

RE 618 / Fin 618 – Real Estate Investment Analysis Introduction to Leases Lecture Notes

1) Real Estate Leases

NOTE: There is an excellent discussion of general lease terms in Concept Boxes 9.1, 9.2, 9.3 and 9.4 in your text. *You will be responsible for all of the material contained in these boxes, even if we do not discuss it in class.*

2) Common Lease Jargon (see handout in *Downloads* section of the website)

a) Rent

- Base rent
 - Commercial - \$ psf per year
 - Residential - \$ per unit per month
\$ psf per month
- Asking rent
- Contract rent
- Market rent

b) Rent adjustments

• Indexed leases

- Base rent adjusts periodically based on some outside index

• Step leases

- Specific rent changes are written into the lease.

• Percentage leases and overage rent

- Lease payment depends on tenant's sales.
- Breakpoint
Level of sales above which % rent kicks in.
- Natural breakpoint

- Example: Suppose a lease for a 2,500 square foot store specifies base rent of \$12 psf and percentage rent of 6% of sales above the natural breakpoint. What is the natural breakpoint?

$$\text{Base rent} = 2,500 \times \$12 = \$30,000$$

$$\frac{30,000}{0.06} = \boxed{\$500,000 \text{ in sales}}$$

If total sales in a year are \$600,000, how much total rent will the tenant pay?

$$\begin{aligned} & \$30,000 + (600,000 - 500,000) \times 0.06 \\ & = \$36,000 \end{aligned}$$

If the contract specifies a breakpoint of \$400,000, how much total rent will the tenant pay?

$$\begin{aligned} & 30,000 + (600,000 - 400,000) \times 0.06 \\ & = \$42,000 \end{aligned}$$

c) Expense Allocations

- Gross (full-service) lease - Landlord pays all op. exp. - Prop. Taxes, Ins., Utilities, maintenance, etc.
- Net (hybrid) lease
 - Tenant pays.
 - Double-net lease
 - Triple-net (absolutely-net) lease

- Expense stops

↳ Limit the landlord's OE commitment

- Common area maintenance (CAM) charges

Example - Suppose a shopping center has 750,000 square feet of rentable area, of which 300,000 square feet is occupied by anchor tenants. Total CAM expenses for a given year are \$4.125 million. The anchor tenants have negotiated to pay CAM charges of \$3 psf. What will be the CAM charge for the in-line tenants?

$$\text{Total CAM} = 4,125,000 - 3 \times 300,000 = \$3,225,000$$

$$\text{In line SF} = 750,000 - 300,000 = 450,000$$

$$\text{CAM}_S = 3,225,000 / 450,000 = \$7.17 \text{ psf.}$$

d) Other Common Lease Terms

- Rent Concessions
- Tenant improvements

3) Building Measurement Terms – The terms outlining how office space is measured are based on standardized definitions created by the Building Owners and Managers Association (BOMA). More information can be obtained from their web site at <http://www.boma.org>.

a) Gross building area – Also known as gross measured area or gross square feet.

- used in const. + development.

b) Total rentable area – Also known as gross leasable area or rentable square feet.

c) Usable area – Also known as office area or usable square feet.

- Enclosed area used exclusively by the tenant.

d) Common areas

e) Load factor – Also known as the add-on factor or the common area factor.

- Floor load factor

Example: Suppose four tenants in a building share the fifth floor that has a total rentable area of 27,000 square feet. Tenant A occupies 10,000 square feet of usable area, while Tenants B, C & D each have 5,000 square feet of usable area. What is the load factor for this floor?

$$\text{Usable} = 10,000 + 3 \times 5,000 = 25,000 \text{ sf}$$

$$\text{Common} = 2,000 \text{ sf.}$$

$$LF = \frac{\text{Rentable}}{\text{Usable}} = \frac{27}{25} = 1.08$$

- Building load factor

Example: Suppose that the total rentable space in this building is 165,000 square feet, of which 15,000 square feet are *building* common areas. (In other words, if one tenant were leasing the entire building, it would lease 165,000 square feet.) What is the building load factor?

