

## Real Estate Case Study – 4-Hour Office/Retail Acquisition & Renovation Modeling Test (45 Milk Street)



Your firm, HYM Investment, is considering the acquisition and renovation of a 61,000 square-foot mixed-used office/retail property in the Financial District of Boston (45 Milk Street).

The asking price for the property is \$20.5 million USD, which represents an approximate 8.0% Going-In Cap Rate, higher than the prevailing 7.5% Cap Rate for Class-B office properties in the area due to the property's age and less competitive amenities.

Your firm plans to spend 15% of the purchase price on major renovations, which are expected to begin midway through 2019 and last for 2.5 years.

With fees, reserves, and renovation costs included, the effective purchase price will be closer to \$24 million.

45 Milk Street is currently only 82.5% occupied vs. an average 93.0% occupancy rate for similar office properties in Boston.

Additionally, the property's 5 current tenants (WeWork, Suffolk Construction, PTC, Safety Insurance, and Trader Joe's) are currently paying rent that's ~10% below market rates due to the building's condition.

Your firm plans to boost the occupancy rate to the 90-100% range by attracting 1-2 new tenants, and it plans to raise in-place rents to market rates when the existing tenants' leases expire in 2019 – 2022.

The Boston Office market has seen record rental growth and Cap Rate compression in the past 2 years, but your firm does not believe these growth rates are sustainable. You will create Upside, Base, and Downside cases to account for the most likely outcomes.



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The deal will be financed at a 75% LTV, with 65% for the Senior Loan and 10% for the Mezzanine. HYM Investment plans to contribute 10% of the required Equity, and its Limited Partners will contribute the remaining 90%.

The Limited Partners will earn an 8% Preferred Return, and the General Partners (HYM Investment) will receive a 20% Catch-Up Return; after that, cash flows will be split 80 / 20 between the LPs and GPs.

Your job is to model the acquisition and renovation, calculate the returns to each investor group, and make an investment recommendation at the end.

Please use the following assumptions and complete the provided Excel template. You have **four (4) hours** to make the calculations and respond to the case study questions:

### Part 1 – Acquisition, Financing, and Exit Assumptions

Use the following figures to set up the key model assumptions:

- **Gross Square Feet of Property:** 61,000
- **Rentable to Gross Area:** 90.0%
- **GP / LP Equity Split:** 10% / 90%
- **Acquisition Date:** 2018-12-31
- **Acquisition Price:** \$20.5 million
- **Acquisition Costs:** 1.0%
- **Renovation Costs % Acquisition Price:** 15.0%
- **Additional Reserves % Acquisition Price:** 1.0%

You should allow for Exit Dates of December 2021 and December 2022; selling costs will be approximately 2.0% of the property value upon exit.

The Senior Loan and Mezzanine used to fund the deal have the following terms:

Term:	Senior Loan:	Mezzanine:
Loan-to-Value (LTV) Ratio	65.0%	10.0%
Holdback Amount	Renovation Costs + Additional Reserves	None
Annual Holdback Release	\$35.00 / RSF / Year (Begins when renovation begins)	N/A
LIBOR Spread	3.00%	N/A
LIBOR Floor	1.75%	N/A



Fixed Cash Interest Rate	N/A	3.00%
Fixed PIK Interest Rate	N/A	6.00%
Interest-Only Period	2 years	N/A
Amortization Period	30 years	N/A
Tenor	5 years	5 years
Loan Issuance Fees	1.00%	1.00%
Prepayment Penalty	1.00%	1.00%

The Holdback exists because the renovation funding is not part of the initial acquisition price. Assume a monthly release into the property's Replacement Reserve balance until the entire Holdback has been allocated.

For the Senior Loan, assume that the 3-month LIBOR increases from 2.60% in FY 18 to 3.80% in FY 22.

The lenders are seeking a minimum Cash Interest Coverage Ratio of 1.50x, a minimum Debt Service Coverage Ratio (DSCR) of 1.20x, and a minimum Debt Yield of 7.0%.

