

## 1 - Legal Concepts - ch. 1

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## **Supplemental**

- ▼ Statute of Frauds
  - ▼ dictate all real property agreements/transactions are in writing
- **▼** fee simple
  - ▼ right to own, use, possess

## **Big Ideas**

**▼** Estates: Land, Real Estate, Personal Property

## Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/c97a 5afb-9c2b-49b4-83b6-aea4ed001 de0/BASIC\_LEGAL\_CONCEPTS \_-\_Chapter\_1.pdf

#### ▼ Real Estate

- ▼ land and things "permanently" attached
- ▼ Real property
  - ▼ ownership rights for real estate (possession)
- ▼ fixtures
  - ▼ personal property that becomes "permanently attached" to the estate → becomes real property
- ▼ Life Estate
  - ▼ lasts for the life of the named person
- ▼ Future Estate
  - ▼ a <u>Remainder</u> interest lasts for remainder of time or life and is conveyed by 3rd party
  - ▼ or <u>Reversion</u> interest last for specified time or life then is reverted to specified party

## **▼** Property Rights: Own, Possess, Use

- ▼ Easement
  - ▼ right to use (no possession or ownership)
  - ▼ e.g. shared driveway property line dictates ownership/possession)

- ▼ Lease (Leasehold Estate)
  - ▼ property can be <u>leased</u> by a landlord to a tenant - gives right to posses (for time being) and use
  - ▼ > 1 yr must be in writing by statute of frauds
- ▼ Freehold Estate
  - ▼ Indefinite lease
- **▼** Title
  - ▼ determine ownership of real property (as stated in the deed)
- **▼** Deed
  - ▼ grants title from a Grantor to Grantee - only needs grantors/sellers signature
  - ▼ General Warranty Deed (strongest)
    - ▼ protects the buyer and ensures the seller has "free and clear" title to the property
    - ▼ protects the buyer from future claims against the title of the property
    - ▼ i.e. makes sure seller has good claim to the title of the property
  - ▼ Grant Deed

- ▼ gives buyer more protection than a quitclaim
- ▼ only needs grantors signature, but requires both parties' names and conditions/covenants
- ▼ Quitclaim Deed (weakest)
  - ▼ releases a person's interest in a property without stating warranties of that person's (owners) interests or rights in the property
  - ▼ the grantor (owner) gives up all ownership rights on the property stated n the deed
  - ▼ BUT it makes no guarantees that the seller actually has title to the property
  - ▼ usually used for non-sale transfers e.g. between family
- ▼ Security Interests (Mortgages)
  - ▼ Mortgage a Deed of Trust between borrower (truster, mortgagor) and a lender (beneficiary, mortgagee)
  - ▼ pledges Real Estate owned by the Borrower to secure repayment of a Loan

#### ▼ Recording Act

▼ statutory rules to resolve
Priority of claims relating to real
property → gives the public
constructive Notice of recorded
items (claims and property)

#### ▼ Abstract of Title

- ▼ a historical summary of the publicly recorded documents that affect a Title to aa Real Property
- **▼** Title insurance
  - ▼ assures title to real property
  - ▼ owner's policy
  - ▼ lender's policy (CLTA or ALTA
- ▼ Mechanic's Lien
  - ▼ recorded by unpaid contractors - to secure payment for work done to a real estate





## 2 - Notes and Mortgages - ch. 2

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## **Definitions**

- ▼ recourse and non-recourse loans
  - ▼ recourse allows lenders to pursue the borrower's other assets to compensate for the unpaid balance on a default
  - ▼ non-recourse allows lenders to only pursue the listed collateral for compensation
- ▼ reconveyance
  - ▼ lender returns security instrument (Deed of trust) so Title is clear and clean of any promises

## Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/b9f96 a16-1190-40e3-98cf-a589b49b33 4b/NOTES\_AND\_MORTGAGES\_ -\_Chapter\_2.pdf

## **Big Ideas**

#### **▼** Notes

- **▼** Promissory Note
  - ▼ documents a loan between borrower and lender
  - ▼ must include: parties, loan amount, interest rate, maturity date
  - ▼ usually includes clauses: amortization, assumability (due on sale), recourse/non-recourse, prepayment/lockout, assignment, default/acceleration
  - ▼ only borrower signs

## **▼** Mortgages

- ▼ Mortgage
  - ▼ 2-party security interest in real property secures repayment of a real estate loan given by borrower to a lender
- ▼ deed of trust
  - ▼ 3-party security interest secures a loan given by a borrower to an independent Trustee to secure repayment of the loan for the lender
  - ▼ borrower signs
- ▼ Senior vs Junior Mortgage

- ▼ determined by a state to determine priority of recording
- ▼ bypassed by a subordination clause
- ▼ construction loan
  - ▼ loan to construct a building/improvements
  - ▼ made against a maximum loan amount (Secured by mortgage/deed of trust against real property) usually with recourse to the developer
- ▼ purchase money loan made for a borrower to purchase real estate

## **▼** Mortgage Failures

- ▼ Default
  - ▼ failure to meet the conditions of the Loan/Mortgage
  - ▼ usually a failure to pay interest or principal on time
  - ▼ can lead to <u>acceleration</u> of the loan and a <u>foreclosure</u> of the property
  - ▼ usually will have a default rate of interest for time past the maturity date
- ▼ foreclosure
  - ▼ lender takes title to real property or forces a sale to

satisfy unpaid mortgage balance

- ▼ can be judicial or non-judicial, with a deed of trust
- ▼ junior mortgages are extinguished when a senior mortgage lender forecloses on a property
- ▼ but, debt secured by the junior mortgages is usually untouched
- ▼ deficiency judgement
  - ▼ a loan balance remaining after a judicial foreclosure sale
  - → can become personal judgment against the borrower if the loan is recourse
  - ▼ CA laws tend to protect borrowers from a deficiency judgment
- ▼ workouts and extension agreements
  - ▼ lenders negotiate with borrowers to extend Maturity date, increase amortization period, or temporarily reduce mortgage payments instead of permanently lowering interest rate or reducing the loan balance
  - ▼ preferred by lenders over foreclosures
- ▼ short sale

- ▼ lender allow sale of the property for less than the outstanding loan balance
- ▼ usually does not require borrower to pay the difference
- ▼ "taking the loss"
- ▼ bankruptcy
  - ▼ chapter 7 liquidation
  - ▼ chapter 11 reorganization
- ▼ acceleration
  - ▼ accelerates the date of maturity when payments are missed, etc.



