

Land: A Question of Value

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While land is the foundation of the the entire real estate industry, it is paradoxically the hardest segment of the industry to value. If land generated a defined income, estimation of its value would be simple. But the value of unimproved property must be derived from its future use—and the key factors that determine use tomorrow are not necessarily apparent today—making an accurate estimate of land value difficult at best.

The U.S. appraisal community has grappled for years with the problem

of valuing land. For appraisers, the conceptual value of land is the price that a willing buyer and seller would agree to today. Accordingly, so-called comparable sales are the essential ingredient in valuing land. Unfortunately, comparability is a fallacy.

THE INCOMPARABILITY OF LAND

Are any two tracts of land truly comparable in value? Most land appraisals involved finding similarly zoned parcels in the same general vicinity, determining the recent sales prices of those parcels, and adjusting these prices for differences in location and size. On this basis, a value is ascribed to the property.

For three reasons, this value does not equate to real value. First, similarly zoned tracts of land are still far

from being comparable in value. Many subjective factors besides zoning determine usability: shape, the ratio of road frontage to the property's depth, topography, and accessibility. Very few tracts are truly comparable.

A second factor for consideration is that properties are frequently over-zoned. Consider a typical 15-acre tract that is at the intersection of two roads in a growing area: the property may be eight to 10 years from development, but the current owner successfully petitions the city for retail zoning—the zoning classification that will generate the highest value—for the full 15 acres.

As the time for the development of the property approaches, its market use is likely to differ from its zoned use. Perhaps the market will support retail development on seven acres and single-family housing on the remaining eight. It is in fact common in many areas for only 50 percent of property zoned for retail uses ever to be developed as retail space. Because a tract's ultimate use may be materially different from its zoned use, the values of comparably zoned tracts may also be materially different. In this hypothetical example, assuming the land's value is \$6 per square foot for retail uses and \$0.50 per square foot for single-family residential use, the tract could be worth \$3.8 million to a company developing 15 acres of retail uses but only \$2 million to one developing retail on seven acres and housing on eight.

A third factor to consider in so-called comparable sales is the economic "validity" of many land sales. Following the deregulation of financial institutions in the United States in 1982, many land sales have been driven by investors buying to resell (as opposed to developers buying land to develop it). The dubious economic premise upon which many such land sales have been based in

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the "greater fool" theory: another buyer will always be available to pay a higher price. Participants in such transactions have given almost no consideration to the value of the land to its ultimate user. Obviously, a deep shadow of doubt is cast on the validity of "value" derived from such sales.

VALUE AS A FUNCTION OF FUTURE USE

The clear fact is that appraisals based on "comparable" sales that are not comparable do not accurately reflect value. The better approach is to appraise land based simply on its future use.

Today's investor in land should evaluate it on the basis of what a developer would pay for it at the point when the land becomes ripe for development, and factor into today's price and appropriate return on investment for holding the land until it attains its maximum value to a developer. Land, then, has three primary components of value: 1) its future value to the developer, 2) the timing of development, and 3) the landholder's return on investment.

To determine the future value of the land to the developer, one first anticipates the property's future use through a consideration of demographic trends and the current zoning of the property and then anticipates the time when it will be ready for development. The detailed projection of use can best be undertaken with the help of an experienced land planner, who can analyze local population, economics, and traffic to assess the property's visibility and accessibility. Having weighed the various factors, the land planner can then estimate the number of acres of different land uses that the market would support on the property.

The next step is to forecast the timing of development, a function

of a wide array of factors that includes availability of land in the area, the proximity of the property to development, and historic growth. An analysis of these factors can paint a reasonable picture of future land development in the area as well as pinpoint the timing of the property's development.

The investor can then look at current market factors—rents, construction costs, and prices of developed property—to determine what a developer would pay today for the property if it were now ready for development. This price plus a reasonable inflation factor applied

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over the length of the holding period will produce a reasonable estimate of the future value of the property to the developer.

The last component of value is the appropriate return on investment to the holder of undeveloped land. As with any investment, the appropriate return is a direct function of the risk. The risk associated with investment in land is quite different from the risk associated with investment in income property, largely because the methods of establishing returns are so different.

With income properties, income is received on a current, ongoing basis, whereas with land, income is received only when the property is sold. Further, with income properties, the primary factor that establishes value (the current income stream) is a known factor, while with undeveloped land, the factors that establish value are inherently nebulous, derived as they are from educated guesses on use and timing. Time and unknowns make the risk in land greater.

Given that investment in land is

about twice as risky as investment in income properties, the appropriate return on investment is roughly double: if the market indicates a 10 percent rate of return is appropriate for income properties, then the appropriate investment return for land purchased on a cash basis may well be 20 percent.

For land purchased on a leveraged basis, loan terms are another key determinant of risk. One of the primary risk factors in land investment is the ability to hold the property until whenever development might take place. Land investment that is leveraged increases the risk of

not being able to hold the property. For this reason, the appropriate return on investment for land acquired on a leveraged basis may well be 25 to 30 percent, depending on the amount of leverage and the payment terms.

VALUE V. MARKET PRICING

Typically, the closer the land is to development, the better market pricing reflects economic value. For the last buyer of unimproved property—that is, for the developer—the price paid must equal the use value. Conversely, market pricing tends to deviate the most from economic value the farther away from development land is.

Take, for example, a 15-acre tract that will be suitable for development as a neighborhood shopping center in five years. Based on current retail rents, a developer would pay \$6.00 per square foot for the property were it developable today. Assuming inflation at 5 percent the developer would pay \$7.66 per square foot in five years. Calculations of present value

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