Midterm Review

Rules

A) Nothing New

B) If yes then yes, if not then not

C) High Speed – You've been there done that. Open your RAM

Comparing

Amenity Property vs Investment Property

- ## Amenity Property

Owner Acquires property based upon the satisfaction of use and comfort

Financing Obtained on owners ability to support loan pmts/ Qualify

Market Area Local/Proximity to Job

Holding Period Based on family size job changes, income level etc…

Ownership Generally individuals and families

Occupancy By definition the owner

- ## Investment Property

Owner Acquires property based upon the expected return/yield of investment

Financing Obtained on buildings ability to support loan/Qualify

Market Area Regional, National, Intl.

Holding Period Based on return goals and other investment opps.

Ownership Individuals, partnerships, corporations etc…

Occupancy Leased to a tenant

Commercial/Investment Property Types

Five Basic Commercial/Investment Property Types

Retail

Office

Industrial

Residential Income

Land

Leases

There are 4 Basic types of leases & Many Variations

Gross Lease: Tenants pay a flat base rent plus there own use costs i.e P.G.E, H2O, Trash, Owner pays taxes, insurance and major exterior repairs. CAM charges are paid by tenants in industrial property and owners in residential.

Net Lease: This lease is broken down in 3 categories, **N, NN, NNN**

    N = Net lease wherein tenant pays prorata share of property taxes

    NN = Double Net Lease wherein tenant pays prorata taxes and insurance

    NNN = Triple Net Lease wherein tenant pays prorata taxes, insurance, plus all operational costs

Usually

Full Service Lease: Tenant pays one flat fee for rent and owner pays for everything else including janitorial

Percentage Lease: Tenants rent is based is some part on the total sales revenue for the business using the space

Investment Characteristics

Every investment has certain characteristics which appeal to the investor who is considering its acquisition.

The Following are 8 Characteristics which are universal in investment decision making:

1) **Liquidity/Marketability:** Ability to convert investment to cash
2) **Leverage:** Ability to use borrowed funds to purchase investment
3) **Management:** Level of investor involvement in investment
4) **Taxation:** Tax consequences/benefits of investment
5) **Risk: A)** Purchasing Power, **B)** Financial **C)** Business **D)** Interest Rates
6) **Yield**
7) **Cash Flow:** Operations and Sale Profits
8) **Initial Investment:** Size does matter

Anatomy of RE Investments

Real Estate Appeals to Investors in three main categories

Leverage: Real Estate provides one of the best leverage opportunities in investing. Increases potential Yield, Reduces Initial Investment, and adds the most to the risk in real estate investing

Tax Positive: Provides the opportunity to earn tax sheltered cash flow as well as shelter personal income, Qualifies for capital gain treatment, allows tax free exchanging

Yield:

Cash Flow: Tenants pay mortgage, Cash on Cash Yield, Sale profits at End of investment.

Appreciation Potential: They aren't making anymore land

Investment Property Operations

There are five components to the operation of investment properties:

➢ **Income (Collecting the Rents)**

➢ **Expenses (Paying the Bills)**

➢ **Mortgage Obligations (Investor Specific)**

➢ **Taxes (pay taxes, save taxes)**

➢ **Sale (Profit or Loss)**

Income

Scheduled Gross Income

Less

Vacancy and Credit Loss

Equals

Effective Rental Income

Plus

Other Income

Equals

Gross Operating Income

Expenses

The following is a list of Expenses incurred in the operation of an investment property

- ➢ Accounting and Legal
- ➢ Advertising
- ➢ Insurance
- ➢ License and Permits
- ➢ Management
  - Offsite
  - Onsite
  - Payroll Taxes/Workers Comp
- ➢ Real Property Taxes
- ➢ Personal Property Taxes
- ➢ Repairs and Maintenance
- ➢ Supplies

- ➢ Contract Services
  - Landscaping
  - Pool
  - Janitorial
  - Pest Control
  - Elevator
  - other
- ➢ Utilities
  - Gas and Electric
  - Water
  - Sewer
  - Trash
- ➢ Miscellaneous

