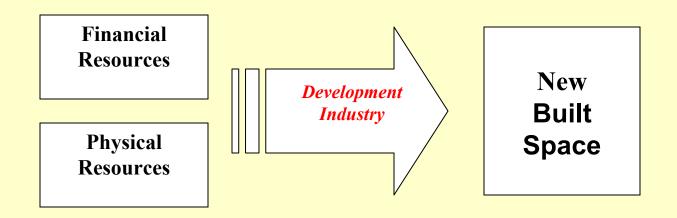
Chapter 2:

The Real Estate System

The Real Estate System

- 1. The development industry
- 2. Overview of the R.E. "system"
- 3. The "4-Quadrant" model (4QM)
- 4. Using the 4QM to understand "boom & bust" cycles in R.E.

2.1 The Commercial Property Development Industry



The Development Industry

Development is a *creative*, entrepreneurial process characterized by...

Vision
Greed
Cooperation
Risk

(All the most *entertaining* features of American capitalism.)

Development (cont.)...

Cooperation:

- Between public & private sectors;
- Between developers & financiers.

• Risk:

- Even an economy in recession needs an *existing stock* of built space.
- New space (need for development) results only from economic growth &/or change.

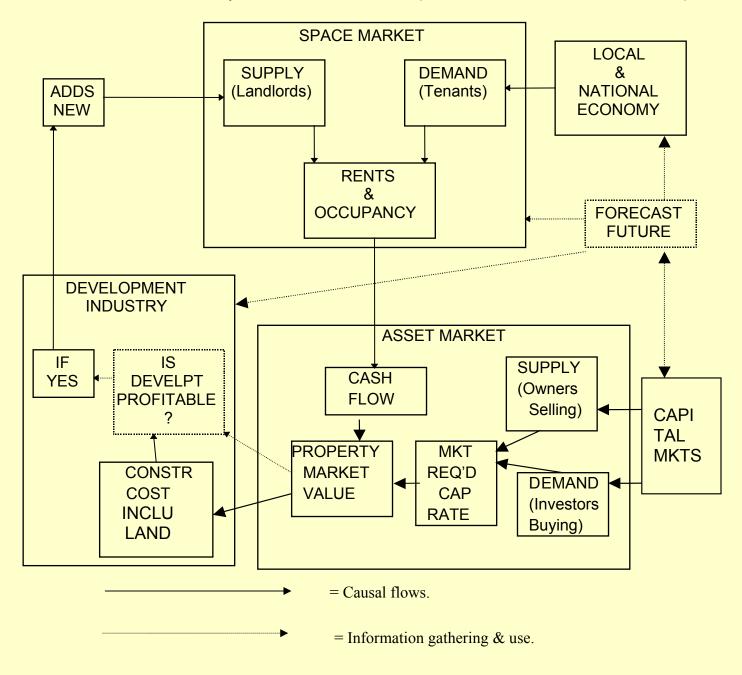
Development (cont.)...

R.E. Development is therefore dealing with the dynamic "cutting edge" of the physical built environment.

This makes development *the most cyclical* branch of the real estate industry...

2.2 The Real Estate System

Exhibit 2-2: The "Real Estate System": Interaction of the Space Market, Asset Market, & Development Industry



"Negative feedback loops"...

Mechanisms within a system that tend to dampen the changes in the system, helping to keep it in control, preventing it from spiraling out of control.

Example:

A **thermostat** puts a negative feedback loop into a heating and cooling (HVAC) system in a building.

- When the temperature in the building gets too low, the thermostat triggers the heater.
- When the temperature in the building gets too high, the thermostat triggers the air conditioning.

The result is that the building temperature remains "under control", within a comfortable temperature range.

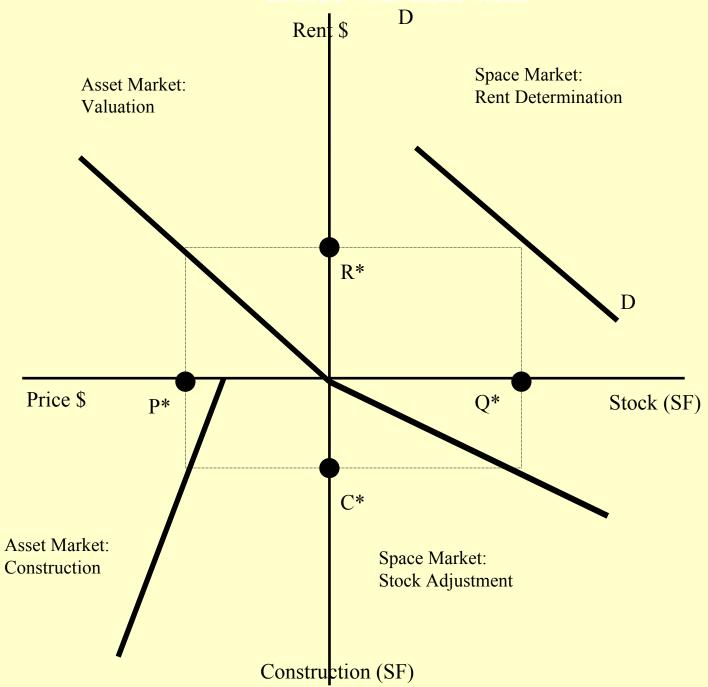
Concept check:

