

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

g. "Guide to Real Estate Investment  
Analysis", no date

Outline to  
Guide to Real Estate Investment Analysis

AFTERNOON SESSION

1. Any measure of yield requires careful definition of what is an annual profit and what will be included in resale proceeds and an explicit assumption about the opportunity cost of money or the reinvestment rate.
  - A. Refer to definitions on page        of Case problem #2.
  - B. Refer to alternative definitions of annual profits and sales proceeds as found in limited partnership agreements by Stephen Roulac.

"Annual Returns"

1. Taxable income,
2. Net profit only (i.e. not net loss),
3. Taxable income calculated on the basis of straight line depreciation,
4. Net profit calculated on the basis of straight line depreciation,
5. Cash available for distribution before allowance for reserves,
6. Cash available for distribution after allowance for reserves,
7. Cash actually distributed,
8. Cash available for distribution before allowance for reserves plus the amount of that year's principal payment on the mortgage debt,
9. Cash available for distribution after allowance for reserves plus the amount of that year's principal payment on the mortgage debt,
10. Cash actually distributed plus the amount of that year's principal payment on the mortgage debt,
11. Cash available for distribution before allowance for reserves plus the tax liability or the tax shelter benefits of the taxable income calculated for a specified tax bracket,
12. Cash available for distribution after allowance for reserves plus the tax liability or the tax shelter benefits of the taxable income calculated for a specified tax bracket.
13. Cash actually distributed plus the tax liability or the tax shelter benefits of the taxable income calculated for a specified tax bracket,
14. Cash available for distribution before allowance for reserves plus the tax liability or the tax shelter benefits of the taxable income calculated for a specified tax bracket plus the amount of that year's principal payment on the mortgage debt,
15. Cash available for distribution after allowance for reserves plus the tax liability or the tax shelter benefits of the taxable income calculated for a specified tax bracket plus the amount of that year's principal payment on the mortgage debt,
16. Cash actually distributed plus the tax liability or the tax shelter benefits of the taxable income calculated for a specified tax bracket, plus the amount of that year's principal payment on the mortgage debt.

Definitions of "Sales Proceeds"

1. Gross sales price,
2. Gross sales price less closing costs and real estate sales commissions, also known as the net sales price,

BUILDING & OPERATIONS CASH FLOWGRAASKAMP ISLANDTHOUSANDS OF 1972 \$

L/C		<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>TOTAL</u>
<u>A. DEVELOPMENT ACTIVITIES</u>							
<u>SOURCES OF FUNDS</u>							
1	SINGLE FAMILY SALES	....	2533	5002	5152	5168	17856
2	MULTI-FAMILY RENTAL	....	256	323	424	421	1425
3	TOTAL	....	2790	5325	5576	5589	19282
<u>APPLICATIONS OF FUNDS</u>							
LAND							
4	SINGLE FAMILY	548	1082	1114	1118	....	3853
5	MULTI-FAMILY	231	291	382	379	....	1285
6	SUBTOTAL	779	1373	1497	1497	....	5148
CONSTRUCTION							
7	SINGLE FAMILY	1411	2704	2704	2634	....	9455
8	MULTI-FAMILY	1395	1705	2170	2092	....	7362
9	SUBTOTAL	2806	4409	4874	4726	....	16817
OPERATIONS & SALES							
10	S-F SALES COMMISSION	....	152	300	309	310	1071
11	M-F OPERATING EXPENSES	....	95	119	156	155	527
12	SUBTOTAL	....	247	419	466	465	1598
13	TOTAL APPLICATIONS	3586	6030	6791	6690	465	23565
<u>NET CASH FLOW FROM DEV. ACT.</u>							
14	ANNUAL	-3586	-3240	-1466	-1114	5123	-4283
15	CUMULATIVE	-3586	-6826	-8292	-9406	-4283	....
<u>B. CAPITAL ACTIVITIES</u>							
<u>SOURCES OF FUNDS</u>							
16	MORTGAGE PROCEEDS	....	1278	1608	2109	2094	7090
17	LIQUIDATION	....	....	....	....	11629	11629
18	SUBTOTAL	....	1278	1608	2109	13723	18719
<u>APPLICATIONS OF FUNDS</u>							
19	MORTGAGE INTEREST	....	108	243	417	585	1354
20	PRINCIPAL REPAYMENTS	....	26	61	110	6891	7090
21	DEBT SERVICE	....	135	305	527	7477	8445
22	NCF FROM CAPITAL ACTIVITIES	....	1143	1303	1581	6246	10274
<u>C. PROJECT NET CASH FLOW</u>							
23	ANNUAL	-3586	-2097	-162	466	11369	5991
24	CUMULATIVE	-3586	-5683	-5845	-5378	5991	....