Net Operating Income

Net Operating Income is the first "Most important #" in Investment Real estate

Gross Operating Income

Less

Operating Expenses

Equals

Net Operating Income

Nature of Income and Expenses

Income is measured based on the type of use of the Tenant

$ per Unit	=	Residential
$ per Room	=	Residential
$ per Bed	=	Residential/Care
$ per Sq. Ft.	=	Retail, Office, Industrial
$ per revenue	=	Retail
$ per Door	=	Hotel, Care Facilities, Trucking

Expenses are paid based on the type of tenant use and lease

Residential	=	owner pays predominance of operating expenses
Office	=	Owners often pay all operational expenses
Industrial	=	Owner pays Taxes and Insurance
Retail	=	Tenants pay most if not all operating expenses

Park Place Apts. APOD

Snapshot Valuation W/APOD

Establish a Snapshot Valuation of Any Investment Property:

Financial Valuation Benchmarks

Gross Rent Multiplier	=	SP/SGI
Capitalization Rate	=	NOI/SP

Physical Valuation Benchmarks

Sale Price per Unit	=	SP/Unit
Sale Price per Room	=	SP/Room
Sale Price per Sq. Ft.	=	SP/Sq.Ft.
etc… (how do you collect rent?)	=	SP/…

Park Place Apartments Review

Sale Price	$1,650,000
Scheduled Gross Income (SGI)	$ 165,600
Net Operating Income (NOI)	$ 109,850
Gross Rent Multiplier (GRM)	9.96 ($1,650,000/$165,600)
Capitalization Rate	6.67% ($109,850/$1,650,000)
Total Units	12
Total Rooms	42
Sale Price Per Unit	$137,500 ($1,650,000/12)
Sale Price Per Room	$ 32,285 ($1,650,000/42)

