

REAL ESTATE ISSUES

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Editor's Statement

Inflation is changing the rules of the game, along with the size of the markers and the nature and thinking of the players. We are entering a new era in real estate, an era characterized by large institutional equity investors, complex financing arrangements, indexed leases, radical changes in the structure of our financial institutions, and the use of cash flow modeling over a ten or fifteen year forecast period as the test of value and feasibility.

This number of *Real Estate Issues* focuses on the new setting in which the game will be played through the 1980s, and perhaps beyond. It begins with an appraiser's view — that of Lloyd D. Hanford, Jr., who articulates the uneasiness that is bothering many appraisers these days and suggests various ways of coping. Maury Seldin describes and diagnoses the new situation in the first of a series which will deal with the problems of change in real estate. Samuel Zell, a player who has matched his own moves to the transformations of the market over the past decade with great skill, draws inferences for the '80s and offers further insights into the unleveraged times ahead.

As real estate ownership shifts from country-club partnerships to institutional investors, an important share of brokerage and counseling activities is moving away from local real estate firms in the direction of investment banking houses, national real estate companies and financial conglomerates. Bowen McCoy describes the big action as it is handled by the big players, in this instance Morgan Stanley & Co. The sheer size of the dollar amounts involved in these cliff-hangers will seize your imagination.

Inflation of course has other consequences, direct and indirect, some of which are examined by other authors in this issue in discussing broker effectiveness, investment returns to homeowners, development planning and rent control. The decay of New York City, in part a result of inflationary pressures, is counterpointed by the summary of world office rents. Will inflation continue unabated? There are excellent reasons to think it will, and that the lessons to be learned from this number of *REI* will be valuable for years to come.

A handwritten signature in black ink, reading "David Ahlman". The signature is fluid and cursive, with the first name "David" and last name "Ahlman" clearly distinguishable.

Editor-in-chief

New Perceptions of Value

Lloyd D. Hanford, Jr., Page 1

Radical changes in the money markets since October 1979 have altered the structure of real estate financing and transactions, and caused critics to question the validity of real estate appraisals. This article reviews the impact of change on traditional valuation methodology and examines how appraisers and consultants can approach valuation problems under conditions of great uncertainty.

Seldin on Change: Betting on Inflation

Maury Seldin, Page 6

Over the last 20 years the inflation rate has risen and, despite presidential promises, it is not expected to subside in the '80s. Using real estate as a hedge against inflation, investors are betting that the rate will continue its climb or fluctuate around current levels. But what happens if inflation is contained or even reduced? Both the rewards and the risks for investors betting on inflation are explored.

Neither a Lender nor a Lender Be

Samuel Zell, Page 9

Some of the greatest structural alterations in real estate financing since World War II are taking place in this decade. The most important changes are occurring in the availability and sources of funding. New approaches in such areas as joint venture participation, pension funds and the public real estate company are discussed, and the impact of this realigned real estate industry is reviewed.

Adventures in Marketing Large Real Estate Portfolios

Bowen H. McCoy, Page 13

The orderly sale of large portfolios involving major investment properties is an undertaking which requires hard work, astute thinking, careful planning and capable organization. This article describes how four cases over the past 10 years were handled by the author's firm, which served as evaluator, advisor, packager and marketer of these transactions: The Irvine Ranch, Tishman, Monumental Properties and Ernest Hahn.

The Effect of Real Estate Brokers on Selling Price

James R. Webb, Page 19

Real estate brokerages are often touted by consumers as "good" or "bad" depending on their service and communication. A more important and more easily quantifiable measure would be the effect of the brokerage on selling price. Twenty-five brokerages and 366 multifamily residential real property transactions are used to test the effect of the listing broker and the selling broker on selling price.

Return on Investment in Owner-Occupied Dwellings

Patricia M. Rudolph, Page 22

The return on investment in residential housing is calculated by using the internal rate of return (IRR) framework. The IRR

calculation simplifies the task of incorporating tax effects in the return. Since owner-occupied dwellings provide housing services as well as dollar returns, an imputed value of the housing services is figured in the cash flow. An example demonstrates the calculations involved and compares the IRR including the imputed rental value of the house with two other measures of return.

The Counselor, the Computer, and Creative Financing

Robert J. Spiegel and Richard de Mornay, Page 25

The professional real estate counselor is often required to provide his client with alternative answers to specific questions, a procedure known as sensitivity analysis. This type of analysis was time-consuming and tedious before the advent of micro-computers. In this article, the LANDEV Participation Program, used for the analysis of potential development projects and now available on an inexpensive computer, is presented.

Urban Revitalization and Rent Control in the District of Columbia

Chester C. McGuire, Page 32

Washington, D.C. is an example of a city in which rent control exists at the same time that neighborhood revitalization is occurring. What is the impact of an active rent control program on the revitalization process? Can central city revitalization be sustained under the restrictive climate of rent control? A sample of rent-controlled buildings divided into two groups (condo-eligible group and control group) is used to determine these effects.

Corporate Ownership Entity Reconsidered

Gaylon E. Greer and Michael D. Farrell, Page 41

Despite widely-discussed limitations, the corporate form of ownership is the most attractive entity choice for many real estate investors. It provides investors with tax-planning opportunities and income tax advantages such as lower marginal rates, a favorable add-on preference tax and various deductions. The advantages of corporate forms may be amplified by judicious tax strategy planning.

The Last Supper at Gracie Mansion: A Fable

Seymour B. Durst, Page 46

New York and the other older cities in this country are in the process of steady economic decline. Real solution and restoration of the income-producing potential of these cities does not depend on more inflationary Federal aid, but requires the will to make fundamental changes in the tax laws, subsidy programs and number of housing restrictions.

World Rental Levels

Richard Ellis, Inc., Page 48

Current office rental values for 23 cities throughout the world are given in the local currency and converted into dollars for comparison. A graph illustrates the rental levels.

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NEW PERCEPTIONS OF VALUE

by Lloyd D. Hanford, Jr., C.R.E.

Real estate appraising is under fire. Critics charge that many appraisals are worthless in today's chaotic market. Property owners are challenging valuations, and buyers and sellers are often ignoring them. And although appraisers say they are trying to adapt to the new era, there is reason for skepticism.¹



Is this skepticism well-founded? To the degree that appraisers under current market conditions still follow the time-honored approaches to value and methodology for analyzing value, there is reason for wide public skepticism.

Lloyd D. Hanford, Jr., CRE, is owner of Lloyd Hanford, Jr. & Co., a real estate counseling and appraisal firm in San Francisco, California. Nationally-known as a lecturer and author on real estate, he is a past president of the Institute of Real Estate Management of the National Association of Realtors. Hanford also holds the professional designations MAI, SREA and CPM. He received a degree in economics and political science from the University of California at Berkeley.

Policy Change Impacts On Market

Prior to October 6, 1979 the majority of residential and investment real estate transactions was predicated on a structure involving debt and equity. Typical transactions included conventional debt in a ratio of 75 percent or more of property value, with a 25 percent or less cash equity contribution. The conventional real estate finance market was relatively orderly with a relatively stable supply of lendable funds at affordable interest rates. In an unprecedented midnight session on October 6, 1979 the Federal Reserve Board raised the discount rate, signaling the beginning of a new, tough monetary policy. Money became extremely tight. By April 1980 the prime interest rate had risen to 20 percent. The cost of real estate financing escalated to a range of 17.5 percent to 18 percent on apartment properties and 14 percent to 15.5 percent on commercial properties with little or no availability of funds. Prime dropped significantly between April and July 1980, hitting a low of 10.75 percent before beginning its upward spike. From August 1980 through January 1981 prime rapidly climbed to an unprecedented high of 21 percent before beginning a descent. During this time funds available for real estate financing were in extremely short supply.

The election and inauguration of President Reagan may be promising but have not altered the capital markets. The stock market, a bellwether of anticipation, has been erratic at best, indicating a substantial uncertainty concerning the immediate future of the economy. Assuming that the president's promise to fight inflation is successful, it could be years rather than months before the measures taken have a stabilizing effect on the economy.

Perceptions of real estate value, long predicated on the availability of real estate financing, have been altered and will remain altered for the foreseeable future. It is indicated that a policy of tight money will

continue. Even if the demand for loans reduces significantly, with a concomitant drop in interest rates to reflect a lessened demand, it would not be reasonable to anticipate a resurgence of a healthy real estate finance picture. If interest rates drop significantly, the backlog of corporate financing coupled with the regular refinancing of government obligations will quickly erode the supply, sending interest rates back up. The backlog of corporate and governmental demand for money should leave very little available for the real estate sector.

Implications For Real Estate

Since October 1979 major changes have occurred in the structure of real estate finance. While the supply of lendable funds may increase, many of these changes should become permanent fixtures in the market. It is obvious that long-term lenders will no longer provide money at interest rates below the rate of inflation, so that appraisers will have to monitor changes in inflationary trends and money supply figures carefully for a prediction of movement in interest rates on real estate loans. The era of the long-term, fixed-rate real estate loan is over. New loans will either be short-term loans, variable rate loans or short-term roll-over loans with renegotiated interest rates.

In the residential field, shared appreciation mortgages (SAMs) may become a frequent device. Major lenders have shifted from the ownership of a debt instrument to the ownership of an equity position, emphasizing participating mortgages, mortgages convertible into an equity position and/or joint ventures.

Changes in the structure of financing have completely altered the concepts of leveraging. The ability to achieve the benefits of a highly leveraged transaction was nearly unique to real estate. At this point in time it is impossible to quantify the value weight given by purchasers to the benefits of leveraging, but it is clear that these benefits have been changed substantially and that the valuator of real estate, to be contemporary, must consider these changes.

Sales transactions negotiated prior to October 6, 1979 occurred under totally different economic conditions than those existing today. Therefore, those transactions are probably of no material significance in arriving at a current market value estimate. Although not provable, it is probable that a majority of transactions closing between October 1979 and April 1980 was negotiated either prior to October 6, 1979 or was negotiated on the presumption that the existent chaos in the money markets was a short-term phenomenon. Probably these transactions do not shed any light on the current market. Belief that the present status of the money market is a temporary or short-term phenomenon has a greater probability of being in error than of being correct.

A large number of sales transactions occurring since

October 1979, particularly in the residential field, have been structured on seller-carried debt either in the form of a first loan, a second loan or wraparound financing. This seller-carried debt frequently has been at an interest rate lower than the prevailing market rate. If appraisers rely on seller-carried financing in processing comparable value, then it is mandatory that they qualify their value conclusions as being based on the assumption that the seller would carry notes equivalent to those in the sales sample. On the other hand, if appraisers report value in terms of cash or cash equivalent, then in processing comparable sales they must apply the market discount rate to any seller-carried financing to report a cash equivalent value for the property being appraised. The latter approach is probably the most consistent under accepted value definitions, since those definitions refer to price in terms of "money" and not in terms of "paper."

Weakness In Residential Market

Much past real estate activity was induced by the belief that real estate is the best inflation hedge. The speculative market of homes and condominiums is evidence of that belief. To measure any hedge, the analyst must be aware that the costs to carry a property in excess of income tend to modify or nullify the hedge. Adjustable interest rates leave questions as to the long-term and real hedge benefits. Evidence based on stock market behavior is emerging that investors may be adjusting their anticipations of future inflation rates. If these anticipations are adjusted downward, it is possible that historic growth patterns in real estate will be modified, inducing less aggressive buying patterns. Today's appraiser should be current on the degree to which fear of inflation — or the reduction of those fears — might impact the marketability and price of property.

The current residential market with high interest rates and equity requirements is one in which a majority of potential purchasers cannot qualify even if loans were available. Under these conditions and consistent with past performance, anticipations of value increases may not be realistic. Under these conditions and despite supply shortages, the number of listings available for purchase on a national basis probably exceeds the number of qualified purchasers ready, willing and able to purchase. A proliferation of "For Sale" signs and the durations of sign postings are signals of this possibility. Advertisements indicating "price reduced" or "owner will carry financing" are additional evidence of a relatively weak market. Probate offerings on an all cash basis and with no bidders are frequently occurring. Motivated sellers or those having to sell are faced with the prospect of a lower price on a cash basis, or if contract price is important they are faced with participating in the financing at a submarket rate of interest. Appraising the current market value of residential property without considering these phenomena is not prudent.

Two-Tiered Investment Market

The investment real estate market is exhibiting changing patterns. Yield expectancies appear to be increasing from 1979 levels, although the number of transactions is insufficient to make this conclusive. The investment property market appears to be dividing into two distinct tiers. The first tier represents property that is of pension fund, institutional, off-shore, or large investor quality with concentration on prime-located, major projects like office buildings, shopping centers and general purpose industrials with a cash investment upward of \$2,000,000. Purchasers do not appear to be affected by the lack of available conventional financing, and demand appears to be strong despite unsettlement in the money markets. Pension fund, institutional and some off-shore investors are cash purchasers and operate without financing. Large investors and developers have the ability to finance through equity participations or joint venture arrangements.

A subcategory of the first tier consists of those properties with existing assumable long-term debt at low interest rates. Demand for this type of property remains high, with some premium for below market rate debt if the debt ratio is high enough.

The second tier of the market is comprised of those properties not of pension fund, institutional, off-shore or large investor size or quality, but includes secondarily-located properties and properties of comparatively small size. Properties in this tier are not financed readily. Purchasers tend to be dependent on financing as a basis for acquisition. The second tier apartment properties are probably more adversely affected than other commercial properties. The short supply of new housing and lack of affordability have placed severe pressure on existing rental housing, also in short supply. The result has been the threat or enactment of rent control and/or condominium conversion restrictions. This, in turn, has chased potential lenders out of this market, even when funds are available, and has induced buyer concerns which adversely impact marketability. In general, properties in this second tier appear substantially less marketable than in 1979, with a consequent downward pressure on cash price or the equivalent prospect of seller-carried debt.

While there may be numerous exceptions to these observations, today's appraiser should give detailed consideration to the type of market that may exist for the property under appraisal and the probable transaction structure that may result from an offering.

Need For New Rate Determination

Capitalization rates from previous market transactions, even though negotiated since October 1979, are probably inconclusive and misleading for two reasons:

- Too few "comparable" transactions exist to permit

development of a statistically accurate model;

- Money and real estate markets are changing too rapidly to allow any dependence on past transactions.

With high interest rates, variable rate mortgages, short-term loans, renegotiable rates and the lack of available funds, it is no longer practical to develop a capitalization rate using a debt constant-equity dividend, weighted band of investment method.² Even if financing were available, the weighted debt constant component would force the capitalization rate to unrealistic heights.³ For example, a 15 percent interest rate on a 30-year loan would produce a constant of 15.173 percent. A 75 percent debt ratio ($.75 \times .15173$) would force a capitalization rate of 11.38 percent, which is higher than current overall rates. The same problems impact the development of a capitalization rate based on the Ellwood Tables.

The investment property appraiser faces a dilemma. Years of refining the art have led toward increased market substantiation for capitalization rates employed. Yet the traditional methods of substantiation and documentation do not exist in a practical sense. Today's appraiser must rely more heavily on judgmental factors without the comfort of reliable, current guidelines for substantiation and a statistically reliable, comparable sales sample. However, judgment need not be exercised in a vacuum for it is still possible and practical to determine yield rates sought by the first tier investors by contacting pension and institutional fund managers. If these rates represent the yields in prime transactions, they tend to establish a floor against which the appraiser can adjust for relative risk in the property under appraisal. Further, offers become a key source of rate information, except in condemnation cases where offers are generally inadmissible evidence. By contacting brokers to determine the basis of current offers, the appraiser can establish a pattern of current buyer behavior. In the last analysis, an appraisal is a judgment and its quality cannot be compromised by reliance on traditional methodology that may be irrelevant.

In the past, lenders used debt coverage ratios in tandem with a capitalization rate derived from a debt constant-equity dividend band of investment. Where financing is available today, the coverage ratio is the key to the amount of financing that a property can command. Lenders will generally seek a coverage ratio minimum of 1.2 to 1 which means that net income before debt service must be 1.2 times debt service. If net income is \$100,000, the maximum available for debt service is \$83,333. If the available loan is 15 percent at 30 years and the constant is 15.173 percent, then the maximum debt is \$550,000 (rounded) or \$83,333 divided by .151173. The debt ratio will be 55 percent if the property is selling for \$1,000,000. Appraisers should remain current on lender coverage ratios in order to evaluate the marketability

of a property, the cash equity requirements and the ability of the typical purchaser to meet the equity requirement.

Many analysts are proponents of internal rate of return (IRR) or financial management rate of return (FMRR) studies as indicators of investment value. These tools if used are not guides to market value but are subjective analyses based on a series of assumptions as to the future as well as to reinvestment. Predictions as to future income streams are highly uncertain and speculative under current economic conditions. Because of the cloud of uncertainty, these predictions have a greater probability of being in error than of being correct. Studies predicated on any assumption that cash outflows are reinvested are suspect because the typical property owner rarely reinvests all of the outflows. The reinvestment assumption is usually very artificial and causes study results to be equally artificial. Investors effectively can use IRR or FMRR as a basis for qualifying potential investments. For example, investors may determine a need for a 15 percent IRR to make a potential investment worthwhile. The investors can make projections based on a set of assumptions that they are comfortable with, and determine whether or not the desired rate will be produced. An investor can also use IRR studies in projecting the optimum holding period for a property. But appraisers should not construe these analytical tools as market value determinants.

Future Income Projections

Many investment decisions may have been reached based on capitalization of future anticipated revenues versus current market revenues. In 1979 shopping centers were a highly-favored investment due to the belief that inflation would induce increased gross sales and higher percentage rents. In 1980 retail sales growth did not keep pace with inflation and percentage rent anticipations did not universally materialize. Further, tight money coupled with sluggish retail sales adversely impacted retail profitability with local, under-capitalized tenants hit hardest. Vacancy or impending retail vacancy because of business failure or lack of profitability is a reality, with demand for secondary or satellite store space reduced because locals are unable to finance new locations. The high cost of construction coupled with a short supply of space often has induced retail rents to rise beyond a justified point based on realistic volume expectations. If there is a further reduction of consumer spending as a result of anti-inflationary pressures, the viability of predictions of future rents becomes more suspect.

Many future income projections are based on historic increases in rentals. If the economy is brought into greater balance, the historic rates will be irrelevant. If the economy is not brought into greater balance, the historic rates will be irrelevant for sure. Projections based on historic or presumed inflation



rates are capable of measuring only the quantity of dollars. To the extent that future income projections are purely inflation-based, studies of investment value based on those predictions tend to be misleading and unnecessary. If one believes that income will only grow at a rate equivalent with inflation rates, then it would seem far more accurate to base value decisions on current dollars rather than the present worth of future dollars and make the assumption that value and/or income will change over time and according to the rate of inflation. If the analyst believes that income will increase faster than the rate of inflation, then the difference between inflation-induced change and forecast rent becomes the "real increase," and can be translated into present worth without distorting the results. Conversely, if the analyst believes that income will not keep pace with inflation, as in rent-controlled apartments, then the shortfall can be translated into a negative worth.

Conclusion

Chaotic conditions in the capital markets have disrupted traditional concepts of measuring real estate value. Attempts to explain the changes with new, complicated mathematical formulas are noble but artificial for two key reasons:

- Investors or sellers do not employ these formulas in arriving at buy-sell decisions;
- The market is changing more rapidly than new formulas can be constructed and printed.

Therefore, the assumptions underlying the new approach are susceptible to change.

It is probably safe to predict that change will continue at an accelerated rate over the foreseeable future. To meet the challenge of change, real estate appraisers should modernize their reports to be sure they answer the value questions meaningfully. Following are some suggestions toward that goal:

- Include a detailed section on the financing market. Relate its status to the probabilities of financing the project or the lack of ability to finance. Conclude with an opinion as to whether or not the financing market will assist or retard marketability and/or value.
- Develop a detailed analysis of any existing assumable debt or locked-in debt, with an analysis of debt impact on marketability or value.
- Make an in-depth analysis of the typical purchaser market for the property under appraisal. Identify the typical purchaser and the typical purchaser's buying patterns. The potential purchasers are the market for the property. Therefore, the appraisal must somehow relate value to the typical purchaser patterns.
- Add a supplementary section detailing impressions and citing reasons for probable future market changes and their potential impact on marketability, value or price. Include advice on marketing strategy and asking price where appropriate. This added section makes the appraisal report not only a value report but also a consultation report to help the recipient in making decisions.
- Above all, qualify all assumptions and do not be afraid to make appropriate reference to the rapidly changing market and the uncertainty that rapid change brings to any value prediction. There is no rule that says appraisers must be able to develop an unqualified, absolutely correct answer. Ac-

countants and attorneys qualify their opinions whenever qualification is called for, and appraisers should do the same.

Appraisals will be worthless in a chaotic market unless appraisers adapt their analytical approaches and rationale to the market as it is today, not as it was yesterday. While comfortable guidelines and past data have been erased from the board, appraisals are not dead but much alive and improving. To improve the quality of their judgments, though, appraisers will have to remain current on factors that influence the market such as economic theory, economic policy, monetary policy and politics. They will have to reorient their reports to explain the existing market for the particular property being appraised. Finally, appraisers will need to go beyond rendering a dollar value opinion, and render advice on marketing, price, terms, and strategy, or at least render advice on how to use the specific appraisal as a decision-making tool considering the purposes for which the value study was performed.