LINE 23 (COL 1 - 5) INTERNAL RATE-OF-RETURN IS 21.845%

LINE 23 (COL 1 - 5) NET PRESENT VALUE IS 1275.29 AT 15.00%

3. Net sales price less beginning mortgage balance,
4. Net sales price less mortgage balance at time of sale,
5. Net sales price less purchase price,
6. Net sales price less the mortgage balance at time of sale less the initial equity investment,
7. Net sales price less the mortgage balance at the time of sale less the initial equity investment plus the sum of returns, however defined, distributed to the limited partners,
8. Net sales price less the partners' basis for tax purposes (the purchase price less accumulated depreciation),
9. Net sales price less the partners' basis for tax purposes less the amount necessary to pay taxes at some specified rate,
10. All cash, after payment of mortgage balance at time of sale, including refund of working capital, unused reserves, and unallocated reserves.

C. Suggestions for the appraiser looking for a standard on which to base valuation judgments:

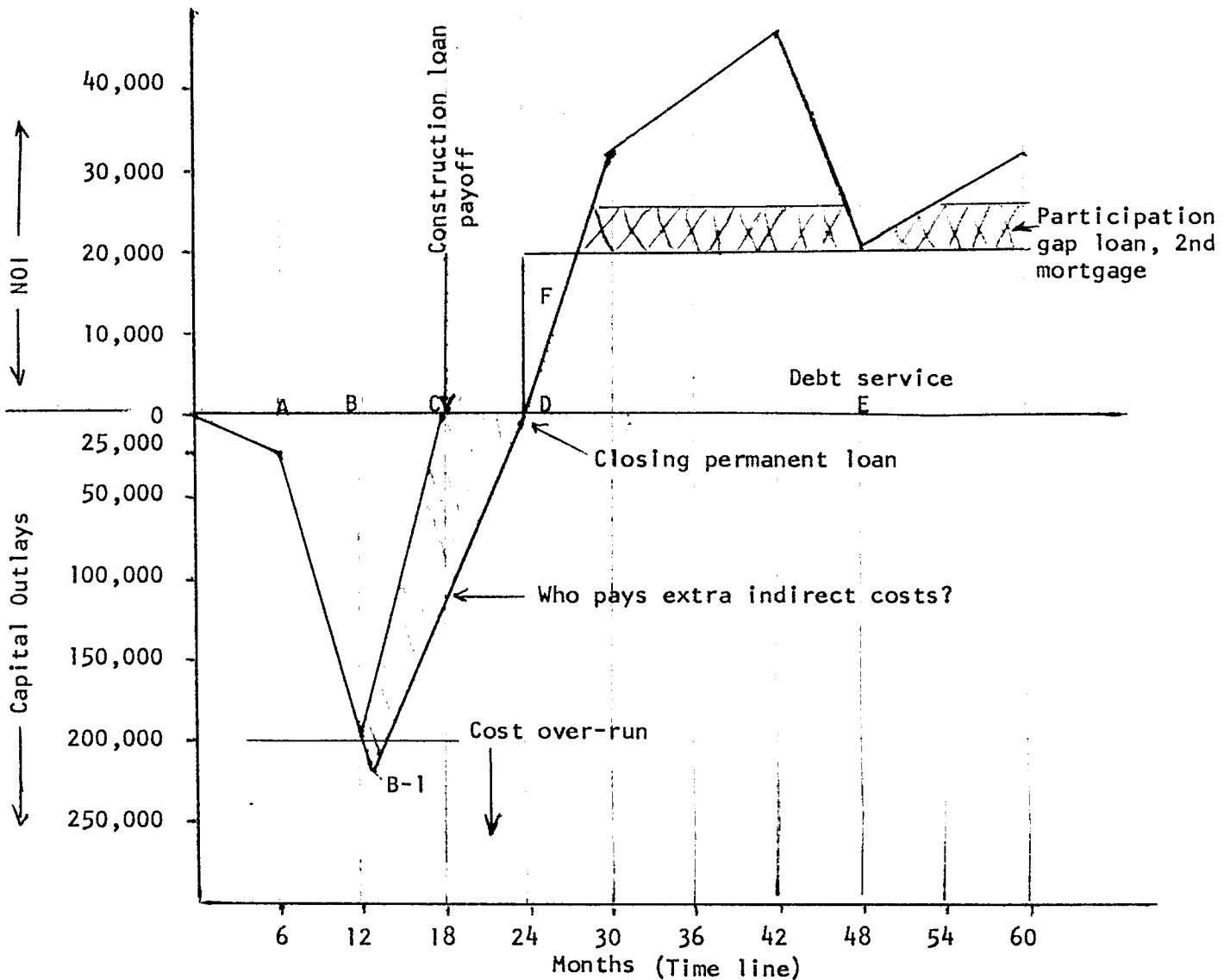
1. Relate to purpose of appraisal and significance of hard dollar and soft dollars to the viewpoint to be served
2. Ellwood method
3. EDUCARE standard models for the investor/buyer
4. Standard assumptions to be promulgated by SEC
5. The appraisal customer's ideal preferences

