

Real Estate Finance & Investment

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REA 631

Introductory Lecture



Real Estate Finance & Investment

REA631

Lecture 0 Orientation

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الأسبوع 1	أسبوع توجيهي
الأسبوع 2	محاضرة 1 + اختبار قصير + حلقة نقاش
الأسبوع 3	محاضرة 2 + اختبار قصير + حلقة نقاش
الأسبوع 4	محاضرة 3 + اختبار قصير + حلقة نقاش
الأسبوع 5	محاضرة 4 + اختبار قصير + حلقة نقاش
الأسبوع 6	محاضرة 5 + اختبار قصير + حلقة نقاش
الأسبوع 7	محاضرة 6 + اختبار قصير + حلقة نقاش
الأسبوع 8	محاضرة 7 + اختبار قصير + حلقة نقاش
الأسبوع 9	محاضرة 8 + اختبار قصير + حلقة نقاش
الأسبوع 10	محاضرة 9 + اختبار قصير + حلقة نقاش
الأسبوع 11	محاضرة 10 + اختبار قصير + حلقة نقاش
الأسبوع 12	حلقة نقاش
الأسبوع 13	الاختبارات النهائية

Quizzes & Exams

○ أسئلة الاختبار الفصلي / MCQ / True-False / أسئلة صوتية

○ تعد الإجابة على الاختبار بمثابة الحضور للطلاب

○ درجة الاختبار القصير ٨ درجات / ٨ أسئلة (اجمالي ٨٠ درجة)

○ فترة عقد الاختبار القصير / ٣٠ دقيقة

Quizzes & Exams

○ الاختبار النهائي سيكون من خلال المودل

○ أسئلة الاختبار النهائي / MCQ / True-False / أسئلة صوتية

○ درجة الاختبار النهائي ٢٠ درجة / ٢٠ سؤال

○ فترة عقد الاختبار النهائي / ٦٠ دقيقة

الأعمال	توزيع الدرجات - 100%
محاضرة مسجلة أسبوعيًا - السبت من كل أسبوع	حضور المحاضرة - حل الأسئلة المصاحبة
اختبار قصير مصاحب للمحاضرة بشكل أسبوعي	8 درجات لكل اختبار قصير - بمجموع 80 %
حلقة نقاش افتراضية أسبوعية لمناقشة محتوى المحاضرة المسجلة.	الحضور اختياري
الاختبار النهائي	20%

- يتم احتساب الغياب من خلال حل الطالب للاختبار القصير المصاحب للمحاضرة الأسبوعية. وإذا تغيب الطالب 4 اختبارات قصيرة يعتبر الطالب في هذه الحالة حرمان.
- آخر موعد للاعتذار عن أي اختبار قصير يكون قبل إغلاق موعد الاختبار مع إرفاق دليل تثبته لأي أعذار قهرية أو مرضية عبر نموذج الاعتذار عن اختبار قصير عبر منصة (SIS).
- آخر موعد للاعتذار عن الاختبار النهائي يكون قبل موعد عقد الاختبار مع إرفاق الدليل الثبوتية لأي عذر قهري أو طبي، عبر نموذج الاعتذار عن اختبار نهائي عبر منصة (SIS).
- ولن يتم احتساب أي أعذار بعد نهاية الموعد.
- يحق للإدارة الجامعية مراعاة بعض الظروف القهرية.

What You Will Learn in This Course

01



FOUNDATIONS

- Real estate markets
- Investment principles
- Time value of money

02



ANALYSIS

- Valuation methods
- NPV, IRR, payback
- Sensitivity & risk

03



FINANCE

- Mortgages & mezzanine
- Capital structure
- REITs & securitization

04



PRACTICE

- Development feasibility
- Project financing
- Live case studies

Real Estate Markets & Investment Principles

Real estate is a unique asset class — illiquid, locally driven, and shaped by both space markets (rent, vacancy) and capital markets (yields, financing). Understanding how these two markets interact is the foundation of every investment decision you will make.

KEY CONCEPTS

- The Four Quadrants: private vs. public × debt vs. equity
- Property cycles: recovery, expansion, hyper-supply, recession
- Location theory, demand drivers, supply elasticity
- Risk–return profile across core, value-add, opportunistic

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THE FOUR QUADRANTS

Private Equity

Direct ownership,
partnerships

Public Equity

REITs, listed real
estate

Private Debt

Whole loans,
mezzanine

Public Debt

CMBS, mortgage
bonds

Time Value of Money & Financial Mathematics

A dollar today is worth more than a dollar tomorrow. Every valuation, every investment decision, and every loan calculation in this course rests on this single idea.

