JAMES A. GRAASKAMP COLLECTION OF TEACHING MATERIALS

II. CLASSES AT THE UNIVERSITY OF WISCONSIN--MADISON

L. Business 850: Real Estate Equity Investment

2. Selected Exams and Exam Keys: 1977-88

Index

Business 850
Mid-Semester Equity Investment Exam

Wednesday, March 30, 1977 Graaskamp & Robbins

I. Define and discuss the following terms and concepts as they have appeared in the Real Estate Equity Investment course. Write on five of the following: (25%)

A. Five financial tests in MR CAP which would indicate the investor paid too much for the real estate proprety.

B. Identify two tax shelter strategies available in the reformed gift and estate tax law of 1976.
C. Identify four basic issues in analyzing income tax characteristics of a real estate investment.
D. What is the minimum tax and its concept?
E. Why is a single family home a tax shelter investment?
F. Define investment yield in real estate.

II. Write on one of the following two questions: (35%)

A. Compare and contrast the risk analysis system put forward by Steve Pyhrr, Michael Young, and Mike Miles.

OR

B. Discuss the constraints imposed on tax shelter investment strategies of the individual with very high earned income imposed by both the income tax reform and estate tax reforms of 1976.

III. Write on one of the following two questions: (20%)

A. Discuss the limitations of the limited partnership form of ownership from the viewpoint of the general partner-sponsor.

OR

B. Discuss the disadvantages of the limited partnership from the viewpoint of a wealthy limited partner with business management ability who is in need of tax shelter immediately.

IV. Explain and check the following Cash Flow elements. (Show all work, you will be graded on how you attempt the solution as well as the answer derived): (20%)

A. What is the Amount of the After Tax Net Worth at the end of Year 3 and end of Year 4.

B. Why is Change In After Tax Net Worth at end of Year 4 negative? If this is a problem suggest corrective action.

C. Following the sale of the property at the end of Year 4, determine the Modified Internal Rate of Return.

D. Determine the Present Value of Project Before Taxes at the end of Year 4.

P R O F O R M A

P R O F O R M A

INVESTMENT ANALYSIS OF
850 MIDTERM EXAM
FOR
JAG ENTERPRISES

* GROSS RENT	$ 52310.	* RATE OF GROWTH OF GROSS RENT	.0476
* EXPENSES	$ 9470.	* RATE OF GROWTH OF EXPENSES	.0566
* R E TAXES	$ 9216.	* RATE OF GROWTH OF R E TAXES	.0073
INCOME TAX RATE	.3000	PROJECT VALUE GROWTH OF	6.0000
* VACANCY RATE	.0500	WORKING CAPITAL LOAN RATE	.1400
EQUITY DISCOUNT RATE	.180	EXTRAORDINARY EXPENSES	$ 1000.
RESALE COST	.0700	REINVESTMENT RATE	.0410
WKG CAPITAL RS	$ 600.	CAPITAL RESER INTEREST RATE	.0300
INITIAL COST	$ 240000.	INITIAL EQUITY REQUIRED	$ 45600.

ALL '*' VALUES ARE AVERAGE AMOUNTS FOR HOLDING PERIOD.

C O M P O N E N T S U M M A R Y

TITLE	PCT. DEPR	BEGIN USE	USEFUL LIFE	DEPR METHOD		COST	SCH
LAND	.00	1	0.	0	$	40000.	0
BUILDING	1.00	1	35.	4	$	165300.	0
OTHER	.80	1	20.	4	$	34700.	0
REFURBISH	1.00	4	7.	2	$	11000.	0

M O R T G A G E S U M M A R Y

TITLE	INTR RATE	BEGIN YR.	END YR.	TERM		ORIG BALC	PCT VALUE	
FIRST ASSUMED MORTGA	.0775	1	3	20	$	180000.	.750	195
SELLERS 2ND MORTGAGE	.0850	1	3	0	$	15000.	.063	
REFINANCE MORTGAGE	.0800	4	24	20	$	190000.	.757	195000