How do the development industry and the real estate asset market work together to provide a (long-run) negative feedback loop in the Real Estate System?...

How can "forward-looking" behavior (good forecasting of the space market) in the development industry and R.E. asset market (capital market) improve this negative feedback loop?...

2.3 The "4-Quadrant Model" (4QM)...

Exhibit 2-3: The DiPasquale-Wheaton 4-



2.4 Using the 4QM to help understand "boom & bust" cycles...

EXHIBIT 7-10: THE "ROLLER COASTER RIDE" IN COMMERCIAL PROPERTY PRICES OVER THE LAST QUARTER-CENTURY . . .

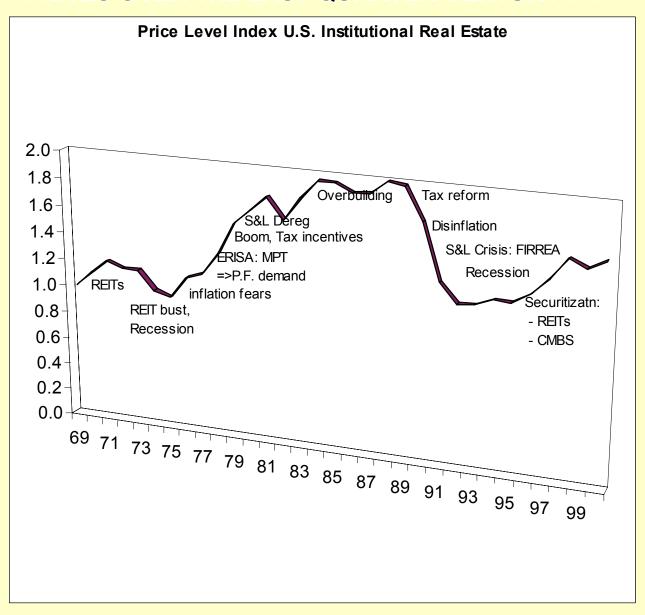


Exhibit 2-4a: Effect of **Demand Growth** in Space Market:

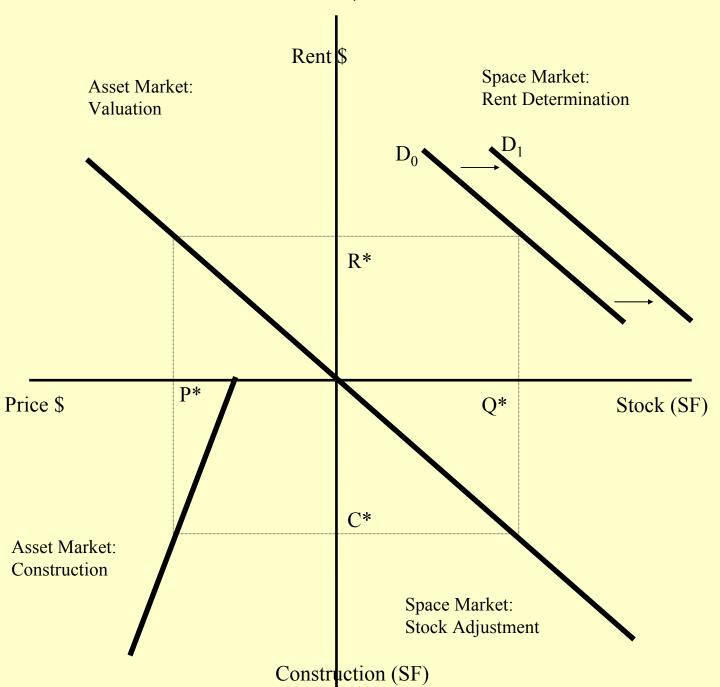


Exhibit 2-4a: Effect of Demand Growth in Space Market: First phase...