NOTES

1. Lawrence Rout, "Critics Contend Chaotic Economy Makes Most Appraisals Worthless," *Wall Street Journal* (December 24, 1980), 9.
2. Lloyd D. Hanford, Jr., "The Capitalization Process Revisited," *The Appraisal Journal* (July 1976).
3. Robert A. Steele, "DCR/Re Capitalization Rate Tables for Today's Financing," *The Appraisal Journal* (January 1981).

Seldin On Change BETTING ON INFLATION

by Maury Seldin, C.R.E.

The Mouse That Roared, now a vintage movie, depicts how a tiny country is going to escape its economic difficulties by declaring war on the United States. The country plans to lose and then become prosperous with U.S. aid. But someone asks in the movie, "What happens if we win?"

Inflation Rate Continues Climb

No one has seen many "WIN" buttons lately — those emblems of President Ford's "Whip Inflation Now" program which did not work. Neither did President Carter's program, which relied heavily on the Federal Reserve Board policy. Since October 1979 that policy has been to observe the money supply as the salient indicator for monetary control. This may be a step in the right direction, but the road is long and hard.

Factors causing inflation include OPEC, the federal deficit, and the lack of gains in productivity combined with domestic wage pressures. It is to be hoped that President Reagan will be more effective in containing inflation. Until there is concrete evidence, however, it should come as no great surprise

that most real estate investors are still betting the inflation rate will continue its upward trend or at least fluctuate around current levels. And, of course, it is common knowledge that investors are betting on real estate as a hedge against inflation. Not as obvious is the nature of the bet in terms of risk and reward.

Cash Flow Early Benefit

Thirty years ago, investors expected from 10 percent to 12 percent cash-on-cash, also called cash on the down payment. The rate of inflation in the early '50s was low, and although some investors who were astute in location and property selection expected substantial appreciation, most investors looked to the cash flow as the major benefit. Properties of lowest quality would return the down payment through cash flow in the first five years and those of better quality in periods up to 10 years or longer. Measurement of the payback period is a crude method for an investment decision. Although users may have considered the tax shelter, it was viewed as an added benefit that went along with the type of investment.

Some investors used criteria beyond cash flow. Aside from tax shelter, the other benefit is proceeds of sale, the importance of which varied considerably. Combined measures of total benefit were not commonplace, however. The after-tax internal rate of return was not a popular analytical tool. It could be estimated using tables and a desk calculator, but such laborious work was obviously not worthwhile to most investors because the results were of spurious accuracy.

Borrowed Money As Later Leverage

As the inflation rate rose in the '60s and '70s, an interesting phenomenon occurred. A new variety of leverage, commonplace in the financial community, occurred for real estate investors. In dealing with securities and non-real estate investments, the finan-

This article inaugurates the Seldin On Change series which will be a regular feature in REI. Through these articles, Dr. Seldin will attempt to explore the problems of change in the real estate industry and evaluate plans and strategies for survival.



Maury Seldin, CRE, PhD, is president of Metro Metrics, Inc., a real estate research and counseling firm in Washington, D.C. He is professor of finance and real estate at the Kogod College of Business Administration of The American University. His books include *Real Estate Investment for Profit through Appreciation*, *Land Investment*, *Real Estate Investment Strategy* (co-author) and *Housing Markets* (co-author). He received his M.B.A. from UCLA and his doctorate degree in business administration from Indiana University.

cial community traditionally defined leverage as the use of borrowed money to magnify gains or losses as it related to total gains. No concern existed as to whether the stock dividend produced enough income to pay the interest on funds borrowed to acquire stock. If more money eventually was made on the borrowed money than it cost in interest, then the financial leverage was viewed as favorable.

Real estate investors used a different concept of leverage. To them the garden variety of leverage was the use of borrowed money to magnify cash-on-cash which fit into the "get your equity out fast" approach. This worked because the annual constants were lower than the overall capitalization rate or the ratio of debt-free cash flow to purchase price. Thus, the more borrowed, the higher the ratio of cash flow to down payment. For example, a \$60,000 loan at 8 percent interest with an annual constant of 9 percent has monthly payments of \$450 or annual payments of \$5,400. If the property has a \$100,000 price with \$10,000 net operating income or debt-free cash flow, the overall cap rate is 10 percent. Under these circumstances, a \$40,000 down payment would get \$4,600 cash flow or 11.5 percent. A \$30,000 down payment would get a higher cash-on-cash return; the \$70,000 loan would take \$6,300 a year and the \$3,700 balance on \$30,000 would provide a 12.3 percent cash-on-cash return.

Because institutional lenders generally lend only up to 70 percent or 80 percent of the purchase price, some buyers would get sellers to carry back financing so the down payment could be low and still get cash flow. If payments on the second were interest only or otherwise low, the cash-on-cash, that is, cash on the down payment would be further increased. Generally, the payment on the second was 1 percent per month of the original unpaid balance including interest. Thus, the annual constant of 12 percent hurt the cash flow but was most suitable for investors who considered the leverage to encompass the benefits of proceeds of sale. They controlled more property with less money and were betting on appreciation.

Focus Now On Appreciation

Currently, the concept of leverage among real estate investors focuses on appreciation as well as cash flow. The rising inflation rate has caused a situation in which borrowing money generally hurts the cash-on-cash return. The increase in the rate of inflation has led to an increase in mortgage interest rates. These rates were the lender's protection, which did not work out well for the lender. Thus, the annual constants rose by amounts commensurate with rising interest rates.

While inflation was pushing up interest rates, it was also pushing up rents and expenses, resulting in increasing debt-free cash flow. This rising income stream, sold at higher prices, means lower capitalization rates. Investors will pay more for a rising income

stream than for one holding level. The result is prices that are high when compared to current income. In other words, it means the overall cap rate was low.

When the annual constant exceeded the overall cap rate, borrowing began to hurt the cash-on-cash return. Borrowers would gladly give up the cash flow as long as they are paid for it in appreciation supplemented with tax shelter. This leverage is unfavorable if evaluated only on a cash basis. It may be called "leverage unfavorable to cash flow," which may still magnify gains but diminish the ratio of cash flow to the down payment.

The current market has many property sales in which there is no cash flow. Some use only an amortizing first mortgage, while others have secondary financing. In some cases there is a negative cash flow and the investor has to count on tax savings from tax shelter to offset some or all of the negative cash flow. Some investors are even using "gimmick" financing to capture the appreciation with a low down payment and in order not to have too large a negative cash flow. For example, the seller may carry back a mortgage at 12 percent but pay only 9 percent of the interest in cash. The other 3 percent accrues so that the mortgage debt increases during the life of the loan.

Investors are betting on inflation; some accept a low cash flow, while others take a negative cash flow, using what was described earlier as leverage unfavorable to cash flow. The final rates of return on the investment are sensitive to proceeds of sale, especially if "gimmick" financing causes mortgage debt to increase rather than amortize.



Rates Subject To Constant Change

Proceeds of sale are frequently forecast by extrapolating or projecting a rate of appreciation. Although convenient for mathematical analysis, this treatment

bears little relationship to reality. Changes in value occur at differing rates over time because income expectations and capitalization rates constantly shift. Inflation accounts for some of the changes; others occur because of changes in income-producing ability of the real estate.

The change in rental income from non-inflation-related causes is based upon changes in the productivity of the real estate: the location may get better; the demand for the type of space may increase sharply; the supply of competitive space may be choked off by sewer moratoria or restrictive zoning. That is the stuff of which big profit is made. Yet most of the high-powered mathematical analyses used in calculating rates of return overlook dealing with the land economics aspects of the real estate investment.

Such changes affect income-producing ability, but what is sold is the income-producing potential. A market of expectations may run high or low depending not only on inflation but also on the expected growth of the economy. These are all implicit in any expectations of future income-producing ability. Furthermore, these expectations are much more variable than the income-producing ability itself. The result is that both the income that is being capitalized and the capitalization rate for converting that income to value are subject to change. The cap rate will change with the supply and demand of investment capital and the expectations of future economic conditions. It is apparent that the general

health of the economy and inflation expectations are factors again.

So what happens if inflation is contained or even reduced? What happens if there is a slow growth in the economy even without a deep recession? The answer is that some investments and some investors won't make it.

Spirit For Survival Still Exists

It is unlikely that inflation will abate or that the economy will stagnate in the '80s. The economy is hyped up on the drug of deficit spending and has a cancerous attack of "economic distortus energitus," attributable to "cartelistic stick-it-to-em-itus." It is not fatal, however, because enough spirit still exists to keep this country from dying a whimpering death in bed. Rather, it will fight for survival. While it doesn't necessarily mean war, a war sure would change the economy. Even with a peaceful '80s, that is, a no-combat situation, the drastic adjustment might well take place in the '90s, if at all.

The danger of some kind of dramatic change during this decade certainly exists. A simple expectation of "more of the same" in real estate appreciation through inflation with a fair to middling economy is risky. A strategy for the '80s should take cognizance of this risk.

Coming in the next REI: Strategy Of Using Leverage

NEITHER A LENDER NOR A LENDER BE

by Samuel Zell

The 1980s will present the greatest structural changes in real estate financing since World War II. Major changes will occur in the availability and sources of financing as well as its terms and conditions. A realigned real estate industry, significantly different from that of the past 35 years, will develop as a consequence.

Shortage Of Available Capital

The most important alteration relates to the availability of funds. The industry in the '80s will experience a shortage of available capital, resulting in a de facto allocation system. Deferral of capital expenditures over the past 15 years combined with new challenges will result in a demand for funds much greater than the supply. In such a marketplace, funds will move toward that portion of the economy providing the greatest degree of profitability while maintaining security. This criterion will discourage lending institutions from advancing funds to questionable projects or advancing a high percentage of the total value of the project.

The '80s will be a time when capital is allocated according to a system of priorities with security and stability at the top of the list. In a business climate of capital shortages, lenders are unwilling to take much risk. The attraction of high-risk, high-yield loans pales when profitable moderate spreads are available. Less than top-quality credit will find the marketplace inhospitable. Funds will be allocated within the credit market based upon rate only — not risk. Only minimal levels of risk will be acceptable.

Samuel Zell is the founder and principal stockholder of Equity Financial and Management Company in Chicago, Illinois, where he is primarily responsible for negotiation, financing new ventures and long-term planning. His involvement in real estate covers varied forms of property ownership, management and financing. He has contributed several articles to Real Estate Review.

Real estate lending will see a major reduction in the loan-to-value ratio. Past development loans have ranged from 75 percent to 100 percent of capital requirements. Developers encouraged lenders to make "full loans," because more funds were available than there were opportunities. As funds become short, lenders will have no incentive to advance higher proportions of the total cost. Lenders will perceive correctly that advancing funds and taking risks in development situations is the equivalent of owning, and will happily be owners. Along with this transition will come the disenfranchisement of the small real estate borrower and the less-than-totally credit-worthy corporate customer. The availability of profitable loan business will result in a greater diversification and a gradual movement by lenders away from a concentration of investment.

Creative Approaches To Financing

The future orientation and form of real estate financing will reflect new approaches. Funds will be borrowed on short-term, fixed-rate loans — 90 to 180 days — or for longer terms at some increment to prime or the London Interbank rate. Long term will be defined as 5 to 10 years interest-only loans of no more than 50 percent of value. Loan criteria will become so conservative that all but the most creditworthy and heavy equity opportunities will be precluded from the market. A new array of debt instruments carrying equity characteristics will meet equity requirements:

- convertible debt instruments in real estate companies or trusts;
- debt instruments with fixed rates adjusted by the Consumer Price Index;
- debt offerings made to the public or institutions and
- rights offerings relating to specific real estate,

or to companies or combinations thereof, will replace the shrinking debt element in real estate ownership.

As interest rates have moved from 6 percent to 18 percent, the cost of construction financing as a percentage of total project cost has tripled over the last 10 years. The increase in construction interest as a factor in the construction budget requires innovative efforts to reduce the cost of money during the development period. An obvious method for reducing interest costs is increasing equity investments. Another method will be for real estate companies to go into the commercial paper market and issue short-term paper backed by bank letters of credit or surety bonds. This reduction emanates from the tendency of commercial paper rates to float from 200 to 300 basis points below prime. Since the cost of construction financing is a greater portion of total cost, bringing innovative ideas and equity into this phase of the business becomes even more critical when competing against developers such as insurance companies and pension funds, which have a much lower cost of money.

Creative financial thinking will be required to make real estate transactions in the '80s feasible. Layered financing such as ground leases, fixed-payment schedules with variable underlying interest rates, master leases and other fragmentations of the various factors inherent in the structure of transactions will be used in attempting to reduce the debt service requirement of new development projects. This type of segmentation is advantageous in matching diverse interests with portions of a project that achieve their respective goals. An example of same is the subordinated ground lease and the leasehold position.

The nontaxpaying entity which owns a nondepreciable segment of a project such as the ground makes available the leasehold to a tax-conscious investor who will accept a lower yield to achieve tax benefits.

Joint Venture Participation

Sources of real estate financing throughout the '80s will differ only in the form and willingness of participation and in the expected yield for the effort. Traditional sources of lendable funds such as savings banks, savings and loan associations and banks will alter materially their role in the real estate economy. Instead of being prime sources of lendable funds, they will be active participants as joint venture and equity partners. They will adjust to using less of their own capital while playing the role of conduit for other people's capital. Consequently, a bank, originally very conservative, will enter into construction loans that will be joint-ventured with pension funds, taking a small piece of the transaction and laying off most of the loan to a pension fund. The bank will then provide equity funds at the higher risk levels for

commensurate ownership rewards. The nature of the bank's role as a conduit requires a reduction in the risk quotient of lending. Consequently, there will be additional momentum toward lower percentage of value loans with other branches of the same institution participating on the equity side.

Recently much has been written about the new "joint venture deals" being done with insurance companies, and commonly referred to as 50 - 50 JVs. In these deals, the insurance companies put up all the money in a combination of debt and equity. For example, a lender will provide 65 percent to 70 percent of the total cost of the project in the form of a fixed-rate mortgage of 5 to 10 years. A kicker to this mortgage will require the borrower to give the lender 20 percent of the net as additional consideration. The insurance company provides the remaining 30 percent to 35 percent of the funds as equity. This equity carries with it a 10 percent to 12 percent cumulative preferred return and 50 percent of the ownership. The developer is responsible for completing the project and usually for meeting deficit cash flow requirements needed to fill up the project. The developer retains a 50 percent ownership position.

Despite the nominal description of a 50 - 50 transaction, the developer in reality has less than 20 percent. The impact of a cumulative yield on an equity of 35 percent of the total cost of the project defers the benefits of ownership to the developer joint venture partner for at least five years. During the life of the partnership, if there are dislocations or other reasons for reduced cash flow from the project, the developer, who may have spent five years catching up, can go into the hole quickly.

This form of joint venture represents a transition from the insurance company as lender to the insurance company as developer/owner. In the last decade, insurance companies have gained experience and confidence in the area of development. Companies such as Prudential Life Insurance Company, Metropolitan Life, Northwestern Mutual Life Insurance Company, Safeco Insurance, Equitable, Aetna and others have been participants in joint ventures in many major development projects. They have been forced to take over and complete many ill-conceived or undercapitalized joint ventures, thereby gaining valuable experience. There are numerous examples of major insurance companies beginning projects with no developer/partner. Another alternative is for the developer to put the transaction together and then sell it to the insurance company. In the future, as insurance companies realize that the most important commodity required for successful development is low-cost, available dollars, the transitional 50 - 50 deals will disappear.

Pension Funds As Source Of Capital

The biggest potential source of funds by far is pension funds, a growing armada of capital needing to

diversify in real estate. To date, pension funds have dabbled in the market and gained some experience by buying mortgages, participating in insurance company blind pools and investing with insurance companies directly in specific investments. In the '80s pension funds will continue to pursue these routes, de-emphasizing mortgage portfolio acquisition and becoming more aggressive. They will continue to pursue joint ventures with major insurance companies which are responsible for investment and development. Banks will become a major factor in brokering transactions to pension funds. They will also joint venture them through various equity investment arms, either already established or being built by most of the major banking institutions.

As available capital becomes dearer, pension funds will exercise more influence in structuring and participating in joint venture transactions, commensurate with the number of dollars available. While insurance companies are already set up to be owning entities, pension funds have not done so yet. Both to protect their tax-free status and because of their fiduciary responsibility, pension funds probably will not create their own real estate investment departments, but will continue to rely on third party advice, participation and partnerships.

Advent Of Public Real Estate Company

A new, major factor — the public real estate company — will begin to play in the market of the '80s. An integral part of its success will be its ability to sell various forms of participations, debt instruments and equity involvement to pension funds. Pension funds will find this form of investment group both a diversification and an opportunity to produce a better yield than participating with the insurance companies and banks in broader, conservative investments.

In England, Japan and Hong Kong, capital for the international real estate market is provided through public ownership of stock. Ownership of entities which in turn own real estate assets has been the preferred method of participation, reflecting both a high degree of sensitivity to liquidity and a customary method of access for small investors. The sole exception to this has been the United States where the stock market has been earnings-oriented rather than cash flow and asset-oriented. Examples of unsuccessful attempts to change this orientation include Tishman, Monmouth Properties, The Hahn Company and General Growth Properties. These companies had to announce liquidations in order to get the market to reflect their true value. Other companies such as Rouse are encouraging asset valuation by reporting market value as well as historic cost.

In the next five years, a limited number of public real estate companies will be created that will compete directly in size and sophistication with major insur-

ance companies and foreign real estate companies. Publicly-owned and traded real estate companies will use that status both for credibility and for the ability to issue various kinds of financial instruments to raise capital such as convertible debentures, equity participations in various specific real estate ventures convertible into share ownerships or asset ownership, and other forms of quasi debt/equity. These instruments will provide major sources of capital such as the pension funds with access to the real estate market.

A key element in the creation of these entities is the credibility that comes with being a major-sized, public New York Stock Exchange entity. This credibility allows for the issuance of both privately-placed and public securities, a task more difficult for a privately held company of comparable size. These entities will represent the last entrepreneurial participation in what is rapidly becoming an institutional real estate investment environment. Equally important in encouraging public companies is the increasing trend toward recourse financing, which encourages growth of large monolithic companies that provide major balance and diversification to cover difficult periods in various geographical areas. The existence of large real estate net operating loss carry forwards will provide an ideal opportunity for building equity in a major public entity. These net operating losses, primarily in REITs of the '70s, could add net worth without dilution by combining them with income-producing activities such as condominium conversions and land development.

Impact Of Changes

Having assumed that these major changes are either occurring or will soon occur, it is necessary to attempt to determine their impact. A distinction is required between real and apparent risk. Permanent, secured real estate lending primarily has been non-recourse. With minimal or limited equity, the risk is on the lender and the reward inures to the borrower. Construction financing is recourse, but there have been rare examples of deficiency judgments. Although the borrower is legally responsible for the debt, lenders have often been willing to release the borrower and take a deed in lieu of foreclosure. This nonaccountability emanates from a debtor-oriented legal system that provides ample opportunity for dilatory tactics. The new bankruptcy laws further imperil the lender with cram-down authority to the judiciary. In the past real estate lenders assumed the problems of bad debts as a cost of doing business to achieve a prescribed volume level. In periods of capital shortage, lenders will be able to reorient the risk-reward ratio by the ultimate form of discipline — equity investment.

In reviewing their past performance and benefiting from hindsight, lenders will be less willing to under-

take workout arrangements on projects in difficulty. They have found that a material percentage of their previous real estate losses could have been recouped by taking title and reselling the property. In an inflationary climate, defaulted real estate loans will be viewed as an opportunity rather than a problem. This changed perception increases the risk to the borrower, who had been confident that in difficult times aid was available from lenders. These changed circumstances will require better capitalized owners with deeper pockets. The owner who ultimately looked to the lender as a partner will have to adjust to the new realities.

The combination of more equity and less debt reduces leverage to the real estate investor. Fixed-rate leverage in particular has an impact on investment return. This yield curve is accelerated by double-digit inflation, which rewards the investor at the expense of the economic system. As available debt decreases as a percentage of total investment, and as the interest rate becomes variable rather than fixed, this measure of reward will shrink.

The role of the entrepreneur is undergoing major modification. Entrepreneurs throughout history have participated in the origin, implementation and ownership of real estate projects. The availability of long-term, nonrecourse and fixed-rate debt reflected the surplus conditions of the money markets. Lenders were satisfied with a perceived spread between money costs and the yield generated. A casualty of this transition period will be the ownership role of the entrepreneur. Although ample opportunity exists to assemble and package future projects for institutional ownership, the institutions will opt for long-term 100 percent ownership. Entrepreneurs will also assist by providing development and management services to institutional owners. The passing of the entrepreneur as a real estate owner is likely to decrease the efficiency of real estate development. As corporate accountability increases and overhead becomes significant, the chain of command will be-

come more bureaucratic and costly. This diminution in profitability will not discourage participants since the remaining yields will still exceed alternatives.