#### SUMMARY



## 3 - Time Value of Money - ch. 3

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## **Definitions**

- ▼ Interest Rate (i), effective yield, and IRR (internal rate of return)
  - ▼ aa measure of the ROC (Return on capital) or Cost of Capital

## **Big Ideas**

## **▼** Compound Interest

- $\blacktriangledown (1+i)^n$
- lacktriangledown i is the periodic interest rate; n is the number of periods compunded
- **▼** Compounding (PV)

### Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/4181 2573-c0ee-4f15-95ea-975ebbeef4 90/TIME\_VALUE\_OF\_MONEY\_-Chapter\_3.pdf ▼ Getting FV from PV

$$FV = PV \cdot (1+i)^n$$

- **▼** Discounting (FV)
  - ▼ Getting PV from FV

$$PV = FV \div (1+i)^n$$

- **▼** Annuities (PMT)
  - ▼ Investments with constant future periodic payments
- **▼** Investment Metrics: NPV, IRR, Risk
  - **▼** Net Present Value (NPV)
    - ▼ Present value of all <u>projected</u>
      <u>future cash flows</u> discounted at a
      Discount Rate:
    - ▼ MINUS/LESS the cost of investment
  - ▼ Internal Rate of Return (IRR)
    - ▼ Discount rate at which:
    - ▼ PV of all <u>projected future cash</u>
      <u>flows</u> = cost of investment
  - **▼** Risk
    - ▼ a metric to determine whether expected return is worth the cost of capital in the perceived risk

## **SUMMARY**



## 4 - Fixed Rate Mortgage - ch. 4

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## **Definitions**

- **▼** point
  - ▼ a 1% charge on a loan usually used to collect payment up front
- ▼ monthly payments (PMT)
  - ▼ usually pay monthly interest + some principal (amortization)
- ▼ arm
  - ▼ adjustable rate mortgage
- ▼ debt service constant
  - ▼ rate of payment interest + amortization rates

## Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/df90a 7f7-def1-4b18-b0de-46e66fec946 4/FIXED\_RATE\_MORTGAGES\_-\_Chapter\_4.pdf

- when debt service constant =
   interest → interest only loan → PV
   = FV = loan amount
- ▼ CPM
  - ▼ constant payment loan pay
- ▼ annuity
  - ▼ a guaranteed payment to you accumulates over time
- ▼ free and clear
  - ▼ free and clear of debt
  - ▼ promissory note fulfilled
  - ▼ security instrument (deed of trust/mortgage) extinuished

## **Big Ideas**

#### **▼** Lecture

- ▼ Capital Markets
  - ▼ financial and securities markets - includes mortgage market
- ▼ loan availability
  - ▼ supply/cost of mortgage funds
     affected by economic growth
    (global, national, local),
    expected Inflation, and other
    Risks
- ▼ lenders as intermediaries

▼ most real estate lenders (mortgage providers, banks) sell their <u>loans</u> into the secondary mortgage market instead of holding loans to maturity

#### ▼ loan pricing

- ▼ interest rate, fees, points and costs charged by lender, and loan terms (e.g. prepayment penalties)
- ▼ real interest rate
  - ▼ nominal/contract interest rate MINUS expected inflation
- ▼ risk adjusted return
  - ▼ expected return relative to expected risk
- ▼ amortization
  - ▼ process of repaying the loan (principal) balance over time
- ▼ balloon payment
  - ▼ principal balance due on the maturity date
- ▼ pay rate vs. accrual rate
  - ▼ pay rate is true monthly payment made by a Borrower against the loan ≥ accrued interest due on the loan
- ▼ constant payment mortgage (CPM)

- ▼ when monthly payments are constant - loan is fully/partially/negative amortizing, or interest only
- ▼ constant amortizing mortgage (CAM)
  - ▼ when each monthly payment has constant amortization
     (principal payment) → monthly payment and interest accrued are decreasing → you pay less interest overall than CPM
- ▼ reverse annuity mortgage (RAM)
  - ▼ lender sends fixed monthly checks to borrower who pays back accumulated principal and accrued interest
  - ▼ targeted at seniors who have paid off their loans but cannot stay/afford to stay in the home
    → allows borrowers/owners to convert equity into periodic income/cash
  - ▼ the loan is to be repaid when the house is old, the borrower dies, or by heirs
- ▼ loan fees and costs
  - ▼ origination fees (for loan writing and processing), appraisal and credit report
  - ▼ loan fees and points increase the lender's yield (return)

- ▼ annual percentage rate (APR)
  - ▼ discloses effects of loan fee, points, and costs on residential loans (assuming held to maturity)
- ▼ truth-in-lending act
  - ▼ fred regulation Z requires lenders to include all fees, points, costs in APR (NOT prepayment penalties)
- ▼ prepayment penalties
  - ▼ increase the effective yield to lender subject to negotiation, not reflected in APR
- ▼ effective annual interest rate
  - ▼ calculation that considers all loan fees, points, costs, and any prepayment penalties actually paid
  - ightharpoonup only affected by time the loan is held until (full) repayment



#### SUMMARY



# 5 - Adjustable Rate Mortgage (ARM) - ch. 5

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## ▼ Supplemental

- ▼ adjustable rate mortgage
  - ▼ also called floating rate mortgage and variable rate mortgage
- **▼** SOFR
  - ▼ Secured Overnight Financing Rate
- **▼** LIBOR
  - ▼ London Interbank Offered rate
  - ▼ being replaced by SOFR

### Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/32f45 5f6-9a05-4eeb-99f1-552ea55e551 9/ADJUSTABLE\_RATE\_MORTGA GE\_LOANS - Chapter 5.pdf

- ▼ the worldwide standard for variable interest rate for ALL types of loans
- ▼ taken by survey of the bank offerings offered by London international banks

#### ▼ COFI

▼ 11th district Cost of Funds Index

#### **▼** Prime

- ▼ US prime index slow and high currently 8.00
- ▼ with good credit you could do "prime minus"
- ▼ loan assignment
  - ▼ lender (assignor) assigns rights to loan agreement to another lender (assignee)
- ▼ assumable vs "due on sale"
  - ▼ when house is sold, assumable allows the mortgage to be picked up by the new buyer
  - ▼ due on sale mortgage is due on sale of the home, new buyer needs new loan
- ▼ recourse vs non-recourse
  - ▼ recourse allows lenders to pursue borrowers other assets to pay off the loan balance

▼ non-recourse limits to the home itself and the listed collateral

#### ▼ lockout

▼ period of time which the loan cannot be repaid - prevents prepayment

#### ▼ net-funded

▼ when lender funds the seller, they will remove the point down payment so that it guarantees the borrower pays back the point (1%) immediately

#### **▼** Notes

- ▼ inderest rate changes
  - ▼ indexed to other market interest rates + margin
  - ▼ keeps lender's profit margin when indices change
- **▼** index
  - ▼ includes SOFR (instead of LIBOR), US treasuries, COFI, Prime
  - ▼ index can be any time interest rate time series
- ▼ margin
  - ▼ lender's profit margin (spread) over (above) the index
- ▼ composite rate

▼ index + margin - the composite interest rate on the loan

#### ▼ reset dates

▼ date when interest rate changes (usually every half or full year)

#### ▼ caps and floors

▼ max and min allowed periodic/lifetime adjustments to the interest rate or loan payment amount

#### ▼ loan terms

- ▼ generally the same as fixed rate loans but with interest rate changes
- ▼ include <u>assumable or is it</u>
  <u>"due on sale",</u> recourse or is it
  non-recourse, prepayment
  (premium) and lockout,
  assignment, default and
  acceleration

