A Reply To New Critics

by Austin J. Jaffe

Upon presentation in 1978 of a working paper entitled, "Optimal Holding Period Analysis: Much Ado About Nothing,"[1] I received a number of comments which argued against the basic premise and specific methodology used in the paper, that is, whether or not sensitivity analysis could be used to identify crucial variables in normative real estate analysis.

Changes in those inputs which exhibited relatively small impacts on output were judged to be relatively unimportant to the analyst. Subsequently, critics frequently pointed out that changes in a *set* of inputs would result in different sensitivity effects than would changes in individual parameter values in isolation. This hypothesis was and is undoubtedly correct. After the first dozen demonstrations, however, I thought I had heard them all.

It was hoped that the change in title from the working paper to the published article ("... Much Ado About Not Much")[2] would permit additional breathing space for skeptics and other critics. In a world where investment analysis was costless to perform *and* where market efficiency was presumed to be poor, at best, optimal holding period analysis seemed likely to matter. In other words, it remains a frivolous exercise.

Recently, two new critics have appeared armed with new ammunition: a time-tested bow-and-arrow famous in ancient battles but still employed today by "real-world" warriors[3] and a shiny new cannon developed in the battles of fixed-income securities fought elsewhere but hopelessly misapplied to the battles waged in this journal.[4] Since I have previously dealt with the earlier criticism in a different context,[5] I wish to reply here to the latest thrasher with perhaps the unrealistic hope of ending this particular battle, if not the entire phase of the war.

The author's concern seems to be over the alleged neglect of investment abandonment decisions in the study of sensitivity analysis of real estate projects. Despite a well-defined body of literature on capital budgeting and abandonment value[6] to which the author appeals, the analysis of optimal holding period selection is perfectly consistent in concept with the consensus of that literature. The techniques of abandonment value analysis were not particularly relevant for my purposes in evaluating the relative futility of optimal holding period analysis.

The author seems to misunderstand the model used in the sensitivity analysis and accuses me of creating a fixed-income investment as a strawman to reject

Austin J. Jaffe, *PhD, is associate professor of real estate in the College of Business Administration at The Pennsylvania State University in University Park, Pennsylvania. He has published articles in numerous other journals including* American Real Estate and Urban Economics Journal, Journal of Property Management, The Appraisal Journal *and* The Real Estate Review.

the usefulness of the determination of optimal holding period analysis. He then proceeds to cite others who have shown that risk can be viewed as a function of the holding period for fixed-income investments. Therefore, "holding period is the key to risk thresholds."

If the real estate valuation model were similar to that used for fixed-income securities cited, the length of the holding period might matter. However, contrary to the author's beliefs, the discounted cash flow model used in the sensitivity analysis allows for changing net operating income levels as well as for permitting growth in the anticipated sales price of the asset's property rights. Thus, the sensitivity results were shown for an asset which is quite dissimilar to the one the author had hoped to use for a comparison.

If the real estate valuation model were dissimilar to that used for fixed-income securities, then it seems we truly have "a case of apples (where) the presence of oranges is unimportant." But the author also states that "the fixed-principal nature of the security is, of course, quite different from real property investments." Either real estate valuation is or is not comparable to the relevant properties of fixed-income securities. In either case, my basic results seem unaffected by the answer.

Recent research on fixed-income securities has demonstrated the usefulness of alternative measures of yield (for example, duration, coupon bias, etc.) which can be used in valuation.[7] Much of this research has implied that holding period considerations can affect the riskiness of borrower/lender or buyer/seller positions. However, none of it is particularly relevant to the issue of the usefulness of determining the optimal holding period for real estate investment analysis.

Fundamentally, real estate valuation remains a function of the property's location and this certainly seems true here. The author concludes that "the jury is still out on the importance and cost effectiveness of optimal holding period analysis for real estate decisions." I guess the validity of that conclusion depends on where the courthouse is located.

NOTES

1. Austin J. Jaffe, "Optimal Holding Period Analysis: Much Ado About Nothing," paper presented at the American Real Estate and Urban Economics Association Meetings in Chicago, Illinois, August 1978.
2. Austin J. Jaffe, "Optimal Holding Period Analysis: Much Ado About Not Much," *Real Estate Issues* 4 (Summer 1979), 79-95.
3. Letters to the Editor, "Optimal Holding Period," *Real Estate Issues* 4 (Winter 1979), 87.
4. Bruce N. Wardrep, "Optimal Holding Period Analysis: Yet Unresolved," *Real Estate Issues* 6 (Fall/Winter 1981), 38-39.
5. Austin J. Jaffe, "'When Should Real Estate be Sold?': A Comment," *Real Estate Issues* 4 (Summer 1979), 79-81.
6. Alexander A. Robichek and James C. Van Horne, "Abandonment Value and Capital Budgeting," *Journal of Finance* 22 (December 1967), 557-589 and others.
7. For example, George G. Kaufman and George E. Morgan, "Standardizing Yields on Mortgages and Other Securities," *American Real Estate and Urban Economics Association Journal* 8 (Summer 1980), 163-179.