BUSI 300

Answer Guide No. 10

CHAPTER 11: Real Estate Markets

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1. Answer: (3)
Real estate vacancies serve two important functions. First, vacancies facilitate the search and match process through which buyers and sellers meet. Every real estate transaction involves a match between a buyer and a seller. Because the preferences of buyers and the characteristics of properties are all different, finding a suitable match can require an extensive search of the available stock. This can be very time consuming and therefore very costly. In order for this search and match process to function effectively, there needs to be an inventory of available space, much of which may be unoccupied, in any real estate market at every point in time. Vacancies provide an inventory of space to help sellers respond to unexpected changes in demand. It is very costly, and in some cases, impossible to build new real estate space on short notice. This is especially true for office space in or near the CBD. These inventories serve as a sort of buffer, allowing builders to accommodate new demands for space without incurring the very high cost of adding a small amount of new space each period.

2. Answer: (4)
If the vacancy rate in a market is high, then it may not be in the owner's interest to raise rents in response to a demand shock. Doing so would just cause vacant units to be unoccupied for a longer time. Conversely, when vacancy rates are low, and time on the market is short, an increase in demand should be followed by significant rent increases to keep vacancies from falling below their desired level.

3. Answer: (3)
A favourable event in the market for the basic or export goods that a region produces will cause production there to rise and cause the prices of these inputs to rise. It will also increase the demand for employment, thereby pushing up the demand curve in the space market and making the equilibrium rent higher.

4. Answer: (1)
The rent on real estate space comprises the income stream that determines the value of real estate assets.

5. Answer: (3)
Using the formula Pt = Rt + 1/(1 + r) + Rt + 2/(1 + r) ^2) + Rt + 3/(1 + r) ^3) + ……. therefore we have Pt = $26,000/(1 + .096) + $28,000/(1 + 0.096)^2) + $31,000/(1 + 0.096) ^3) + $27,000/(1 + 0.096) ^4) + $675,000/(1 + 0.096) ^4) = $23,722.63 + $23,309.71 + $23,546.70 + $18,712.06 + $467,801.44 = $557,092.54. Rounded up to the next highest hundred dollars is $557,100.

6. Answer: (1)
Using the formula to find the value of an investment that pays a fixed amount each period in perpetuity is P = R/r = $2,900/0.096 = $302,083.33. Rounded up to the next highest hundred dollars is $302,100.

7. Answer: (2)
Using the formula P = R/(r – g), $29,000/(0.096 – 0.026) = $29,000/0.07 = $414,285.71. Rounded up to the next highest hundred dollars is $414,300.

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8. Answer: (4)
There are three basic determinants or components to the capitalization rate for real estate. First, capitalization rates should depend on the overall level of interest rates in the economy. If interest rates rise, then, other things being equal, we expect the yield on real estate investments to rise as well. By the same token, the capitalization rate should also depend on the yields of other, comparable investments. Second, capitalization rates should depend on the risk associated with a particular property class or location. Third, capitalization rates should depend on the rate at which rents are expected to grow in the future.

9. Answer: (3)
A decrease in the demand for space, shifts the demand curve down in the northeast quadrant, leading to decreases in rent, price, construction, and stock.

10. Answer: (2)
A subsidy for new construction from the government reduces construction costs, moving the CP schedule downward, leading to a decrease in rent and price and an increase in construction and stock.