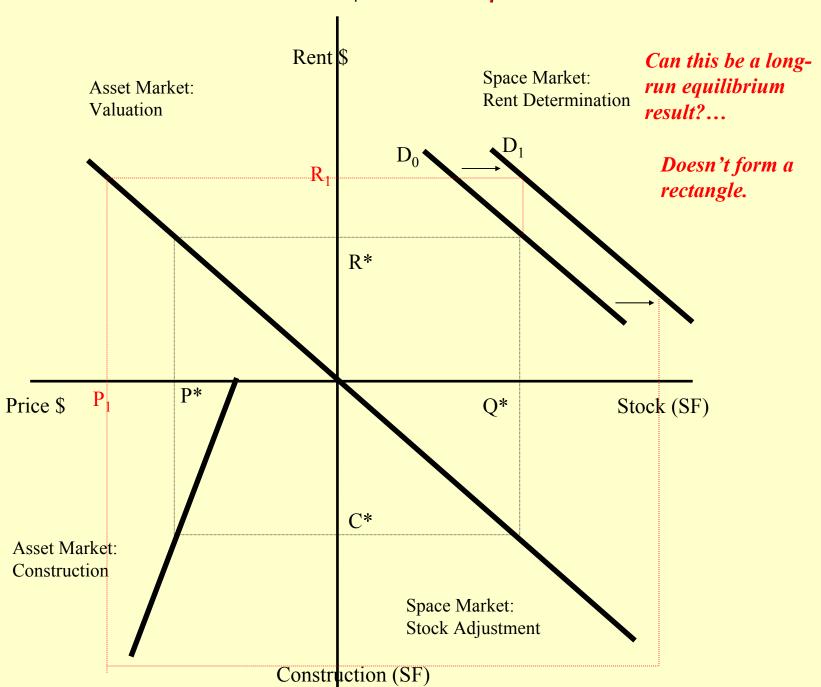


Exhibit 2-4a: Effect of Demand Growth in Space Market: LR Equilibrium...

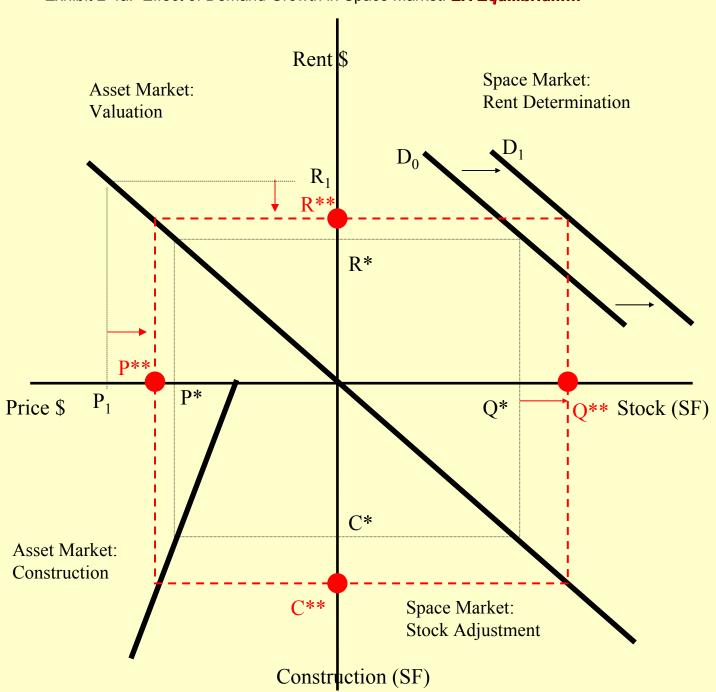


Exhibit 2-4a: Effect of Demand Growth in Space Market: LR Equilibrium...