CASH FLOW ANALYSIS

		1	2	3	4
1	GROSS RENT	47334.	49701.	52186.	54795.
2	LESS VACANCY	2367.	2485.	2609.	2740.
3	LESS REAL ESTATE TAXES	9000.	9270.	9270.	9270.
4	LESS EXPENSES	9400.	8904.	9438.	10005.
5	NET INCOME	26567.	29042.	30868.	32781.
6	LESS DEPRECIATION	9687.	9188.	8717.	9843.
7	LESS INTEREST	15050.	14648.	14214.	15081.
8	TAXABLE INCOME	1831.	5205.	7938.	7857.
9	PLUS DEPRECIATION	9687.	9188.	8717.	9843.
10	LESS PRINCIPAL PAYMENTS	4902.	5304.	5739.	4041.
11	CASH THROW-OFF	6615.	9089.	10916.	13659.
12	LESS TAXES	549.	1562.	2381.	2357.
13	LESS RESERVES AT 200.000	200.	200.	200.	200.
14	CASH FROM OPERATIONS	5866.	7328.	8334.	11047.
15	WORKING CAPITAL LOAN(CUM B)	0.	0.	0.	0.
16	DISTRIBUTABLE CASH AFR TAX	5866.	7328.	8334.	11047.
17	TAX SAVING ON OTHER INCOME	0.	0.	0.	0.
18	SPENDABLE CASH AFTER TAXES	5866.	7328.	8334.	11047.

CASH FLOW ANALYSIS

MARKET VALUE

		1	2	3	4
19	BY METHOD - 6 - AT .0150	243600.	247254.	250963.	254727.
20	LESS RESALE COST	17052.	17308.	17567.	17831.
21	LESS LOAN BALANCES	190098.	184793.	179055.	185959.
22	PLUS CUM. CASH RESERVES	818.	1043.	1274.	1512.
23	B/4 TAX NET WORTH	37268.	46195.	55615.	52450.
24	CAPITAL GAIN (IF SOLD)	-7341.	2168.	11728.	22911.
25	CAPITAL GAINS TAX	-1101.	325.	1759.	3437.
26	INCOME TAX ON EXCESS DEP	1073.	1996.	2778.	3426.
27	TOTAL TAX ON SALE	742.	2321.	4537.	6863.
48	AFTER TAX NET WORTH	36526.	43874.	51078.	45587.

YEAR OF ANALYSIS
=================

		1	2	3	4
	BEFORE TAX RATIO ANALYSIS				
28	RETURN ON NET WORTH B/4 TAXES	-.0376	.4834	.4402	.1877
29	CHANGE IN NET WORTH B/4 TAXES	-8332.	8927.	9419.	-3165.
30	CASH RTN ON ORIG CASH EQUITY	.1451	.1993	.2394	.2995
31	PERCENT ORIG EQUITY PAYBACK	.1286	.2893	.4721	.7144
32	PRESENT VALUE OF PROJECT	232189.	240310.	241449.	

YEAR OF ANALYSIS
=================

		1	2	3	4
	AFTER TAX RATIO ANALYSIS				
33	RETURN ON NEW WORTH AFT TAXES	-.0704	.4018	.3541	.1088
34	CHANGE IN NET WORTH AFT TAXES	-9074.	7348.	7203.	-5491.
35	CASH RTN ON ORIG CASH EQUITY	.1286	.1607	.1828	.2423
36	PERCENT ORIG EQUITY PAYBACK	.1286	.2893	.4721	.7144
37	PRESENT VALUE OF PROJECT	230925.	236743.	235878.	

38	NET INCOME-MARKET VALUE RTO	.1091	.1175	.1230	.1287
39	LENDER BONUS INTEREST RATE	.0000	.0000	.0000	.0000
40	DEFAULT RATIO	.8103	.7671	.7408	.7007

YEAR OF ANALYSIS
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MODIFIED INTERNAL RATE OF RETURN ANALYSIS
===

		1	2	3	4
	RETURN ANALYSIS WITHOUT SALE				
41	CUM. AFT TAX SPENDABLE CASH	5866.	13434.	22319.	34281.
42	MOD. I.R.R. ON ORIG EQUITY	-.8714	-.4572	-.2119	-.0688
43	MOD. I.R.R. ON CUM. EQUITY	-.8714	-.4572	-.2119	-.0689
	RETURN ANALYSIS WITH SALE				
44	CUM. CASH LESS ORIG EQUITY	-3208.	11708.	27797.	34268.
45	CUM. CASH LESS CUM. EQUITY	-3208.	11708.	27797.	34268.
46	MOD I.R.R. ON ORIG EQUITY	-.0704	.1211		
47	MOD I.R.R. ON CUM. EQUITY	-.0704	.1211		

ENTER '1' FOR RESTART TO PROCESS NEW DATA FILE'0' TO QUIT.

