

Vacancy Management II: An Agency Problem

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This is the second in a series of *ORER Letter* articles on the economic analysis of property management. The first article in the series, "Vacancy Management," appeared in the Summer 1989

The purpose of the previous article was to debunk the notion that maximum income is the natural outgrowth of a zero vacancy level. That article focused on effective gross income (EGI), demonstrating that maximizing the EGI of an income-producing property may require the owner and manager to tolerate some level of vacancy. The current article focuses on net operating income (NOI), which is the portion of EGI that remains available to the property owner after management and other operating expenses have been paid.

An owner's goal, of course, should be to maximize NOI. Like EGI, NOI is maximized at a vacancy rate in excess of 0%. In fact, maximizing NOI would generally require greater vacancy than maximizing EGI. These concepts are illustrated in the graph. Note that the horizontal axis measures occupancy, so points farther from full-occupancy point F represent higher vacancy levels. V_n , the level of vacancy that maximizes NOI (it falls below vertical line AB, which shows the maximum difference between EGI and operating expenses) is to the left of V_e , the vacancy that maximizes EGI (it falls below the highest point on the EGI curve). Therefore, a higher level of vacancy is required for NOI than for EGI.

But would the manager seek the level of vacancy that would maximize NOI? If so, is the manager's duty to the owner the force that would assure NOI maximization? Under an improperly designed compensation system, there would be an inherent conflict between the manager's goals and those of the owner. Therefore, a desire on the part of an owner does not necessarily lead to consistent action by a non-owning man-

ager. The economics and finance literature have long noted this conflict, which is known as the *agency problem*. To control this problem, we must design a compensation system that aligns the manager's motivation with the owner's goal of maximizing NOI. In designing such a system, we must first consider whether a manager, who is typically paid a percentage of EGI, would prefer that the EGI be maximized. Second, we must question

A seemingly helpful change in the typical compensation scheme would guarantee a conflict between the owner's goals and the manager's.

whether paying the manager a percentage of NOI would eliminate the conflict between the manager's and owner's goals.

It is logical to assume that the manager would wish to maximize his own compensation. We might initially conclude that the hired manager, if compensated as a percentage of EGI, would pursue any activity that would increase gross receipts, doing so even if the activity

were a largely unproductive one involving high expenses, a slight increase in EGI, and a resulting decrease in NOI.

Such a conclusion requires, however, that the manager bears no cost associated with operating expenses. Consider an alternative view, in which we assume that the manager's own costs, in terms of such factors as time, supervision, and worry, are the same percentage of total costs that the manager's compensation is of EGI.

If this is the case, there is no conflict between the goal of the owner and that of the manager. Both would want to maximize NOI, even if the manager's compensation were based on EGI. There would be no conflict between principal (owner) and agent (manager). Thus, with conventional compensation schemes the possibility exists that there would be no agency problem.

What would happen if we were to instead pay the manager a percentage of NOI? If the manager would bear any opportunity costs (and it is preposterous to imagine that a manager could avoid costs), then his compensation would be maximized at some point ■

Optimal Occupancy/Vacancy Rates: EGI and NOI