Future Value

$$FV = PV \times (1 + r)^n$$

Compounding: today's money grown forward

Present Value

$$PV = FV / (1 + r)^n$$

Discounting: tomorrow's money valued today

Annuity (PV)

$$PV = PMT \times [1 - (1+r)^{-n}] / r$$

Mortgage payments, lease streams

Effective Rate

$$EAR = (1 + r/m)^m - 1$$

Compounding frequency adjustment

Real Estate Valuation — Three Approaches



Sales Comparison

What did similar properties sell for?

Adjusts recent comparable transactions for differences in location, size, condition, and timing. Most reliable in active markets.



Income Capitalization

What income will it generate?

Value = NOI ÷ Cap Rate. The DCF refinement projects future cash flows and discounts them at the required return.



Cost Approach

What would it cost to replace?

Land value + replacement cost – depreciation. Useful for new, special-purpose, or insurance-related valuations.

Investment Analysis & Decision Criteria

Which deal should we do? You will learn to defend an answer using four complementary tools — each one revealing a different facet of the same cash flow.

NPV

Net Present Value

Dollar value created.
Accept if $NPV > 0$.

IRR

Internal Rate of Return

The return implied by the
deal's own cash flows.
Accept if $IRR > \text{hurdle}$.

PB

Payback Period

How quickly the initial
equity is recovered. A
liquidity and risk lens.

SA

Sensitivity Analysis

How the answer changes
when rents, vacancy, or
rates move against you.

Financing Instruments — The Capital Stack

HIGHER
RISK
&
RETURN

Common Equity	15–25%+ target IRR
Preferred Equity	10–14%
Mezzanine Debt	9–13%
Senior Mortgage	5–7%

LOWER
RISK
&
RETURN

THE CAPITAL STACK

Who gets paid first, who takes the risk.

Senior debt is paid first and bears the least risk , but takes the lowest return.

Mezzanine and preferred equity fill the gap between cheap debt and expensive common equity.

Common equity takes the residual risk , and the upside. The whole structure is the lever that transforms *asset-level returns* into *equity-level returns*.

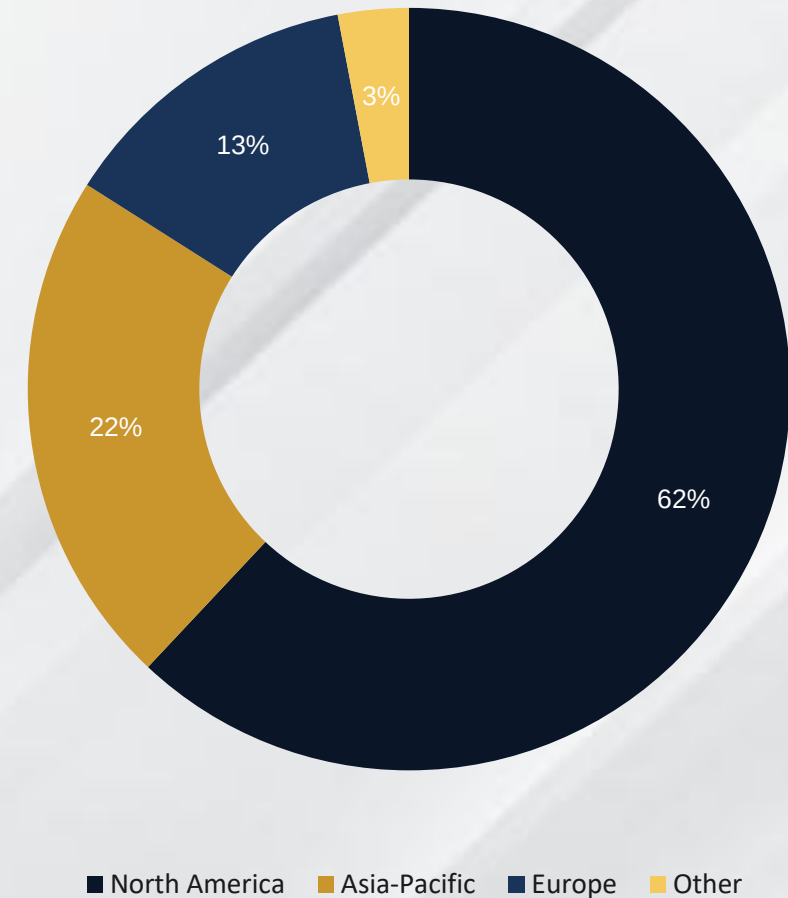
Capital Markets & REITs

REITs democratised real estate — turning illiquid buildings into liquid shares. They now trade in 40+ countries and own over \$4.5 trillion of gross real estate assets globally.

