

Land Values as a Residual

Consider a retail property that generates \$250,000 / year in NOI.

- Investors require a 10% return

$$\Rightarrow V = \frac{\text{NOI}}{r} = \frac{250,000}{.10} = \$2.5 \text{ million}$$

Suppose that the improvements cost \$2 million to construct.

What is value of land?

$$V = B + L$$

$$L = \$2.5 \text{ m} - \$2 \text{ m} = \$500,000$$

Suppose market rents rise so
that $\text{NOI} = \$260,000 / \text{year}$

$$V = \frac{260,000}{.1} = \$2.6 \text{ m} \quad 4\% \uparrow$$

$$B = \$2 \text{ m}$$

$$L = \$600,000 \quad 20\% \uparrow$$

Fee Simple vs. Leased Fee Interests

George owns some land. He leases it to Bill.

G: Leased Fee Int.	\$ 5 m
B: <u>Leasehold int.</u>	\$ 0 m
Value of Land	<u>\$ 5 m</u>

Bill Builds a building for \$5 m.

Land Value =	\$ 5 m
<u>Bldg Value =</u>	<u>\$ 5 m</u>
Total Value	\$ 10 m

Suppose rents fall so that the total value of the property is only \$9 m

$$\begin{array}{r} L = \$4 \text{ m} \\ B = \$5 \text{ m} \\ \hline V = \$9 \text{ m} \end{array}$$

G: Leased Fee Int.	\$5 m
B: <u>Leasehold Int.</u>	<u>-\$1 m</u>
Land Value	4 m

George's Interests \$5 m

Bill's interests \$4 m
 (\$5 m bldg + -\$1 m leasehold)

Highest & Best Use

HBU is the reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value to the owner.

Land values are determined by HBU, not necessarily the current use.

4 Questions

- Is the use physically possible?
- Is it legally permissible?
- Is it financially feasible?
- Is it maximally productive?
 - Greatest economic return.

HBU as vacant

HBU as improved

HBU as though Vacant

Determines land value

Example:

<u>Use</u>	<u>NOI</u>	<u>Cap. Rate</u>	<u>V</u>	<u>B</u>	<u>L</u>
Retail	\$250K	10%	\$2.5m	\$2m	\$500K
Office	\$750K	12%	\$6.25m	\$6m	\$250K
Ind.	\$150K	8%	\$1.875m	\$1m	\$875K

HBU

HBU as vacant is industrial
 \Rightarrow Land value = \$875K

If Retail is current use,
 + demo costs are \$100K, then
 It would cost \$2.6 to
 acquire the property + turn it
 into vacant land. This is
 greater than the land value
 under any other use, so HBU
 as improved is retail.

$$L = \$875K \leftarrow$$

$$V = \$2.5m$$

$$B = \$1.625m$$