

Angus Cartwright Harvard Case Solution & Analysis

The Investors

John DeRight

- retired
- plans to live off of 750K of stock dividends, and 250k other income
- sold business for \$35 mm of company's stock
 - plans to sell half of stock (\$17.5 mm) to reinvest in RE and more
- wants to diversify and capitalize on 20% capital gains tax rate
- more risk averse

Judy DeRight

- owns small chemical company
 - wants to continue to grow company internally
- \$45 mm invested in stocks, bonds, and short-term securities
 - available for outside investment
- wants to diversify
- more risk tolerant

Investor Considerations

- diversification of assets
- tax benefits
- cash flow
- property appreciation
- low involvement/management
- leveraged return of 10% after tax

The Properties

Apartment

Alison Green

100-unit garden apartment complex in Cambridge, MA. High-end finishes, excellent location, strong rental history. 100% occupied. \$1.2M purchase price. \$1.5M renovation cost. \$1.8M total cost. \$1.2M total value. 10% cap rate.

Ivy Terrace

10-unit garden apartment complex in Cambridge, MA. High-end finishes, excellent location, strong rental history. 100% occupied. \$1.2M purchase price. \$1.5M renovation cost. \$1.8M total cost. \$1.2M total value. 10% cap rate.

Office

800 Stony Brook

100,000 sq ft office building in Cambridge, MA. High-end finishes, excellent location, strong rental history. 100% occupied. \$1.2M purchase price. \$1.5M renovation cost. \$1.8M total cost. \$1.2M total value. 10% cap rate.

The Fowler Building

100,000 sq ft office building in Cambridge, MA. High-end finishes, excellent location, strong rental history. 100% occupied. \$1.2M purchase price. \$1.5M renovation cost. \$1.8M total cost. \$1.2M total value. 10% cap rate.

Existing

Under Construction

Recommendations

John DeRight

Alison Green ✓

Here's Why:

- Great location, strong rental history
- High-end finishes, excellent location
- 100% occupied
- High-end finishes, excellent location
- 100% occupied

Judy DeRight

The Fowler Building ✓

Here's Why:

- High-end finishes, excellent location
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Both

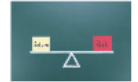
Ivy Terrace ✓✓

Here's Why:

- High-end finishes, excellent location
- 100% occupied
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Mitigating Risk

- not guaranteed 93%
- collateral
- escrow account in buying it
- higher than expected construction
 - acquire a property with lower LTV
 - leave room for additional financing
- unanticipated maintenance and repairs
 - conservative annual reserves
 - higher reserves during most profitable years



Questions?

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The Properties

Apartment

Alison Green

100-unit garden apartment complex in Boston, MA. High-end finishes, central air conditioning, and a swimming pool. Located in a prime area with excellent public transportation. The property is currently 95% occupied and has a strong track record of rental income.

Ivy Terrace

120-unit garden apartment complex in Boston, MA. High-end finishes, central air conditioning, and a swimming pool. Located in a prime area with excellent public transportation. The property is currently 95% occupied and has a strong track record of rental income.

Office

800 Stony Brook

100,000 sq ft office building in Stony Brook, NY. High-quality construction, modern office space, and excellent location. The property is currently 90% occupied and has a strong track record of rental income.

The Fowler Building

100,000 sq ft office building in Stony Brook, NY. High-quality construction, modern office space, and excellent location. The property is currently 90% occupied and has a strong track record of rental income.

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Recommendations

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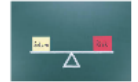
Alison Green ✓
Here's Why:
 - Great location, proximity to public transportation
 - High-end finishes and amenities
 - High occupancy rate (95%)
 - Strong track record of rental income

Judy DeRight ✓
Here's Why:
 - Excellent location for future value
 - High-end finishes and amenities
 - High occupancy rate (90%)
 - Strong track record of rental income

Both ✓
Ivy Terrace ✓
Here's Why:
 - High-end finishes and amenities
 - High occupancy rate (95%)
 - Strong track record of rental income

Mitigating Risk

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The Properties

Apartment

Alison Green

- 100 unit garden apartment in Montgomery County, Maryland
- completed in 2009, operating at 95% occupancy
- asking price= \$21 mm
- mortgage= \$14 mm, 4% interest rate, 30 year amortization period
- estimated sales price= \$24 mm
- CF before debt= \$1.45 mm
- RE taxes = 12% of gross rental income

Important Financial Metrics:

Operating Income	1,450,000
Operating Expenses	(1,000,000)
Operating Profit	450,000
Capital Expenditures	(200,000)
Depreciation	(1,000,000)
Interest Expense	(1,000,000)
Income Tax Expense	(100,000)
CF Before Debt	1,450,000
CF After Debt	450,000
Debt Service	(1,000,000)
CF Available to Equity	(550,000)
Equity Contribution	550,000
CF Available to Equity	0
Debt Service	(1,000,000)
CF Available to Equity	(550,000)
Equity Contribution	550,000
CF Available to Equity	0

Ivy Terrace

- 75 unit garden apartment, located in Arlington, Virginia
- under construction, guaranteed cash flow assuming 93% occupancy
- asking purchase price= \$11.2 mm
- mortgage= \$7 mm, 4.25% interest rate, 30 year amortization period
- estimated sales price= \$14 mm
- NOI= \$900,000
- RE taxes= 10% of gross rental income

Important Financial Metrics:

