

## How to Test Hotel Feasibility

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When designing a hotel, the architect and development team need to create a project that is ultimately economically feasible. Unless the hotel's owner is ego driven rather than economically motivated, most investors are looking for a return on their invested capital. Since feasibility means different things to different people, and as a hotel consultant having prepared thousands of feasibility studies, I have been asked to provide my perspective on this topic.

The process I like to use for determining whether a proposed hotel is economically feasible is to compare the total project cost (including land) with the hotel's estimated economic value on the date it opens. A feasible project is one where the economic value is greater than the cost. Accurately estimating the total project cost is a relatively simple process for the architect and development team. However, determining the economic value is much more complicated.

The first step in the valuation process is to perform a market study where the local hotel demand is quantified and allocated among the existing and proposed supply of lodging facilities. The allocation of roomnight demand is based on the relative competitiveness of all the hotels in the market. The end result is a projection of demand captured by the proposed subject hotel, which is then converted into an estimate of annual occupancy. A similar procedure is used to project the average room rate.

The second step is to project the hotel's operating revenue and expenses based on the previously estimated occupancy and room rate. This results in an estimate of annual net operating income. Most consultants use a five- to 10-year projection period, so this process needs to be repeated for each year.

The last step is to convert the projected NOI into an estimate of value using a weighted cost of capital discounted cash flow procedure. The end result is an estimate of economic value that can be compared to the total project cost.

Some consultants will substitute a net present value calculation or determine the internal rate of return (IRR) for the last step. However, I prefer using the economic value approach because you end up comparing "apples with apples" — i.e. cost with value.

As you can see, this process of determining economic value requires local market knowledge, hotel financial expertise and experience with valuation methodology. Luckily for architects and hotel developers, there are two simple rules of thumbs that will provide a rough approximation as to whether a project is economically feasible.

The first thumb rule tests the cost of the land to determine whether it exceeds a supportable economic land value. The following formula calculates economic land value:

$$\text{Occupancy} \times \text{ADR} \times \text{Rooms} \times 365 \times .04 / .08 = \text{Economic Land Value.}$$

As example, a proposed hotel is being considered on a parcel of land that can be acquired for \$3,800,000. Zoning permits the development of 200 rooms. Based on local market conditions, the proposed hotel should achieve a stabilized occupancy of 70% and an average room rate of \$150. Using these inputs the Economic Land Value would be calculated as follows:

$$.70 \text{ Occupancy} \times \$150 \text{ ADR} \times 200 \text{ Rooms} \times 365 \times .04 / .08 = \$3,832,500.$$

The calculation shows the Economic Land Value is above the cost of the land so the developer is not overpaying for the land. If the land cost was \$4,000,000 or above, the developer needs to re-evaluate the project because

### Summary

Steve Rushmore's August 2011 column in Lodging Hospitality magazine.

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it's not supported by the hotel's underlying economics. Perhaps additional rooms could be added, which would increase the room count or a higher quality of hotel developed would increase the average room rate. This Economic Land Value formula works well in most markets. For prime center city locations the .04 factor can be moved up to .08.

The second rule of thumb is the Average Rate Multiplier formula. This is a very simple way to approximate a hotel's total economic value. The formula is as follows:

$$\text{ADR} \times \text{Rooms} \times 1,000 = \text{Economic Value}$$

Using the numbers from the example above produces the following Economic Value:

$$\$150 \times 200 \times 1,000 = \$30,000,000$$

If the hotel's total development cost is over \$30,000,000, there could be a feasibility problem. In most cases where the development cost is significantly higher than the economic value it is because the local market's average room rate is too low to support the contemplated improvements. In these situations the proposed plans and specifications need to be scaled back in order to produce a lower total project cost, which might then create a feasible project.

One additional point of reference looks at the percentage relationship between the hotel's land cost and the economic value. In this example, the value of the land is approximately 13% of the overall economic value ( $\$3,832,500 / \$30,000,000 = 13\%$ ). This relationship should be no more than 15% to 20%. In other parts of the world where labor cost is low, this percentage relationship can be higher.

Using these hotel feasibility rules of thumb combined with a professionally prepared study will insure the architect and developer are not creating a project that has no economic viability. As with any rule of thumb, there are numerous exceptions that need to be factored into the evaluation. Before abandoning a project because the rules don't produce the desired results, it is a good time to call in a professional consultant to prepare a more in depth analysis to either verify or dispute the conclusions produced by the rules of thumb.

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### About **Steve Rushmore**



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