Perhaps the most profound impact on real estate in the '80s will be the reduction in development. New construction will increase initially as many new players sample the water. But a shakeout will follow as various institutions make commitments to long-term, owned real estate. A corollary to capital shortage conditions is a reevaluation of the underlying premise of development. Whereas development historically has been for future demand, development will be a response to pent-up demand. Both vacancy factors and the occupancy risk of the development process will decline in importance. Elimination and/or reduction of this risk makes real estate more attractive to institutions. Reduction in available alternatives and economic strength of ownership will result in a much greater cost of occupancy in a buyer's market. Available space will command premium rents.

Summary

The structural alteration in the real estate financial system probably will have a major and long-term impact on future growth and development in this country. The lending function has been downgraded in both importance and impact. The ownership mantle is drifting to the source of capital, and the capital requirements to participate in the industry are increasing exponentially and will preclude ease of entry.

Mirror, Mirror On The Wall

Will There Be Any Loans At All?

Will Deals Be Done Based On Leverage?

Or Will Equity Be The Only Beverage?

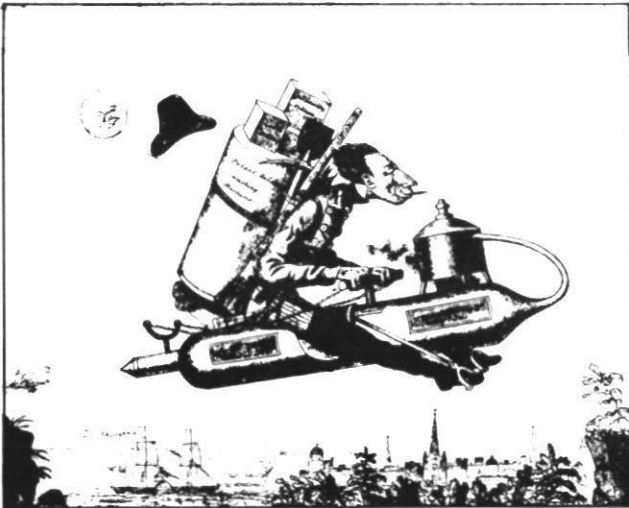
Turn This Decade And You Will See,

An Institutionally-Owned Industry.

ADVENTURES IN MARKETING LARGE REAL ESTATE PORTFOLIOS

by Bowen H. McCoy, C.R.E.

The four transactions presented cover some 20 major urban areas throughout America and involve all types of commercial property. They also involve politics, corporate raiders, lawsuits, fraud, deceit and allegations of murder. These adventures belong to my work with Morgan Stanley & Co., one of the



leading U.S. investment banks. Its real estate financing and counseling activities are carried on by Brooks Harvey, a 65-year-old firm that in the past two years

This article is based on a speech presented by Mr. McCoy on January 30, 1981 at the midwinter meeting of the American Society of Real Estate Counselors in Las Vegas, Nevada.

Bowen H. McCoy, CRE, is managing director of Morgan Stanley & Co. Inc. and president of Morgan Stanley Realty Inc., both of New York City. He is also a director of Brooks, Harvey & Co., Inc., a wholly-owned real estate financing and counseling subsidiary of Morgan Stanley. Involved in the real estate business for over 10 years, he specializes as a counselor in all phases of market investment, development, economic and valuation studies and analysis of all types of commercial property throughout the United States and Canada.

has sold or financed \$3 billion worth of commercial real estate.

From these experiences I will attempt to draw some conclusions about what we have learned by executing the assignments, which not only underline the interesting content of the counselor's work, but also offer insights into factors contributing to success in large transactions.

Irvine Vs. Joan

Starting in 1971, I worked as a counselor for the James Irvine Foundation for seven years. The Irvine Foundation held as its principal asset 54 percent of the common stock of the Irvine Company, which in turn owned 80,000 acres comprising 22 percent of Orange County, the southernmost contiguous county to Los Angeles County.

Called the Irvine Ranch, the area is an old Spanish land grant with an interesting history. At the inception of our assignment, I read a monograph published by the Huntington Library and filled with tales of cowboys, Indians, rustlers, robbers and young James Irvine riding his bicycle from San Francisco to inspect his property.

The property included a regional shopping mall, an office park, a hotel, a number of single-family homes and apartments, golf courses, marinas, perhaps the best industrial park in the nation, 3½ miles of pristine Pacific coastline beachfront, agricultural land on the ranch and in the San Joaquin Valley, and the Flying "D" Ranch on the Gallatin River.

There were other shareholders in the Irvine Company including a 22 percent block controlled by Joan Irvine Smith and her mother, Athalie.

The immediate problem was to value the foundation's holding of Irvine common stock in order to comply with the Tax Reform Act of 1969 as it applied

to holdings of private foundations. At the time, the Irvine Foundation carried its total holdings in the ranch at one dollar. Our valuation would become the basis for the charitable payout requirement to be levied on the foundation by the Internal Revenue Service. The assignment in its own terms was challenging, as it included such problems as judging developmental time horizons, discount rates for raw land, capitalization rates for various types of income property and valuations of single-family ground leases. Added to this was the as yet undefinable impact of the newly-formulated requirements for environmental impact studies, the California Coastal Initiative Restriction on 3½ miles of oceanfront, and the newly-generated "last-in, last-in" aspirations of the residents of the Town of Irvine.

The foundation trustees cautioned us that Joan Irvine might be less than conservative in her approach to value, and that any value arrived at was likely to be challenged ultimately in the courts. Ms. Irvine had brought 15 separate lawsuits against the foundation to break its control over the property. She felt the property should have been left to her mother and herself, as James Irvine's granddaughter. After we were employed, it was discovered that Joan Irvine had implicated the foundation in the death of her grandfather, James Irvine, who drowned while fishing in the Gallatin River on the Flying "D" Ranch, as well as in the death of her father, Myford Irvine, who eventually was deemed a suicide by the California Supreme Court. It was later learned that Joan Irvine had supported a rider to the 1969 tax bill that lasted all the way to the Senate Finance-House Ways and Means Conference Committee. The rider would have made it unlawful for any charitable foundation to own 20 percent or more of any county in the United States.

This is not meant to disparage Joan Irvine, but serves to point out the elements of high drama and complexity which her role brought to this assignment. While we were not influenced by her strong feelings against our client, it was soon clear that the relationship between the two principal shareholders was contentious, adverse and frozen in past emotions.

This was a serious deficiency having an adverse impact on value. Anyone who ultimately might wish to purchase the foundation's 54 percent interest would step into its shoes, and would have to deal with Ms. Irvine to gain control of the ranch.

There was thus a "control" premium in the valuation of this delicate piece of property. The foundation's 54 percent holding did not represent control, while Ms. Joan Irvine and her mother held a blocking position. The blocking position impaired value to the foundation and put Ms. Irvine in the catbird seat with respect to the Internal Revenue Service (which was interested in a high value for charitable payout purposes), the State of California Attorney General (who

was required by law to approve major sales of foundation assets) and any prospective purchaser of the foundation's shares.

Another problem was the fact that the foundation owned shares of common stock, not real estate; and because of Joan Irvine it was not in full control of the asset, its disposition or its development plan. Recognizing this lack of control, were we to value the shares or the underlying asset?

We valued the shares and treated the land as burdened by fragmented control, old Proposition 13 (the coastal initiative), a slowdown in development because of environmental impact studies and the like, a 30-year development cycle, and a discount rate on raw land of 15 percent. A discounted cash flow model for the development of the entire Irvine Ranch with absorption projections for each segment of possible land use was constructed. Those lands with more than a 30 degree slope were eliminated and longer-term development of the coast frontage was assumed.

Based on these studies, the prices of common stock of some 30 publicly-traded land or development companies, a prime rate of 14 percent and an annualized housing start rate of 800,000, we opined that an offer to purchase 100 percent of the shares of the Irvine Company by Mobil Oil Corporation for \$200 million was within a range of fairness. Ms. Irvine, heavily influenced by the relatively small portion of the ranch which was fully developed, thought all the shares were worth \$1 billion. She felt that the Mobil deal was "too close" of an arrangement between the trustees and Mobil, and that we were unprincipled agents of the foundation. She made her point of view known to the Internal Revenue Service, the California Attorney General and several others who had a more than purely academic interest in the proceedings.

Ms. Irvine should have realized that her interests and those of our client were compatible. We wished to cover the market and achieve the highest offer for the foundation's shares, letting the market tell us what it was worth. What Ms. Irvine apparently did not realize was that her contentiousness alarmed potential purchasers and depressed potential value.

Back at the ranch we found ourselves locked in a deal with Mobil. The foundation required a court adjudication of fairness of a firm offer in order to sell, as only such a process could secure the California Attorney General's approval. Without a firm offer there could be no such court proceeding. Mobil bargained hard, saying its offer would hold only so long as the trustees would not shop it. Because we and the trustees felt the Mobil offer was fair, we decided not to market the shares but to proceed through the courts for confirmation of fairness. We could only react to unsolicited inquiries from other prospective purchasers.

This posture lasted for 18 months. During this period no other bona fide offer was received. Joan Irvine intervened effectively in the court adjudication. Also during this time the economy began to recover from the oil crisis of 1974-75; interest rates came down and housing starts increased.

At one point we felt Ms. Irvine and the other family interests were agreeable to a share-for-share stock swap with Mobil. Mobil stock was then at \$30; today it is at \$80 after a stock split. Thus, its offer would have become a \$1 billion tax-free transaction. But that offer fell apart.

After 12 months Mobil was advised that unless we could produce a record for the judge that the shares had been aggressively offered to the market, Ms. Irvine probably could continue to delay final approval. This was one time when Joan Irvine's strategy helped us. Mobil's attitude was that its price of \$200 million had been in the public domain for 18 months; since no other offers were forthcoming, it released the trustees from the "no shopping" constraint.

We made 113 offerings throughout the world and barely got Cadillac Fairview into the picture before the judge could rule. Later the Taubman-Irvine (Joan)-Ford-Bren-Petrie-Fisher-Allen group came in and the judge said, "This is just a court-monitored auction!"

In the spring of 1977 I was on the witness stand in Superior Court, Orange County in Santa Ana for three weeks, testifying as to value and the body of our work over seven years. The IRS, the Attorney General and Joan Irvine were on the other side. During those three weeks almost every query I could think of, and some I hadn't, were served up.

A couple of months later, Taubman overbid Mobil by ten cents a share or \$800,000 in what became the last round, and as a friend of mine says, "He stole the ranch!" for \$336 million. Joan Irvine had a 10 percent interest in his consortium.

The Tishman Liquidation

While Irvine was moving to its 18-month flashpoint, we were employed as advisor and agent to liquidate Tishman Realty and Construction, a 50-year-old publicly-traded real estate company with 17 major office building properties located in Los Angeles, San Francisco, Chicago, Cleveland, Rochester and New York City. It also held development properties, raw land, a prominent construction and construction management organization, a leasing and management company and a research organization. Common stock was \$8 a share, and Bob Tishman felt the intrinsic value of the real estate was far greater.

An added problem was that losses on 1166 Avenue of the Americas, resulting from the almost complete demoralization of the New York City major corporate

office rental market, had put Tishman into a corporate retained earnings deficit which, under New York corporate law, prevented the corporation from paying common stock dividends. Since real estate cash flows could not be reported for corporate accounting reasons, the dividends had been the major support for the stock price. At that time, the only major real estate company to have gone private in an asset liquidation was Oliver Tyrone.

An added fillip was that a significant minority position in the common stock was held by Sy Scheuer, a prominent corporate asset liquidator.

Bob Tishman needed someone who could analyze, appraise, package and sell the 17 urban office towers and the construction company, deal with the New York Stock Exchange and the Securities and Exchange Commission, aid in gaining shareholder approval for the sales, deal with the corporate raiders especially during the liquidation, and deal with the financial press and the arbitrage community which were just beginning to see real estate values in publicly-traded real estate stock.

Tishman chose our firm. We studied each individual property including leases, expense escalations, stops, conformity to local fire codes, possible additional expenses to an institutional purchaser and local market supply/demand factors. Projections of lease rollovers, rents and increases in occupancy expense were prepared as well as offering procedures and confidentiality agreements. This was the first of the major institutional portfolio sales. A third of the property was located in Manhattan and it was during the most critical part of the marketing period that the *New York Daily News* ran the headline, "Ford Says New York Drop Dead!"

Looking back at what astute buys Olympia and York made for Uris and Equitable for Tishman, we tend to forget what courage it took at the time — two classic examples of "fishing in troubled waters." We sold John Tishman's construction business to Rockefeller Center, Inc.; he has since repurchased it, but the Tishman shareholders get their money for it.

The shareholders ultimately received \$27 a share, or a 340 percent premium in value compared to the stock price when we began. The confidentiality agreements worked, and the arbitrageurs were caught napping. The deal stayed ahead of the stock price all the way.

Marketing Monumental

The Meyerhoff family in Baltimore had developed a significant regional shopping mall and multi-family residential real estate portfolio as owner-developers in the 1960s. Like Sea Pines, Ernie Hahn, Cousins and many others, they desired a stock market listing which gave added value over the intrinsic real estate asset values and also provided liquidity for family members. Accordingly, they purchased Monumental

Life Insurance Company of Baltimore and merged their real estate into Monumental, keeping the public shareholder group. The Meyerhoff family, including their son-in-law Jack Pearlstone, controlled approximately one-third of Monumental Life.

In the 1970s the stock market was in the doldrums and real estate suffered the greatest loss in value since the depression. Monumental sold for \$18 a share and in the minds of its board of directors, the market accorded zero value to either the real estate assets or the life insurance assets. Utilizing local counsel, the directors evolved a plan of action. The assets of Monumental were divided into two classes. All the real estate was placed, tax-free, into a liquidating trust known as Monumental Properties Trust. The life insurance assets remained in Monumental Corporation. Each shareholder received a number of shares of Monumental Property Trust equal to his holdings in Monumental Corporation.

The Internal Revenue Service ruled that no corporate tax was payable and taxed each shareholder only at capital gains rates, a ruling which will not be given in the future. To meet the standards of the ruling, all the assets had to be sold within one year. The burden of proving to the IRS that this could not be done was on the trustees. If the deadline were not met, a double tax would be imposed.

The plan was approved by a shareholder vote, and Harvey M. "Bud" Meyerhoff, managing trustee of Monumental Properties Trust, went out looking for an advisor, talked to all the household names, and picked us.

Along with the competitors and the logical buyers, we believe that the way to sell income property is from projections and analysis of internal rates of return, even though this requires a heavy amount of front end work. Bud Meyerhoff wanted to be in the market with all 75 income properties within 60 days. Insisting on 120 days of quiet, intensive analysis, I told him that more work in the beginning would save time in evaluation, commitment and closing.

A team of 18 assembled to study and evaluate the 75 properties located in Boston, Buffalo, Baltimore, Atlanta, Miami, New Orleans, Houston, Dallas and Oklahoma City. There were 18 major regional shopping malls, 17,000 apartment units in 41 separate projects, 4 office parks, 4 strip shopping centers, an urban parking garage and raw land.

Each property had to be analyzed. Projections were prepared for 1,500 mall tenants including buy-outs, space cut-ups, overage rents, rerents, common area maintenance charges, taxes, roof repairs, promotion budgets and pads for added anchors. We also had the 17,000 apartments and the other properties to contend with, as well as the competition and conducting the area market studies.

After that came pricing, the packaging and the sourcing. Questions included: What process will induce the best offer? Should it be sold as one package? Should we skim the cream? What is the largest dollar price which will still provide broad market access? How many prospective buyers can physically be processed, negotiated with and closed with? How do we provide a "scarcity value" for the property? How do we persuade anyone to spend the \$250,000 required to analyze all the properties properly, if they don't know they will be a buyer?

Efforts produced 2,000 written or telephone inquiries to which we responded, plus continual press inquiry and unrelenting inquiry from the arbitrageurs who followed the transaction closely. During Thanksgiving week my key stalwart fainted from exhaustion at Northlake Mall in Atlanta. Three people worked all day New Year's Day in Baltimore, and the Monumental people worked side-by-side with them.

By Monday after New Year's 1979, four months from kickoff, we were in the market. The 18 regional malls were offered in three packages at \$120 million each over existing mortgages. The marketplace told us we were ingenious in creating indifference, or shall I say equality, among the three. The apartments were in seven packages; the miscellaneous properties were individually offered. A complete set of our full disclosure, internal rate of return, cash flow projections was about three feet high.

We were able to obtain commitments on the 75 properties in a 10-week effort. Substantially all the sales were closed within one year of our employment. Gross value exceeded \$900 million. Shareholders whose combined shares sold for \$18 received \$70 for Monumental Property Trust and retained a share of Monumental Corporation which sold in the \$20s.

We are proud of the end result of closure on the terms of commitment. Throughout the closing process we stayed involved, and became experts at such matters as overage rent apportionment, tax apportionment, leaky roofs, number of stripes in the parking lots and dike maintenance such as in New Orleans. It is interesting to note that one apartment complex was closed nine miles from Three-Mile Island; and another one originally had been syndicated to a soon-to-be-assassinated Iranian.

The major properties — the 18 regional malls — generated six offers. The three highest were from domestic institutions; the three lowest, off-shore institutions. Jack Pearlstone particularly had predicted these properties would end up in foreign ownership. I think the reason is the way we offered them: we played to the sophisticated buyer who could understand the projections, discounted cash flow and internal rate of return. They also understand matters such as the logic of buying out the leases of underperforming tenants, cutting up space and

moving theaters to a freestanding location to increase mall space.

Analyzing Ernest Hahn

At the same time as the Monumental transaction, we were analyzing the real estate and various corporate alternatives for realizing the intrinsic asset value of the Ernest Hahn Company for its shareholders. Hahn owned 54 regional shopping centers of which 28 were operational and the balance was under construction or development. Although Hahn controlled 18 percent of the regional mall space in the state of California, it was also active in 14 other states from the Sun Belt to the East Coast. In addition, Hahn had a very active construction company, a development organization, a management and leasing business, and a strip center development subsidiary.

Our teams were in the field analyzing properties, the competition and the market, projecting rents and developing valuation techniques to analyze the risks inherent in projects under construction or development.

Taxes became a major constraint. The Monumental ruling was not available. Hahn Corporation was a “dealer” and Ernie was a greater-than-5 percent stockholder. The consequence was double tax at ordinary rates to Ernie as well as to the other large shareholders. The difference to Ernie alone between a single tax at capital gains rates and a double tax at ordinary rates was substantial.

The only logical way to escape the tax problem was to sell the common stock instead of the real estate assets. Yet this appeared to be an immediate impediment to sale. The stock was publicly traded at \$18, far less than the asset values. A stock sale implied all or none. Wouldn't it be more logical to sell the operating centers to an institution and the construction and development centers to an entrepreneur? Only real estate people could recognize the future values, but real estate people don't buy common stock, especially with all those contingent liabilities. Furthermore, we knew that an opinion in writing in the proxy statement to each public shareholder stating the transaction was fair to him had to be provided. Could we do a tax deal for Ernest Hahn that would still provide fair value for the public shareholder?

Again, a three-foot pile of setups was prepared and included a separate package for each of the individual centers and our confidentiality agreements. For this one we also had a 20-minute, three-screen sound and light show with background music depicting 56 properties and including some shots of Ernie.

As background material to support a classic “bait and switch” marketing effort, we prepared a lengthy annotated balance sheet detailing each individual actual or contingent asset and liability of the Hahn Company and tying back into each individual property being offered. It was invaluable in convert-

ing prospective purchasers from the assets to the common stock without any meaningful erosion of value.

After lengthy negotiations with the outside directors and several thousand dollars of analysis, we hit the market in January 1980 — just in time for the 20 percent prime rate, severe disintermediation in the life insurance industry, and the return of the Deutsche Bank and its friends to the bunkers.

Although we had a safety net to fall into, we gave Olympia & York six weeks to verify our data including the tax position. This resulted in an offer from Trizec to buy, at \$55 a share, 300 percent of the stock price when we obtained the assignment and 200 times earnings per share.

The frenzy of Wall Street caught up with the transaction. Ahead of the deal most of the time, the arbitrageurs inhibited the marketing. Prospective buyers were justified in feeling the stock was overpriced. As insiders, we could not discuss this.

The closing process was a horror. Two of my best people were in California for three weeks, seven days a week, 14 hours a day. Nevertheless, Hahn closed on schedule like clockwork, and the shareholders were all paid by mid-December.

Achieving Successful Transactions

The counselor's role is to bring order and structure out of chaos and indecision, to bring patience and quiet understanding out of high emotion and confusion. How does one succeed at bringing about complex transactions on a major scale and in all types of market conditions, which may never have been accomplished before?

Hard work — The president of Morgan Stanley has in his office a cushion upon which is stitched: “The harder I work, the luckier I get!”

Front end analysis — enough to make the investment decision as easy as possible for the most sophisticated investor.