II. Modern management defines risk as the potential variance between expectations and realizations, i.e., between proforma prospects and balance sheet and P & L statements:

- A. Dynamic risks can produce profit or loss and are best controlled by the finesse of management execution of a plan.
- B. Static risks are those which can only cause a loss due to surprise upset of a plan.
- C. Risk management has two objectives:
  1. Conservation of existing enterprise assets despite surprise events
  2. Realization of budgeted expectations despite surprise events
- D. The process of risk management involves:
  1. Identification of significant exposures to loss
  2. Estimation of potential loss frequency and severity
  3. Identification of alternative methods to avoid loss
  4. Selection of a risk management method
  5. Monitoring execution of risk management plan
- E. Alternative methods for surviving potential risk losses:
  1. Eliminate uncertainty (research or confirm)
  2. Reduce frequency or severity of loss contingencies (incentive contracts)
  3. Combine risks to increase predictability (reserves for expenses or pool investments)

4. Shift risk by contract (subcontracts or escape clauses)
5. Shift risk by combination by contract (insurance)
6. Limit maximum loss (corporate shell or limited partnership)
7. Hedging (gap financing)

F. A graphic representation of real estate cash flows will serve to review the nature of yield and risk control in real estate financing and investment and provide a method for analyzing loan opportunities or limited partnerships.



- A = Start of construction
- B = Estimated completion date
- B-1 = Actual completion date
- C = Construction loan payoff
- C-D = Gap financing period
- D-E = Positive cash flow and gap loan participation
- F = Negative cash throw-off

"MARKET VALUE" NOT ALWAYS APPLICABLE TO INVESTMENT PROPERTY OWNERS

"Market value", under its hundreds of state and federal court definitions, has been acceptable to the real estate appraiser as the fair measurement of just compensation (for all but special use properties) under eminent domain, estate and gift tax, property tax assessment and other situations. It is also applied as one of the two standards for assessment by assessment appraisers. Most definitions of market value mention a "price" and a "willing seller" and a "willing buyer". Even those which do not name or refer to a "seller" have been interpreted to carry the inference that the seller would be willing to sell at the price the buyer could afford to pay.