Steven Tabb
5-18-77

II

Real Estate Equity Investment 850
Final Exam

Wednesday, May 18, 1977

James A. Graaskamp
Michael L. Robbins

30% I. Identify the significant real estate investment attributes and investor limitations for three (3) of the following:

A. Real estate equity investment trust
B. Farm investment corporations
C. Tax exempt organization investment in real estate
D. Oil and gas syndications

20% II. Discuss trends and impact in next decade toward control of real estate investments as securities as developed in Roulac and readings on condominiums.

30% III. Discuss one of the following subjects:

A. Is it probable that real estate investment properties could out-perform bonds + common stocks to the end of our oil in this century as it has in the past 25 years? Supply a set of axioms and argue your position.

B. What types of screens and asset allocation criteria should be used to select and rank real estate investments for a ~~bank managed pension fund~~ national ... ? Supply a set of objectives which generate suggested screens.

20% IV. Orvil P. Anderson is back; this time with a proposal for an exchange. Orvil owns a property with an appraised fair market value of $175,000, an adjusted basis of $75,000 and a mortgage of $50,000. Orvil would like to swap properties with his brother-in-law, Mert Mizer, whose property has an appraised fair market value of $275,000, a mortgage of $100,000 and a basis of $125,000.

Orvil has proposed to Mert that he refinance for $150,000 in this tax year and then they would swap even in the next tax year.

What is the tax effect on each party?

Business 850, Mid-Semester Exam
Real Estate Equity Investment

March 23, 1983 Prof. James A. Graaskamp

I. (20%) Write a short paragraph on five of the following concepts as developed in this course. (4 points each)

1. Political exposures of real estate investment (Graaskamp)
2. Measuring profits in uncertain times (Drucker)
3. Seven major trends in the U.S. (Naisbitt)
4. Inflation and the real estate investor (Wendt)
5. Three conditions for real property price appreciation (Coldwell Banker)
6. Five ways to go bust

II. (20%) Outline step by step the procedure necessary to calculate cash flow from a sale of depreciable real estate with excess depreciation taken by the seller.

III. (20%) Write a short summary of the process required by one of the following systematic procedures:

1. How does one analyze the tax implications of disposition of real estate?

2. Measurement of comparative pricing, returns, and risk of real estate vs. common stock as seen by Roulac, Pyhrr, and Cooper.

IV. (20%) Give two examples of investment planning for real estate ownership which accomplishes each of the following:

1. Conversion of ordinary income to capital gain
2. Deferral of capital gain tax
3. Reduction of estate tax

V. (20%) Discuss the impact of investment real estate ownership on estate planning and transfer and suggest the role of the expert counselor.

REAL ESTATE EQUITY INVESTMENT

Mid Semester Exam

March 15, 1985 Prof. James A. Graaskamp

I. - 25% Write in sentence outline form the historical development presented in one of the following articles.

A. The historical development of modern investment theory and real estate analysis - as presented by Peter Penney.

B. The future of the real estate industry as anticipated by John McMahan.

II. - 24% Briefly describe the thrust or message in three of the following articles.

A. "Managing Fundamentals," Peter Drucker, The Best of Business.

B. Chapter Fifteen, "Investment Analysis," Real Estate Syndication, Steve Jarchow, 1985.

C. "Inflation and the Real Estate investor," Paul Wendt, The Appraisal Journal, July, 1977.

D. Chapter Two, "Choice of Business Entity," Real Estate Syndication, Steve Jarchow, 1985.

III. - 30% Write on Three of the following strategy questions.

A. When would you use the new marital deduction Q-TIP Trust?

B. What set of conditions would suggest the use of a real estate exchange rather than sale of the property, payment of taxes, and purchase of a new piece of real estate?