Credibility — Back up and double check every number and every assumption in your presentation.

Competition — Every major investor will say “Deal with me exclusively and I'll give you my best offer because I know I'll get the product.” Not true. We all respond to competition.

Limit the market — enough to maintain scarcity value. Be confident in your judgment to know what is fair value without injuring the market with your offering.

Offering procedures — Lay them out front and stick to them.

Know your customer — Limit your efforts to those with a proven record of closing similar deals on time.

Check out new market entrants thoroughly, and do it yourself.

Disclosure — Be sure you have made full disclosure of every possible defect in the deal before commitment, so you don't lose credibility and waste months of effort by the deal unraveling during closing.

People — Have bright, highly-motivated, well-paid people work for you. Make them look good and share the credit. Allow them to make mistakes, to risk and to grow. Remember, you can't look at 125 regional malls all by yourself.

Avoid ego and hyperbole and exude quiet confidence — even when you are not certain how you're

going to get the deal done. Most clients in major deals already have a lot on their minds.

Be flexible and listen — Don't tell the market where the market is. Learn something about the deal from every potential investor.

Be decisive — Seek market opportunities and have confidence in your judgment when markets open up. Don't wait for another offer to confirm value.

Market leadership — Be personally committed to the project in order to educate the market to do something perhaps risky and innovative. Make your market judgment a self-fulfilling prophecy.

THE EFFECT OF REAL ESTATE BROKERS ON SELLING PRICE

by James R. Webb

Real estate brokerages are frequently touted by past users as being "good" or "bad" for reasons often due to service and communication or a lack of them. Although these factors make the process of buying and selling in the real estate markets more enjoyable or endurable, the ultimate measure of a real estate broker's worth would seem to be the brokerage's effect on the selling price of the subject property.

If brokerage X obtains a better selling price than brokerage Y, then brokerage X would be "good" while brokerage Y would be "bad." If neither brokerage positively affects the selling price, then selection must be based on other factors. If there are no other significant factors, then a brokerage may be chosen at random.

Standard Measures Of Brokerage Success

A brokerage may be extremely successful and obtain many listings and sell many properties without having a positive effect on selling price. The characteristics of successful brokerages and brokers mention nothing about selling price effects. A study by Lynn N. Woodward concludes that the more desire the major broker has to succeed, the more successful is the brokerage office¹, success being measured in terms of the number of sales and listings. Other truths concerning sales success from the National Association of Realtors include:

1. Organizing one's work, accepting new ideas and methods, making decisions based on all the

facts, keeping current, establishing an area of expertise, doing follow-up work, keeping current with respect to the finance market and joining relevant associations.²

2. Having a "money personality," that is, the desire to get ahead.³

3. Controlling one's emotions, employees and information.⁴



4. Effectively planning, establishing priorities, keeping a good perspective, being punctual, being perceptive, having poise, avoiding procrastination, being prepared, adhering to one's own principles and leaving time for play.⁵

5. Establishing a good follow-up program.⁶

6. Having a good self-image.⁷

7. Effectively communicating.⁸

8. Recognizing the trade-off between a good office location and the expenses involved, belonging to professional societies and having an adequate reference library.⁹

None of these suggestions includes selling price or

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other brokerage user — that is, consumer — references that would seem important, such as selling time for the subject property.

Selling Price As Effectiveness Factor

Because selling price is a major concern of real property sellers, this study will focus on it as the determinant of brokerage desirability. To test the effect of brokers on the selling price of real property, a multiple regression model will be used. Listing brokers will be tested separately from selling brokers. Listing practices may also affect the ultimate selling price. The specific models are as follows:

$$\begin{aligned} SP &= f(PGI, TOM, LB) & (1) \\ SP &= g(PGI, TOM, SB) & (2) \end{aligned}$$

where SP = Selling price in dollars
PGI = Potential gross income in dollars
TOM = Time on the market in days
LB = A vector of dummy variables indicating the listing broker
SB = A vector of dummy variables indicating the selling broker

The data used with these models consists of 366 multifamily residential sales within the city limits of Chicago between 2Q76 and 1Q78. Observations are from a contiguous area north of Madison Avenue. The data was obtained via MLS listings and results reports.

Because the properties are income-producing, that is, rentals, gross income was included as an independent variable. An income projection is a major determinant of investor motivation. Time on the market (TOM) was also included because of the trade-off between time and price often envisioned in financial literature.

Study Results

Table 1 contains the regression results for 25 listing brokers. Potential gross income (PGI) and TOM are significant at the 99 percent level of confidence. PGI has a positive sign while TOM has a negative sign. The TOM coefficient indicates a \$46 loss in selling price for each day the property is on the market.

The sign for listing brokers is negative in 13 cases and positive in 11 cases. A negative sign indicates the listing broker negatively influenced the selling price relative to listing broker number 25 (LB25). However, only eight of the coefficients for listing brokers are significant at the 90 percent or better level of confidence. Four are positive and four are negative, that is, four brokerages positively affected the selling

TABLE 1
Regression Results With Listing Broker

Variables	Coefficient	Standard-Error	t-statistic
PGI	4.616	.146	31.526†
TOM	-45.927	25.170	1.825§
LB1	-2,224.216	11,549.998	.192
LB2	-9,815.668	16,067.381	.611
LB3	14,248.490	8,923.227	1.597*
LB4	-2,583.498	9,979.483	.259
LB5	17,528.800	9,013.553	1.945§
LB6	-13,979.870	7,565.105	1.848§
LB7	49,316.880	10,653.284	4.629†
LB8	-15,090.450	4,632.583	3.257†
LB9	5,861.935	5,666.465	1.034
LB10	-13,397.160	13,910.127	.963
LB11	-4,354.770	27,540.255	.158
LB12	3,601.727	9,280.202	.389
LB13	-1,092.554	8,243.470	.134
LB14	2,790.668	7,639.071	.365
LB15	-3,113.533	15,995.744	.195
LB16	19,351.550	16,086.567	1.203
LB17	-13,137.250	11,002.652	1.194
LB18	-7,449.121	5,249.990	1.419*
LB19	8,393.011	10,464.475	.802
LB20	-15,408.770	6,007.176	2.565†
LB21	13,311.570	8,339.737	1.596*
LB22	18,061.160	19,086.538	.946
LB23	-586.774	5,294.535	.110
LB24	8,027.374	8,841.004	.908
R ²	.760		
n	366		
F	43.767		
Standard Error of Regression	27,410.883		

*Significant at the 90 percent level of confidence.

§Significant at the 95 percent level of confidence.

†Significant at the 99 percent level of confidence.

price while four negatively affected it. The other 16 had no significant effect either way on LB25.

Table 2 contains the regression results for 25 selling brokers. Fifteen of the coefficients for the selling brokers are negative while only nine are positive. However, only nine selling broker coefficients are significant at the 90 percent or better level of confidence. Of these nine, six are negative and three are positive, that is, out of 25 selling brokers on 366 properties, 15 did not affect significantly the selling price, six negatively affected the selling price and only three positively affected the selling price relative to selling broker number 25 (SB25).

Six of the subject brokerages had significant results at the 90 percent or better level of confidence for both their listing and selling functions. Four of the six negatively affected the selling price and only two brokerages positively affected the selling price for both their listing and selling functions.

TABLE 2
Regression Results With Selling Broker

Variables	Coefficient	Standard-Error	t-statistic
PGI	4.572	.144	31.670†
TOM	-58.412	25.166	2.331†
SB1	-7,195.960	12,820.880	.561
SB2	-11,980.740	12,466.256	.961
SB3	21,898.370	8,758.347	2.500†
SB4	-5,664.961	7,956.564	.712
SB5	6,417.394	11,408.634	.562
SB6	-20,032.160	9,155.896	2.188§
SB7	9,690.444	3,744.688	2.588†
SB8	-17,580.760	5,626.648	3.125†
SB9	3,085.896	6,972.242	.443
SB10	-11,771.080	9,903.810	1.184
SB11	-9,579.828	10,349.378	.926
SB12	-10,119.980	9,354.758	1.082
SB13	10,951.790	13,468.350	.813
SB14	-13,478.550	6,963.988	1.935§
SB15	6,328.177	10,543.842	.600
SB16	2,080.505	8,109.709	.257
SB17	-13,212.980	12,413.809	1.064
SB18	-7,297.004	4,756.217	1.534*
SB19	5,324.391	7,740.970	.688
SB20	-21,318.840	5,984.251	3.562†
SB21	-3,302.326	5,242.986	.630
SB22	-6,974.324	11,101.231	.628
SB23	-12,442.550	5,900.824	2.109§
SB24	19,868.340	9,559.126	2.078§
R ²	.761		
n	366		
F	45.820		
Standard Error of Regression	27,315.710		

*Significant at the 90 percent level of confidence.

§Significant at the 95 percent level of confidence.

†Significant at the 99 percent level of confidence.

Conclusions

Twenty-five brokers and 366 income property transactions were used to test brokerage effects on selling price. Selling price was used as a quantitative proxy of "good" versus "bad," where a "good" brokerage would positively affect the selling price while a "bad" brokerage would negatively affect the selling price.

Brokerages having neither a significant negative nor positive effect would be considered neutral.

Results indicate that more than half the brokerages studied do not have any significant effect on the selling price. Of those that do have a significant effect, about half have a negative effect. Results also indicate that both a "good" broker and a "bad" broker are hard to find. The probability implied is approximately .75 of either a "good" or a "neutral" brokerage.

Further research should perhaps concentrate on how to identify "good," "bad" and "neutral" brokerages before the sales transaction is completed. This would enable the consumer of brokerage services to make the best choice and also encourage "bad" brokerages to go out of business because of a lack of customers.

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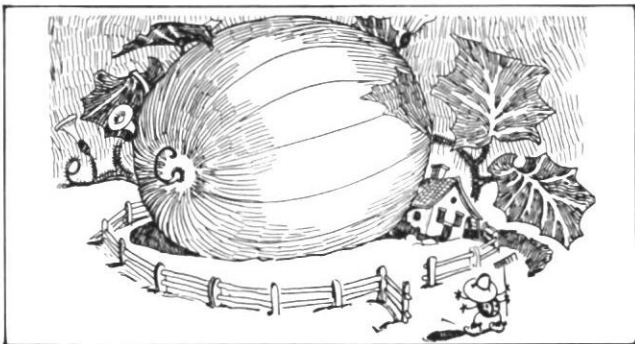
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RETURN ON INVESTMENT IN OWNER-OCCUPIED DWELLINGS

by Patricia M. Rudolph

The decision to buy a home for most individuals is the most important investment decision they will make. This decision should be the subject of careful profitability analysis which includes all of the costs and benefits of homeownership. As interest rates rise and the increase in the price of houses seems less certain, the profitability analysis for residential real estate investment should receive more attention. It is no longer sufficient to assume that buying a home is an individual's best investment.



Some general discussions point to the rapid increase in the price of houses and use this figure to represent the return on investment. Obviously, the change in the price of the house is important, but it does not take into account tax effects of ownership or the costs of maintenance or insurance. Investors in income-producing properties frequently calculate the internal rate of return (IRR) on their investment. The IRR takes into account tax effects and all ownership costs. For the homebuyer, however, a house is a place to live as well as an investment. Both the return on the house as an investment and the value of the

housing services received must be considered.

The discounted cash-flow capital budgeting techniques such as the present value and the IRR have frequently been applied to the investment decision for income-producing property¹; however, they have not been applied to the individual's decision to buy a primary dwelling. Rosen and Rosen² present a theoretical framework for the rental-ownership decision and test this model using aggregate national data. The model emphasizes the importance of federal taxes and the imputed rental value on the decision to buy. Their theoretical framework is very useful, but the decision to purchase a house is a personal investment decision. While the results of their empirical model using aggregate data are interesting, they cannot be applied on an individual basis.

In this paper, the IRR for an owner-occupied dwelling is explained and calculated. First, the IRR is defined. The cash inflows and outflows that must be considered are discussed. Finally, an example of the calculation of the IRR is presented and compared with the two other measures of return.

To emphasize the importance of calculating the return on the housing investment correctly, the IRR, including the imputed value of the housing services, will be compared to the annual percentage change in the price of the house and to the IRR calculated without the value of the housing services. The method of calculation has a significant impact on the size of the return. As mortgage interest rates rise and the hurdle rate for investment in housing increases, it is important to calculate the return on the housing investment as precisely as possible.

Defining The IRR

The internal rate of return (IRR) is that discount rate that equates the present value of the cash inflows from an investment with the present value of the cash outflows. Alternatively, the IRR is the

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discount rate that equates the present value of the net cash flows from the investment with zero. Although the two definitions mean the same thing, the second definition is useful in making the actual calculations, while the first is more helpful in organizing the information necessary to make the investment decision.

For prospective homebuyers, some of these cash flows will be known and others estimated. The mortgage payments and the breakdown between interest and principal are known, providing the mortgage is a fixed-rate, fully amortized mortgage. Insurance cost, property taxes, maintenance and the cost of selling the house as well as the sales price must be projected. The appropriate value for the stream of housing services that the house provides must also be estimated.

Non-monetary costs and benefits of homeownership will be excluded from this discussion because they are impossible to quantify and may not be viewed consistently by prospective buyers. For example, the value of a large yard to a gardener is difficult to quantify. This same yard may be considered a cost to other possible buyers who dislike gardening. Because of these difficulties, no attempt will be made to measure and include these non-monetary costs and benefits in the cash flows.

Cash Inflows Associated With Residential Investment

The cash inflows are of two types: the imputed rental value of the house and the difference between the sale price and the mortgage outstanding at the time of sale. The imputed value of the housing services can be interpreted in several ways. The fair market rent of the house purchased is one interpretation. Even if this market data is available, it may not accurately represent the value of the housing services to the buyer because the house may not be the type he would purchase. A more appropriate measure might be the cost of the alternative housing that the prospective buyer would purchase. For example, the cost of the apartment the individual might rent could be the appropriate measure of the imputed rental value.

The difference between the sale price of the house and the mortgage outstanding at the time of the sale represents the recovery of the equity, comprised of the owner's downpayment and monthly debt reduction payments and any appreciation in the value of the house.

Three Groups Of Cash Outflows

The cash outflows can be divided into three groups based on when they occur. At the time of purchase, the downpayment and fees are paid. Fees involved with financing are generally tax-deductible and should be converted to after-tax terms. (Before-tax

costs can be converted to after-tax terms by multiplying the before-tax costs times $[1-t]$ where t is the individual's marginal tax rate.) Because these cash flows occur at the beginning of the period, they need not be discounted.

The second group of cash outflows occurs monthly and includes the mortgage payment, property taxes, insurance and maintenance. The interest portion of the monthly payment and the property taxes are tax deductible and should be converted to their after-tax equivalent. The final group of cash outflows takes place at the time of sale and consists of the commission fees involved with the sale. These are tax-deductible and will also be converted to after-tax terms.

A Sampling Of The IRR

Use of actual data will demonstrate the calculation of the IRR on a residential property. Except for the sales price, all the figures used are actual figures. Although these numbers may seem out-of-line in some parts of the country, they are actual numbers from a medium-sized town in the southeast.

The numbers in the example are factual but the results of this calculation have no significance beyond this particular investment decision. The choice to buy or not to buy a house, like any other investment decision, is based on the situation involved. The decision maker must supply his or her own estimates for the cost of the house, taxes, and imputed rental value. This example is presented to demonstrate the calculations involved and to compare the IRR with two other possible measures of return.

To calculate the IRR, the following assumptions are made:

- The buyer purchased the house for \$38,245 in April 1979. At the time of sale, the outstanding mortgage was assumed with a balance of about \$33,545 and monthly payments of \$284. Property taxes and insurance are \$16 and \$28 per month. The downpayment on the house was \$4,700, and the fees involved with closing were \$80.
- Maintenance costs were estimated to be approximately \$30 per month.
- When the house was sold in September 1980, the selling price was \$48,244 and the balance outstanding on the mortgage was \$33,201. (The sales price was obtained using the homeownership component of the Consumer Price Index to adjust the price of the house.)
- The sales commission was 7 percent of the selling price, or \$3,377.
- The imputed rental value of the house was \$120 — the rent on the apartment in which the buyer lived before purchasing the house.
- The buyer's marginal tax bracket was 34 percent.

TABLE
Cash Flows

Initial Cash Flow = Downpayment + Closing Costs = \$4,700 + \$80 = \$4,780

Monthly Cash Flows

	Interest Payment	Principal Reduction	Insurance	Property Taxes	Mainte- nance	After Tax Taxes & Interest ¹	Imputed Rent	After Tax Cash Flows ²	After Tax Cash Flows Less Imputed Rent ³
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4/79	\$265.57	\$17.85	\$28	\$16	\$30	\$185.84	\$120	\$253.69	\$133.69
5/79	265.43	17.99	28	16	30	185.74	120	253.73	133.73
6/79	265.28	18.14	28	16	30	185.64	120	253.78	133.78
7/79	265.14	18.28	28	16	30	185.55	120	253.83	133.83
8/79	265.00	18.42	28	16	30	185.46	120	253.88	133.88
9/79	264.85	18.57	28	16	30	185.36	120	253.93	133.93
10/79	264.70	18.72	28	16	30	185.26	120	253.98	133.98
11/79	264.56	18.86	28	16	30	185.17	120	254.03	134.03
12/79	265.41	19.01	28	16	30	185.07	120	254.08	134.08
1/80	264.26	19.16	28	16	30	184.97	120	254.13	134.13
2/80	264.10	19.32	28	16	30	184.87	120	254.19	134.19
3/80	263.95	19.47	28	16	30	184.77	120	254.24	134.24
4/80	263.80	19.62	28	16	30	184.67	120	254.29	134.29
5/80	263.64	19.78	28	16	30	184.56	120	254.34	134.34
6/80	263.49	19.93	28	16	30	184.46	120	254.39	134.39
7/80	263.33	20.09	28	16	30	184.36	120	254.45	134.45
8/80	263.17	20.25	28	16	30	184.25	120	254.50	134.50
9/80	263.01	20.41	28	16	30	184.15	120	254.56	134.56

¹After Tax Interest and Property Taxes = (1 - .34) (Interest + Property Taxes).

²After Tax Net Cash Flow = (2) + (3) + (5) + (6) = (8).

³After Tax Net Cash Flows Less Imputed Rent = (8) - (7) = (9).

Final Cash Flow = Sales Price - Mortgage Balance - Commission.
= \$48,244 - \$33,201 - (1 - .34) (3,377) = \$12,814.

All the steps in calculating monthly cash flows using these assumptions appear in the Table.

These figures were used to calculate three different measures of return on this investment. The first and the least preferred is the percentage change in the price of the house. Using the annualized price change, the return is 17.4 percent. With mortgage interest rates at 14 percent (assuming that the mortgage rate is the appropriate cost of capital for the buyer), this investment is marginally acceptable.

When the IRR is calculated in the usual manner, without including the value of the housing services, the return increases to 27.8 percent. Again, the investment is acceptable, but the return is well above the cutoff rate. When the IRR is calculated including the housing services, the return jumps to 46 percent, a significant change from the other two methods. It is this 46 percent return which the investor should use in making decisions.

Conclusions

As mortgage rates climb again and the rate of increase in the price of houses seems likely to decline,

the conventional wisdom that real estate is an individual's best investment opportunity comes under serious scrutiny. When prospective homebuyers may be uncertain about the decision to buy, it is important that the return on residential investment is calculated correctly. By using the IRR framework and including in the cash flow estimates of the imputed value of the housing services received, a rate of return on residential investment can be calculated that comes closer to considering all the costs and benefits of homebuying. As shown in the example, the method of calculating the return has a significant impact on the estimated returns to residential real estate investment.

NOTES

1. Donald J. Valachi, "Three Faces of IRR," *Real Estate Review* (Fall 1978), 74-78; "Determining the Value of a Real Estate Investment," *Real Estate Review* (Winter 1978), 64-67; Mike E. Miles and Arthur S. Estey, "The Relevant Required Rate of Return," *The Appraisal Journal* (October 1979), 511-522.

2. Harvey S. Rosen and Kenneth T. Rosen, "Federal Taxes and Homeownership: Evidence from Time Series," *Journal of Political Economy*, Vol. 88 (February 1980), 59-75.

THE COUNSELOR, THE COMPUTER, AND CREATIVE FINANCING

by Robert J. Spiegel, C.R.E.,
and Richard de Mornay

In this day of double-digit inflation, "out of this world" interest rates, and impossible mortgage terms, it's no wonder that lenders, investors, brokers and developers hardly know which way to turn. Market data on projects sold as recently as four to six months ago are hardly relevant to circumstances today. Changing political conditions as well as uncertainties regarding fuel and energy availabilities and rising construction costs cause real estate values to fluctuate accordingly. More than ever before, the counselor is called upon to give clients the guidance and help that they seek and need.

Professional counseling is defined as providing competent and unbiased advice, guidance, and judgment on diversified real estate problems. Clients are looking for solutions in the form of alternatives to merchandising, leasing, management, planning, financing and appraising. In many of these areas, the counselor can develop the numbers on which decisions can be made. The counselor's function in many assignments is to prepare a list of alternative answers to one or more specific questions, from which the client can make a reasoned judgment and form a conclusion regarding his course of action. This procedure on the part of the counselor is known as "sensitivity analysis."

