

# Real Estate Private Equity 101

- **Purpose:** Just like with normal PE firms and LBOs... use debt and equity to acquire a property, grow it over time, and then sell it
- That same **housing analogy** applies... but here, it really is a house we're buying!
- **But...** the modeling itself might be much *simpler*, or possibly more *complex*



# This Tutorial

- **Part 1:** The Types of RE PE Case Studies
- **Part 2:** This Case Study and What Makes It Tricky
- **Part 3:** Why Excel is *Horrible* for This Case Study
- **Part 4:** The Model and Returns Analysis
- **Part 5:** The Investment Recommendation



# Three Types of RE PE Cases

- **Value-Add:** Improve rents, occupancy rates, or renewal rates / tenant quality



# Three Types of RE PE Cases

- **Key Question:** How much is the property *changing*?

Figure 1: Risk/Return Styles



# Modeling Complexity

- **Key Questions:** How granular is it (individual tenants and leases), and how much is the property changing?
- **Easiest:** Stabilized property with hundreds of tenants, not changing at all over time
- **Most Difficult:** Office or retail complex with 10 tenants with different lease terms, changing significantly over time



# This Case Study

- **Property:** Class-B Office in Boston (45 Milk Street) with some problems
- **Question:** Should we pay \$18 million to acquire it and \$2 million to renovate it if we're targeting a 5-year 15% IRR and 2.0x multiple?
- **Other Terms:** Spelled out in the document – Base Case, Downside Case, and Upside Case with different rent/occupancy/expense figures



# What's Wrong with This Property?

- **Problem #1:** Class-B Office with a 26% vacancy rate... in Downtown Boston?!! (Typically 10-12%)



- **Problem #2:** Many tenants leasing at below-market rates (e.g., \$35 PSF rather than \$38)



- **Problem #3:** In need of more significant renovation



- **Solution:** Acquire the property, renovate it, get new tenants, raise rent, and sell it for fun and profit!

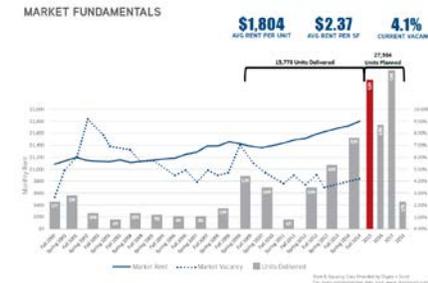


# This Case – Typical Value-Added Scenario

- **Purpose:** Unlike the Core / Stabilized case, this one's far more about getting *the calculations* right



- **Market Data:** Still plays a role, but more to *confirm* numbers than to forecast trends

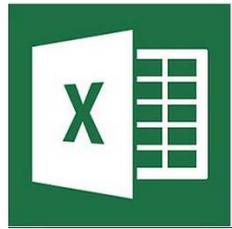


- **Prerequisites:** Must be good with Excel (IF, OFFSET, INDEX/MATCH, EOMONTH, etc.) and finance / RE fundamentals (waterfalls, debt, etc.)



# What's Tricky About This Case...

- **Trick:** Lots of detailed tenant mix information... and now you do need it!
- **But:** Complex Excel Formulas for Free Months of Rent, Leasing Commissions, and even Debt
- **So:** Spend some time on market data, but mostly pay attention to the instructions at the end, and jump into Excel more quickly



Key Assumption:	Units:	Value:
Scheduled Base Rental Revenue:	N/A	Link to the rent roll and the assumptions in the "Scenarios" table below.
Expense Reimbursement Revenue:	\$/ Square Foot / Year	\$0.20
General Vacancy:	N/A	Link to the rent roll and the assumptions in the "Scenarios" table below.
Management Fees:	% Effective Gross Revenue	3.0%
Utilities:	\$/ Square Foot / Year	\$2.50
Association Fees:	\$/ Square Foot / Year	\$1.50
Leitorial Fees:	\$/ Square Foot / Year	\$1.75
Repairs and Maintenance:	\$/ Square Foot / Year	\$2.80
Property Taxes:	\$/ Square Foot / Year	\$3.40
Insurance:	\$/ Square Foot / Year	\$0.40

# Why Excel Fails! Sometimes...

- **Granular Models:** Have to factor in that some tenants may *not* renew... whereas others may renew
- **Easy:** If there's just one renewal point – just two scenarios
- **Harder:** If you're modeling a 10-year period with 2-year leases – 5 separate renewal points and  $2^5$  scenarios!

# Why Excel Fails! Sometimes...

- **Result:** Even in our simple 2-scenario model, you get formulas like this:

Free Months of Rent - Renewal + New Tenants:	Months Abatement:	Lease Start:	Lease End OR Abatement Start:	Jan 15	Feb 15	Mar 15	Apr 15	May 15	Jun 15
				A - 110	1	2015-01-31	2019-06-30	\$ -	\$ (11,473)
A - 115	1	2015-01-31	2020-06-30	-	(15,201)	-	-	-	-
A - 120	1	2011-03-31	2017-03-31	-	-	-	-	-	-
B - 105	1	2009-12-31	2016-06-30	-	-	-	-	-	-
B - 120	1	2010-09-30	2018-06-30	=IF(AND(H\$39>\$E103,H\$39<=EOMONTH(\$E103,\$D103)),-H78*\$H14/Months, IF(AND(H\$39>\$F103,H\$39<=EOMONTH(\$F103,\$D103)),-H78*\$H14/Months,0))					
B - 135	1	2011-10-31	2017-10-31	-	-	-	-	-	-
C - 110	1	2011-09-30	2017-09-30	-	-	-	-	-	-
C - 120	1	2013-01-31	2016-02-29	-	-	-	-	-	-
C - 130	1	2013-05-31	2019-07-31	-	-	-	-	-	-
D - 110	1	2014-10-31	2020-11-30	-	-	-	-	-	-
D - 120	1	2015-02-28	2022-12-31	-	-	(19,061)	-	-	-
D - 130	1	2014-03-31	2020-03-31	-	-	-	-	-	-
E - 110	1	2014-04-30	2021-03-31	-	-	-	-	-	-

- Not the most intuitive to understand at first glance...