Compounding

Investing Money Today

Money in the Future
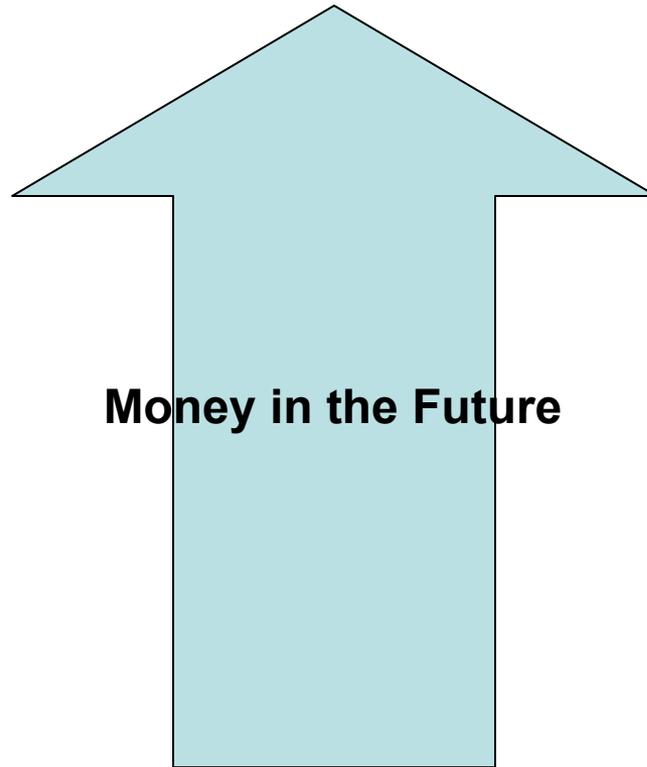
Discounting

What Will You Pay Today

Future Profits
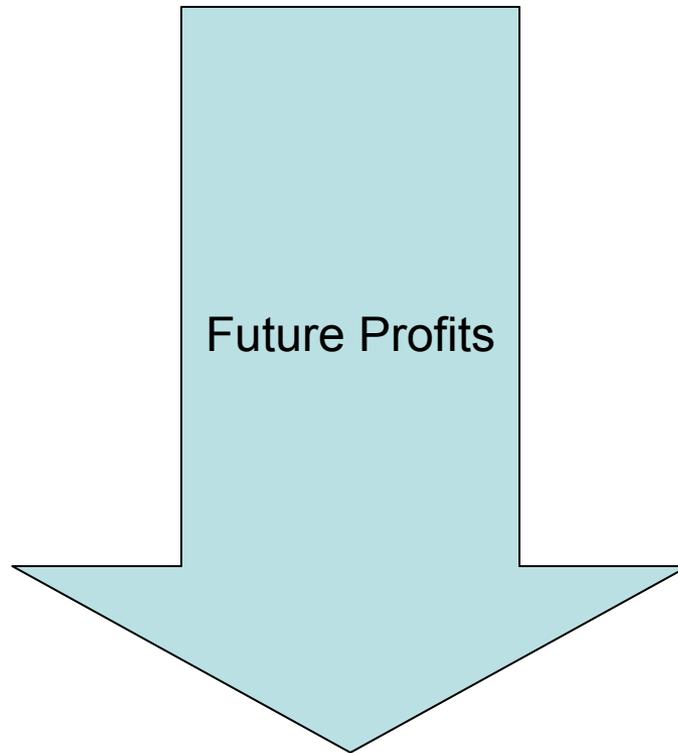
Compounding & Discounting

Five Basic Factors to Compounding and Discounting

n = # Of Periods (Time)

I = Interest Rate/Discount Rate

pv = Present Value (Money Today)

pmt = Periodic Payment/Periodic Investment

fv = Future Value (Money Later)

Compounding

There are Three Types of Compounding Equations

1)   Compounding a Single Investment

2)   Compounding an Annuity

3)   Sinking Fund Investment

Discounting

There are Three Types of Discounting Equations
(the opposite three of compounding)

1)   Discounting a single future value to a present value

2)   Discounting a future stream of payments into a single present value

3)   Calculating a stream of future payments which will amortize a present value

Compounding A Single Investment

Compounding a Single Annuity: Investing a single sum at a rate over a period of time. (e.g. If I invest $10,000 today @ 9.5% compounded annually for 10 years, what will this investment be worth at the end?)

n	=	10
I	=	9.5
pv	=	($10,000)
pmt	=	na
fv	=	?24,782.28

e.g. – Compounding a Single Investment

How much will I have in 5 years if I invest $50,000 @ 7.5% compounding Annually?
N=5
i=7.5%
PV= ($50,000)
pmt=na
fv= ?71,781.47

Same Problem compounded monthly

n=5x12=60
i=7.5 g I
pv=($50,000)
pmt=na
fv= ?72,664.72

What annual rate of interest must I earn in order to invest $10,000 today and have $25,000 10 years from today?
n= 10
i= ?9.5958
pv=($10,000)
pmt=na
fv=$25,000

How much if it's a monthly compounding opportunity?
i=9.198%

Compounding an Annuity

Compounding an Annuity: Investing a specific amount periodically, (monthly or annually) at a rate for a period of time. (e.g. If I invest $1,000 per year for the next ten years and I earn 9.5% interest, what will this investment be worth at the end?)

n=10

i=9.5%

pv=

pmt=($1,000)

fv= ?

e.g. Compounding an Annuity

How much will I have if I invest $500 per month earning 8% compounded monthly for five yrs:

n	=	60
I	=	8
pv	=	na
pmt	=	($500)
fv	=$36,738.43	

How much will it be if I invested $6,000 annually for five years @ 8%:$35,199.61

What interest rate must I earn in order to have $10,000 in an account in 10 years $750/year:

n	=	10
I	=	6.245%
pv	=	na
pmt	=	($750)
fv	=	$10,000

How about if I invested $62.50/month for 10 years:5.5572%

Sinking Fund Account

Compounding for a Sinking Fund: Investing a single amount or periodic payment into an account with a specific future goal/need. (e.g. I need $20,000 five years from today and I can earn an interest rate of 6% compounded annually. How much must I invest each year?)

n	=	5
I	=	6
pv	=	na
pmt	=	?(3,547.93)
fv	=	$20,000

e.g. Compounding a Sinking Fund

You buy an annuity which will grow to $100,000 40 years from today with a growth rate of 4.5%. How much will you need to invest annually?

n	=	40
I	=	4.5
pv	=	na
pmt	=	?(934.31)
fv	=	100,000

How much would you have to invest monthly? ($74.56)