Computer Aid In Creative Financing Process

In the past, "sensitivity analysis" was time-consuming and required many hours of manual number mani-

pulating. With the advent of micro-computers or "personal computers" as they are called, this type of analysis for the counselor is no longer the chore it was a couple of years ago. Computers capable of handling extremely complicated software are now available for as little as \$1,500. As few as five years ago equivalent equipment would have sold for as much as \$15,000. By the time the cost of the program was added to the cost of the hardware, it wasn't economically feasible for the average analyst to make the investment required to "computerize."

Among recent and puzzling devices that today's developers and lenders struggle with is so-called creative financing. The scenario goes something like this:

1. The developer approaches the lender to finance a proposed subdivision, office building, shopping center, or industrial park.
2. The lender agrees to loan construction financing at current rates and also provides from 75 percent to 100 percent of the acquisition money for the underlying land.
3. In addition to the financing, the lender and the developer will split on a 50-50 basis whatever is left after all expenses and debt service are paid but before the developer earns any profit-on-sales or return on equity.
4. The participating lender reserves the right to — and often does — sell off in the secondary market all or part of the commitment. This action leverages the participating lender's position; wherever the lender is successful in selling or laying off all of the loans, he will be in the same position as the developer, with little or no money up front at risk.

Robert J. Spiegel, CRE, is owner of Robert J. Spiegel and Associates, Inc., a San Diego firm specializing in valuation and computer-assisted evaluation of real estate. He also holds the professional designations MAI and SRPA.

Richard de Mornay is currently doing graduate work in mathematics and statistics at the University of California. For the past several years he has been designing specialized computer algorithms used throughout the world.

The author's recent assignment for a lender involved considerable "what if" analyses of a prospective development, including creative financing on the part of the lender. A series of assumptions was provided and alternatives requested. The Apple II Plus computer was used to assist in the analysis. The following describes the application of the micro-computer to the counseling problem.

In 1978 the American Institute of Real Estate Appraisers (AIREA) published an educational memorandum entitled *Subdivision Analysis*, which described seven methods for the valuation of a potential project.

One of the methods considered most applicable (Method No. 7) allows a potential investor or lender to recognize quickly the negative cash flows to be borne by the project, so that loans can be structured accordingly. This method accounts for all sources of revenue and expense, including mortgage loans, disbursements, interest charges, and loan amortization, in the period in which they occur.

The biggest problem with this method is the volume of "number crunching" required and the attendant potential for errors in the process. If one uses a hand calculator, at least six to eight hours of time are normally required. This effectively eliminates the possibility of doing any in-depth sensitivity analysis for a project. At the same time, it becomes increasingly evident in using this methodology that sensitivity analyses are urgently needed. The only way they can feasibly and economically be accomplished is through computerization.

The following computer hardware was obtained at a cost of approximately \$5,000: an Apple II Plus computer with one disc drive (48K memory), a Sanyo 15" CRT, and a Texas Instruments Model 810 dot matrix impact printer.

The Method No. 7 described in *Subdivision Analysis* was programmed and written in Apple Soft Basic contained on one floppy diskette. The program followed the exact format of Method No. 7; however, it has been expanded to include the features of participation lending.

The program can compute the market value analysis based on the method's assumptions and also divide the operating cash flows among the participating lender, the developer, and any third party investors. It indicates the amount of the development loan and of the acquisition loan the lender is carrying in the event all or part of the loans should be sold.

The fact that third party investors are purchasing the loans at interest rates different from those the project is paying also can be entered into the program. The program can eliminate any negative cash flows in a project so that the developer will not have to put up any money, if this is his arrangement with the participating lender.

Example Of Project

The following example describes an actual project consisting of 1,074 acres. A tentative map of this property indicates that 303 dwelling sites averaging 2½ acres each can be built on the subject property. It is the developer's opinion, supported by market investigation, that in the first year of development no lots would be sold; in the second year, 117 lots would be sold; in the third year, another 117; and in the fourth and final year, the last 69 would be sold. In the first year of sales (the second year of development), lots would average \$127,500. In the following two years, lots would average \$147,000 and \$169,000 respectively.

Estimates of the development loan advances and certain expenses over each of these years are as follows:

	Year 1	Year 2	Year 3	Year 4
Development loan advance	\$2,980,596	\$4,378,582	\$3,612,330	\$3,973,562
Engineering costs	245,000	4,378,852	3,612,330	3,973,562
Overhead and sales expense	150,000	1,193,400	1,375,920	932,880
Real estate taxes	29,000	29,000	17,400	7,400
Management and supervision costs	50,000	172,500	201,250	230,000

An appraisal based on market data indicated the current value for the subject property was \$13,000,000, which, according to the computer analysis, came to \$13,031,342. Because this presentation deals with participation financing, it was determined that a profit of approximately 16.32 percent on each lot would be required to support the total value as based on other variables that were analyzed.

The development loan was based on an interest rate of 16 percent with repayment accelerated at 110 percent of projected anticipated sales. The acquisition loan was made on the basis of 100 percent loan-to-value ratio at 15 percent interest; its repayment also was to be accelerated at 110 percent out of escrows. Based on the market data analysis, the developer would require a 15 percent return on equity.

In addition to the interest on the development and acquisition loans, the lender and the developer will each receive 50 percent of the operating cash flow after payment of expenses, development costs, and loan amortization.

It is assumed that the participating lender will sell off two-thirds of the acquisition loan, retaining one-third each of the development and acquisition loans. Further, these loans were to be sold in the secondary

TABLE 1
LANDEV Participation Program Input Form

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
NUMBER OF UNITS SOLD	0	117	117	69	
AVERAGE PRICE PER UNIT	0	127,500	147,000	169,000	
DEVELOPMENT LOAN ADVANCE	2,980,596	4,378,582	3,612,330	3,973,562	
OVERHEAD AND SALES EXPENSE	150,000	1,193,400	1,315,920	932,880	
REAL ESTATE TAXES ESTIMATED	29,000	29,000	12,400	7,400	
MANAGEMENT AND SUPERVISION	50,000	172,500	201,250	230,000	
DEVELOPMENT COSTS	245,000	4,378,852	3,612,330	3,973,562	
MISC./CONSULTANTS/ATTYS. ARCHITECTS/ENGINEERS, ETC.	75,000	0	0	0	
.....					
PROFIT (% OF SALES)			16.317795		
DEVELOPMENT LOAN REPAYMENT ACCELERATION RATE			10%		
DEVELOPMENT LOAN INTEREST RATE			16%		
ACQUISITION LOAN TO VALUE RATIO			100%		
ACQUISITION LOAN REPAYMENT ACCELERATION RATE			10%		
ACQUISITION LOAN INTEREST RATE			15%		
RETURN ON EQUITY			15%		
VALUE/PRICE					
DEVELOPER'S % OF OPERATING CASH FLOW			50%		
PARTICIPATING LENDER'S % OF OPERATING CASH FLOW			50%		
PARTICIPATING LENDER'S % OF DEVELOPMENT LOAN			33.3333%		
PARTICIPATING LENDER'S % OF ACQUISITION LOAN			33.3333%		
THIRD PARTY INVESTOR'S DEVELOPMENT LOAN INTEREST RATE			14%		
THIRD PARTY INVESTOR'S ACQUISITION LOAN INTEREST RATE			13%		
ONE UNIT = 1 RESIDENTIAL LOT.					

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market at rates lower than that being paid to the participating lender. It was assumed that the development loan would be sold at an interest rate of 14 percent and the acquisition loan at a rate of 13 percent.

The preceding data was entered by hand on the form shown in Table 1. This input sheet details the specified variables, allowing one blank space for the market value, which is computed by the computer.

TABLE 2

	YEAR 1	YEAR 2	YEAR 3	YEAR 4
NUMBER OF UNITS SOLD	0	117	117	69
AVERAGE PRICE PER UNIT	0	127,500	147,000	169,000
DEVELOPMENT LOAN ADVANCE	2,980,596	4,378,582	3,612,330	3,973,562
OVERHEAD AND SALES EXPENSE	150,000	1,193,400	1,375,920	932,880
REAL ESTATE TAXES ESTIMATED	29,000	29,000	17,400	7,400
MANAGEMENT AND SUPERVISION	50,000	172,500	201,250	230,000
DEVELOPMENT COSTS	245,000	4,378,852	3,612,330	3,973,562
MISC./CONSULTANTS/ATTYS. ARCHITECTS/ENGINEERS, ETC.	75,000	0	0	0
PROFIT (% OF SALES)		16.317495%		
DEVELOPMENT LOAN REPAYMENT ACCELERATION RATE		10%		
DEVELOPMENT LOAN INTEREST RATE		16%		
ACQUISITION LOAN TO VALUE RATIO		100%		
ACQUISITION LOAN REPAYMENT ACCELERATION RATE		10%		
ACQUISITION LOAN INTEREST RATE		15%		
RETURN ON EQUITY		15%		
VALUE/PRICE		\$13,031,342		
DEVELOPER'S % OF OPERATING CASH FLOW		50%		
PARTICIPATING LENDER'S % OF OPERATING CASH FLOW		50%		
PARTICIPATING LENDER'S % OF DEVELOPMENT LOAN		33.3333%		
PARTICIPATING LENDER'S % OF ACQUISITION LOAN		33.3333%		
THIRD PARTY INVESTOR'S DEVELOPMENT LOAN INTEREST RATE		14%		
THIRD PARTY INVESTOR'S ACQUISITION LOAN INTEREST RATE		13%		
ONE UNIT = 1 RESIDENTIAL LOT				

TABLE 3

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	TOTAL
SOURCES OF CASH					
NUMBER OF UNITS SOLD	0	117	117	69	303
AVERAGE PRICE PER UNIT	0	\$127,500	\$147,000	\$169,000	
INCOME FROM UNIT SALES	0	14,917,500	17,199,000	11,661,000	43,777,500
PERCENTAGE OF TOTAL INCOME	0	34.08%	39.29%	26.64%	
DEVELOPMENT LOAN ADVANCE	2,980,596	4,378,582	3,612,330	3,973,562	14,945,070
TOTAL CASH AVAILABLE	2,980,596	19,296,082	20,811,330	15,634,562	58,722,570
CASH REQUIREMENTS, OPERATIONS					
OVERHEAD AND SALES EXPENSE	150,000	1,193,400	1,375,920	932,880	3,652,200
REAL ESTATE TAXES ESTIMATED	29,000	29,000	17,400	7,400	82,800
MANAGEMENT AND SUPERVISION	50,000	172,500	201,250	230,000	653,750
DEVELOPMENT COSTS	245,000	4,378,852	3,612,330	3,973,562	12,209,744
MISC./CONSULTANTS/ATTYS. ARCHITECTS/ENGINEERS, ETC.	75,000	0	0	0	75,000
TOTAL CASH REQUIREMENTS	549,000	5,773,752	5,206,900	5,143,842	16,673,494
CASH FLOW BEFORE DEBT SERVICE	2,431,596	13,522,330	15,604,430	10,490,720	42,049,076
DEVELOPMENT LOAN REPAYMENT SCHEDULE					
BEGINNING OF PERIOD BALANCE	2,980,596	7,359,178	5,368,900	2,883,352	
REPAYMENT ACCELERATED @ 10%	0	5,602,603	6,459,110	2,883,332	14,945,070
END OF PERIOD BALANCE	2,980,596	1,756,570	\$1,090,210	0	
AVERAGE BALANCE	2,980,596	4,557,374	2,139,345	1,441,676	
INTEREST @ 16%	476,895	729,260	342,295	230,668	1,779,119
TOTAL DEVELOPMENT LOAN REPAYMENT	476,895	6,331,868	6,801,405	3,114,021	16,724,189
CASH FLOW BEFORE ACQUISITION LOAN REPAYMENT	\$1,954,701	\$7,190,462	\$8,803,025	\$7,376,699	\$25,324,887

Table 2 is the computer printout of the data gathered on the handwritten input sheet; it includes the value of the property.

Table 3 is an annualized pro forma estimate of cash sources, cash requirements, and development loan repayment schedule. Final line shows the cash flow remaining before debt service on the acquisition loan and after debt service on the development loan.

In Table 4 the property value is computed as follows:

the cash flows shown in Table 3 (after deducting the profit that is computed as a percentage of sales) are each discounted at the developer's desired rate of return on investment and totalled to give an indication of the present worth of the residual cash flows. This figure is divided by the total of the percentage of value that has been repaid on the acquisition loan, including principal and interest, also discounted at the developer's desired rate of return on investment. The resulting figure represents the value of the property.

TABLE 4
Repayment of Acquisition Loan and
Computation of Value

YEAR 1		NET INCOME	PERCENT PAID	AVERAGE BALANCE	RATE
BOP	1	(\$1,954,701 -	$(0*1*1.1)V -$	$(2*1-0)V/2 *$.15)
% PAID	0	(\$1,954,701 -	$(0)V -$	$(1)V *$.15)
EOP	1	(\$1,954,701 -	$(0)V -$	$(.15)V$	
DISCOUNTED	15%	\$1,699,740 -	$.130435 V$		
YEAR 2					
BOP	1	(\$4,756,300 -	$(.3408*1*1.1)V -$	$(2*1-.37488)V/2 *$.15)
% PAID	.37488	(\$4,756,300 -	$(.37488)V -$	$(.81256)V *$.15)
EOP	.62512	(\$4,756,300 -	$(.37488)V -$	$(.121884)V$	
DISCOUNTED	15%	\$3,596,446 -	$.375625 V$		
YEAR 3					
BOP	.62512	(\$5,996,579 -	$(.3929*1*1.1)V -$	$(2*.62512-.43219)V/2 *$.15)
% PAID	.43219	(\$5,996,579 -	$(.43219)V -$	$(.409025)V *$.15)
EOP	.19293	(\$5,996,579 -	$(.43219)V -$	$(.061354)V$	
DISCOUNTED	15%	\$3,942,848 -	$.324513 V$		
YEAR 4					
BOP	.19293	(\$5,473,916 -	$(.19293*1*1)V -$	$(2*.19293-.19293)V/2 *$.15)
% PAID	.19293	(\$5,473,916 -	$(.19293)V -$	$(.096465)V *$.15)
EOP	0	(\$5,473,916 -	$(.19293)V -$	$(.01447)V$	
DISCOUNTED	15%	\$3,129,729 -	$.118582 V$		
P.W. OF OV =		\$12,368,763 -	$.949155 V$		
.949155V =		\$12,368,763	V = \$12,368,763/.949155	VALUE =	\$13,031,342

TABLE 5
Acquisition Loan Debt Service and Division of Cash Flows

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	TOTAL
CASH FLOW BEFORE ACQUISITION LOAN REPAYMENT	\$1,954,701	\$7,190,462	\$8,803,025	\$7,376,699	\$25,324,887
ACQUISITION LOAN REPAYMENT SCHEDULE					
BEGINNING OF PERIOD BALANCE	13,031,342	13,031,342	8,146,153	2,514,137	13,031,342
REPAYMENT ACCELERATED @ 10%	0	4,885,189	5,632,016	2,514,137	
END OF PERIOD BALANCE	13,031,342	8,146,153	2,514,137	0	
AVERAGE BALANCE	13,031,342	10,588,747	5,330,145	1,257,068	
INTEREST @ 15%	1,954,701	1,588,312	799,522	188,560	4,531,095
TOTAL ACQUISITION LOAN REPAYMENT	1,954,701	6,473,502	6,431,537	2,702,697	17,562,437
OPERATING CASH FLOW	\$<1>	\$716,961	\$2,371,488	\$4,674,002	\$7,762,450
DEVELOPER'S CASH FLOW @ 50%	0	\$358,480	\$1,185,744	\$2,337,001	\$3,881,225
PARTICIPATING LENDER'S @ 50%	0	\$358,480	\$1,185,744	\$2,337,001	\$3,881,225
PARTICIPATING LENDER'S NET DEVELOPMENT LOAN CASH FLOW	<794,825>	711,866	1,091,549	<267,291>	741,299
PARTICIPATING LENDER'S NET ACQUISITION LOAN CASH FLOW	825,318	2,299,015	2,214,912	917,659	6,256,904
PARTICIPATING LENDER'S TOTAL CASH FLOW	\$30,493	\$3,369,362	\$4,492,205	\$2,987,369	\$10,879,428
.....					
PARTICIPATING LENDER'S			DEVELOPER'S		
ORIGINAL INVESTMENT = \$4,343,776			ORIGINAL INVESTMENT = 0		
TOTAL \$ RETURN = \$10,879,428			TOTAL \$ RETURN = \$3,881,225		
INTERNAL RATE OF RETURN = 37.78%					

Table 5 shows the debt service on the acquisition loan including interest and principal with acceleration. The resulting cash flow is available to the developer and participating lender on a 50-50 basis in this instance. The lender's cash flow from operations, as well as the net cash flow from the development loan and the acquisition loan are then totalled to give the lender's total cash flow for the project. At the bottom of Table 5 is the lender's original investment, total dollar return, and internal rate of return based on the original investment. Next to this is the developer's original investment, which in this case was zero, and the total dollar return over the period of the projection.

In Table 5 there are no negative cash flows. The computer has been programmed to spread the cash flows over the project period so that the developer will not have to come up with any money. The project is financed completely by the participating lender who, in turn, has leveraged his position by selling off

two-thirds of the acquisition and development loans. The computations indicate that the participating lender has an initial "upfront" investment of one-third the value of the underlying land amounting to \$4,343,776. The computed cash flows projected for the lender on an annual basis are:

Year 1	\$ 30,493
Year 2	3,369,362
Year 3	4,492,205
Year 4	2,987,369
	<u>\$10,879,429</u>

In this exercise the internal rate of return is that rate which discounts the total returns of the four years to equal the original investment of \$4,343,776. It is that discount rate that equates the present value of the benefits to the present value of the capital outlays. As indicated in Table 5, the participating lender has an internal rate of return on his "upfront" investment of

37.78 percent over the four-year span of the project's development and sellout. Thus, by leveraging his position by selling off two-thirds of his loans and at the same time taking one-half of the anticipated profits, the participating lender is getting a far better return (37.78 percent) on his "upfront" money than the nominal 16 percent on the development loan and 15 percent on the acquisition loan that he was charging.

At the same time, the developer partner, with no investment in the property at all during the entire four-year period of development and sellout, will have a projected cash flow as follows:

Year 1	\$	0
Year 2		358,480
Year 3		1,185,744
Year 4		<u>2,337,001</u>
		\$3,881,225

In the event that the developer had a capital outlay in the property, the computer would have calculated the developer's internal rate of return using the same methodology described for the participating lender. If the developer had no capital outlay but shared the burden of any first-year negative cash flows, the computer would have calculated the developer's internal rate of return using the developer's share of the first-year negative cash flow as the capital outlay basis.

Summary And Conclusion

The LANDEV Participation Program accounts for all sources of revenues and expense including mortgage loan disbursements, interest charges, and loan amortization in the period in which they occur. It is available on inexpensive equipment. It identifies for the participating lender and the developer their total

cash flows and internal rates of return on investment, which is shown as the last statistic on Table 5.

By changing any or all of the variables, new values can be computed quickly. All of the input data can, of course, be saved for future reference by means of convenient disk storage. Any desired set of input data can be retrieved instantly.

A review of the types of analyses recently done shows the multiplicity of applications for which the LANDEV Participation Program has been used to assist in estimating present worth values and/or highest and best use:

1. Proposed construction of a condominium development.
2. Proposed apartment conversion to condominium units.
3. Proposed office/warehouse/industrial park.
4. Proposed rehabilitation of an older structure and conversion to an office building.
5. Proposed land development project with multiple use commercial, industrial, and residential vacant land.
6. Proposed rehabilitation of an outdated hotel.
7. Proposed high-rise office building.

In the case of analyses 1, 3, 5, 6, and 7, an indication of the present worth of the underlying land was developed. In cases 2 and 4, present worth of land and existing improvements were estimated.

LANDEV, based on the method described in AIREA's *Subdivision Analysis* educational memorandum, is an exciting new tool, now available on an inexpensive computer to anyone engaged in developmental analysis. The process and the equipment should simplify and speed up the analysis of potential development projects of all kinds.

URBAN REVITALIZATION & RENT CONTROL IN THE DISTRICT OF COLUMBIA

by Chester C. McGuire

Two current themes in urban development are the spontaneous, private revitalization of central city neighborhoods and the renewed interest in rent control in some urban areas. These phenomena are not seemingly related, although some overlap arises from unintentional side effects of revitalization such as dislocation of poor residents, higher rents and condominium conversions.

Washington, D.C. has rent control and is also in the vanguard among cities in private neighborhood revitalization. Rent control in the District has existed only since 1974, so there is no long history from which to make definitive judgments.¹ However, a variety of noteworthy urban revitalization activities have occurred at the same time that rent controls have been institutionalized. What is the actual or likely impact of an active rent control program on the revitalization process? Can central city revitalization be sustained under the restrictive climate of rent control?