#### ▼ loan fees/costs

- ▼ same as fixed rate origination, points, costs charged to borrower to increase lender's margin
- ▼ interest only or amortizing
  - ▼ ARMs are usually fully amortizing, but can b interest only or partially amortizing

#### ▼ negative amortization

- ▼ unpaid interest is added to principal balance (unpaid)
- ▼ if loan payment < accrued interest (because of payment cap) → negative amortization
- ▼ interest rate caps don't cause negative amortization

#### ▼ teaser rate

▼ initial rate on the loan usually far blow composite rate

#### ▼ payment shock

▼ when interest rate adjusts to the current composite rat → new loan payment is >> than teaser rate

#### ▼ interest rate risk

- ▼ the higher the frequency of reset dates → more risk to borrower and less risk to lender
- ▼ due to ARM

#### ▼ default risk

- ▼ potential future rat increases
- → increase risk of borrower default on the loan

#### ▼ hybrid ARMs

▼ fixed rate for initial time period then become ARMs with annual interest rate reset dates

- ▼ 3/1, 5/1, 7/1, 10/1 → 3, 5, 7, 10 yr fixed then annual ARM
- ▼ conversion option
  - ▼ right of borrower to convert from ARM to fixed rate at future date
  - ▼ usually along with a fee

## **▼** Lecture

▼

## **▼** Textbook





## 6 - Additional Mortgages - ch. 6

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## **▼** Supplemental

- ▼ junior mortgage
  - ▼ secondary or more mortgages on a property
- ▼ seller financing
  - ▼ seller offers a loan and becoms the lender
- ▼ reg z
  - ▼ US regulaation z mandates lenders report APRs (rates that include interest and any and all feess other than prepayment penalties)

## ▼ Notes

## Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/7b37 2685-b842-49aa-bb82-8dc723227 74a/MORTGAGES\_-\_ADDITIONA L\_CONCEPTS\_-\_Chapter\_6.pdf ▼ loan-to-value ration (LTV)

$$LTV = \frac{Mortgage\ Debt}{Property\ Value\ or\ Price}$$

- ▼ markt value of a loan
  - ▼ present value of all expected future loan payments
  - ▼ i.e. all expected future payments of principal and interest
- ▼ home equity line of credit (HELOC)
  - ▼ can be secured by 1st, 2nd, or more junior mortgage
  - ▼ typically revolving a line of credit
  - ▼ i.e. collaterizing equity on the home to get a line of credit (like a property backed credit card)
- ▼ buydown loans
  - ▼ when a <u>seller</u> pays a **fee** to a <u>lender</u> to buy down the *interest* rate on a purchase money loan to motivate the buyer/borrower to acquire the property
  - ▼ amount paid to buy down the interesst rate << PV of the rduced loan payments due to the lower interest rate
  - ▼ i.e. the seller pays the buyer's lender in order for them to

- decrease the interest rate they offer to the borrower
- ▼ below market seller financing
  - ▼ when pricing of the Seller financing is less than th market pricing of available financing
  - ▼ often used to omprove the sale price of a property by a motivated seller
  - ▼ i.e. seller offers financing to the buyer directly on property at a lower rate than other lenders to motiaate the buyr to close on the deal
- ▼ wraparound loans
  - ▼ seller offers buyer a loan
  - ▼ the payments on this loan are used to pay of the seller'ss own loan on the same property
  - ▼ thus, does not work if the seller's loan is "due on sale"
  - ▼ usually used in slow markets and when the buyer has poor credit

	n	i	PV	PMT	FV
4	360	0.5000%	\$1,000,000.00	-\$5,995.51	\$0.00
3	360	0.5000%	\$500,000.00	-\$2,997.75	\$0.00
0	360	1.0000%	\$500,000.00	-\$5,143.06	\$0.00
)	360	0.4583%	\$500,000.00	-\$2,838.95	\$0.00
	360	0.5000%	\$473,512.22	-\$2,838.95	\$0.00
:	96	0.4583%	\$500,000.00	-\$2,838.95	-\$434,189.63
6	96	0.5001%	\$485,000.00	-\$2,838.95	-\$434,189.63
1	360	0.4167%	\$500,000.00	-\$2,684.11	\$0.00
	360	0.5000%	\$447,686.73	-\$2,684.11	\$0.00
	41	0.4167%	\$500,000.00	-\$2,684.11	-\$473,199.86
	41	0.4998%	\$485,000.00	-\$2,684,11	-\$473,199.86

## **▼** Lecture

▼ APR = Interest iff. no fees and points

## **▼** Discussion





## 7 - Income Producing Properties - ch. 9

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## **▼** Supplemental

## **▼** Notes

- ▼ commerical property
  - ▼ office, retail, apartment, industrial (shippng), hotel, mixed-use
- ▼ supply and demand analysis
  - ▼ used for valuation of properties and projected future rent and occupancy levels
  - ▼ global, national, and regional, and local factrs impact valuation

## Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/b0d6 296a-69ba-4ee3-be2a-6a494efb2 87c/INCOME\_PRODUCING\_PRO PERTIES\_-\_LEASES\_-\_Chapter\_ 9.pdf

#### ▼ location

- ▼ most imprtant factor in ral estat valuation
- ▼ occupancy / vacancy
  - ▼ occupancy = 100% vacancy %
  - ▼ vacancy i dtermined by supply and demand, location, quality and other

#### ▼ lease terms

- ▼ parties: lendors/lessor and tenants/lessee
- ▼ premises (cardinal location, square footage), terms (length), base rent, CPI increases percent rent, security depsits and guarantors
- ▼ allowabl use, insurance, maintenance, damage, property taxes, assignment, subletting, defaults, remedies
- ▼ subordination (tentant is subordinate to the lender before the landlord) and attornment (tenant respects new landloords), non-disturbance (lender is not allwedt odisturb tenant's property in a foreclosure)
- ▼ signage (tenant marketing, used for rent negtiation)

▼ right of first refusal (right to look first at. adjacent/additional space), expansion option and adjacnt space (right to rent oout additional space), notices, governing law

#### ▼ rental income

- ▼ flat base rent
- ▼ step-up rent
- ▼ CPI or indexed rent w/ caps and/or floors
- ▼ percentage rent with overage rnt. above a breakpoint

#### ▼ concessions

▼ free rent, rducd rent, tnant iimprovemnt allowaance (TI)

#### ▼ property expenses

- ▼ gross leaase (tenant pays no expenses) e.g. dorms
- ▼ modified gross leases (usually utilities) - e.g. residential apartments
- ▼ triple net lease (tenant pays all operating expenses: property taxes, insurance, repairs, maintenance, utilities) - e.g. commerical, industrial, retail

#### ▼ expense stop

▼ landlord pays property expenses per rentable square foot up to the expense stop

- ▼ tenant pays expenses over that stop
- ▼ usually used for medical and office buildings
- ▼ rentable vs usable square footage
  - ▼ rentable space usable space
     + tenant's pro rata hare of
     Building's cmmoon areass (and amenities)
- ▼ load factor