C. When would it might be appropriate to acquire control of a property through a Master lease ala Jay Schidler rather than purchase?

D. Where is their opportunity to mismatch interest income and expense for seller and buyer.

IV. - 21% Fill in the attached blank form writing neatly and concisely.

IV.

BUSINESS 850

MID SEMESTER SPRING EXAM

Tax Ploy - Give example - available under 1984, law.	Treatment available under proposed treasury reforms for 1985-1986 tax bill.

1. Reduction of marginal tax rate and deferral of income tax using depreciation.
   - use the ACRS tables to compute depreciation on an apartment with a depreciable life of 18 years. this reduces taxable income and defers payment of tax until sale. It may then be converted to capital gain tax, further reducing the rate.

2. Sale of a two million dollar office building on non recourse and contract with 5% down and 9% interest, 25 year term.
   - in this situation, a sale and leaseback might be a good idea. If you are currently occupying the building you might be willing to sell on these terms and then lease it back to get the current annual deduction as an operating expense.

3. Postponing capital gains taxes.
   - implement a tax deferred exchange. If no gain is realized, no taxes will be paid at the time of transaction. Basis in property acquired will be basis in old property + additional debt - boot. Capital gain will then be paid on disposition of new property.

4. Avoiding capital gains.
   - capital gains tax can be avoided by dying and leaving property to heirs, who take a stepped up basis. Or could use a trust form of transfer where purchaser has no control over funds after deposited.

5. Tax investment credit for rehabilitation.
   - substantially rehabilitate a building certified as a historic structure leaving 75% of the existing walls in tact. Can receive an ITC for 25% of cost of rehabilitation.

REAL ESTATE EQUITY INVESTMENT - Bus. 850

Final Exam, Spring 1985

Wednesday, May 8, 1985 Prof. James A. Graaskamp

I. (20%) Briefly identify all potential disadvantages of a limited partnership investment to the potential investor and then provide an example of how those who structure and draft partnership agreements have tried to reduce that possible disadvantage of risk. It may be that certain disadvantages have not been remedied, even partially, and if so, indicate why you think this is so.

II. (20%) Compare and contrast the relative advantages and disadvantages of an open end commingled fund and a finite real estate investment trust as a vehicle for pension fund investment.

III. (20%) Write on <u>one</u> of the following:

A. Discuss the income tax advantages and disadvantages for foreign investors placing money in United States real estate investment. Identify significant trade-offs, if any, between public disclosure and tax treatment.

OR

B. Discuss concepts of investment liquidity, diversification, fiduciary risk, and a core portfolio as it relates to institutional management of pension fund investment in real estate.

IV. (20%) Discuss the limited partnership as a potential security under both federal and state laws and the controls imposed by Regulation D or NASD.

V. (20%) Compare and contrast the benefits of the investment tax credit, accelerated depreciation, and the capital gains tax opportunities for a land and commercial buildings developer who is choosing between ownership of the project as a private corporation, a sub-chapter corporation or a joint venture partnership.

FINAL EXAM BUSINESS 850

Monday, May 5, 1986 Prof. James A. Graaskamp

WRITE ON FOUR OF THE FOLLOWING QUESTIONS: 25% EACH

I. Compare and contrast the advantages and disadvantages of pension fund investment in open end, closed end, or segretated accounts real estate investment pools.

II. Discuss the major accounting and appraisal issues which make performance evaluation of a real estate investment fund difficult in terms of comparability to other funds and between fiscal periods.

III. Outline the significant exemptions of real estate securities from regulation by the SEC. Do you think real estate investment marketing people should be permitted such broad latitude of exemptions?

IV. Discuss the possible advantages and disadvantages specifically available to foreign investment in U.S. real estate relative to tax laws and other constraints.

V. Compare what is meant by structuring a real estate investment for a tax shelter syndication as compared to what is meant by structuring for a private estate management concern.

Business 850

Real Estate Equity Investment
Six Weeks Exam

Spring Semester 1987
Monday, February 23, 1987 Prof. James A. Graaskamp

1. If you had $10 million to invest in real estate, over and beyond an equal amount of stocks and bonds, how would you rationalize your investment hope if oil is in declining supply, America will restructure socially, capitalism is doubtful, and urban environments are politically unstable?