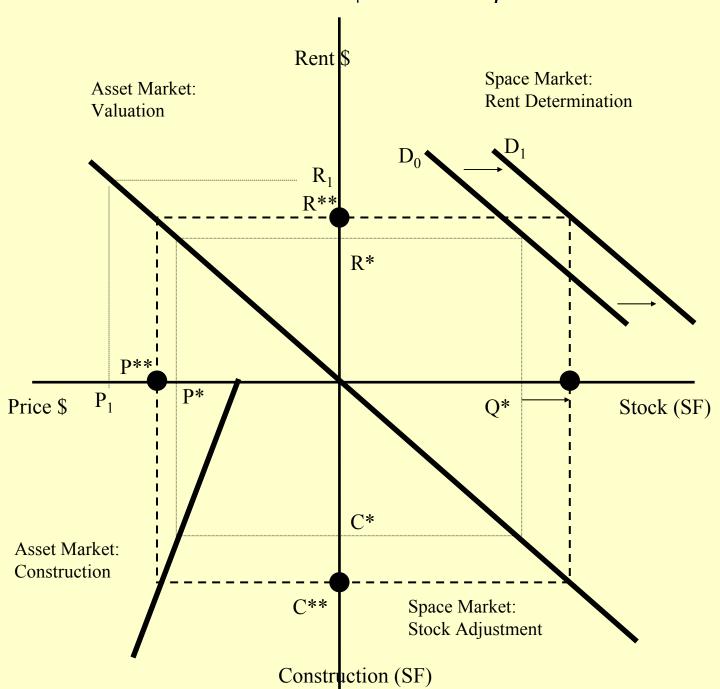


Exhibit 2-4a: Effect of Demand Growth in Asset Market...

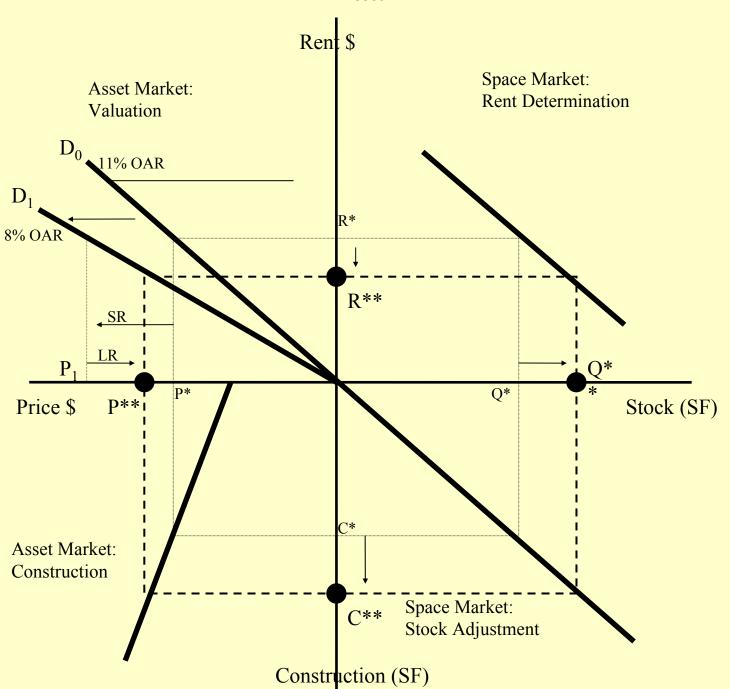
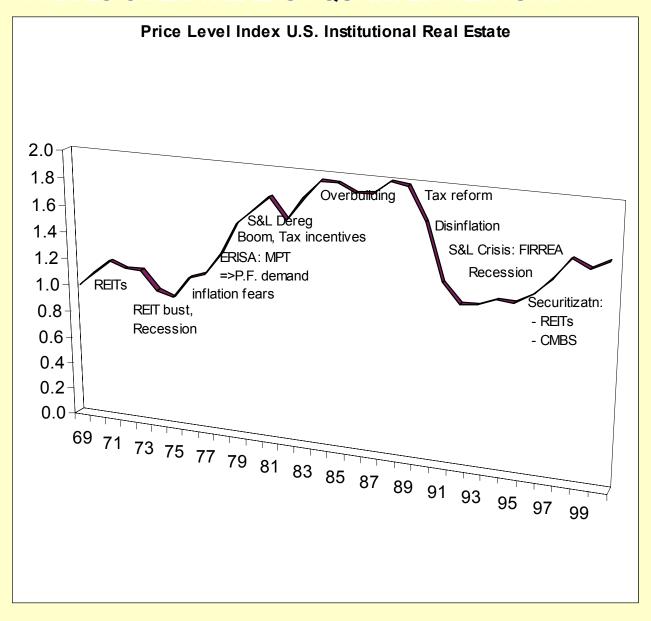


EXHIBIT 7-10: THE "ROLLER COASTER RIDE" IN COMMERCIAL PROPERTY PRICES OVER THE LAST QUARTER-CENTURY . . .



Concept check...

1. What does the 4Q Model reveal about the interaction of the space market, the asset market, and the development industry in causing "boom & bust" cycles?

2. How can the an understanding of the 4Q Model help participants in the asset market and development industry to avoid "boom & bust" cycles? [Hint: Can the 4Q Model help with "forward-looking" decision-making?...]