- ▼ parking
  - ▼ spots can be assigned to aa Tenant or pr thousand squar ft of rentd space
  - ▼ paarking charges can be included in rent or additional
- ▼ office leases
  - ▼ anchor tenants, signage, parking
  - ▼ expansion option, purchas option or right of first refusal
  - ▼ overloading, fross or net expnse stops
- ▼ retail leases
  - ▼ Anchor Tenants, Signage, Parking,
  - ▼ Co-Tenancy clause, Exclusivity, Radius clause,

Termination or Kick-Out rights,

- ▼ Operating Times, and CAM charges
- **▼** Lecture
- **▼** Discussion





## 8 - Valuation of Income Properties - ch. 10

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## **▼** Supplemental

## **▼** Lecture

- ▼ market value
  - ▼ price at which buyr and sller agree on at a particular time
- ▼ appraised. vaalue
  - ▼ an stimate or. opinion onproperty value for a particular purpose for a particular date, by an appraiser
- ▼ three methods of valuation:
  - ▼ Sales comparison

## Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/f6b45 147-cb59-4979-9920-09495098e6 32/VALUATION\_OF\_INCOME\_PR OPERTIES\_-\_APPRAISAL\_-\_Cha pter\_10.pdf

- ▼ compares recent sales of highly comparable properties similar in location, size, age, construction quality
- ▼ generally only method used for residential properties
- ▼ one of three used for commercial properties
- ▼ capitalization of income
  - ▼ gross rent multiplier (GRM)
    - ▼ annual rental income X gross rent multiplier = price (or value)
    - ▼ gross rent multiplier must bederived from the GRMs on sales of comparable properties
    - ▼ i.e. GRM = price / rental income (of comparable properties) then apply to subject property
    - ▼ simple method often used for apartment appraisal
  - ▼ capitalization of net operating income NOI
    - ▼ cap rate = NOI / Price (derived from

#### comparable sales)

- ▼ NOI / cap rate = price (or value)
- ▼ capitalization (cap)
  raate derived from
  recent sales of
  comparable proprties affected by market
  conditions
- ▼ falling interest rates→ lower cap rates andvv.
- ▼ increase in demand relative supply → lower cap rates and vv.
- ▼ Discounted present value (DCF) of projected future NOI
  - ▼ a 10yr cash flow model
  - ▼ dicount rate (or required internal rate of return) based on byer's assessment of risk of achieving projected NOI and projected future sale price
  - ▼ relative to current alternative investment and capital market benchmarks
- ▼ replacment cost

- ▼ sum of land value + depreciated replacment cost of improvements
- ▼ dpreeciation of building can com from physical deprciation, functional obsolescnce, and extrnal obsolescence (effects of others i.e. sewage plants nearby, train stations, etc)
- ▼ land value is derived from comparable sales analysis of similar land plots
- ▼ replacment cost is more reliable when improvements are relatively new
- ▼ may be vastly different from reality due to cost of time, unknown future market conditions on both properties and cost of materials to build a property
- ▼ i.e. find cost of a comparable land plot + cost to construct new property = price (or value)

#### ▼ land value

- ▼ a highest and best use analysis to determine value of particular land site
- ▼ regardless of whteher land is vacant or improved

▼ particular land plot may be worth more if the existing improvements are demolished and removed





# 9 - Investment Analysis - ch. 11

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## **▼** Supplemental

- ▼ cap rate is positive with interest
- ▼ price is negative with interest
- ▼ DSCR = NOI / debt service
- ▼ BTCF (before tax cash flow) = NOI - debt service
- ▼ Purchase price = NOI / Cap rate
- ▼ opex = max(expenses, expense stop)

#### **▼** Lecture

- ▼ investment benefits
  - ▼ cash flow post-tax

#### Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/ad74 03b5-d139-4f06-b893-ae6529346 6cb/8 - INVESTMENT\_ANALYSI S\_AND\_TAXATION\_OF\_INCOME PROPERTIES - Chapter\_11.pdf

- ▼ price appreciation
- ▼ diversification
- ▼ real estate cycle
  - ▼ growth and decline in rents, occupancy, value
  - ▼ industry os large and competitive with many owners and limited concentration of ownership
- ▼ investment strategies
  - ▼ risk/return focussd
    - ▼ core, value addded, or opportunitic
  - ▼ property type
    - ▼ office, retail, aapartment, hotel
  - ▼ Geographic focus
- ▼ market analysis
  - ▼ S/D analysis for property tupe and local market
  - ▼ local Absorption projection too forecast future occupany rates and rent levels
- ▼ leverage
  - ▼ use oof debt to aquire property
- ▼ loan to value ratio (LTV)
  - ▼ = mortgagge balance / property value

- ▼ debt servie coverage ratio (DSCR)
  - ▼ = annual NOI / mortgage payments
  - ▼ higher DSCR shows greateer ability for borrower to make payments
- ▼ Net operating income (NOI)
  - ▼ rent and other property income MINUS expenses
  - ▼ often capitalized to determine market value of a property
- ▼ before tax cash flow
  - ▼ = NOI DSCR capital expenditures (Cap Ex)
- ▼ affter tax cash flow
  - ▼ = before tax cash flow taxes
- ▼ taxable income
  - ▼ = NOI interest tax depreciation
- ▼ tax depreciation
  - ▼ amount of purchase price allocated to improvements, exlusive off land, is the depreciable cost basis
  - ▼ depreciable cost basis can be amortized as tax depreciation over 27.5 years for resideential and 39 years for non-residential
- ▼ mortgage interest deductuon

- ▼ interet portion of monthly payments is fully tax deductible for investment properties
- ▼ limited to primary and secondary homes to annual interest up to 750k of mortgagee debt
- ▼ unleveeraged returns vs Iveraged returns
  - ▼ IRR, ROE, and equity multipl due to mortgage financing are ddifferent
  - ▼ leveraged returns should be highr than unleveraged to account for additional risk from us of leverage





# 10 - Financial Leverage - ch. 12

Q course	MGMT 170
	ucla
created	@May 1, 2023 12:33 AM
<ul><li>updated</li></ul>	@June 15, 2023 10:08 AM
	MGMT 170: Real Estate Finance
Ø URL	
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## **▼** Supplemental

- ▼ debt servie coverage ratio(DSCR)
  - ▼ = annual NOI / mortgage payments
  - ▼ higher DSCR shows greateer ability for borrower to make payments

#### **▼** Lecture

- ▼ financial leverage
  - ▼ allows investors to use less equity to acquire an investment
     → potentially higher leveraged
     ROE

#### Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/a741 7adb-e616-4349-829b-0c06682f3 86b/9 - FINANCIAL\_LEVERAGE \_AND\_FINANCING\_ALTERNATIV ES - Chapter\_12.pdf