To determine the effects of rent control on revitalization activities, a sample of rent-controlled buildings was drawn from the files of the Rental Accommodations Office (RAO) of the District of Columbia. The sample was divided into buildings that had applied for certificates of eligibility to convert to condominiums (Table 1) and those that had not made such application (Table 2). The condo-eligibility

group was gathered from a list made available by the Condominium Office of the Housing and Community Development Department and the control group was selected at random from the files.²

RENT CONTROL IN THE DISTRICT

Rent control in the District of Columbia dates from 1974. Current authorization is contained in the Rental Housing Act of 1977 which includes not only rent control provisions that affect the security of tenants and the sale, conversion and substantial rehabilitation of rental housing, but also a provision for relocation assistance and a rent supplement program.

The Rental Housing Act of 1977 requires that owners of all eligible property file an annual statement with the RAO. Buildings with four or less units or owners who have fewer than four rental units are exempt from the law. Other exemptions are for:

- All publicly-owned or publicly-subsidized housing.
- All new rental housing built after January 1, 1977.
- Dormitories, hospitals, and homes for the elderly.

The RAO determines rent ceilings, which are the highest legal rents that can be charged for a unit covered under the law. The base rent is essentially the rent that was chargeable on October 31, 1977, plus any authorized rent increases since then. Certain options are open to the landlord in raising rents based on operating costs. Landlords may file a hardship petition if the rate of return is lower than 8 percent or if the cash flow is negative.

Rate Of Return Formula

The D.C. rent control law allows 8 percent return on investment, computed by allowing deductions of operating expenses, taxes and management

This article is based on a study made possible by a grant from the Federal National Mortgage Association. The views expressed are entirely those of the author.

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TABLE 1

Selected Characteristics of
a Sample of Rent-Controlled
Apartment Buildings That Have Applied
for Eligibility to Convert to Condominiums

Building Characteristics	Total	Condominiums		
		Conn./Mass. Wisc. Ave. Corridor	Capitol Hill	Adams-Morgan Shaw 16th St. Area
Units	90.3	102.1	63.8	93.6
Years owned	7.6	10.8	3.5	6.7
Percent owning other property	46%	60%	33%	39%
Percent filing petitions for				
a. ownership hardship	6%	4%	0	7%
b. tenant grievance	20%	16%	17%	22%
c. substantial rehab	16%	0	0	17%
Operating Characteristics				
Gross income	\$278,719	\$376,301	\$214,470	\$263,112
Operating expenses	134,624	176,480	97,616	128,592
% of gross income	48.3	46.9	45.5	48.8
Property tax	23,468	31,464	18,663	22,286
% of gross income	8.4	8.4	8.7	8.4
Management fee	12,477	17,401	4,619	12,066
% of gross income	4.5	4.6	2.1	4.6
Depreciation	19,453	25,682	14,992	18,654
% of gross income	6.9	6.8	6.9	7.1
Net income	88,694	125,274	78,579	81,513
% of gross income	31.8	33.9	36.6	30.9
Available % for debt service	108,148	150,956	93,571	100,166
% of gross income	38.8	40.1	43.6	38.1
Assessed value	1,290,937	1,628,979	1,088,667	1,261,724
Return on investment (%)	5.1	7.2	5.6	4.8
Gross income multiplier	4.63	4.32	5.07	4.80
Average monthly rent	257.22	307.13	280.13	234.25
Number of cases	90	25	6	59

fees plus 2 percent depreciation from gross rent. To arrive at the return the net rent is divided by the assessed valuation. District assessments are at full market value, and the rate of return formula has not been popular since it does not allow for debt service in the computation.

The D.C. formula is not the common method real estate investors use to calculate return since it does not consider leverage, which is common to real estate. The formula tends to underestimate the return by a factor of three or four since the actual investment (equity) is a fraction of the sale price. Offsetting this, however, is the omission of debt service. In the early years almost all the debt service is interest, which should be allowed as a proper business expense. If this were done, the profit margin would be considerably lower than that computed by the

D.C. formula.

The deficiencies in the D.C. rate of return formula are offsetting. The degree of bias is dependent on the relative weight of the cost of financing. For older properties with low interest loans and low debt service the formula would appear adequate, but would penalize properties with large mortgages at high interest.

Analysis of data from the building sample reveals that the allowed 8 percent return is not being earned. The return on the control group was only 3.9 percent and the return on the condo group was only 5.1 percent.³ Regardless of deficiencies in the formula, the properties should be earning at least the allowed level. Earning at rates lower than allowed appears at odds with the profit-maximizing behavior assumed of real estate investors.

TABLE 2

Selected Characteristics of
a Sample of Rent-Controlled
Apartment Buildings in
the District of Columbia

Building Characteristics	Total	Selected Areas			
		Conn./Mass. Wisc. Ave. Corridor	Capitol Hill	Adams-Morgan Shaw 16th St. Area	Rest of City
Units	19.6	13.8	9.2	28.0	17.7
Years owned	9.7	16.9	8.1	9.0	9.2
Percent owning other property	59%	20%	70%	51%	68%
Percent filing petitions for					
a. ownership hardship	8%	10%	10%	18%	2%
b. tenant grievance	13%	10%	0	18%	14%
c. substantial rehab	1%	0	0	3%	0
Operating Characteristics					
Gross income	\$ 43,402	\$ 29,567	\$ 15,275	\$ 51,614	\$ 45,921
Operating expenses	25,746	16,286	7,185	32,722	26,594
% of gross income	59.3	55.1	47.0	63.4	57.9
Property tax	3,419	3,214	1,247	3,904	3,551
% of gross income	7.9	10.9	8.2	7.5	7.7
Management fee	2,283	1,633	911	2,858	2,304
% of gross income	5.3	5.5	5.9	5.5	5.0
Depreciation	2,879	2,093	1,212	3,064	3,193
% of gross income	6.6	7.1	7.9	5.9	6.9
Net income	9,073	6,342	4,718	9,065	10,278
% of gross income	20.9	21.4	30.9	17.5	22.4
Available % for debt service	11,953	8,434	5,931	12,130	13,470
% of gross income	27.5	28.5	38.8	23.5	29.3
Assessed value	192,893	173,295	81,965	254,819	185,415
Return on investment (%)	3.9	3.1	6.6	2.8	4.2
Gross income multiplier	4.4	5.9	5.4	4.9	4.0
Average monthly rent	184.50	178.54	138.36	153.61	216.20
Number of cases	112	10	10	33	59

Source: District of Columbia, Rental Accommodations Office

To attain the 8 percent rate of return, rents would have to be raised in the condo-eligible group by 5.2 percent and in the control group by 14.6 percent. These increases would have to come on top of any inflationary increases in operating costs and taxes.

Four factors are likely to explain the low rates of return:

High transaction costs — Although owners may file a hardship petition when rent is below the allowed rate, they claim that the procedure is cumbersome and biased. Only prosperous owners can undertake the necessary and costly services of accountants and lawyers. Even when the process is

successful, no guarantee exists that prompt rent increases will be granted.

Lag in rents — Leases are arranged a year or more in advance. During an inflationary period costs usually will rise faster than the owner's ability to raise rents, since rents can only be adjusted upward at the end of the term.

Turnover minimization — Small landlords are prone to use the strategy of turnover minimization rather than profit maximization. In a small building one vacancy can take a terrific toll on cash flow. Landlords will try to keep established, dependable tenants, since it is better to get less

rent from a stable tenant than to have a period of vacancy at higher rent.

Low equilibrium rent level in the city — Returns may be low because the true market rent in the District may be low. Many low-income families in the District are renters, and low-rent units serve this market. The amount that tenants can afford to pay is independent of the rent-setting formula. The discrepancy between allowed and actual rent differs among buildings. For example, among the higher-rent buildings in the condo-eligible group, the discrepancy between allowed and actual rent is only 5.2 percent, but among the lower-rent buildings the discrepancy is 14.6 percent (Table 3). The latter have a much larger gap to overcome — a discrepancy not easily explained by the first three propositions.

Some truth exists to all four reasons for the shortfall in rents. Unfortunately, the data do not allow firm conclusions and the subject deserves more analysis. The fourth reason — low equilibrium rents — is most consistent with the profit-maximizing model of real estate investor behavior and is buttressed by the discrepancy in profitability along the lines of rent level.

TABLE 3

Return on Investment Deficit
for Apartment Buildings in the
District of Columbia

	Condominium Applicants	Other Buildings
Theoretically allowed 8% return on investment	\$103,274	\$15,431
Actual return	88,694	9,073
Deficit (total)	14,580	6,358
Deficit (per unit monthly)	13.45	27.03
Deficit as % of rent	5.2%	14.6%

Based upon the average return for the two samples

Reduction Of Maintenance Under Rent Control

Data substantiating reduction of maintenance are sketchy. Information from the Apartment and Office Building Association of Metropolitan Washington indicates that operating expenses as a percentage of income have increased.⁴ Much of this increase is due to rises in costs such as utilities. Because of these complications, it is very difficult to make determinations revealing such operating experience before and after rent control.

The two groups of buildings — those applying for condominium conversion and those that have not — reveal some differences between them. The condo group had only 48 percent of the gross income going toward operating expenses, as opposed to 59 percent for the control group. The differences in absolute dollars on a per unit basis are not that great: the condo group spent an average of \$1,495 per unit, as opposed to \$1,313 per unit in the control group. On this account the buildings requesting permission to convert to condominium were more favorably endowed than the average apartment buildings in the District.

With the imposition of controls through 1979, the maximum allowed rent increases since 1972 have been 39.2 percent in the aggregate, which comes to less than 5 percent per year.⁵ During this same time the Consumer Price Index increased by 88 percent or more than double the allowed rate of rent increases. If one looks at specific items, the picture is even more grim with:

- heating oil increases over 300 percent;
- electricity by 150 percent;
- natural gas by 90 percent; and
- sewer and water charges by 92 percent.

Since the imposition of controls, the classic situation of “squeeze” has been put on D.C. apartment owners. Although rent increases subject to justification by the landlord have been allowed, they have not made up for the general increases in operating costs.

Again in reference to the profit-maximizing model, it would appear that the likeliest impact of a revenue shortfall would be first on profits and then on operating expenses. The deficit cannot be made up entirely by reducing maintenance because that would reduce the level of housing services below optimum. To defer too much maintenance takes a toll on the structure, reducing its value and salability. But the deficit cannot be financed entirely by reduced profits, because this lowers the return on investment and, hence, the value of the building. The owner is in a difficult situation; the likely outcome is both reduced profits and reduced property value resulting from a lower level of housing services being offered. Tenants are also less well off since they continue to pay the same nominal rent for reduced services.

Extending Loans Under Rent Control

The reluctance of lenders to lend under rent control is a difficult allegation to test empirically. In a study that explored this hypothesis through a canvass of lenders in New Jersey, Gruen showed that some reluctance existed on the part of lenders to become involved in new projects after the imposition of rent control.⁶ The experience, however, was not unanimous, and the results do not entirely support the hypothesis.

One problem in trying to gain a clear-cut answer is the fact that the amount of multifamily housing constructed in the District of Columbia since the imposition of rent control has declined, which is not entirely the result of rent control.⁷

Questioning the motivations of lenders is not as instructive as analyzing the amount of money available for debt service — one of the key ratios in apartment building operation. The maximum amount available is that left over after payment of expenses, which includes the profit margin plus the allowance for depreciation. This determines the absolute amount that is available for payment of mortgage debt or the ability to incur additional debt. Equally critical is the level of interest rates. The higher the interest rate, the less the amount that can be borrowed with a fixed amount available for debt service. At low interest rates a given amount available for debt service can support a much higher level of indebtedness than at high interest rates. This is illustrated in Table 4, which shows the debt-carrying capacity of the amount available for debt service in both the condo group and control group.

TABLE 4

Maximum Value of Loan
Supportable by the Amount Available
for Debt Service under
Alternative Rates of Interest

	Interest Rates				
	5	8	10	12	15
Condominium applicants	104	82	71	63	52
Other buildings	77	61	53	46	39

Figures expressed as the loan-to-value ratio of the maximum amount that could be supported at those interest rates.

Debt service is not an allowed expense in the setting of rents. The amount available for debt service at any given time is fixed and this affects significantly the ability to sell or refinance a building. In the case of a sale the potential purchaser faces a limited amount of rent revenue, which cannot be changed regardless of his interest expense. The cash available for debt service may not support a significant loan if the building were to be sold. For example, the maximum loan available for the average control group building would be 46 percent of the building value when the rate of interest is 12 percent. At a 15 percent rate, which was common in the latter half of 1979, the loan-to-value ratio would be less than 40 percent. The situation is a little better in the building which

seeks eligibility for condominium conversion. Table 4 shows that at very low interest rates, which were common in the 1950s, the amount available for debt service is adequate. But based on the levels of interest rates common in the late 1970s, the amount available for debt service is grossly inadequate.

The principal consequence of the low amount available for debt service is that it affects the ability to sell and refinance properties. For example, there are three likely outcomes when D.C. rental property is put on the market:

1. A well-heeled buyer might purchase the property and put down more than half of the sale price as equity, since the amount available for debt service from the property will not support a loan of more than half its value. Considering the low rate of return on rental property, however, such buyers are likely to be in short supply.
2. The seller might take back a purchase money mortgage for a substantial portion of the selling price, which will effectively exhaust what normally would be the owner's capital gain in the building. The ability of the seller eventually to obtain full payment of the purchase money mortgage depends on the ability of the building's rents to pay off all indebtedness after expenses.
3. The sale might be consummated at a deep discount. Buyers will calculate their bid prices based on current yields, which will tend to depress the sale price. Evidence from the building sample demonstrates that the value is already low as a percentage of income based on normal rules of thumb.

Erosion Of Tax Base

New York City frequently has been cited as an example of the fiscal consequences of rent control.⁸ One reason for its fiscal crisis was that rent control had suppressed the value of real estate. Since more than 70 percent of the city's housing stock was in apartments, depressing the value of rental property through rent control had disastrous fiscal consequences. Also, a study of Cambridge, Massachusetts, showed that rent control caused a reduction in the city's tax base.⁹

For Washington, D.C., the subject of the shift in tax from apartment owners to homeowners (as the buildings were converted) is worthy of some consideration although no definitive study of the shifting tax incidence has been made. The evidence is sketchy and inferences can be made only from bits and pieces of information. The data from the two groups in the sample do provide some insight, however.

The valuation of buildings as rental property appears to be low in terms of their income. The gross income multiplier, expressed in terms of assessed valuation, is relatively low: only 4.4 for the control group and 5.1

for the condo group. Generally the gross income multiplier should be somewhat higher, in the range of 6 or 7.¹⁰ One caveat is that assessed values used may not always match actual market values, so that there may be some bias.

Considerable room for error exists in appraising properties for tax assessment purposes. In a rising market assessed values may tend to lag behind market values; in a falling market, the reverse is true. The direction of bias can be estimated if the direction of the market is known. For example, in the District the direction of market values in the single-family sector is up, with most properties appreciating in value. This trend has been substantiated by the D.C. assessor. However, there has been no comparable systematic study of property values in the multi-family stock and many opinions are offered as to whether apartment houses are rising or falling in value. Conversations with appraisers in the assessor's office give the impression that any bias in the estimation of value among apartments is toward the low side, that is, assessed value is below market, but this has not been proved.

In this analysis the issue of the degree of bias in assessed value is important but not critical. If assessed values are below market values, the return calculated is too high. Conversely, if assessed values are higher than market value, then calculated returns are too low, which is the most critical. If assessed values are 20 percent above market, then the average return on investment rises from 3.9 percent to 5.8 percent, still well below the allowed 8 percent. Therefore, the conclusions are not sensitive to substantial errors in the assessment of value for property tax purposes.

One would have to conclude that valuation of rental property as a percentage of its income is on the low side compared with real estate investment in general. These are low rates of return compared with what real estate investors normally desire. Based on this evidence it would appear that multifamily values in the District are lower than what they would be in the absence of rent control.

Without the ability to raise rents as warranted by increases in operating expenses, many property owners have applied for reductions in their assessments. Many reductions have been sustained because of the diminished income capacity of the buildings. In these specific instances the decline in value of apartment buildings does lower the tax roll.

Inhibition Of Rehabilitation

All housing at some time or another requires major renovation to sustain a certain level of housing services. Certain subsystems, such as the heating plant, electrical wiring, roof and other features, will need periodic replacement.

A landlord contemplating a major investment in an existing apartment building does so on the basis that

the investment will yield a return commensurate with other investment opportunities. Substantial rehabilitation of a building will probably require raising rents to compensate for the increased investment. If the required increases can be passed on to tenants in the form of higher rent, the investment will make economic sense.

Substantial rehabilitation is defined in the Rent Control Act as improvements or renovations that cost 50 percent or more of the assessed value. To engage in substantial rehabilitation the landlord must first petition the RAO for approval, a process which consists of examining the proposed rehabilitation plans so the RAO can determine the appropriate rental ceiling after the rehabilitation has been done. After permission has been obtained the new rent can be a maximum of 125 percent above the pre-rehab rent.

Of those properties seeking certificates of eligibility for conversion, 16 percent had also submitted petitions for substantial rehabilitation. Among the control group, where the rate of return is lower, only 1 percent — an extremely low percentage — had submitted petitions for substantial rehab. Substantial private rehabilitation among rent-controlled buildings is not occurring.

CONDOMINIUM CONVERSION

Issues

In the area of multifamily revitalization the most contentious issue is condominium conversion, which raises the ire of renters, politicians, and owners. Statistics on condominium conversion show that although substantial, it is not the widespread phenomenon portrayed. For the nation as a whole the number of multifamily units built as condominiums averages approximately 10 percent to 20 percent of the total.¹¹ Conversion of the existing rental stock to condominiums is a localized issue that varies from city to city.

One reason often stated for the conversion to condominiums is the deteriorating economic situation of apartment buildings under rent control. It cannot be the only reason because in some cities without rent control the conversion is proceeding as rapidly as in D.C. Chicago leads in the number of condominium conversions with an estimated 35,000.¹² However, the conversion of condominiums in Chicago has tended to be localized in large buildings near the lakefront. Condominiums are not generally found at random throughout the city, although apartment buildings are certainly in every area.

Condominium conversion became a political issue in D.C. because of the large number of landlords who expressed intention to convert their buildings. In an attempt to deal with a perceived problem, the city has had moratoria, which have been on-again-off-

again. As of December 1978 the District had approximately 8,000 apartments that had been built as or converted to condominiums.¹³ In addition, landlords had applied for eligibility to convert an additional 14,642 apartment units. The potential for condominiums in the District was approximately 12 percent of the existing multifamily units.¹⁴ Many citizens became alarmed and felt this might be a trend leading to a significant reduction in the rental stock in the District.

To convert rental units to condominiums the District's Condominium Act of 1976 requires that:

- The unit being converted is a high-rent accommodation;
- A majority of the tenants agrees to the conversion; or
- The vacancy rate in the District for non-high rent accommodations is above 3 percent.

Prior to conversion landlords are required to give 120 days written notice to tenants, who must be given right of first refusal to purchase. Relocation assistance as required by the law must be made available to displaced tenants.

Condo Locations

Although there are concentrations of apartment buildings throughout the city, since 70 percent of all the households in the District rent, condominium conversions are not scattered at random across the city. Rather, more than 90 percent of all actual conversions and requests for eligibility to convert are concentrated in three relatively well-defined sections of the city, in the northwest quadrant radiating out along major arteries. The first major concentration of condominium conversions is the area along Wisconsin and Connecticut Avenue, characterized by many large apartment buildings in a relatively affluent part of the city. The second area occurs in what is loosely defined as the Capitol Hill area, a neighborhood that surrounds the Capitol, the Library of Congress, and the Supreme Court. Its boundaries are undefined but seem to enlarge every year due to its popularity. In the Capitol Hill neighborhood, buildings tend to be the smaller, walk-up variety. The third area of concentration is loosely referred to as the Shaw-Adams-Morgan-16th Street area, which emanates from the central business district in a northward direction and is characterized by many large apartment complexes.

Economics Of Condo Conversion

Are the condo group buildings different from other apartment buildings in the city? When the condo group sample is compared with the control group, it becomes apparent that those seeking to convert are significantly different from the ordinary apartment buildings in the District. One outstanding characteristic is that they are the largest of the apartment

buildings, with an average size of more than 90 units, compared with a citywide average of less than 20 units per complex. They also have significantly higher rentals, with an average monthly rent of \$257 versus \$184 for the control group. In terms of assessed valuation the condo group was assessed at more than six times the average of buildings in the control group.

The condo group buildings are also more profitable than other apartment buildings in the city. The average rate of return on investment was 5.1 percent for the condominium sample as opposed to 3.9 percent for the control group. Among the condo group the highest returns were found among the large apartment buildings in the Wisconsin-Connecticut Avenue corridor.