WHY REITs MATTER

- Liquid exposure to large, diversified property portfolios
- Tax-advantaged structure: 90%+ of income distributed as dividends
- Low correlation to stocks/bonds → portfolio diversifier
- Securitization: CMBS, MBS, and tokenised real estate

Global REIT Market Share (illustrative)



Risk Analysis & Portfolio Diversification

THE RISKS WE PRICE

Market risk — rents, vacancy, cap-rate movement

Credit risk — tenant default, refinancing

Liquidity risk — exit timing in a frozen market

Operational risk — management, capex, insurance

Political & legal risk — regulation, expropriation, tax

Currency & inflation risk — cross-border exposure

DIVERSIFICATION

Don't put all your buildings in one city.

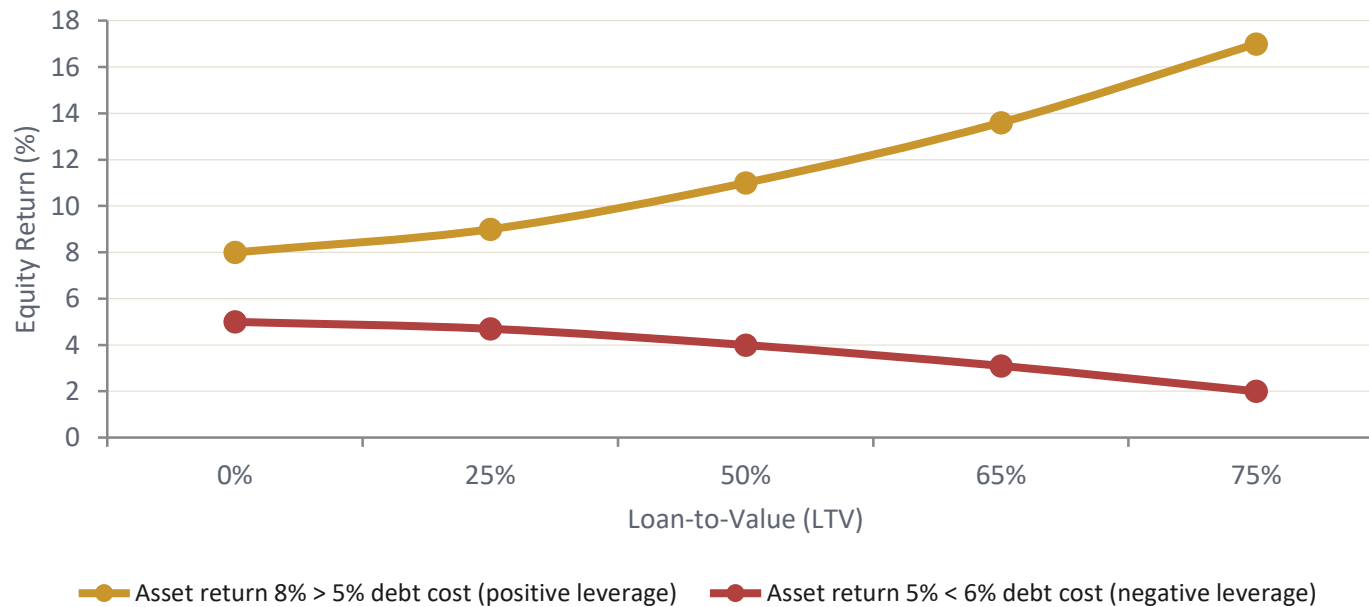
Diversify across:

- Property types
(office, industrial, residential, hospitality, data centres)
- Geographies
(cities, countries, currencies)
- Time vintages
(deploy capital through cycles, not at peaks)

Leverage, Capital Structure & Cost of Capital

Leverage amplifies returns — in both directions. The art is choosing the level of debt that maximises risk-adjusted equity returns without exposing you to refinancing or rate shocks.