- allows tax deductibility on mortgage interest
- ▼ invetors might borrow at higher LTV (thus higher risk) to increase leveraged expected ROE
- ▼ positive and negative leverage
  - ▼ positive leverage: when ROE w/ debt > ROE w/o → implies higher LTV the higher the expected leveraged ROE
  - ▼ negatie is v.v. → higher LTV→ lower ecpected leveragedROE
- ▼ loan underwriting
  - ▼ LTV and DSCR aree key elements
  - ▼ max LTV and min. DSCR vary with mortgage market condition
  - ▼ lenders have lower risk w/ lower LTV and higher DSCR
- ▼ prepayment penalties, yield maintenance, loan lockout
  - ▼ mortgage loan terms thaat make it costly for a borrower to payoff or refi a loan before maturity
- ▼ interest-only loan
  - ▼ borrower pays only interest on the loan

- ▼ no principal amortization
- ▼ thus a balloon payment due at maturity → "bullet loan"
- ▼ negative amortizing loan
  - ▼ payment rate on a loan is less than accrual rate → negative amortization → loan balance increase
  - ▼ may be used when interest rates are very high
- ▼ participating loan
  - ▼ lender receives additional interest
  - ▼ based on a formula related to gross income, NOI, or cash flow
  - ▼ called participation or "equity kicker"
  - ▼ but lender has no onwership interest in the property
- ▼ convertible mortgage
  - ▼ lender ha the right to convert part or all of the loan principal to an ownershiop interest in the property at a specified time
- ▼ mezzanine loan
  - ▼ loan secured by owners
     equity in a property rather than
     by a mortgage on the property
  - ▼ usually requires inter-creditor agreement between mezzanine

lendder and first mortgage lender

- ▼ preferred equity
  - ▼ investment in ownership interest that is not a mortgage
  - ▼ with a preferred return that takes priority over other equity investors
- ▼ sale-leaseback
  - ▼ alternate mean of mentizing a property where sellr retains Use of property for the duration of the leas term
  - ▼ with a repurchase option in the leeas, seller may reacquir ownershup of the property in the future

## **▼** Discussion



**SUMMARY** 



## 11 - Risk Analysis - ch. 13

Q course	MGMT 170
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• tags	

## ▼ Supplemental

**▼** IRR

#### Resources

Internal Rate of Return (IRR) Rule: Definition and Example Internal Return The internal rate of return (IRR) is a metric used in captures://s3-u budgeting to estimate the return of potential investmerom/secui https://www.investopedia.com/terms/i/irr.asp 54d/9.2 - RISK ANALYSIS - Ch apter\_13.pdf

- The internal rate of return (IRR) is the annual rate of growth that an investment is expected to generate.
- · IRR is calculated using the same concept as net present value (NPV), except it sets the NPV equal to zero.
- The ultimate goal of IRR is to identify the rate of discount, which makes the present value of the sum of annual nominal cash inflows equal to the initial net cash outlay for the investment.
- . IRR is ideal for analyzing capital budgeting projects to understand and compare potential rates of annual return over time.
- In addition to being used by companies to determine which capital projects to use, IRR can help investors determine the investment return of various assets.

#### **▼** Lecture

- ▼ risk
  - ▼ higher the variability of expected returns → greater rik of an investment
- ▼ risk averse
  - ▼ investors generally require higher expected rturn for mor risk
- ▼ risk vs return
  - ▼ key investmnt consideration
  - ▼ IRR or projected NPV should be viewed w.r.t. risks associated
- ▼ investment risks
  - ▼ economic risk (all geo scales)
  - ▼ bussinesss risk, financial risk, internal rate risk, liquidity rik, inflation risk, managemnt risk
  - ▼ environmental risk, legislaativ risk, pandmic risk, etc.
- ▼ due diligence
  - ▼ process of identifying various risk and potential returns by evaluating all relevant information to determing if returns are worth the risk
  - ▼ market study, rent roll, major leasess, physical inpection, design and engineering, title and

survey, zoning and code compliance, taxes, insurance, litigation

#### ▼ senitivity analysis

- ▼ modifying key asumptions of future invetment performance (rent levels, CPI, occupancy, exit cap rate, sale timing) to check impact on IRR and equity multiple
- ▼ usually done in combination (two at a time)
- ▼ shows how ensitive expected reuturn is to changes in assunmptions

#### ▼ paritioning IRR

▼ determining portion of investment return that comes from annual cah flow and portion from sale or residual value





# 12 - Disposition and Renovation - ch. 14

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## **▼** Supplemental

#### **▼** Lecture

#### ▼ exit strategiees

- ▼ to realize increased equity value created from an appreciated property → owner may sell, exchange, or refi the propeerrty
- ▼ hold/sell analysis
  - ▼ analyze marginal rate of return from holdingg the properrty for an additional period

## Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/8aafd 997-1425-4959-8cb8-c937d853cdf 1/10\_-\_DISPOSITION\_AND\_REN OVATION\_OF\_INCOME\_PROPE RTIES\_-\_Chapter\_14.pdf of time ompared to sellingg the property

#### ▼ property sale

- ▼ sell for cah and pay off outstanding debt and pay all federal, state, local taxes on capital gain
- ▼ IRS form 1040 schedule D

#### ▼ installment sale

- ▼ sell on an installment sale basis receiving ale price over time and paying a proportional amount of the capital gains tax with each installment received
- ▼ amount of intallment sale income to be reported each year upon whih tax paid is a function of thee ratio between gross profit on the sale / contract price
- ▼ installment sale is a form of selller financing

#### ▼ section 1031 exchange

- ▼ trade the property for like kind property in a US Internal revenue code section 1031 exchangetransaction to defer taxes on any capital gains but with the exchange property having a substituted tax basis
- ▼ setion 1031 require exchange property must be identified within 45 days of prior sale close

and acquired within 180 days of the sale close

- ▼ unlike property acquired in a section 1031 is called Boot and subject to capital gains taxe on the sale
- ▼ Boot includess cash, peronal property, and any unlike real property received in the exchange
- **▼** IRS Form 8824

#### ▼ Refinancing

- ▼ replace an exiting loan with a new loan
- ▼ if you refi with a larger loan you pay NO tax on additional loan proceed
- ▼ if interet rates have fallen → might be posssible to refi w/ larger loan WHILE reducin annual borrowin cost → should conider point, appraisal fees, and other loan cost

#### ▼ renovation

▼ as an alternative to a ale, 1031 exchange, or refi: property may be held and renovated to increase rents, occupancy, and/or reduce operating cot → iincrease NOI → increae property value

- ▼ renovation cot, time, effort, and opportunity cost must be considered
- ▼ sale leaseback
  - ▼ alternate means of monetizing a property where seller retains use for duration oof lease term
  - ▼ with a repurchase option in the lease → seller may buyback the ownership in the future
  - ▼ now irrelevant due to FASB ASC 842: leases >1yr mut be reported on balance sheet not just expenses on income sheet





# 13 - Corporate Financing - ch. 15

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# **▼** Supplemental

## **▼** Lecture

- ▼ Lease vs Own analysis
  - ▼ factor include: space (Relative to property), time (short/long),
  - ▼ risk from owning, control and management, maintnance and special purpose,
  - ▼ tax benefits from depreciaton, cost of capital
  - ▼ impact on financial statements (now irrelevant due to ASC 842 of the FASB)
- ▼ residual value