$$\begin{aligned} \text{Usable in bldg} &= \text{Rentable} - \text{Common} \\ &= 165,000 - 15,000 = 150,000 \end{aligned}$$

What is the total load factor for a tenant on the fifth floor of this building?

$$LF = \frac{165}{150} = 1.1$$

What is the total rentable area for Tenant B?

$$\begin{aligned} \text{TLF} &= 1.08 \times 1.10 = 1.188 \\ &\quad \text{Floor Bldg.} \end{aligned}$$

$$\text{Rentable Area} = 5000 \times 1.188 = 5,940$$

- Efficiency percentage

What is the efficiency percentage for the building in the example above?

$$EP = \frac{1}{LF} = \frac{1}{1.188} = 84\%$$

- 4) Effective Rents – Given the way leases can change over time, how do you determine which lease generates the most income for the owner or the lowest total payment for a tenant?
- Calculating the average rent over the life of the lease ignores the timing of the rent payments.
 - The “effective rent” is the level annuity that provides the same discounted value as the actual lease cash flows.

Steps for calculating effective rent:

- Calculate actual CFs each year.
- Calc. the PV of these CFs
- Calc. the PMT assoc. w/ this PV

Make sure you work through the example in the book carefully (pp. 263-266).

Problem 4 on Homework

Total sf = 2.8 m

Anchor sf = 800,000

In-line sf 2,000,000

$$\begin{array}{r} 2,800,000 \\ 800,000 \\ \hline 1,300,000 \\ 700,000 \text{ SF} \\ \text{common} \end{array}$$

$$\text{Anchor CAM} = 800,000 \times 2 = 1,600,000$$

$$\text{In-line CAM} = 700,000 \times 8 = 5,600,000$$

$$\begin{array}{r} 1,600,000 \\ \hline 4,000,000 \end{array}$$

to in-line

$$\text{CAM psf} = \frac{4,000,000}{1,300,000} = \$3.08 \text{ psf}$$

c) Example: A tenant would like to lease 8,000 sf of space for five years. Operating expenses for this space are expected to cost \$2.00 psf in the first year; these expenses are expected to increase at the same rate as overall inflation (3 percent). Assume a 10 percent discount rate.

Consider the choice among three different lease alternatives:

- Net lease with base rent of \$22.00 psf each year.

Year	Rent	O/E	Total Tenant Cost
1	22	2.00	24.00
2	22	2.06	24.06
3	22	2.12	24.12
4	22	2.19	24.19
5	22	2.25	24.25

Effective rent to landlord = \$22 psf

PV = 91.40
 \Rightarrow PMT = \$24.11

Effective cost to tenant =
 \$24.11

- Gross lease with steps. Base rent will be \$22.00 psf in the first year, increasing by \$1 psf each year.

Year	Rent	O/E	Net to L.L.
1	22	2.00	20.00
2	23	2.06	20.94
3	24	2.12	21.88
4	25	2.19	22.81
5	26	2.25	23.75

Effective rent to landlord = \$21.70

PV @ 10% = 82.25

Effective cost to tenant = \$23.81
 CF worksheet:

L1	} \Rightarrow PV @ 10% = \$90.26
22	
23	
24	
25	
26	

$PV = 90.26, N = 5, PMY = 1, FV = 0, I = 10$
 $\Rightarrow PMT = 23.81$

For Option 1 on previous pg.

- Input CFs into my CF worksheet
- Use NPV function w/ $I=10$ to solve for PV.

→ Recall $NPV = PV - CF_0$

$$NPV = PV \overset{0}{\underset{0}{\parallel}}$$

- Put that PV into the PV key in my TVM solver:

$$PV = 91.40, I = 10, P/Y = 1, N = 5$$

$$FV = 0 \Rightarrow PMT = -24.11$$

- Gross lease with CPI adjustment. Base rent is \$23.50 per year, increasing at the same rate as overall inflation rate in future years.

<u>Year</u>	<u>Rent</u>
1	23.50
2	24.21
3	24.93
4	25.68
5	26.45

Effective rent to landlord =

\$ 22.70

Effective cost to tenant = \$24.81

- Which option would you choose if you were the landlord? Why?
- Which option would you choose if you were the tenant? Why?