II. What are the key ratios and accounting baseline on which Steve Jarchow or Victor Trapasso seek investment success?

III. What are the basic concepts in estimating liquidity needs for estate tax and what provision should the real estate investor make to anticipate those needs?

IV. Discuss the issues that need to be addressed in tax planning for a property to be acquired as discussed by Pyhrr and Cooper and then modified by Coopers and Lybrand in their 1986 tax letter.

V. Identify five tax ploys that remain in the 1986-87 tax law that may permit postponement or avoidance of capital gains tax.

NAME ______________________________

REAL ESTATE EQUITY INVESTMENT 850

FINAL EXAM, SPRING, 1987

25% I. Develop an essay on one of the following two questions:

A. Discuss structuring and important features of a general partnership/joint venture agreement.

OR

B. Discuss the real estate exchange in terms of tax treatment and investment objectives of the parties.

NAME ______________________________

REAL ESTATE EQUITY INVESTMENT 850

FINAL EXAM, SPRING, 1987

25% II. Discuss real estate equity investment strategies and alternatives for the pension fund investment portfolio.

NAME ______________________

REAL ESTATE EQUITY INVESTMENT 850

FINAL EXAM, SPRING, 1987

25% III. Write on one of the following two questions:

A. Discuss alternative methods and technical problems in measuring performance and comparative performance of the real estate equity investment.

OR

B. Compare the relative performance of owned real estate, REIT shares, and common stock in terms of the research studies and discussions in the course readings.

NAME ____________________

REAL ESTATE EQUITY INVESTMENT 850

FINAL EXAM, SPRING, 1987

25% IV. On the attached grid sheets fill in each box to indicate the degree to which each real estate structure possesses the listed attribute.

ATTRIBUTE	ALTERNATIVE RESPONSES
1. Control of Real Estate Management by Investor	None, indirectly by electing board, direct management participation as an owner.
2. Limit of Liability for Investors	Limited to investment, unlimited, agreement to be assessable.
3. Liquidity	Very marketable, controlled resale, long-term commitment.
4. Double Taxation	No tax, single tax audit, double tax entity.
5. Regulation as a Security	Never, sometimes exempt, always regulated.
6. Ease of Raising Large Amounts of Capital	Practical limitation on number of investors, national marketing and expandable number of shares, unlimited growth potential.
7. Flexibility in Terms of Active Management or Buying and Selling Assets	Asset manager is autonomous, asset manager can only be discharged for malfeasance, real estate manager serves at the will of the investor.

ATTRIBUTE	REIT	MLP	SUBCHAPTER S	REGULAR CORPORATION
1. Control of Real Estate Management by Investor	indirect	none	direct	indirect
2. Limit of Liability for Investors	limited to investment	limited to investment	limited to investment	limited to investment
3. Liquidity	very marketable	very marketable	controlled resale	very marketable
4. Double Taxation	single tax	single tax	single tax	double tax
5. Regulation as a Security	always regulated	always regulated	never	always regulated
6. Ease of Raising Large Amounts of Capital	practical limitations	practical limitations	practical or legal limitation to 35	unlimited growth potential
7. Flexibility in Terms of Active Management or Buying and Selling Assets	automonous	discharge for malfeasance	at the will of the investors	at the will of investors

ATTRIBUTE	GENERAL PARTNERSHIP	LIMITED PARTNERSHIP	OPEN END CO-MINGLED FUND	CLOSED END CO-MINGLED FUND
1. Control of Real Estate Management by Investor	direct participation	none	none	none
2. Limit of Liability for Investors	none (unlimited liability)	limited to investment assessable	limited to investment	limited to investment
3. Liquidity	long term commitment	controlled resale or long term commitment	controlled resale	long term commitment
4. Double Taxation	single tax	single tax	no tax	no tax
5. Regulation as a Security	never	sometimes exempt	never	never
6. Ease of Raising Large Amounts of Capital	practical limitations	practical limitations	unlimited	practical limitations
7. Flexibility in Terms of Active Management or Buying and Selling Assets	autonomous	substitution for malfeasance	served at will of investor	served at will of investor

BUSINESS 850

REAL ESTATE EQUITY INVESTMENT

MID-SEMESTER EXAM

Wednesday, February 24, 1988

Prof. J. A. Graaskamp

I. Long-term investment real estate is based on many implicit hopes and assumptions about the future of the community and the country. Identify at least eight major soft hopes and the possible risk management factors for each that become part of a real estate investment strategy for a real estate investor. (20 points)

II. Write on ONE of the following two questions based on your readings and lecture: (25 points)

A. Identify and define all the major tools for quantifying risk as a tolerance for surprise in a real estate income invesment.