#### Resources

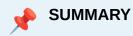
https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/97cf0 cb2-ad69-41e8-a398-b27659ec29 52/11 - FINANCING\_CORPORA TE\_REAL\_ESTATE - Chapter\_1 5.pdf

- ▼ proprty's projected future residual (exit) value
- ▼ usually not a decison factor forr corps
- ▼ company could negotiate a lease with an "equity kicker" or purchase option for future value
- ▼ corporate real estate financing
  - ▼ aacquiston of properrty can be fnanced with <u>mortgage debt</u> or unsecured <u>corporate</u> borrowing
  - ▼ mortage debt is usually preferred if its cheapeer than the company's borrowingg cost
  - ▼ corporate creditt desk has NO security instrument ONLY promissory note IF credit is good enough: B-BBB, A+
- ▼ capital lease
  - **▼** formerrly:
  - ▼ if a lease term exceeded 75% of an asset's remailing economic life
  - ▼ OR PV of future lease payment was the majorrity if the Property's FMV (future market value) at lease commencement (90%+)
  - ▼ OR if property ownership is likeely to be transferred to the

lessee upon expiration (purchase way option below FMV)

- ▼ THEN lease was trreated as a apital lease and reported ass if that part of the asset was owned by the lessee
- ▼ finance vs operating lease
  - ▼ under recent ASC 842 of the FASB: PV of all lease payments for leases > 1 yr mut be capitalized and reported on the balance sheet a right-of-ue aset and lease liability
  - ▼ and annuaal leae payments reported as an expense on income statement
  - ▼ if lease term ≤ 1yr lease paymentswill bereeported on the expense on income sstatement but not balance sheet
- ▼ sale-leaseback (previously)
  - ▼ company might sell a propeerty and simultaneouly lease it back on a long term basis to obtain cash while retaining use of property
  - ▼ might negotiate repurchase option into the lease
  - ▼ this (a sale leaseback) is doen so its written as an operating lease thus off balance

- sheeet financing (now not true due to ASC 842 of FASB)
- ▼ hidden corporate real estate value
  - ▼ companies required to report property values at the lower of depreciated cost or market value
  - ▼ can lead to publicly traded company to become an acquisition target (completely) if their properties' market value substantially exceeds reported depreciated book value





# 14 - Financing Project Development - ch. 16

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	ucla
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## ▼ Supplemental

- ▼ Apple acquiring HP land through real estate firm → apple park
- ▼ Disney acquiring disney world in florida using 40 separate buyers
- ▼ using fake or intermediary companies to buy up lan at a lower priice for a largeer corp is a completely legal

#### **▼** Lecture

- ▼ Projct development
  - ▼ acquiring a land site

#### Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/05c3 83c8-9dcc-4dad-a692-48857691a 7fa/12\_-\_FINANCING\_PROJECT \_DEVELOPMENT\_-\_Chapter\_16. pdf

- ▼ financing and construction of a building - ofice, apartments, etc.
- ▼ leasing and managing the property
- ▼ selling, eexchanging, or refi
- ▼ mixed use development
  - ▼ comboof real estate uses in a single project
- ▼ development decision factors
  - ▼ global, national, local economic forecast
  - ▼ supply and demand for space
  - ▼ competition from current and planned developments
  - ▼ capital markets financing cost and availability
- ▼ project feasability
  - ▼ feasability study → to forecast tenant ddemand, rent levels, consstruction costs, project timing, exit strategies & future sales price, risk eval
  - ▼ location is a key factor
- ▼ construction financing
  - ▼ covers hard (physical reources and related services) costs and soft costs (designs, legal stuff may include interest) of construction

- ▼ construction loans are disbursed in "draws" (disburse the loan only after pieces of construction are compleeted by the contractor) after costs are incurred
- ▼ typically recourse to th developer
- ▼ usually short term (maturing after construction completion)
- ▼ floating rate with construction intrest capitalized into the outstanding loan balance → negative amorrtizing → PV=0

  FV=balance+interest
- ▼ construction lenders want permannt lender (take out lender) in place to pay off and replace construction loan when contruction is completeed & leasing targets selected
- ▼ a permanent "stand by" lender is a permanent lendr who doesnt intend to actually fund their loan → just to collect fees from developer by paying off the construction loan
- ▼ project deevelopment issues
  - ▼ building issues: footprint, envelope (the exterior of the building enveloping th ebuilding), facade (all

perceivable exterior design), stacking plan (floors)

- ▼ traffic mitigation plans, property taxes
- ▼ permitting isues: zoning codes, building codes

#### ▼ permitting

- ▼ process of obtaining govt approval to permit the proposed project development
- ▼ project must comply with local zoning codes and building codes → or getting <u>Variance</u> → for a building permit
- ▼ permitting incolves negotiating with city planners and staff → ultimately negotiating with residents in the area

#### ▼ zoning codes

- ▼ allowable uses, maximum floor area ratio (FAR) how many floors/how dense, height restrictions, minimum lot size, minimum parking ratios, building setbacks (distance from other developments)
- ▼ zoniing codes specify what developments can be permitted r1-r5, c1-c3, m1-m3,...
- ▼ may include incentive zoning, inclusionary zoning, and/or cumulative zoning

#### ▼ building codes

- ▼ specify materials and approve method for construction → considers natural diasters CA earthquakes, FL hurricanes, South tornadoes
- ▼ city staff must approve architectural and engineering designs and specs for the project
- ▼ includes site plan, elevations, project renderings
- ▼ coode of compliance is enforced by city inspectors during contruction before a certificate of occupancy (c of o) issued by loal authority after project completion and compliance with building and zoning codes

### **▼** Discussion



#### SUMMARY



# 15 - Fincancing Land Development - ch. 17

Q course	MGMT 170
	ucla
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## ▼ Supplemental

- ▼ riskiest part of real estate financing
- ▼ lenders dont want to write loans (will try to give way low LTV <50% and recourse) bc the land is not income producing

#### **▼** Lecture

- ▼ land development
  - ▼ hiighly fragmented, competitive, and local business
- ▼ land acquisition

#### Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/388e 1c58-b3f2-4665-8334-b5e5a111cd c1/13\_-\_FINANCING\_LAND\_DEV ELOPMENT\_-\_Chapter\_17.pdf

- ▼ option agreements often used to give time to the land developer to pursue the Entitlement process
- ▼ periodoic option payments can be made over an extended time frame → if the developer exercises the option the option price for the land will be paid at closing the acquisition
- ▼ zoning and land use
  - ▼ city or county <u>land use plans</u> specify uses for each land parcel (may that be residential, commercial, industrial, agricultural, ...)
  - ▼ letter signifies use andd igit describees allowe denity (floors) e.g., R-1,R-2,R-3,...,A-1,A-2,A-3,...
  - ▼ local land use plans are usually updated every 5-10 years
  - ▼ zoning code can be revised whenever necessary
- ▼ entitlement process
  - ▼ process land developer uses to convince local authorities to convert <u>unentitled land</u> to entitled land to be <u>subdivided</u> and developed for particualr use/size (office, apartment, etc.)