# Why Excel Fails! Sometimes...

- Or even worse:

Leasing Commissions - Renewal + New Tenants:	Rentable Square Feet:	Lease Start:	Abatement Start:	Jan 15	Feb 15	Mar 15	Apr 15	May 15	Jun 15	Jul 15
A - 110	3,500.5	2015-01-31	2019-06-30	\$ -	\$ (23,608)	\$ -	\$ -	\$ -	\$ -	\$ -
A - 115	4,637.9	2015-01-31	2020-06-30	-	(31,969)	-	-	-	-	-
A - 120	8,507.9	2011-03-31	2017-03-31	-	-	-	-	-	-	-
B - 105	7,859.7	2009-12-31	2016-06-30	-	-	-	-	-	-	-
B - 120	8,869.0	2010-09-30	2018-06-30	-	-	-	-	-	-	-
B - 135	9,197.4	2011-10-31	2017-10-31	-	-	-	-	-	-	-
C - 110	8,173.8	2011-09-30	2017-09-30	-	-	-	-	-	-	-
C - 120	3,474.4	2013-01-31	2016-02-29	-	-	-	-	-	-	-
C - 130	4,257.3	2013-05-31	2019-07-31	-	-	-	-	-	-	-
D - 110	5,467.9	2014-10-31	2020-11-30	-	-	-	-	-	-	-
D - 120	5,815.8	2015-02-28	2022-12-31	-	-	-	-	-	-	-
D - 130	6,462.3	2014-03-31	2020-03-31	-	-	-	-	-	-	-
E - 110	8,291.8	2014-04-30	2021-03-31	-	-	-	-	-	-	-
E - 125	584.1	2018-01-31	2018-01-31	-	-	-	-	-	-	-
F - 105	3,701.6	2018-01-31	2018-01-31	-	-	-	-	-	-	-
F - 120	6,827.1	1900-01-00	1900-01-00	-	-	-	-	-	-	-
G - 110	7,546.0	1900-01-00	1900-01-00	-	-	-	-	-	-	-
G - 125	2,450.4	1900-01-00	1900-01-00	-	-	-	-	-	-	-
G - 135	2,122.6	1900-01-00	1900-01-00	-	-	-	-	-	-	-
H - 110	5,647.3	1900-01-00	1900-01-00	-	-	-	-	-	-	-
H - 120	1,273.3	2018-01-31	2018-01-31	-	-	-	-	-	-	-

- It's hard for Excel to “track” statuses and probabilities – much easier to do in **Argus**

# Scenarios

- **Big Question:** By how much can we improve the Occupancy Rate?
  - **Scenario #1 (Base):** Improves from 74% to 80%
  - **Scenario #2 (Downside):** Stays at 74%
  - **Scenario #3 (Upside):** Improves from 74% to 85%
- **Other Differences:**
  - **Base:** Modest rent and expense growth
  - **Downside:** Lower growth, higher TIs/LC/concessions
  - **Upside:** Higher growth, lower TIs/LCs/concessions

# The Property Model

- **Step #1:** Market and Rent Roll Analysis
- **Step #2:** Setting Up Lots of Ugly Formulas
- **Step #3:** Pro-Forma, Acquisitions/Exit/S&U
- **Step #4:** Returns and the Waterfall Schedule
- **Step #5:** Making an Investment Recommendation



Source: CBRE Research



Acquisition Sources and Uses of Funds:

Sources of Funds:	Total:	\$ / RSF:	% LTC:	Initial Draw:
Senior Loan - Drawn:	\$ 9,561,370	\$ 83.38	46.6%	\$ 9,561,370
Senior Loan - TI / LC Holdback Portion:	503,230	4.39	2.5%	
Mezzanine:	4,313,400	37.62	21.0%	4,313,400
YI TI Capital (GPs) - Equity:	1,232,400	10.75	6.0%	1,232,400
Limited Partners (LPs) - Equity:	4,929,600	42.99	24.0%	4,929,600
<b>Total Sources:</b>	<b>\$ 20,540,000</b>	<b>\$ 179.13</b>	<b>100.0%</b>	<b>\$ 20,036,770</b>



# The Investment Recommendation

- **Point #1:** Meet our targeted returns in the Base Case, and get a 1.2-1.5x multiple in the Downside Case
- **Point #2:** It's plausible to boost the occupancy rate to 80-85% and boost average rents to \$38 / SF, given the market data
- **Point #3:** For the numbers *not* to work, we'd need a total disaster – 25% rental decline, < 30% renewal rate, etc. and we can mitigate these risks

# Recap of This Tutorial

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