Operating Income	900,000
Operating Expenses	(500,000)
Operating Profit	400,000
Capital Expenditures	(100,000)
Depreciation	(500,000)
Interest Expense	(500,000)
Income Tax Expense	(100,000)
CF Before Debt	900,000
CF After Debt	400,000
Debt Service	(500,000)
CF Available to Equity	(100,000)
Equity Contribution	100,000
CF Available to Equity	0
Debt Service	(500,000)
CF Available to Equity	(100,000)
Equity Contribution	100,000
CF Available to Equity	0

Office

900 Stony Walk

- 5 story, 80,000 SF office building in Montgomery County, Maryland
- 67,000 rentable SF
- completed in 2010, operating at 95% occupancy
- asking price=\$15.5 mm
- mortgage= \$12.25 mm, 4.75% interest rate, 25 year amortization period
 - CMBS backed loan--> Non-recourse!
- CF before debt= \$1.05 mm
- RE taxes= 12% of gross rental income
- estimated sales price= \$17 mm

Important Financial Metrics:

Operating Income	1,050,000
Operating Expenses	(700,000)
Operating Profit	350,000
Capital Expenditures	(100,000)
Depreciation	(700,000)
Interest Expense	(700,000)
Income Tax Expense	(100,000)
CF Before Debt	1,050,000
CF After Debt	350,000
Debt Service	(700,000)
CF Available to Equity	(350,000)
Equity Contribution	350,000
CF Available to Equity	0
Debt Service	(700,000)
CF Available to Equity	(350,000)
Equity Contribution	350,000
CF Available to Equity	0

The Fowler Building

- 2 story, 135,000 SF office in Arlington, Virginia
- 110,000 rentable SF
- under construction, guaranteed cash flow assuming 93% occupancy
- asking purchase price=\$28 mm
- mortgage= \$21 mm, 4.5% interest rate, 25 year amortization period
- NOI=\$1.865mm
- estimated sales price= \$34.5 mm
- RE taxes=10% of gross rental income

Important Financial Metrics:

Operating Income	1,865,000
Operating Expenses	(1,000,000)
Operating Profit	865,000
Capital Expenditures	(100,000)
Depreciation	(1,000,000)
Interest Expense	(1,000,000)
Income Tax Expense	(100,000)
CF Before Debt	1,865,000
CF After Debt	865,000
Debt Service	(1,000,000)
CF Available to Equity	(135,000)
Equity Contribution	135,000
CF Available to Equity	0
Debt Service	(1,000,000)
CF Available to Equity	(135,000)
Equity Contribution	135,000
CF Available to Equity	0

Financial Analysis

<p>Exhibit 1-List of Salient Facts</p> <table border="1"> <tr><td>Property Name</td><td>Alison Green</td></tr> <tr><td>Location</td><td>Montgomery County, MD</td></tr> <tr><td>Year Completed</td><td>2009</td></tr> <tr><td>Occupancy</td><td>95%</td></tr> <tr><td>Asking Price</td><td>\$21 mm</td></tr> <tr><td>Mortgage</td><td>\$14 mm</td></tr> <tr><td>Interest Rate</td><td>4%</td></tr> <tr><td>Amortization</td><td>30 years</td></tr> <tr><td>Est. Sales Price</td><td>\$24 mm</td></tr> <tr><td>CF Before Debt</td><td>\$1.45 mm</td></tr> <tr><td>RE Taxes</td><td>12% of gross rental income</td></tr> </table>	Property Name	Alison Green	Location	Montgomery County, MD	Year Completed	2009	Occupancy	95%	Asking Price	\$21 mm	Mortgage	\$14 mm	Interest Rate	4%	Amortization	30 years	Est. Sales Price	\$24 mm	CF Before Debt	\$1.45 mm	RE Taxes	12% of gross rental income	<p>Exhibit 2-First Year Project Setups</p> <table border="1"> <tr><td>Property Name</td><td>Alison Green</td></tr> <tr><td>Location</td><td>Montgomery County, MD</td></tr> <tr><td>Year Completed</td><td>2009</td></tr> <tr><td>Occupancy</td><td>95%</td></tr> <tr><td>Asking Price</td><td>\$21 mm</td></tr> <tr><td>Mortgage</td><td>\$14 mm</td></tr> <tr><td>Interest Rate</td><td>4%</td></tr> <tr><td>Amortization</td><td>30 years</td></tr> <tr><td>Est. Sales Price</td><td>\$24 mm</td></tr> <tr><td>CF Before Debt</td><td>\$1.45 mm</td></tr> <tr><td>RE Taxes</td><td>12% of gross rental income</td></tr> </table>	Property Name	Alison Green	Location	Montgomery County, MD	Year Completed	2009	Occupancy	95%	Asking Price	\$21 mm	Mortgage	\$14 mm	Interest Rate	4%	Amortization	30 years	Est. Sales Price	\$24 mm	CF Before Debt	\$1.45 mm	RE Taxes	12% of gross rental income
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Important Financial Metrics:

	Alison Green
Gross Purchase Price	\$20,000,000
Depreciable Life	27.5
Estimated Sales Price	\$24,000,000
NOI	\$1,450,000
Equity Investment	\$6,000,000
Constant Loan Pmt	5.73%
Leverage (+/-)	1.52%
Price/Unit or Price/Rentable SF	200,000.00
Other Op Expenses/Gross Revenue	17%
Avg Monthly Rents/Unit or Rent/SF	\$1,875
Current or Projected Occupancy	95.00%
Added Margin	28.80%
Break-Even Occupancy	66.20%
Loan To Value	70.00%
Debt Coverage Ratio	1.81
Spread on Cap Rates	-0.63%
Cash on Cash	10.80%
Increase in Capital Value	20.00%

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