## Part 2 – Operating and Rent Roll Assumptions

In this model, the Upside case represents strong, continued growth with an eventual 100.0% occupancy rate, the Base Case represents slightly lower growth with an eventual 92.5% occupancy rate, and the Downside Case represents a modest recession and recovery, with the same 82.5% occupancy rate the property currently has.

The scenarios differ as follows:

Assumption:	Upside:	Base:	Downside:
Class-B Office/Retail Rap Rates	7.25% in FY 19 falling to 6.75% by FY 22	7.25% in FY 19 falling to 7.00% by FY 22	7.25% in FY 19, rising to 8.00% in FY 20, and falling to 7.25% in FY 22
Change in Market Rents	Use the figures that have been entered into Excel; FY 19 is the same in all scenarios, but the numbers differ after that		
Fixed Annual Rental Escalations			
Expense Growth Rate			
Retail Sales Growth Rate			



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Renewal Probability	70%	60%	50%
# Downtime Months for Non-Renewal	3	6	9
New Tenants – Months of Free Rent	2	3	4
Renewal Tenants – Months of Free Rent	1	2	3
New Tenants – Tenant Improvements per Rentable Square Foot	\$35.00	\$45.00	\$55.00
Renewal Tenants – Tenant Improvements per Rentable Square Foot	\$15.00	\$20.00	\$25.00
New Tenants – Leasing Commissions % Lease Value	5%	6%	7%
Renewal Tenants – Leasing Commissions % Lease Value	2%	3%	4%
Tenant #6 Lease Start Date	2020-01-31	2020-06-30	N/A
Tenant #7 Lease Start Date	2021-01-31	N/A	N/A

The maximum Cap Rate in this market over the past 4-5 years was 8.0%, and it rose to 9.0% in the last recession. The other figures above are all in-line with market data.

For the other assumptions, all of which stay the same in different scenarios, please use:

- **Lease Term for New Tenants:** 5 years
- **Property Management Fees:** 3% of Effective Gross Income
- **Common Area Maintenance (CAM) per RSF per Year:** \$2.50
- **Insurance per RSF per Year:** \$1.00
- **Real Estate Taxes % Property Value:** 2.55%
- **Replacement Reserves per RSF per Year:** \$3.00
- **Common Area Utilities per RSF per Year:** \$2.00

Since this is a mixed-use office/retail property, the tenants have primarily Triple Net (NNN) leases, but a few have variations such as Full Service (FS), Double Net (NN), and Percentage Rent leases.



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Here's the information for each tenant – note that the Market Rent and “Escalated Rent Paid by Initial Tenant” figures are as of the start of FY 18, so you should escalate them appropriately in each month of the model:

Tenant Name:	% Rentable Square Feet Occupied:	Initial Lease Start Date:	Initial Lease Term:	Initial Lease – Annual Rental Escalation:	Initial Lease – Rent-Free Months:	Market Rent per SF per Year:	Initial Lease – Escalated Rent per SF per Year:
WeWork	25.0%	2015-10-31	5 years	2.50%	6	\$47.00	\$43.00
Suffolk Construction	15.0%	2017-10-31	4 years	3.00%	4	\$49.00	\$45.00
PTC	10.0%	2015-06-30	4 years	2.50%	4	\$46.00	\$43.00
Safety Insurance	12.5%	2016-12-31	6 years	2.00%	5	\$48.00	\$44.00
Trader Joe's	20.0%	2016-06-30	5 years	3.00%	6	\$48.00	\$42.00
Tenant #6	10.0%	Assumptions	5 years	Assumptions	Assumptions	\$60.00	\$60.00
Tenant #7	7.5%	Assumptions	5 years	Assumptions	Assumptions	\$56.00	\$56.00

And here is the information for each tenant's lease type:

Tenant Name:	Lease Type:	Initial Retail Sales per SF per Year:	Initial Breakpoint:	Percentage Rent Beyond Breakpoint:	Monthly Distribution of Retail Sales:
WeWork	NNN	N/A	N/A	N/A	N/A
Suffolk Construction	NNN	N/A	N/A	N/A	N/A
PTC	NNN	N/A	N/A	N/A	N/A
Safety Insurance	NNN	N/A	N/A	N/A	N/A
Trader Joe's	NNN + Percentage Rent	\$800.00	\$500,000	4.0%	See Excel
Tenant #6	FS	N/A	N/A	N/A	N/A
Tenant #7	NN + Percentage Rent	\$900.00	FY 18 Base Rental Income / 5% / 12	5.0%	See Excel



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With Triple Net (NNN) leases, the tenant is responsible for CAM, Common Area Utilities, Insurance, and Property Taxes; with Double Net (NN) leases, the tenant is responsible only for Insurance and Property Taxes.

Assume that Trader Joe's retail sales grow on an *annual basis* and that this \$500,000 artificial breakpoint also grows on an *annual basis*, linked to the retail sales growth rate.

Tenant #7 also pays Percentage Rent; if Tenant #7's monthly retail sales exceed its "natural breakpoint" (described above), it will owe 5% of the excess amount.

This natural breakpoint will also increase annually along with retail sales.

Your formulas for each tenant should be flexible enough to handle different lease start dates and expiration dates, including dates both inside of and outside the holding period.

However, you may assume that there is at most one lease expiration for each tenant in the holding period – otherwise, it gets very difficult to model without using ARGUS.

### **Part 3 – Property Pro-Forma**

Use the figures above to calculate everything down to Adjusted NOI on the Monthly Pro-Forma.

Pay special attention to the Replacement Reserves since they work differently in this model – you must add the TI/LC/CapEx Holdback as it is released.

Once you've finished the Monthly Pro-Forma, create the annual summary down to the Adjusted NOI line.

### **Part 4 – Debt Service and Returns to Equity Investors and Lenders**

Next, project the property's Debt Service, including the Cash and PIK Interest, the Principal Repayments, and the release of the Holdback.

**Note that the Senior Loan Interest is based on the ENTIRE amount of the Senior Loan, even though a significant portion of it is held back when the deal first closes.**

The Holdback affects only the Senior Lenders' basis (and, therefore, their IRR). It does NOT affect the Interest Expense or the Principal Repayments.

You do **not** need to project the Debt Service on a monthly basis; annual numbers are fine.



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Finally, calculate the returns to Equity Investors, Senior Lenders, and Mezzanine Investors at the bottom.

Your model should support different exit dates and the possibility that the lenders may not be repaid in full.

### **Part 5 – Waterfall Returns Schedule with Preferred Return and Catch-Up Provisions**

The Limited Partners will contribute **90%** of the required Equity in this deal, and HYM Investment (the General Partners) will contribute the remaining **10%**.

The Limited Partners receive a Preferred Return up to an **8% IRR**, meaning that **all** cash flows go to them until they have earned an 8% IRR.

Once the LPs have earned this 8% IRR, the GPs will receive a “Catch-Up Return” up to a 20% IRR, which means that **all** cash flows in this next tier will go to the GPs until they have earned a 20% IRR.

After that, the cash flows will be split 80% to the LPs and 20% to the GPs.

Assume that all returns are cumulative and compounded on an annual basis.

Once you’re finished, create sensitivity tables at the bottom that show the IRRs to GPs and LPs under different scenarios, Exit Cap Rates, and acquisition prices. Use your judgment for the ranges.

### **Part 6 – Case Study Questions**

Once you’ve completed the model, please respond to the following questions:

- 1) The Equity Investors are targeting a 20% IRR in the Base Case and a 40% IRR in the Upside Case, and they want to avoid losing money in the Downside Case. The Mezzanine Investors and Senior Lenders are targeting IRRs slightly above the loan interest rates.

Based on that information, would you recommend this deal for each investor group?

- 2) If you *would* recommend this deal, what are the key risk factors, and how could you mitigate them? If you would *not* recommend this deal, what might make you change your mind?