# "When Should Real Estate Be Sold?": A Comment

*by Austin J. Jaffe*

Jack P. Friedman's recent article entitled "When Should Real Estate Be Sold?"[1] attempts to solve what he (and others) have presumed is "a major concern of realty owners, property managers, investment counselors, and mortgage lenders." The determination of the optimal holding period for income-producing property appears to be one of the most appealing and yet elusive butterflies in the real estate forest. Other recent work has also aimed at answering the optimal holding period question.[2] This growing body of literature, specifically Friedman's recent paper in *Real Estate Issues*, warrants these comments.

The major issue raised here must be clarified. The derivation and definition of the optimal holding period tends to split researchers into two camps. The first camp selects the period in which the internal rate of return (usually on equity) is the greatest for the project in question. Cooper, Pyhrr, Friedman, and others have been the leading exponents of this approach. Another view is that holding period selection according to the internal rate of return criterion may not be sufficient for wealth maximization although this condition can be satisfied by selecting the period with the highest geometric mean rate of return. Messner, Findlay, Howson, and others have made these arguments by which the author has been convinced. However, the major point raised by this comment goes beyond the conceptual and theoretical issue.

If the determintion of the optimal holding period is a critical estimate for the real estate analyst, however derived, then the results must yield valu-

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able information which, when translated into policy, can significantly affect decision-making. Or viewed differently, in the event of a sub-optimal choice regarding holding period, the investor or lender or manager has a great deal at stake in terms of his financial objectives. Therefore, the major concern raised here is the importance and significance of this determination, given our valuation techniques and methods.

## CRITIQUE OF FRIEDMAN

The development of a financial theory must, by necessity, remain general enough to be able to solve problems and produce results given any parameter values. The determination of the optimal holding period is a part of a general real estate investment theory. In spite of this impetus for generality, Friedman persists with statements like the following:

> And, since each parcel of realty is unique and so is its owner, generalization about income-producing realty can be quite misleading. (p. 68)
>
> (I)t is obviously dangerous to apply a general rule in suggesting a holding period for all income-producing real estate. (p. 70)
>
> Since determining the best year of sale is a complex matter, that determination is better performed on a case-by-case basis. . .(p. 74)

After all, a reader is left to wonder "when should real estate be sold?" Perhaps this question remains unanswered by Friedman, except on a "case-by-case basis."

It has been argued, however, that the potential gains for the analyst at the beginning of the planning period of the appropriate amount of time to own the income property are quite small.[3] Furthermore, this result seems to hold true for various definitions of optimal holding period and for various data sets.[4] Finally, it has been shown that the analysis of changes in other variables have a significantly greater impact on value and return than do changes in the expected holding period.[5] This result is dramatic enough to suggest that the issue raised by Friedman and others is almost a moot point, even in a world of market inefficiency and imperfection.[*]

Despite warnings to the contrary, Friedman persisted to identify periods in which the internal rate of return is the greatest for different "types" of property. He identified conditions which resulted in short and long "average suggested holding periods." Once again, if the market value of income-producing property is truly a function of expected future net operating income, then the analysis of expectations on length of holding period becomes meaningless. A similar argument could be made regarding the analysis of the "effect of income tax brackets."

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*Given competitive market conditions, the notion of an "optimal holding period" becomes suspect as buyers and sellers will trade at the end of each period for prices that reflect future declining (or rising) values.

But perhaps the most curious analysis is the discussion of the two turning points in income-producing property. These refer to hypothetical periods when principal reduction equals depreciation charges in that year and when the after-tax cash flow becomes zero for the year. Obviously, these recommendations are contingent upon presumptions about growth rates and cash flow patterns used in his model. The generality of these "rules of thumb" are certainly questionable if not dangerous in this context.

Finally, Friedman makes a plea for the analysis of "anticipated future project income" in attempting to make the hold or sell decision. "Past performance does not give this information," he says, "it is the expected future income that is important." Certainly this statement, although quite basic to most students of discounted cash flow techniques, is one of the most important in the article. However, instead of recognizing the significance of changes in income or expenses, even in his own study, Friedman spends his efforts analyzing changes in significantly less consequential variables such as depreciation methods, depreciable lives, and mortgage amortization terms.[6]

## CONCLUSION

Although the development of optimal holding period theory for the discounted cash flow framework of real estate projects is a welcome addition to a growing theory, the potential gains now available to real world users are quite small. It is hoped that real estate analysis can be directed toward those areas where significant improvements can be made in implementing the decision-making process. It seems that the determination of the optimal holding period does not appear to be a very significant matter.