You have $250 per month to invest and you must have $60,000 18 years from today. What rate of return must you earn?

n	=	216
I	=	1.156% pv
=	na	
pmt	=	($250)
fv	=	$60,000

Discounting a FV to a PV

Discounting a Future Value: Converting an amount of money to be received in the future into value today. (e.g. What is the value today for the right to receive $10,000, ten years from today, assuming a discount rate of 5.5%)

n	=	10
I	=	5.5%
pv	=	?
pmt	=	na
fv	=	$10,000

e.g. Discounting a Future Value

How much would you pay today for the right to receive $100,000 in twenty years assuming you required a 9.5% return?

n	=	20
I	=	9.5
pv	=	?
pmt	=	na
fv	=	100,000

How much would you pay if you required a 9.5% return compounded monthly?

If you paid $5,000 for the right to receive $12,000 in ten years what would your annual rate of return be?

n	=	10
I	=	
pv	=	($5,000)
pmt	=	na
fv	=	$12,000

What is your monthly rate of return on this investment?

e.g. Discounting a Future Stream of Payments

How much would you pay today for the right to receive $12,000 per year for the next 10 years if you require a 9% return annually?

n	=	10
I	=	9
pv	=	?
pmt	=	$12,000
fv	=	na

How much would you pay for $1,000 per month for 10 years with a 9% return compounded monthly?

Congratulations, you just won the CA state lottery you will receive $13,000,000. payable over 26 years, what is the cash value today assuming a 6% discount rate?

n	=	26
I	=	6
pv	=	?
pmt	=	$500,000
fv	=	0

Future Payments to Amortize a Present Value

Future Payments to Amortize a Present Value: Calculating the future payments necessary to amortize a present value is used most often in real estate (e.g. What are the annual payments necessary to payoff $100,000 in ten years assuming an interest rate of 8.5%?)

n	=	10
I	=	8.5%
pv	=	$100,000
pmt	=	?
fv	=	na

e.g. Amortization

What are the annual payments necessary to amortize a thirty year loan of $500,000 @ 5.25%?

n   =

I   =

pv   =

pmt   =

fv   =

What are the monthly payments for the same loan?

What is the interest rate on a loan of $650,000 with monthly payments of $3,000 over a thirty year term?

n   =

I   =

pv   =

pmt   =

fv   =

Sample Problems: Compounding and Discounting

➢ If property values increased at 10% per year and you paid $600,000 today what would it be worth in 5 years?

➢ How much would you have to invest monthly at an 8% annual return compounded monthly in order to have $60,000 in 5 years?

➢ If you invested $750 per month for the next thirty years at an 8.5% annual rate how much would you have at the end?

➢ What are the monthly payments necessary to amortize $100,000 over a thirty year term at 8.5%?

➢ If you have $2,250 per month available to pay for a home loan and the rates are 4% per annum for a thirty year term, How much can you borrow?

Sample Problems: Compounding and Discounting

➢ How much would you pay today for a note that pays you $5,000 per month for the next ten years plus $1,000,000 at the end to earn a 9% yield?

➢ How much would you have today if you found an old family savings passbook from 1805 (200 years ago) with a balance of $750 and an interest rate of 3.5%?

➢ If you invest $5,000 today and $500 per month for the next ten years then receive $500,000 at the end, what was your rate of return?

➢ How much would you pay for a cash flow of $10,000 per year for the next 5 years plus $50,000 at the end assuming you require a 12% return?

Investment Cash Flows

Year End	A	B	C	D	E
1	$1,627.45	0	$1,000	$1,000 each	0
2	$1,627.45	0	$1,000	Year in	0
3	$1,627.45	0	$1,000	Perpetuity	0
4	$1,627.45	0	$1,000		0
5	$1,627.45	$16,105.10	$1,000		0
6	$1,627.45	0	$1,000		0
7	$1,627.45	0	$1,000		0
8	$1,627.45	0	$1,000		0
9	$1,627.45	0	$1,000		0
10	$1,627.45	0	$11,000		$25,937.42
Total Receipts	$16,274.50	$16,105.10	$20,000		$25,937.42