The Apartment and Office Building Association of Metropolitan Washington maintains an experience exchange of apartments in the city. The condominium buildings in northwest Washington compared favorably with the AOBA sample and appeared to be more profitable.¹⁵ Thus, the condominium conversion cannot rest entirely on a lack of profitability since these buildings tend to be more profitable on the whole than all of the other apartment buildings scattered throughout the city. Factors other than lack of profitability are at work as incentives in condominium conversion. Were the sole incentive the squeeze between income and expenses brought on by rent control, then one would expect that more buildings that had lower rates of return in other parts of the city would be seeking to convert.

A better understanding of the incentive for owners to convert from rentals to condominiums and the desire for tenants to have the building remain rental, can be gained from looking at the basic economics of the situation. There is a change both in value and in ownership and tenure once a rental building is converted to condominium.

The basic economic framework in a conversion is shown in Table 5. In 1978 the average assessed valuation per unit was \$14,296 in those buildings seeking to change their status. When such a building changes hands to a condominium converter, the price is likely to be higher than the assessed valuation if the building is otherwise eligible for condominium conversion. The exchange value is likely to be in the neighborhood of \$25,000 per unit. The converter will face expenses for recording, settlement costs and sale commissions, which historically have been on the average of \$5,000 per unit. Depending on the state of the building, the conversion process is usually accompanied by some amount of rehabilitation. Minimum rehabilitation usually will include putting in new appliances and floor coverings, repainting and refurbishing the landscape and common areas. Such refurbishment usually will run from \$5,000 to \$10,000, most likely tending toward the high

side. The converter must add in his own markup to cover his costs including interest and payment for his own time.

TABLE 5

Economic Factors in a
Typical Condominium Conversion

Landlord's view:	
Value as rental property (per unit)	\$15,000
Developer's view:	
Sales price to condominium developer	\$25,000
Expenses to refurbish/rehabilitate	10,000
Settlement costs and commission	5,000
Developer's markup	20,000
Sales price as condominium	60,000
Interest expense to developer	6,000
Margin to developer	14,000
Less taxes	7,000
Net margin to developer	7,000
Tenant's view:	
Current apartment rent (per month)	\$250-300
Price as condominium	60,000
Downpayment on condominium (20%)	12,000
Monthly mortgage payment (20 years, 80% of value, 12% rate)	\$ 450
Property taxes (per month)	100
Condominium fee (per month)	150
Total occupancy cost (per month)	700

The most significant cost is interest expense. In the hypothetical conversion as described and shown in Table 5, the converter would have invested approximately \$40,000 per unit. At an interest rate of 15 percent per annum, holding cost would amount to \$6,000. If the holding period lasts longer than one year, the interest expense would go up accordingly. In this example the converter is left with a margin of \$14,000 after payment of interest costs. Assuming that the converter is in the 50 percent tax bracket, his profit on the conversion would be \$7,000. Given the risk involved in these kinds of transactions, this does not appear unreasonable.

Because of the high interest costs involved the converter will desire as many existing tenants as possible to stay on as condominium owners. Since he will do well if 50 percent stay on, he will usually offer them substantial incentives including discounts on the sale price.¹⁶

The incentives for existing tenants to remain after a building has become a condominium are often difficult for the tenant to see. Consider again the hypothetical example: the rent in the average building that is likely to be converted is in the range of \$250 to \$300 per month. The economics of condominium conversion as outlined would result in a selling price for the finished unit in the neighborhood of \$60,000.¹⁷ From the standpoint of the purchaser a mortgage for 80 percent of value at an interest rate of 12 percent with terms of 20 years would result in a monthly payment of \$450. To this must be added the property tax which would be approximately \$100 per month. The property tax would be based upon the current sale price of \$60,000 rather than the average value as a rental which is approximately \$15,000. As a result property taxes would increase three- to four-fold. In addition, there is the condominium fee in the range of \$150 per month which covers the common areas, some utilities and services.

The conversion has increased the occupancy cost to a condominium owner to more than double the former rent of \$250 to \$300. The unit is essentially the same as a condominium as it was as a rental. Although there will probably be some upgrading, the address is the same.

Even with an increase through conversion in the price of the accommodations, it may be attractive as a condominium to some of the existing tenants. Those in high tax brackets can enjoy the benefit of writing off a considerable portion of the monthly cost by deducting interest and property taxes. In addition, there is the possibility of appreciation offering a substantial return. If property is appreciating at 5 percent to 15 percent per annum, the combination of tax deductibility and price appreciation may make the decision to remain as a condominium owner a sound one.

Consider again the hypothetical example in Table 5. A condominium owner in the 50 percent tax bracket would have after-tax expenses of \$420 per month as opposed to pretax expenses of \$700. The after-tax difference between owning and renting is approximately \$120 to \$170 per month. However, the condominium probably would be appreciating and in this case, would have to appreciate at the rate of 8 percent per annum to recover the initial outlay of \$12,000 plus the monthly deficit in five years. During the 1970s, condominiums and other properties in the District appreciated at rates above 8 percent. Given these assumptions, the step from renter to condominium owner would be sound.

Those tenants who do not have the high income to take advantage of the tax shelter, the downpayment required, and/or the faith in the continued price appreciation in condominiums may find that it is not a good deal to remain once the building is converted. They may be better off paying \$250 to \$300 per month rent elsewhere rather than facing a \$700 monthly payment on a condominium, regardless of tax benefits. They have a tremendous incentive to delay or thwart such a conversion. In this case the economics of the situation are straightforward and so are the politics.

NOTES

1. The rent control law is administered by the Rental Accommodations Office (RAO), which has a board and a staff.
2. The data were gathered from the files of the Rental Accommodations Office (RAO). A list of all apartment buildings in which the owner has applied to convert to condominium is maintained by the Department of Housing and Community Development. The condo sample contains most of the buildings on that list. Some of the buildings on the list were not included because the most current statement was not in the RAO files at the time, since they were in use, being processed or being refiled; or the information in the file was incomplete at that time, contained ambiguous entries, or was otherwise difficult to interpret clearly. The control group sample was obtained by selecting at random one or more properties in each file of the individual file drawers, which are maintained by the quadrant of the city and street address. This assured coverage of the entire city.
3. The difference in the mean values for the return on investment between the two samples is significant at the .05 level using a one-tailed test for the distribution of t .
4. Apartment and Office Building Association of Metropolitan Washington, *AOBA Information: Experience Exchange*, 1976.
5. Rent controls were imposed nationwide in 1971 as part of the Nixon Administration's wage and price controls and were lifted in 1973. The D.C. rent control went into effect in 1974 but rents were rolled back to their 1973 level.

6. Gruen, Gruen Associates, *Rent Control in New Jersey: The Beginnings*, consultant report prepared for the California Housing Council, Sacramento, California, 1977.

7. U.S. General Accounting Office, *Rental Housing: A National Problem that Needs Immediate Attention*, Washington, D.C., November 8, 1979.

8. Frank S. Kristof, Temporary Commission on City Finance, *The Effects of Rent Control and Rent Stabilization in New York City*, Fifteenth Interim Report to the Mayor by the Temporary Commission on City Finance, June 1977.

9. Charles R. Lavery, Jr., *Rent Control Highlights: Effect on Property Valuations and Assessed Valuations for Ad Valorem Taxation, or a Probable Predicament*, mimeographed, Cambridge, Massachusetts, October 1976.

10. The concept of the gross income multiplier is common in real estate as a handy valuation device. However, there is no rigorous definition of the appropriate level for the GIM. Because of the current uncertainty in the rental market, a consensus is not easy to obtain. But during this research it became evident that knowledgeable appraisers believe that a GIM of 6 is adequate for well-situated properties of good quality. At the other end of the spectrum, Sternlieb found that the GIM for slum properties was in the range of 1 to 2. Refer to: George Sternlieb, *The Tenement Landlord* (East Brunswick, N.J.: Rutgers University Press, 1966).

11. Between 1975 and 1978 condominium and cooperative apartments accounted for 18 percent of all housing of five or more units. U.S. Department of Commerce, *Current Housing Reports, Market Absorption of Apartments*, H-130-79-Q1, June 1979.

12. Shlaes & Co., *Condominium Conversions in Chicago: Facts and Issues*, Chicago, 1979.

13. Development Economics Group, *Condominium and Cooperative Conversions in the District of Columbia*, Washington, D.C., 1979.

14. According to the D.C. Housing and Community Development Department, there were approximately 8,000 condominiums in the city as of year-end 1979. Data from the *Annual Housing Survey: 1974* (U.S. Bureau of the Census, *Current Housing Reports*, Series H-170-74-18, Housing Characteristics for Selected Metropolitan Areas: Washington, D.C. — Maryland — Virginia SMSA) show a total of 134,900 housing units in buildings of five or more units.

15. AOBA, *loc. cit.*

16. Specific data on condominiums in D.C. are contained in the Development Economics Group study already referenced.

17. Development Economics Group, *loc. cit.*

CORPORATE OWNERSHIP ENTITY RECONSIDERED

by Gaylon E. Greer
and Michael D. Farrell

Real estate investors face a major decision in selecting a legal form of ownership. They must choose from an array of alternatives, each having a different impact on profits, taxes and risk. Entity decisions involve issues such as limitation of investor liability, flexibility in management decision-making, ease in transferring ownership interests, and legal restrictions imposed by state and federal laws.

Corporations have generally-acknowledged advantages with regard to many of these considerations, but the opinion that income tax disadvantages outweigh nontax benefits is widely held, and corporations usually are not viewed as acceptable ownership vehicles for real estate investment. But recent legislation has reduced the corporate income tax rate while stripping away many of the tax shelter opportunities traditionally associated with individual ownership of investment property. As a consequence, tax advantages in many cases may favor the corporate form of ownership.

Traditional Objections To Incorporation

Numerous nontax arguments for incorporation have been intensively examined elsewhere.¹ The most widely publicized is limited liability for corporate shareholders. Ease in transferring ownership interests is also included — though somewhat unpersuasively, for small privately held corporations — in the catalogue of benefits. Although continuity of life is usually included in these arguments, it may be the least compelling reason to choose a corporate entity.

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These and other acknowledged benefits notwithstanding, most investors reject the corporate entity because of anticipated unfavorable income tax consequences such as “double taxation” and lack of “conduit” treatment. Both merit reexamination in the context of contemporary income tax law.

Profit-making corporations are liable for both state and federal income taxes; and shareholders are liable for taxes on any corporate earnings in excess of the dividend exclusion remitted to them as dividends. Thus, tax collectors take a “double serving” from corporate earnings before permitting investors access to the residual.

The “double taxation” objection rests upon two presumptions:

1. That investors wish to withdraw earnings rather than permit the corporation to reinvest; and
2. That they do so only by receiving dividends.

Neither presumption is necessarily valid. If a corporation never declares a dividend in excess of shareholders’ dividend exclusions, “double taxation” is not an issue. Investor-shareholders who wish to withdraw cash from their corporations may employ a number of strategies other than dividend declarations.

Real estate is frequently considered tax-advantaged due to the provision for tax deductible depreciation allowances. Because depreciation allowances reduce taxable income without affecting actual pretax cash flow from an investment, net cash receipts may far outstrip taxable income.

Investors who employ financial leverage wisely in connection with investment in depreciable assets may be able to realize significant pretax cash flow and yet report legitimate losses for tax purposes. Additional tax savings result from offsetting these “artificial accounting losses” against taxable income

from other sources.

Because corporations are taxable entities and not "tax conduits," their losses cannot be offset against shareholder-investors' other taxable income. This lack of "conduit" treatment leads many investors to view the corporate entity as fatally flawed.

Lack of "conduit" treatment is less serious when the corporation has other taxable income to offset "artificial accounting losses." A corporation that acquires property at staggered intervals will always have some taxable income from more mature investments to use to offset losses from recent acquisitions, thus benefiting from depreciation deductions.

Special tax rules permit corporations to recompute as many as three years of prior tax liability, offsetting profits of earlier years against current losses. Any remaining current losses not offset against profits of earlier years may be carried over and offset against future income for as many as seven years.²

Tax Advantages For Corporations

Critics of the corporate organizational form have written vociferously about its income tax disadvantages, but little has been said about offsetting tax benefits. All entities suffer some relative disadvantages under the Internal Revenue Code, and no single tax factor should be considered by itself. Rather, relative tax consequences in conjunction with nontax consequences over the entire life of an estate-building plan should be considered.

The tax code favors corporations over noncorporate taxpayers. Corporations are permitted to deduct items that individuals must capitalize. Tax preference items result in less additional tax for corporations than for individuals. Corporations pay less tax than individuals who have the same net taxable income.

Real estate developers are in a good position to benefit from incorporation. Corporations are permitted the option of reporting construction-period property taxes and interim interest as a currently deductible operating expense, or of amortizing these expenditures over a number of years.³ Noncorporate taxpayers are denied this option, and must amortize such outlays over periods ranging from four to ten years.⁴

Certain available tax deductions dubbed "preference items" may subject the investor to additional tax liability. The surtax or add-on preference tax on preference items equals 15 percent of the amount that preference items exceed a determinable statutory exemption. This obviously reduces the tax savings associated with deductions included in the definition of tax preferences.⁵

Preference items include all depreciation deductions on real estate, to the extent that the deductions exceed what would have resulted from using the straight-line depreciation method. Consequently,

real estate investors who take advantage of allowable accelerated depreciation methods may incur a preference tax obligation in addition to their regular income tax liability.

Noncorporate taxpayers are allowed an add-on preference tax exemption that equals either \$10,000 or one-half their regular income tax obligation, whichever is greater. Corporations may exempt either \$10,000 or 100 percent of their regular income tax obligation, whichever is greater. Thus, the potential maximum exemption for corporations is twice that of noncorporate taxpayers.

Chief among the advantages for corporate taxpayers is lower marginal tax rates. Corporations pay a flat 17 percent on the first \$25,000 of taxable income, after which marginal rates move in steps to a maximum of 46 percent. Unmarried individuals are assessed at an incremental rate exceeding 17 percent on income above \$4,400, and exceeding 50 percent on income greater than \$41,500. Compared with this 17 percent for corporations, the average rate paid by single taxpayers earning \$25,000 is almost 25 percent.

Married taxpayers who file joint returns and those qualifying as heads of households fare a little better than single taxpayers. Regardless of filing status, marginal tax rates for individuals exceed those for corporations at all levels of income above \$7,600, as illustrated in the Figure.

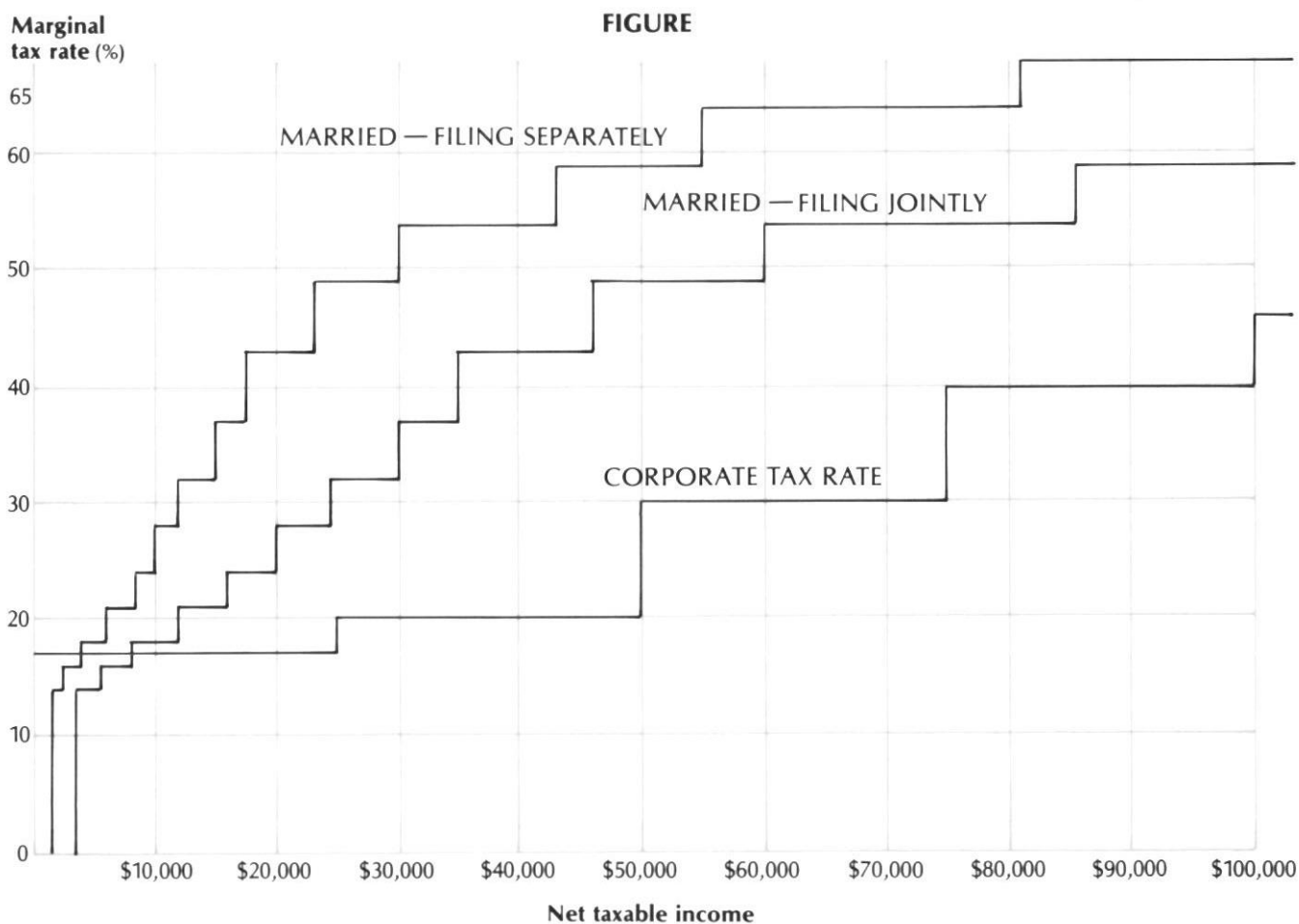
Incorporation Provides Tax-Planning Opportunities

Investors create a number of tax-planning opportunities by incorporating. Delaying incorporation or incorporating only a portion of a venture enables an investor to enjoy the best of both corporate and noncorporate tax environments. Multiple corporations may enhance tax-planning flexibility by providing opportunities to exploit investment tax credit and accelerated depreciation rules, and they may also facilitate property disposal.

Real estate investments that generate tax losses to offset income from other sources present a situation where immediate incorporation might be unwise. If the investor is in a higher income tax bracket than his investment corporation, then a noncorporate entity might be more appropriate.

Tax shelter from real estate is temporary. Annual deductions from accelerated depreciation drop off quickly after the first few years of ownership. The portion of debt service that comprises tax-deductible interest expense declines more slowly.

When investments do begin to generate taxable income, investors may benefit from transferring ownership to a wholly-owned or at least a controlled corporation. If properly structured, an exchange of realty for securities of a controlled or at least 80 percent owned corporation is not a taxable event.⁶ To avoid income tax liability, consideration for the trans-



fer must consist solely of stock and other securities issued by the corporation. Immediately after the exchange, the taxpayer-investor must own at least 80 percent of the voting and 80 percent of the non-voting stock of the corporation.⁷

After the transfer the corporation is in the same position with respect to the property as the investor was before the exchange. Because the corporation is in a lower income tax bracket, less tax liability will be incurred.

Delayed incorporation can enhance the tax benefit associated with rehabilitation of nonresidential income property. A tax credit equaling 10 percent of the cost of rehabilitating qualifying nonresidential real estate is available.⁸ If an investor-rehabilitator claims the full credit and then disposes of property within the ensuing seven years, a portion of the credit must be repaid in the years of disposal.⁹

Transferring rehabilitated property to a wholly-owned or controlled corporation does not require that the investment tax credit be repaid.¹⁰ Investors

may benefit from holding title in their own name during the rehabilitation period, and then transferring ownership to their investment corporation, thereby offsetting the tax credit against their personal income tax liability and retaining income from the property taxed at the lower corporate income tax rates.

Incorporation does not need to be immediate nor complete. Wherever tax planning objectives are better served, only a portion of an investor's ownership interest needs to be transferred to a corporate entity.

For example, upon initial acquisition an investor might choose to have land title vest in a corporation and hold title to improvements in his own name, thereby offsetting his personal income by depreciation allowances and a reasonable land rental paid to his corporation. Because corporate income is taxed at lower rates, his personal tax reduction due to land rental expense will more than offset the corporate income tax on land rental income. One should be

sure that operations divided this way are actually separable and separate; otherwise income and expense items may be reallocated to reflect the IRS's vision of economic reality.¹¹

Forming separate corporations to own each major property interest enhances tax planning flexibility. Since incorporation is inexpensive, as many separate organizations as necessary to benefit financial objectives and a personal income tax position can be formed.

Multiple corporations will not reduce the tax rate applicable to corporate income when the corporations are in related businesses but will form the foundation for disposing of properties without triggering recapture of investment tax credit or excess depreciation. As each property is to be marketed, one sells the owning corporation, carefully avoiding running afoul of the Collapsible Corporation rules of Code Section 341.