It is believed, however, the "market value" premise has been erroneous and thus inapplicable to numerous investment properties in the price range which attracts long term mortgagees and high tax bracket equity investors, ever since the investment market began to exploit the capital depreciation methods of the 1954 Internal Revenue Code. That code provided the first uses of the 200% of straight-line-declining-balance and the sum-of-the-years-digits methods; and the code has not been sufficiently modified by the 1962 and 1969 revisions to discourage but a small portion of investors in creating new properties or buying operating properties primarily - and often exclusively - for sheltering taxable income derived both from the newly acquired properties and from other investments and earnings.

This 7-page handout demonstrates the three major reasons for the obsolescence in the age-old definitions of market value: site cost basis, capital depreciation method, and secondary mortgage financing often provided by the seller of the land, on a non-transferable basis.

In this example the first owner of a one-year old, 250-unit apartment property has constructed the building on a site he acquired at a price of \$720,000, \$511,000 of which price was taken back as a deferred, long term purchase money trust to be subordinated to the mortgage loan on the completed property. The terms of the purchase money trust note call for full prepayment in event the property is resold.

Through his superlative mortgage financing and his use of the most accelerated depreciation method on the new building, the first owner and user of the property could not now afford to sell at the price which another investor in the same federal and state income tax brackets could afford to pay for the property, as the second user. Reasons: the second user could employ only 125% SL/DB depreciation, would not be allowed to claim that the non-depreciable asset, the land, is of less than \$720,000 in value, and would not enjoy the long term second mortgage loan as would the first owner. The major assumptions in this example follow:

1. No monetary inflation or deflation considered; future net income and resale value forecast on basis of constant dollars. Equity yield employed matches the extrapolated yields from recently sold, similarly priced investment properties, all on the constant dollar premise.

2. Future resale value of the property, if held by the first owner for an optimum term of 12 years, is calculated to be the capitalized worth of the next average annual net income stream (\$335,650 at OA rate of .10) less \$250 per apartment unit for major capital replacements at date of future reversion; and, for the second owner, under his optimum ownership term of 10 years, to be the capitalized worth of the next average annual net income stream (\$358,000 at OA rate of .10) less \$200 per apartment unit.

3. The new first mortgage loan, closed two months ago when the building reached 85% occupancy, is more than the laughable "75% of value" to the second owner and user, but is quite typical and realistic. It is based upon a required 125%-of-debt-service (25% coverage ratio) against the "stablized" net annual income projected at 95% occupancy. The terms of this mortgage note do not preclude its assumption by another owner of the property, if approved by the mortgage lender.

4. First owner, for tax reasons, has capitalized some of his entrepreneurial expenses (mortgage and construction loan application fees, architectural and legal fees) as part of his capital costs, totalling \$3,700,000; while today's hypothetical buyer and second user will be allowed to depreciate only that portion of his purchase price which excludes the \$720,000 site value.

See next the two IMV computer printouts (\*) showing,

Investment market value to the first owner = \$4,419,676

Investment market value to the second owner = 3,980,860

Difference = 438,816 (11.02%)

Although the entrepreneurial builder-owner has not invested nearly as much cash as is indicated in the first computer printout, the equity cash figure shown represents the present worth of his entrepreneurial profit, his actual cash investment and the after-tax losses incurred in his expenses of construction loan interest, advertising and building operation during the rent-up period - all as of the date of valuation.

This real estate valuation analysis is written to invite attention to the need of some of the older professions and occupations to modernize their practises in dealing with this branch of land economics. It should also encourage the mortgage lenders, who are facing some increase in loan defaults in certain regions, to specify to the responsible appraisers which of the two values - first or second owner - is to be estimated.

(\*) The Thomas A. Prince computer model treats after-tax cash flow in each year (except the reversion from resale) as being received, in 1/12th instalments, each at the beginning of the month.