## REFERENCES


1. Jack P. Friedman, "When Should Real Estate Be Sold?" *Real Estate Issues*[3] (Summer 1978), pp. 68-76.
2. James R. Cooper and Stephen A. Pyhrr, "Forecasting the Rates of Return on an Apartment Investment: A Case Study," *The Appraisal Journal* 41 (July 1973), pp. 312-37; Stephen D. Messner and M. Chapman Findlay, III, "Real Estate Investment Analysis: IRR Versus FMRR," *The Real Estate Appraiser* 41 (July-August 1975), pp. 5-20; Jack Friedman, "The Internal Rate of Return Plus the Pull Factor," *The Real Estate Appraiser* 42 (March-April 1976), pp. 29-31; Stephen D. Messner and M. Chapman Findlay, III, "Real Estate Investment Analysis: IRR + Pull Factor v. FMRR: A Comment," *The Real Estate Appraiser* 42 (July-August 1976), p. 58; Jack P. Friedman, "IRR + Pull Factor v. FMRR: A Reply," *The Real Estate Appraiser* 42 (July-August 1976), pp. 58-60; M. Chapman Findlay, III and Hugh R. Howson, "Optimal Intertemporal Real Estate Ownership, Valuation and Use," *American Real Estate and Urban Economics Journal* 3 (Summer 1975), pp. 51-66.
3. Austin J. Jaffe, "Optimal Holding Period Analysis: Much Ado About Not Much" *Real Estate Issues*, this edition.
4. *Ibid.*
5. *Ibid.*
6. See Austin J. Jaffe, "The Property Manager: Foremost Among the Decision-Makers," *Journal of Property Management* 42 (November/December 1977), pp. 288-90.

# REPLY

*by Jack P. Friedman*

A real estate investor, before he plunges into another acquisition, should have a feeling for resale prices and holding spans. When combined with pro-forma operating data, the information results in an "investment life cycle," allowing a yield-to-maturity computation. The importance of such a computation has been previously emphasized.[1] The approach requires that a fixed holding period be considered. Sensitivity analysis can be used to consider several holding periods. This provides useful information to the investor.

Austin Jaffe states that the determination of the optimal holding period "appears to be one of the most . . . elusive butterflies in the real estate forest"[2] and suggests that continued interest in this topic is misdirected. He correctly points out that net operating income (he separates effective gross income from operating expenses) and purchase and resale prices are far more important than many other variables; so he emphasizes the need for good property management.[3] I concur. He has captured the thrust of "When Should Real Estate Be Sold?"[4] in his statement that "the question remains unanswered by Friedman except on a case-by-case basis."[5] Though Jaffe has put me in fine company with Cooper and Pyhrr, he has failed to acknowledge significant differences within both "camps."

It is puzzling that, while Jaffe emphasizes the importance of a general real estate investment theory, he fails to recognize the non-uniform results of theory application. That is, the same theory, when applied to different data sets, will offer different results.

More important, Jaffe errs in stating that "the issue (of optimal holding periods) is almost a moot point."[6] As support he cites his own article, which states that "potential gains (for the analyst) . . . are quite small," [7] and that "this seems to hold true for various definitions of optimal holding periods and for various data sets."[8] The matter of holding periods is not to be taken lightly. It frequently accounts for the difference between negative yields on equity and high yields.

Note: Mr. Friedman wrote this reply, after examining Mr. Jaffe's manuscript, " 'When Should Real Estate Be Sold?': A Comment," but without reviewing "Optimal Holding Period Analysis: Much Ado About Not Much."

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For example, after-tax yields on highly levered, rapidly depreciated property are likely to be negative if the property is sold within five years of acquisition. This is especially true for property that is subject to 1) net leases, 2) local rent controls, or 3) HUD-FHA regulatory agreements. Early "turnover" of such property will cause a huge taxable gain, and taxes must be paid from a nominal amount of sales proceeds. Such tax payments are likely to leave no after-tax proceeds from a sale and to erase financial benefits received earlier. But longer holding periods ameliorate this by 1) deferring the tax on the gain, 2) possibly changing ordinary income to capital gain, and 3) possibly eliminating the tax on the gain at the investor's death. (The third possibility, though once thought to be eliminated by the 1976 Tax Reform Act, is still viable at this time.) Under the fixed-income conditions described—and they are not uncommon—holding periods of fifteen years or more may result in high after-tax yields, as opposed to negative yields for disposition within five to seven years. Under other conditions, an immediate profitable sale, with or without an accompanying lease-back, could provide the best results. It might free up capital for profitable reinvestment when such opportunities are favorable. There are still other data sets which, if properly analyzed, would suggest alternative holding strategies.

So a case-by-case approach is the best method of determining when to sell real estate, at least in my opinion. Property management, important as it is, cannot be substituted for investment or portfolio management which is of major concern to owners and their advisors.

## REFERENCES


1. Stephen E. Roulac, "Life Cycle of a Real Estate Investment," *Real Estate Review* 4 (Fall 1974), pp. 113-17.
2. Austin J. Jaffe, "'When Should Real Estate Be Sold?': A Comment," *Real Estate Issues*, this edition.
3. Austin J. Jaffe, "The Property Manager: Foremost Among Decision Makers," *Journal of Property Management* 42 (November-December 1977), pp. 288-90.
4. Jack P. Friedman, "When Should Real Estate Be Sold?" *Real Estate Issues* 3 (Summer 1978), pp. 68-76.
5. Jaffe, *supra* note 2.
6. *Ibid.*
7. *Ibid.*
8. *Ibid.*