-- OR --

B. Identify the major tools and issues for measuring rate of return for a real estate income property investment.

III. Write on ONE of the following two questions: (25 points)

A. Identify the alternative real estate investment formats available to the individual investor and the critical factors, pro and con, for each.

-- OR --

B. Identify the critical tax planning issues for the individual investor planning to acquire income property investment.

IV. Identify the critical issues in planning the estate tax strategy for personal estates dominated by real estate income property investments. (15 points)

V. Identify your favorite article in the 850 reading packet up to this exam, briefly identify the contents, and then explain why it had more impact than most. (15 points)

Business 850 Mid-Semester Exam Key

I-1 Market analysis errors:

Unspecified research direction
Unexplained statistics
Misspecified suply and demand
Uncorrelated supply and demand
Inattention to economic indicators
Omission of primary data

I-2 The Coase Theorem is concerned withthe problem of social cost. He argued that in a world with 0 transaction costs, adjacent users of property will be able to negotiate between themselves in cases of inharmonious uses when incentives exist to do so. Thus it doesn't make any difference which party is initially assigned the property rights for efficient use of society's resources if incentives exist for negotiation.

I-3 The irrelevance of the capital structure agrument is a challenge by Modigliani & Miller that leverage acquired as a result of corporate debt policy is inconsequential because investors invent their own margin with homemade leverage in stock shares. Application to real estate is difficult because of the inherent assumptions. For example for arbitrage to work, personal and corporate leverage must be perfect substitutes without transaction costs, potential bankruptcy costs, or income tax costs. The income tax favors the debt position. It also assumes efficient market information which is seldom found in real estate.

I-4 Basic ratios and limitations of ratio analysis. Some of the basic ratios are loan to value ratio, default ratio, asset turnover ratio, operating expense ratio, profitability ratio, profit margin ratio, return to equity on total investment and return on equity ratio. The limitations include understating operating costs. Ratios depend on viewpoint of the analyst.

II-1 Reinvestment rate assumptions is very low relative to turnon real estate and in addition. The resale price may be falling or there is low interest only mortgage which is failing to provide equity buildup.

II-2 Negative cash from operations implies a bug in theprogram or a large initial working capital reserve to cover deficits.

II-3 All cash is being directed to amortization of the mortgage and the largest portion of the debt service constant is principal so that rents must be very very high.

IV. Perit point pricing presumes that a price earnings ratio is the reciprocal of the ~~cash~~ earnings from net income or earned income view to the degree that the reciprocal exceeded the current rate of distributable earnings. If this rate exceeds cash dividend, then it implies a certain rate of growth over time and many times these growth rates are unreasonable so that Ellis recommends proper timing, loading the overall rate for the expected cash on cash dividend, and assumptions which reasonabl~~e~~y price the property for sale in order to realize capital gains.

VI-A John McMahan sees gradual insitutionalization of ownerhsip of large properties reduced turnover, more emphasis on property management, and a bigger role for government. Much real estate activity would be as a result of geographic shifts in the population to the south and west and demographic shifts in the size of households, number of disabled, and other spcial housing needs. He exepcts the affordability gap to met by smaller units, higher densities, non-union labor, and more efficient city planning efforts.

VI-B Graaskmap isn't sure risk ratios are appropriate except for solvency and capital payback since so many of the risks in real estate are shifted to others by contract. or modified by strategic positioning to protect against politcal exposure, channel demand, management intensiveness, financial parameters, financing and tax matters and estate planning. Investors attempts to satisfy and as Peter Drucker points out improve the solvency position instead of the levergage position. Jaffe proposes a risk premium for risk adjusted discount rates, the certainty equivalent approach, senstiviety analysis, dicision trees and simulation.