ALL INPUTS INVOLVING A % MUST BE ENTERED AS A DECIMAL EQUIVALENT [11.75%=.1175]

PROJECT ID (Maximum 30 characters per line)

100 1 YR OLD APT PROP 95% OCCUPIED  
101 INVESTMENT VALUE TO 1ST OWNER

USED FOR ELLWOOD'S VALUATION

102 AVG. ANNUAL NET INCOME 390000 BEFORE TAX YIELD .11 AFTER TAX YIELD .085

OPERATION CODE:

- ➔ 1-Produces IMV for a given after tax equity yield rate
- 2-Produces four after tax equity yield rates for four given IMVs

NET INCOME CODE:

- 1-Constant net income value for each year
- ➔ 2-Different net income value for each year (If the last year of the projection term does not fall in the last position of a line fill the remaining years of that line with zeros)

103 OPERATION CODE 1 PROJECTION TERM (yrs) 12 NET INCOME CODE 2

NET INCOME [If net income is constant enter the value in position (1) only]

104 (1) 400000 (2) 400000 (3) 400000 (4) 396000 (5) 392000

105 (6) 388000 (7) 384000 (8) 380000 (9) 376000 (10) 372000

106 (11) 368000 (12) 364000 (13) 0 (14) 0 (15) 0

107 (16) (17) (18) (19) (20)

OWNERSHIP FORM CODE:

- 1-Corporation (Operating losses applied to other investments)
- 2-Corporation (Operating losses carried back/carried over)
- 3-Corporation (Taxable income offset by losses from other investments)
- 4-Corporation (Set-up solely for this investment)
- ➔ 5-Non-corporation (Operating losses applied to other investments)
- 6-Non-corporation (Operating losses carried back/carried over)
- 7-Non-corporation (Taxable income offset by losses from other investments)

EXCESS DEPRECIATION RECAPTURE CODE:

- 1-No recapture
- 2-FHA 221 (d) (3), 236 before 1975 (After 20 months-declines 1% per month)
- ➔ 3-All other residential rentals (After 100 months-declines 1% per month)
- 4-All non-residential-100% recapture

108 OWNERSHIP FORM CODE 5 FEDERAL TAX RATE .60 STATE TAX RATE .09 STATE CAPITAL GAINS RATE .09 EXCESS DEPRECIATION RECAPTURE CODE 3

APPRECIATION/DEPRECIATION AT RESALE:

APP/DEP CODE:

- 1-% of IMV (Enter the % in the APP/DEP AT RESALE column)
- 2-\$ amount (Enter the \$ amount in the APP/DEP AT RESALE column)
- ➔ 3-Reversionary \$ amount (Enter the \$ amount in the APP/DEP AT RESALE column)

109 APP/DEP CODE 3 APP/DEP AT RESALE (\$ OR %) 3419000 SALES COMMISSION RATE (0 if none) .02





BEFORE TAX IMV(11.00%) \$ 3957929  
 AFTER TAX IMV( 8.50%) \$ 4419676  
 DO YOU WANT DETAIL (0=NO,1=YES)?1

INVESTMENT MARKET VALUE ANALYSIS  
 1-YR OLD APT PROP 95% OCCUPIED  
 INVESTMENT VALUE TO 1ST OWNER

PREPARED BY A COMPUTER IN  
 CONSULTATION WITH M.B. HODGES, JR  
 6819 ELM ST. MCLEAN, VA. 22101 14:44EST 11/15/72

\*\*\*\*\*  
 INVESTMENT MARKET VALUE:

AFTER TAX YIELD OF 8.50%: \$ 4419676

\*\*\*\*\*  
 DETAIL FOR AFTER TAX IMV

FINANCING:

MORTGAGES:

1. 9.000% 28 YRS 0 MONS \$ 3267000  
 2. 10.000% 25 YRS 0 MONS \$ 511000

EQUITY CASH: \$ 641676

RESALE OF INVESTMENT IN 12 YEARS:

ESTIMATED RESALE PRICE \$ 3419000

LESS: MORTGAGE BAL. 3113321  
 SALES COMMISSION 68380

CASH REVERSION BEFORE TAXES \$ 237299

LESS: CAPITAL GAINS TAX(STD.) 286047  
 TAX ON RECAPTURED DEPR. 228415  
 TAX PREFERENCE TAX 0

CASH REVERSION AFTER TAXES \$ -277163

YR	NET INCOME	MORTGAGE INTEREST	BOOK DEPR.	TAXABLE INCOME	INCOME TAX	CASH FLOW BEFORE TAX	CASH FLOW AFTER TAX
1	400000	343813	268491	-212304	-125319	24256	149575
2	400000	340764	254101	-194865	-115667	24256	139923
3	400000	337425	239711	-177136	-105830	24256	130086
4	396000	333766	225321	-163087	-98334	20256	118590
5	392000	329757	210931	-148688	-90615	16256	106871
6	388000	325365	196540	-133905	-82653	12256	94909
7	384000	320552	182150	-118702	-74423	8256	82679
8	380000	315278	167760	-103038	-65532	4256	69788
9	376000	309500	153370	-86870	-55249	256	55505
10	372000	303169	138980	-70149	-44614	-3744	40870
11	368000	296231	124590	-52821	-33469	-7744	25725
12	364000	288629	118945	-43574	-27713	-11744	15969

BEFORE TAX IMV(11.00%) \$ 3919359  
 AFTER TAX IMV( 8.50%) \$ 3980860  
 DO YOU WANT DETAIL (0=NO,1=YES)?1

INVESTMENT MARKET VALUE ANALYSIS  
 1-YR OLD APT PROP 95% OCCUPIED  
 INVESTMENT VALUE TO 2ND OWNER

PREPARED BY A COMPUTER IN  
 CONSULTATION WITH M.B. HODGES, JR  
 6819 ELM ST. MCLEAN, VA. 22101 14:49EST 11/15/72

\*\*\*\*\*  
 INVESTMENT MARKET VALUE:

AFTER TAX YIELD OF 8.50%: \$ 3980860

\*\*\*\*\*  
 DETAIL FOR AFTER TAX IMV

FINANCING:

MORTGAGES:

1. 9.000% 28 YRS 0 MONS \$ 3267000

EQUITY CASH: \$ 713860

RESALE OF INVESTMENT IN 10 YEARS:

ESTIMATED RESALE PRICE \$ 3530000

LESS: MORTGAGE BAL. 2847849  
 SALES COMMISSION 70600

CASH REVERSION BEFORE TAXES \$ 611551

LESS: CAPITAL GAINS TAX(STD.) 256985  
 TAX ON RECAPTURED DEPR. 29904  
 TAX PREFERENCE TAX 12354

CASH REVERSION AFTER TAXES \$ 312308

YR	NET INCOME	MORTGAGE INTEREST	BOOK DEPR.	TAXABLE INCOME	INCOME TAX	CASH FLOW BEFORE TAX	CASH FLOW AFTER TAX
1	400000	292931	155817	-48748	-30886	79978	110864
2	400000	290389	145174	-35563	-22618	79978	102596
3	400000	287609	135531	-23140	-14717	79978	94695
4	396000	284569	131847	-20416	-12984	75978	88962
5	392000	281243	128319	-17562	-11169	71978	83147
6	388000	277606	125770	-15376	-9779	67978	77757
7	384000	273627	123868	-13495	-8582	63978	72560
8	380000	269274	122025	-11299	-7186	59978	67164
9	376000	264514	120240	-8754	-5567	55978	61545
10	372000	259307	120240	-7547	-4799	51978	56777

V. Analysis of a Limited Partnership Prospectus

A. From the investor viewpoint there are five basic areas of consideration in the selection of limited partnership investment.

1. Strategic choice of property type
2. Attributes of specific property or property pool
3. The marketing method utilized to sell security
4. The use of incentive clauses for control of the general partner
5. The financial projection

B. The strategy in picking a property is to decide where on the time line you wish to commit because of the profit centers in which you wish to participate.