▼ developing a project inconsistent with local zoning and land use requires a <u>variance</u> from local plannng authorities → otherwise will be demolished

#### ▼ land financing

- ▼ difficult to obtain → low LTVs <50% → recourse to borrower → tight conditions to aure repayment
- ▼ due to the risky nature of land
- → not income producing
- ▼ ususally implemented as a blanket mortgage → land dev needs to meet with lender to sell property covered by the loan

#### ▼ release schedule

- ▼ time frame lender expects individual land parcels in a dev. proj. to be sold according to release prices agreed to in the land loan contract → so loan will be repaid
- ▼ onsite improvements
  - ▼ land grading, internal paving, private streets, lighting, landscaping
- **▼** offsite improvements
  - ▼ public roads, street lighting, traffic lights, sewer line

extensions, parks and schools, etc





# 16 - Investment Structures - ch. 18

Q course	MGMT 170
	ucla
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## **▼** Supplemental

#### **▼** Lecture

- ▼ organizational forms
  - ▼ minimize taxes, limit liability, and define management roles in investments
  - ▼ partnerships, LLCs, and REITs are primary legal entities used to structure <u>acquisition and ownership</u> of investments
- ▼ pass through entities

#### Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/3225 2462-c890-4479-bf5b-46df79a9a6 aa/14\_-\_STRUCTURING\_REAL\_ ESTATE\_INVESTMENTS\_-\_Chap ter\_18.pdf

- ▼ do not pay taxes ddirectly, but pass on taxable income or loss to partners, members, or shareholders
- ▼ these members report their allocable share of taxable income or loss

#### ▼ partnerships

- ▼ either general partnership or limited partnership
- ▼ all partnerships are pass through entities and have finite life
- ▼ title to property owned by partnership will be in the name of the partnership
- ▼ in a general partneership, each GP bas decision making authority and unlimited liability
- ▼ a limited partnership must have at least one general partner who has decision making authority and unlimited liability
- ▼ Imtd partnerships can have any numper of LPs with nodecisonmaking authority and liability limitedto amount of their nvestment
- ▼ partnership interests are personal property and not eligible for 1031 exchange

- ▼ a partnership agreement governs agreements of the partners
- ▼ limted liability company LLCs
  - ▼ 1988 IRS approved LLC and 1994 california (46th) enacted LLC law
  - ▼ LLC investors are members and all members havee limited liability
  - CA: ≥ 1 is needed to form an LLC and have unlimited llife
  - ▼ LLCs managedby managing member or third party and can elect pass through status for tax and are governed by an operating agreement
- ▼ limited liability partnership LLP
  - ▼ CA: only professional orgs can be LLPs (law firms, etc.) → no LLPs for real estate investments
- ▼ corporations
  - ▼ legal entities owned by shareholders and managed by a board of directors
  - ▼ bave unlimited life and governed by articles of incorporation and bylaws
  - ▼ dual taxation (corporate "C" and shareholder "S" level)

makes "C" corps unattractive for property investments

- ▼ "S" corps have hareholder restrictions but can elect pass-through status
- ▼ joint venture
  - not a legal US entity → an agreement between ≥ 2 parties for an investment objective
  - ▼ typically nvolve apartenrshiip, LLC, or corp, or other legal entity
- ▼ syndcation
  - ▼ not a legal entity → a means of financing invessments
  - ▼ sells partnership/LLC inteerest in a project to public (Grant Cardone)
- ▼ capital account
  - ▼ accounting of an investor's share in net worth of an entity





# 17 - Secondary Mortgage Market - ch. 19, 20

Q course	MGMT 170
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## ▼ Supplemental

▼ FDIC (federal deposit insurance corporation) insures up to \$250k in a single account

#### **▼** Lecture

- ▼ fannie mae (NYSE:FNMA) and freddie mac (NYSE:FMCC)
  - ▼ fannie mae <u>federal national</u> <u>mortgage association</u>, created 1938, privatized 1968
  - ▼ freddie mac <u>federal home</u> <u>loan mortgage corporation</u>,

#### Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/2d63 ac8f-2292-49ee-9cf4-4098dcaede 71/15\_-\_SECONDARY\_MORTGA GE\_MARKET\_-\_Chapters\_19\_an d\_20.pdf created by <u>Emergency Home</u>
<u>Finance Act of 1970</u>, largest
buyers of home loans in the US

- ▼ HUGE companies together owning 50% of residential home loans and \$7 trillion in loans and securities
- ▼ during 2007-8 crisis, they nearly went bankrupt and were placed in conservatorship of the Federal Housing Finance
  Agency (FHFA housing an economic recovery act of 2008)

#### ▼ ginnie mae

- ▼ Government National Mortgagge Associate (HUD act of 1968)
- ▼ US govt corp within
   Department of Housing and
   Urban Development (HUD)
- ▼ ginnie mae guarantees mortgage backed securities
- ▼ conforming loans
  - ▼ mortgage loans that conform to fannie mae and freddie mac underwriting guidelines for:
  - ▼ loan size, creditworthiness (FICO), DSCR, LTV, and others
- ▼ non-conforming loans
  - ▼ mortgage loans that don't conform to the previous

## guidelines - at a time

- ▼ subprime loans
  - ▼ mortgages that fall BELOW the underwriting guidelines of fannie mae and freddie mac
  - ▼ in FICO, DSCR, LTV
  - ▼ NOT considering loan size
- ▼ seasoned mortgages
  - ▼ mortgages that have been paying monthly principal and interest on time
  - ▼ longer the payments stay current, the more seasoned it is
- ▼ RMBS and CMBS
  - ▼ residential mortgage backed securities and commerical mortgage backed secuirities
  - ▼ created when pools of resi or comm mortgages are <u>tranched</u> into securities for sale to investors in the capital markets
  - ▼ primary riskss are dfault risk and prepayment risk
- ▼ default risk
  - ▼ when <u>default rate</u> on the mortgages in the traunch of a MBS is <u>higher</u> than projected at time of MBS offering
- ▼ prepayment risk

▼ when <u>prepayment rate</u> on the mortgages in the traunch of a MBS is <u>higher</u> than projected at time of MBS offering

## **▼** CMOs

- ▼ collateralized mortgage obligations
- ▼ debt securities issued using a pool of mortgage loanss as collateral
- ▼ issuer retains ownership of the loans

#### **▼** CDOs

- ▼ collateralized debt obligations
- ▼ any debt can be collateral for the securities
- ▼ POs, IOs, and floaters and inverse floaters
  - ▼ principal only tranches, interest only traunches, and tranches tied to an index like LIBOR
  - ▼ unqiue securitiess creaated to appeal to different investors

## **▼** Discussion





# 18 - REITs - ch. 21

Q course	MGMT 170
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# **▼** Supplemental

## **▼** Lecture

#### ▼ REIT structure

- ▼ created by US congress in 1960 for small investors to invest in property markets wo paying corporate tax
- ▼ REITs provide liquidity, dividends, diversification, and prof management
- ▼ if a REIT follows the rules, it will not payu tax at entity level and tax will passthrough to shareholders for dividends (losses not pass through)

## Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/2b64 1f74-5936-43a0-aa2f-a8bd9495ae 03/16\_-\_REAL\_ESTATE\_INVEST MENT\_TRUSTS\_-\_Chapters\_21. pdf

18 - REITs - ch. 21

## ▼ types of REITs

- ▼ most are equity REITs that own properties - usually sing property type
- ▼ rest are Mortgage REITs that own mortgages and MBS - on either resi or commercial

## ▼ REIT qualifications

- ▼ managed by board of directors w at least 100 shareholders
- **▼** no more than 50% equity can be in  $\leq$  5 sharehjolders (5/50 rule)
- ▼ shares must be fully transferrable and either public or private

## ▼ distribution reqs

▼ ≥ 90% of taxable income must be distributed as dividends → else corporate tax applied

## ▼ asset reqs

- ▼ ≥ 75% of assets must be related to real estate, govt secs, or cash
- ▼ ≤ 20% can be in taxable REIT subsidiaries (TRS) authorized by 1999 REIT modernization act

## ▼ income reqs

18 - REITs - ch. 21 2

- ▼ ≥ 95% of gross income from real estate rents, profit on sale, mortgage interest, and dividends
- ▼ net asset value (NAV)
  - ▼ an accounting measure of REITs net worth - not true market value due to depreciated cost
  - ▼ if REIT's stock price reflects

    NAV more so than market value

    → may be prime takeover

    candidate
- **▼** funds from operation (FFO)
  - ▼ reit income is FFO = EPS adjusted by adding back depreciation and excluding profits from asset sales (only rent and interest)
  - ▼ a measure of dividend paying ability

#### **▼** UPREITS

- ▼ umbrella partnership reits issue operating partnership units (OP units) convertible into REIT shares ad allow REIT to buy appreciated properties w OP units instead of cash
- ▼ so sellers can achieve 1031 tax deferred exchange
- ▼ capital gains tax due when OP units transferred to REIT

18 - REITs - ch. 21 3

## shares

- **▼** REIT growth drivers
  - ▼ increase NOI from existing properties (increase rent and occupancy)
  - ▼ acquire more properties
  - ▼ renovate/expand existing or on new land
  - ▼ provide property services through TRS (taxable reit subsidiaries) - leasing, property management
  - ▼ financial engineering property debt or REIT corporate leverage

# **▼** Discussion



18 - REITs - ch. 21 4



# 19 - Portfolio Considerations - ch. 22

Q course	MGMT 170
	ucla
<ul><li>created</li></ul>	@June 7, 2023 11:02 AM
<ul><li>updated</li></ul>	@June 15, 2023 10:08 AM
	MGMT 170: Real Estate Finance
Ø URL	
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# **▼** Supplemental

- ▼ risk = volatlity of returns
- ▼ interest rate increase → property value down
- ▼ inflation inc → property value up
- ▼ inflation ince → interest rate increase (delayed, reactionary)

## **▼** Lecture

- ▼ risk vs return
  - ▼ investments w more risk should provide a higher expected return

## Resources

https://s3-us-west-2.amazonaws.c om/secure.notion-static.com/b687 c86a-31a1-4372-8d5f-777ad3610 c9e/17 - PORTFOLIO\_CONSIDE RATIONS - Chapters\_22.pdf

- ▼ beta is a measure of volatility of returns relatiive to a benchmark
- ▼ alpha is a measure of actual return relative to a benchmark GIVEN the level of risk
- **▼** property performance information
  - ▼ unlike stock and bond markets, real estate performance iinfo is scarce
  - ▼ Natiional Councl of Real Estate Investment Flduciaries (NCREIF) creates quarterly returns for Office, Retaiil, Apartmentm, Industrial, and Hotel property types → based on appraisal - imperfect market value
  - ▼ NCREIF index is unleveraged
  - ▼ REIT stock price performance is a proxy for certain types of real estate. performance → but also affected by non-real estate factors in market moves
- ▼ business risk
  - ▼ speciific to property type, location, and market. conditions
- ▼ default risk
  - ▼ properties are usually. leveraged → higher LTVs = higher default risk

## ▼ liquidity risk

▼ selling prooperty takes tim → real estate is an illiquid investment

#### ▼ diversification

▼ lower volatility of expected returns by diversifying risk through many investments

#### ▼ correlation coefficient

- ▼ measurees relative move. of one criteria to another
- ▼ +1 (positively. correlated), 0 (no correlation), -1 (negative corrlation)

## ▼ inflation hedge

- ▼ real estate is usually a good inflation hedge → positively corrlated with inflation
- ▼ when nflation inc. → property values go up

## ▼ portfolio diversiffication

- ▼ buying properties of diffferent types and loacations → greater diversification
- ▼ global diversification
  - ▼ increase variety of opportunities around the world gives diversification from correlation to US → may reduce protfolio risk

- ▼ foreign invetmnts have other risks
- ▼ foreign investmnt risks
  - **▼** information risk
  - ▼ legal and tax an riights risk
  - ▼ currency and iinterest rate risk
  - ▼ political risk
  - ▼ culture/communicaton risk

# **▼** Discussion



SUMMARY



# 20 - Excel Formulas

Q course	MGMT 170
	ucla
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# **▼** Supplemental

- ▼ REVIEW Q25 of Practce Final regarding FAR
- ▼ refi is tax free
- ▼ taking sale proceeds in installments reduces tax or may be tax free
- ightharpoonup rsing interest ightharpoonup inc cap rate ightharpoonup dec property value
- ▼ triple net pays everything but loan payments
- ▼ REIT must pay out at least 50% of proceeds

# Resources

1

- ▼ fannie mae and freddie mac own 50% of all american resi loaans
- ▼ commericial loan have prepayment penalities and lockouts while resi loans DO NOT have prepayment penalties

## **▼** Lecture

- ▼ =PMT
  - rate, nper, pv, fv, type
    - ▼ in monthly periods
    - ▼ use to find monthly payments
    - ▼ Debt Service is PMT for the period (annual)
- ▼ =RATE
- ▼ =PV
- ▼ =FV
- ▼ =CUMPRINC
  - ▼ use to find cumulative amortzation from start to end date
  - $\blacksquare$
- ▼ =CUMIPMT
  - ▼ finds cumulative interest paid between start and end date
- ▼ Cap Rate
  - ▼ = NOI / Purchase Price
- ▼ Debt Service
- ▼ DSCR

- ▼ = NOI / Debt Service
- ▼ = annual PMT / NOI
- **▼** NOI
  - ▼ = Income opex (possibly with expense stop)
- ▼ Depreciation
  - ▼ 27.5 years for Resi
  - ▼ 39 for Commercial
- ▼ taxable income
  - ▼ NOI interest pai depreciation
- **▼** BTCF (before tax cash flow)
  - ▼ NOI ddebt service
- **▼** FAR
  - ▼ floor to area ratio → determins number of floors as a multiple
  - ▼ i.e. if u have some square footage → multiply by FAR to get total over all floors

# **▼** Discussion



## SUMMARY

20 - Excel Formulas 3