Leverage Cuts Both Ways



THE WACC EQUATION

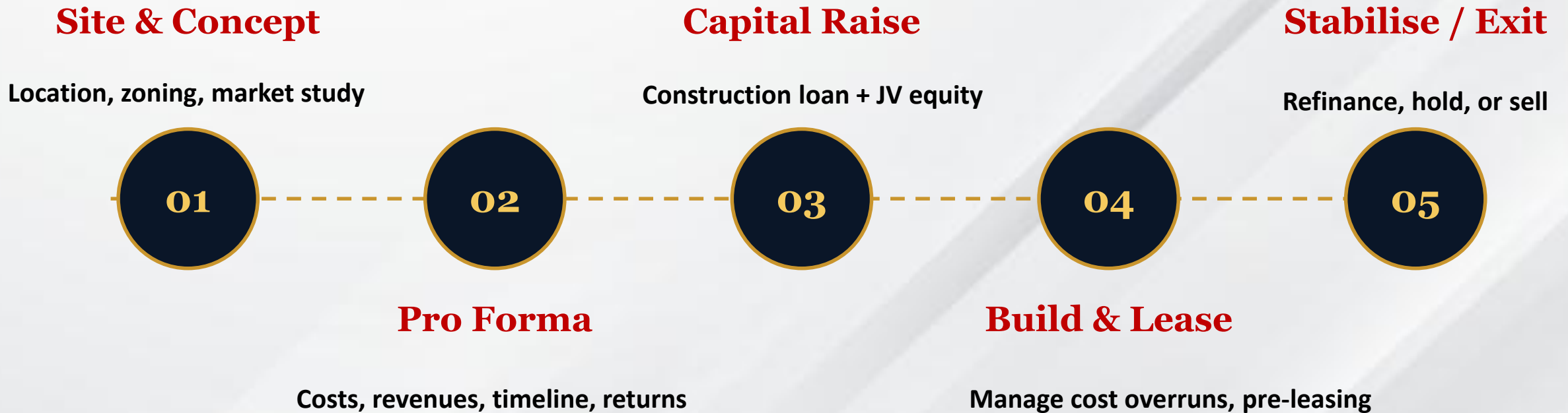
$$WACC = (E/V) \cdot r_e + (D/V) \cdot r_d \cdot (1-T)$$

Your hurdle rate.

Every deal you underwrite must clear it.

We will compute it, stress-test it, and use it to judge whether a project creates or destroys value.

Development Feasibility & Project Financing



REITs & Real Estate Securitization

1,021

Listed REITs worldwide (Nareit,
2024)

\$2.04 T

Combined REIT equity market
cap

40+

Countries with active REIT
regimes

\$4.5 T

Gross real estate assets
owned

FROM BUILDINGS TO BONDS

Securitization turns illiquid property cash flows into tradeable securities.

We will study how loans become CMBS, how REIT shares price properties daily, and how emerging tokenisation platforms (e.g. fractional ownership and on-chain real estate) are extending this logic further. ***Liquidity changes risk — and risk drives price.***

Topics to Be Covered

- | | | | |
|-----------|---|-----------|---|
| 01 | Overview of Real Estate Markets and Investment Principles | 07 | Tax Implications and Legal Considerations in Real Estate Investment |
| 02 | Time Value of Money and Financial Mathematics | 08 | Risk Analysis and Portfolio Diversification |
| 03 | Real Estate Valuation Techniques (Sales Comparison, Income Capitalization, Cost Approach) | 09 | Leverage, Capital Structure, and Cost of Capital |
| 04 | Investment Analysis and Decision Criteria (NPV, IRR, Payback, Sensitivity Analysis) | 10 | Development Feasibility and Project Financing |
| 05 | Real Estate Financing Instruments (Mortgages, Mezzanine Debt, Equity) | 11 | Real Estate Investment Trusts (REITs) and Securitization |
| 06 | Real Estate Capital Markets and REITs | 12 | Case Studies in Property Acquisition and Development Financing |



Markets will rise and fall.



Rates will tighten and loosen.



**Capital will flow toward courage
and away from carelessness.**



**This course gives you the tools
to read those cycles and the
judgement to act on them.**





Thank You