1. The profit centers
2. Position on the time line as a risk control device
3. Staging of capital outlay
4. Priority of claim on cash proceeds and tax shelters
5. Measures of yield

C. Attributes of specific property

1. A limited partnership share is a second mortgage revenue bond
2. Does it lower break-even point for high risk development venture?
3. Does it accelerate payback for the general or limited partner?
4. Does it retail sizzle for the cow carcass bought wholesale?

D. The marketing method utilized to sell security

1. Direct selling in the traditional real estate manner - high cost per unit sold for packager and high cost for investor because of brokers front end load.
2. The seminar approach - loss of credibility, loss of efficiency and now questions of legality.
3. Channeling through securities brokers (efficiency of mutual shares marketing but dependency on uninformed licensed security salesmen).
4. Marketing compensation consists of front-end loads, management fees, or participation in the event - % of asset or of money raised?

E. The use of incentive clauses for control of the general partner

1. Disenchantment clauses for replacement of general partner or property manager or both are critical.
2. Dissolution clauses for sale or refinancing must be watched carefully where general partner has participation.
3. Variance in projections must be controlled:
  - a. Provision for cost guarantees
  - b. Provision for earn-outs against absorption period
  - c. Provision for loans and terms from general partner or assessment and penalties for limited partners for liquidity gaps

- d. A guarantee against negative cash flows
- e. Protection against construction of competitive units on adjacent property with 36 month option or right of first refusal.

4. Incentive clauses to make self interest of general partner the same as limited partner.

- a. Management fee subject to downward adjustment each year if certain expenses have increased at a greater rate than gross income.
- b. Bonus management fees for occupancy in excess of a stated level, say 94% or absorption rate in excess of some stated schedule.
- c. Controls on GP access to certain profit centers such as leasing equipment to partnership, insurance premiums, or similar spinoffs contingent on meeting certain cash payouts to limited partners on a cumulative basis.

F. The financial projection

1. Should be tested for capacity to survive the surprise potential with variables which include payback ratio and cash breakeven point given definitions of returns to general partner. Be careful to define base for GP participation according to prospectus rather than according to sound financial principals.

G. Basic readings and periodicals with which the investment counselor should be familiar:

1. Real Estate Syndication Digest 1972, Principles and Applications, by Stephen E. Roulac, published by Real Estate Syndication Digest, San Francisco, California
2. The Real Estate Trusts: America's Newest Billionaires, by Kenneth Campbell, published by Audit Investment Research, Inc. 230 Park Avenue, New York
3. Real Estate Review quarterly magazine, 89 Beach Street, Boston, Mass.
4. Principles of Real Estate Syndication, Samuel K. Freshman, published by Parker & Son, 6500 Flotilla Street, Los Angeles, California 90040
5. The Mortgage & Real Estate Executives Report by Warren, Gorham & Lamont, Inc., 89 Brach Street, Boston, Mass. 02111
6. "Caveat Emptor in Real Estate Equities" by Samuel L. Hayes & Leonard M. Harlan, Harvard Business Review, March-April 1972  
or  
The Real Estate Appraiser, Summer 1972
7. Real Estate Securities & Syndication

## VI. Recent innovations in financial analysis

- A. Cash flow models discussed today process one set of numbers at a time to test a project for sensitivity to a change in assumption. It is possible, however, to build a model to permit introduction of certain variables as a range of numbers rather than a single point assumption.
  - 1. Operational real estate investment probability or risk density models have been built in various parts of the country, including
    - a. Professor Steve Pyhrr at University of Texas
    - b. A graduate student group at the Harvard School of Business
  - 2. Real estate portfolio risk models are also under development to apply "covariants investment theory" which is used for the securities market by various institutions
    - a. Professor Pellatt of the University of Manitoba
    - b. Wells Fargo Bank
    - c. Various oil company investment departments
- B. The impact of EDUCARE and the computer terminal
- C. The availability of competing national services for cash flow analysis
- D. The encroachment of sophisticated professionals in money management and capital budgeting on appraisal business
  - 1. Professional accountants and engineering firms
  - 2. Bank trust department advisory services
  - 3. Increasing state and federal regulation and auditing of real estate investment performance on standards related to corporate security investment