Investors who consider using accelerated depreciation to amplify the income tax benefits or to reduce adverse tax consequences of investing find the advantages reduced or eliminated by the potential for additional taxes when property is sold. Under most circumstances, any gain on disposal will be taxed as ordinary income to the full extent of accumulated depreciation deductions in excess of those generated by the straight-line method.¹² Because lump-sum recapture may catapult an investor into a high income tax bracket, potential recapture problems rate high among issues that determine whether accelerated depreciation is worthwhile.

Delayed incorporation may solve the recapture dilemma, permitting investors to benefit from accelerated depreciation deductions and avoid this "back-end" cost. Having held a property in their own or a partnership name while claiming accelerated depreciation, taxpayers may transfer ownership to a controlled corporation without recapture.¹³

Potential recapture continues to exist with respect to property transferred to a controlled corporation in a nontaxable transaction. If the corporation sells the depreciable property, the sale will trigger the same recapture problem as a sale by the investor.

Recapture is avoided if the investor sells the corporation, instead of the corporation selling property that is subject to recapture rules. If the investor holds corporate stock for a sufficient length of time and establishes his motive for acquisition as investment-oriented rather than tax avoidance, recapture is not triggered by sale of the corporation. Under these circumstances the entire gain from sale of the corporation is a long-term capital gain. This strategy must be carefully planned and executed to avoid difficulty with Collapsible Corporation rules.¹⁴

Extracting Cash From The Corporation

After lack of "conduit" treatment, the main objection to incorporation is double taxation. Critics observe correctly that earnings are taxed first to the corporation, and again to shareholders when cash is distributed as dividends. The problem can be circumvented by structuring cash withdrawals as other than dividend payouts.

Interest paid on corporate indebtedness to shareholders represents taxable income to the shareholder (after provision for the allowable exclusion), but it is deductible by the corporation. Principal payments are not a taxable event.

This strategy is subject to limitations imposed by provisions associated with "thinly capitalized" corporations. If shareholder loans do not represent prudent business practice, they may be construed by the IRS as capital contributions. In that event, interest and principal payments to shareholders are considered as dividend payouts — taxable to the shareholder but not deductible by the corporation.¹⁵

An appealing opportunity to apply this strategy occurs when property is transferred to a controlled corporation solely in exchange for corporation securities. Qualifying transactions are nontaxable under provisions of Section 351 of the Internal Revenue Code. The Code defines qualifying securities as both stock and certificates of indebtedness. Investors planning periodic cash withdrawals from corporate entities may avoid the "double taxation" problem by including sufficient evidence of indebtedness, that is, intermediate or long-term notes to generate interest payments totalling the amount of the desired periodic withdrawals.

Employee salaries paid by corporations are tax deductible if the amount paid is a "reasonable and necessary business expense." Like any employee, controlling shareholders may receive reasonable compensation for their services. Such compensation is taxable to the employee-shareholder and deductible to the corporation.

Salary payments not justified by the value of services performed, however, may be construed as "constructive dividends." If this occurs, the payment would be taxable as dividend income to the shareholder-recipient and will not be deductible by the corporation.

If only depreciable property is deeded to the corporation, cash may be extracted as rental charges for the land that has corporate-owned buildings. These charges are taxable to the shareholder-landlord and deductible by the corporation.

As emphasized earlier, the corporation must be operating a separate business; otherwise the corporation may be treated as a sham and corporate income will be taxable directly to the shareholders.

Summary

The corporate form of ownership provides real estate investors attractive tax planning opportunities despite widely-cited disadvantages such as "double taxation" and lack of tax "conduit" treatment. Neither of these two reasons for rejecting the corporate form needs to be a serious issue for investors intent upon building an estate through realty.

A number of income tax considerations favor use of the corporate form. Corporations pay taxes at lower marginal rates than do individuals at income levels above approximately \$7,600. Corporations are favored with respect to the add-on preference tax and deduction of construction-period interest and property taxes.

Advantages of incorporation can be amplified by judicious tax strategy planning. Tax consequences can be divided advantageously between corporation and shareholder-owners, with shareholder-owners often withdrawing large sums from the corporation without consequence of "double taxation."

Tax rules applicable to corporations are extremely complicated and somewhat different from those applicable to individuals. A number of tax traps await

the unwary investor who uses a corporate entity. Since failure to avoid these traps can be disastrous, competent tax counsel is advised in decisions having income tax implications.

NOTES

1. For example, see David G. McGrady and William C. Weaver, "Why Set Up a Corporation to Own Real Estate?", *Real Estate Review*, Vol. 10, No. 3 (Fall 1980), 89-93.
2. Internal Revenue Code, Section 172(b).
3. *Ibid*, Sections 189 and 266.
4. *Ibid*, Section 189(b).
5. *Ibid*, Section 56(a).
6. *Ibid*, Section 351.
7. *Ibid*, Section 368(c).
8. *Ibid*, Section 48(g).
9. *Ibid*, Section 47(a).
10. *Ibid*, Section 47(b).
11. *Ibid*, Section 482.
12. *Ibid*, Section 1250.
13. *Ibid*, Section 1250(d).
14. See Gaylon E. Greer, *The Real Estate Investor and the Federal Income Tax* (New York, Wiley-Interscience, 1979), 247-248.
15. *Op. cit.*, Section 385.

The Last Supper at Gracie Mansion: A Fable

by Seymour B. Durst

In 1991 BIG MAC VI was at the Mayor's house celebrating the balancing of the budget — a triumph of planned shrinkage and courageous attrition.

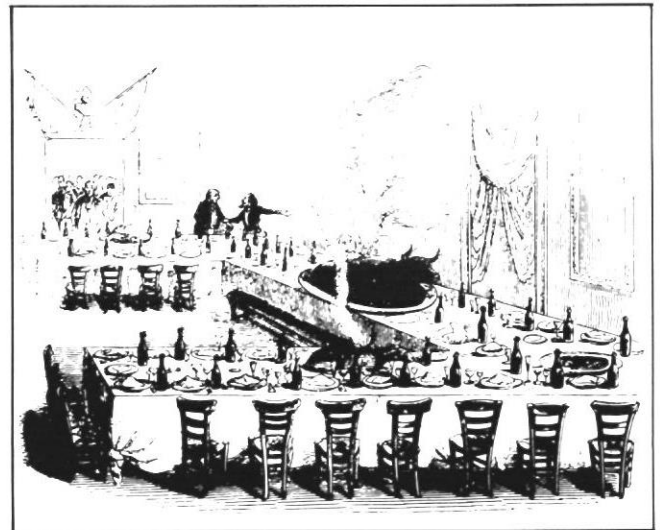
As usual, many celebrations were taking place that night. In another wing of the mansion, a Deputy Mayor celebrated the new freedom for children; the last school had been closed.

The Commissioner of Housing Preservation and Demolition led a celebration of a new housing strategy: house pooling, an adaptation of the 1980 car-pooling plan under which single-occupant cars had been banned from city bridges. The house pooling plan provided that single-occupant dwelling users double up, either through selection of partners by planning sociologists or by drawing lots. The sociologists pointed out that loneliness would be eliminated under this plan. A principal reason for the housing shortage was the accelerating spread of housing abandonment in the other boroughs, after the Bronx had been abandoned a few years earlier.

Pursued to the river's edge by many thousands of their irate, repossessed housing tenants, the members of the City Council escaped into exile in

New Jersey. Their names were then inscribed on the attrition rolls.

The newly-established volunteer fire laddies were celebrating in another wing of the mansion, having won permission to pull their old fire-fighting equipment over the unused subway tracks.



Potholes made dragging the equipment through the streets extremely difficult and caused the loss of much of Brooklyn.

BIG MAC pointed to its major budget-cutting achievement: the saving of the entire Police Department appropriation, once the National Guard was called in to declare a curfew. The BIG MAC revelers recounted how they had enabled the city to return to the credit market with a high bond rating after eliminating all expenses except bond interest and Board of Estimate salaries. "Here's to

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Seymour B. Durst is president of The Durst Organization, Inc., a firm specializing in land assemblage and office building development in Manhattan. He has had two articles published in the Journal of the Institute for Socioeconomic Studies: "If the Cities Go Down, So Goes the Nation" (Autumn 1977); and "Laetrile for the Urban Crisis: 'Planned Shrinkage' and Other Dangerous Nostrums" (Summer 1979).

Generally Accepted Accounting Principles,” chortled the members of BIC MAC as they raised their glasses of water that had been bottled.

Need To Reverse Decline Of Cities

The foregoing scenario may prove to be more reality than spoof if we continue to rely only on budgetary restraint and good accounting to cope with overall urban regression.

The urgent need for New York and the other older cities is restoration of their income-producing potential to reverse their steady economic decline. Correction of the long-standing, anti-urban economic bias is imperative. Federal guarantees and advanced management techniques cannot stem the tide for long. Nor can we continue to rely on inflationary federal aid financed by soaring deficits and printing press dollars.

Real solution and the essential recovery of the older cities require the will to make fundamental changes, to go back to basics in our thinking. Here are some thoughts:

- Cities are not dying; they are being killed. The underlying urban trend from crises toward chaos is not their natural destiny, but results from governmental malpractice of long-standing.
- The problems of our sinking cities will not just go away and the nation cannot just ignore them, try as it may. The rest of the country is moored to the older cities and will capsize with them.
- Cities are overtaxed and under-housed. The excessive taxes of the central cities propel high income families and large segments of their economies across artificial political boundaries and into the surrounding regions.
- Rental housing, an essential ingredient for the survival of the older cities, faces enormous tax bias both in Washington and locally, while elected officials at all levels of government vie with each other to undermine such housing and prevent its replacement.
- Cities were built because they attracted investment. Now they must be rebuilt. But to be rebuilt, they must once again be made safe for investment.
- Congressional leaders and local legislators are quick to protest that reversals of governmental misdirections are not politically possible. Continuation of the pervasive urban decline will make our governmental system no longer politically possible.

Specific Steps To Urban Future

There is great interest in historic preservation of the past, and certainly in improving conditions in

the present. But most important, and lacking, is a constituency for an urban future.

As requested, I will go from the general to a few specifics. The specifics are known, but what is lacking is the will and consensus to do them.

- *Equitable income tax treatment for housing renters* versus house and condominium owners must be enacted in the Federal tax laws to permit any meaningful amount of residential housing to be developed in urban areas and to reduce the heavy bias against rental housing. This is especially essential because of today's inflation-swollen income tax brackets and two-income families. Higher income families cannot afford to live in rental housing.
- *Federal housing subsidies* must be completely redirected toward the single purpose of expanding the urban housing supply, if low income families are ever to obtain decent housing in central cities. Existing housing programs are only political gestures. They cannot accomplish any of their avowed purposes. Attempting, as has been done for the past 40 years, to finance the lowest income families in the highest cost housing cannot solve any housing problems, only reelection problems. Only thin subsidy programs should be enacted, directed toward creating an adequate housing supply for the entire population. It should be obvious — but apparently isn't — that if 20 percent of the housing in older cities is terrible, 20 percent of the families will be living in terrible housing.

A thousand dollar annual rent supplement per unit to assist a higher income family to pay for housing that would not otherwise be built will produce eight times as much housing volume as an \$8,000 annual subsidy that is required for 40 years under the demented Federal Section 8 program.

- *A plethora of major housing constraints exists locally.* Oversized manufacturing zoning districts prohibit residential development, waiting for long-gone manufacturing firms to return. The same procedure occurred when decayed piers were protected for 20 years while waiting for the ships to return. Fortunately, New York City did not try to preserve its agricultural lands. Assemblage and possession roadblocks intimidate any would-be residential builders and, of course, political control of rentals continues to destroy existing housing, just as political control of the price of any product will drive it from the marketplace. And finally, how can the urban cores be financially supported in the future? Only by regional taxation of the surrounding areas that they serve.

WORLD RENTAL LEVELS

Richard Ellis Research compiled a table and graph on the cost of renting office property in the business centers of the world as of January 1981. Equivalent costs for this guide were provided in British currency. The table and graph here have been modified to reflect the exchange rate as of May 26, 1981, and equivalent costs have been converted to U. S. measure and currency based on the more recent exchange rate.

Several factors have combined to produce changes in rents: the differing rates of inflation in each country, the changes in exchange rates, and local demand and supply conditions.

All countries have been affected by inflation since the mid-seventies but some have been more successful than others in dealing with it. Many European countries, North America, Australia and the Far East have had inflation over the last two years from about 20 percent to 30 percent.

Particular countries such as Switzerland, West Germany and Belgium have had a two-year rate at or just under 10 percent, whereas South American countries have recorded inflation in excess of 100 percent over this time.

The effect of local demand and supply conditions has influenced rental levels and growth in particular centers. In general terms, high rental growth indicates an undersupplied market with demand greater than new supply, and an absence of rental growth suggests a deficiency in demand.

Richard Ellis, Inc. is a leading real estate consulting firm with offices throughout the world. The firm provides real estate advice to institutions, major corporations and individuals in the areas of investment, management and development. In the U.S. the firm is headquartered in Chicago.

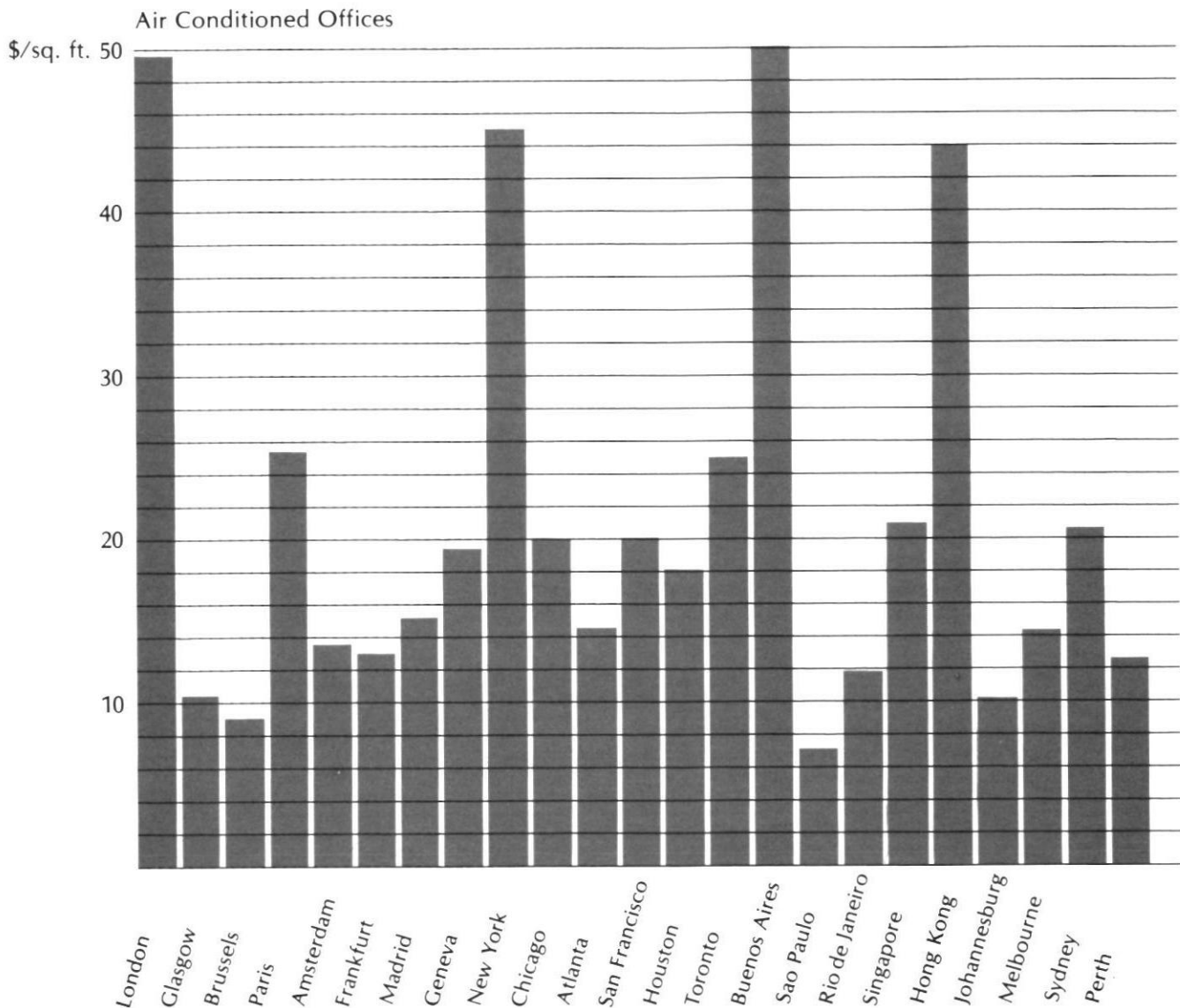


TABLE								
Offices								
City	Suite of 5,000 sq. ft. Highest standard with air conditioning		Suite of 5,000 sq. ft. Reasonable standard		Other terms and method of area measurement			Exchange Rate (5/26/81)
	Rent in local currency	Equivalent rent on net area in dollars per sq. ft. per annum	Rent in local currency	Equivalent rent on net area in dollars per sq. ft. per annum	Additional charge for services	Rent review or indexation	Area measurement	
London	£24.00 per sq. ft. p.a.	\$49.52	£17.00 per sq. ft. p.a.	\$35.08	15%	R/R 5 yearly	Net usable	£2.0635
Glasgow	£5.00 per sq. ft. p.a.	10.32	£4.50 per sq. ft. p.a.	9.29	20%	R/R 5 yearly	Net usable	£2.0635
Brussels	BF 3250 M ² p.a.	8.55	BF 2400 M ² p.a.	6.31	30%	Indexation p.a.	Gross internal incl. core	BF .0263
Paris	FF 1400 M ² p.a.	25.30	FF 1000 M ² p.a.	18.07	20%	Indexation p.a.	Gross internal excl. core	FF .1807
Amsterdam	DFL 350 M ² p.a.	13.50	DFL 250 M ² p.a.	9.64	20%	Indexation p.a.	Net + toilets	DFL .3856
Frankfurt	DM 30 M ² p.m.	12.85	DM 20 M ² p.m.	8.57	20%	Indexation or R/R every 2/3 years	Gross internal	DM .4284
Madrid	PTS 1400 M ² p.m.	15.12	PTS 1000 M ² p.m.	10.80	15%	Indexation p.a.	Gross internal	PTS .0108
Geneva	SF 400 M ² p.a.	19.27	SF 250 M ² p.a.	12.04	10%	Indexation p.a.	Gross internal	SF .4817
New York	\$45.00 per sq. ft. p.a.	45.00	\$30.00 per sq. ft. p.a.	30.00	Nil	None	Gross internal	N/A
Chicago	\$20.00 per sq. ft. p.a.	20.00	\$11.00 per sq. ft. p.a.	11.00	Nil	R/R expiring	Gross internal	N/A
Atlanta	\$14.50 per sq. ft. p.a.	14.50	\$9.50 per sq. ft. p.a.	9.50	Nil	R/R expiring	Net usable	N/A
San Francisco	\$30.00 per sq. ft. p.a.	30.00	\$18.00 per sq. ft. p.a.	18.00	Nil	None	Net usable	N/A
Houston	\$18.00 per sq. ft. p.a.	18.00	\$13.50 per sq. ft. p.a.	13.50	Nil	R/R every 3/5 years	Gross internal	N/A
Toronto	C\$30.00 per sq. ft. p.a.	24.99	C\$20.00 per sq. ft. p.a.	16.66	Nil	None	Gross internal	C\$.833
Sao Paulo	CZ 600 M ² p.m.	7.08	CZ 350 M ² p.m.	4.13	Nil	Indexation p.a.	Gross internal	CZ .0118
Rio de Janeiro	CZ 1000 M ² p.m.	11.80	CZ 600 M ² p.m.	7.08	Nil	Indexation p.a.	Gross internal	CZ .0118
Buenos Aires	US\$50.00 M ² p.m.	50.00	US\$25.00 M ² p.m.	25.00	Nil	Indexation	Gross internal	N/A
Singapore	S\$45.00 per sq. ft. p.a.	20.87	S\$35.00 per sq. ft. p.a.	16.23	10%	R/R expiring	Gross internal	S\$.4638
Hong Kong	HK\$24.00 per sq. ft. p.m.	43.87	HK\$12.00 per sq. ft. p.m.	21.94	Nil	R/R 3 yearly	Net usable	HK\$.1828
Johannesburg	R 8.50 M ² p.m.	10.05	R 6.00 M ² p.m.	7.10	Nil	6% compound p.a.	Gross internal	R 1.1825
Melbourne	A\$12.50 per sq. ft. p.a.	14.24	A\$7.50 per sq. ft. p.a.	8.55	Nil	R/R 3 yearly	Gross internal	A\$1.1395
Sydney	A\$18.00 per sq. ft. p.a.	20.51	A\$12.50 per sq. ft. p.a.	14.24	Nil	R/R 3 yearly	Gross internal	A\$1.1395
Perth	A\$11.00 per sq. ft. p.a.	12.53	A\$9.00 per sq. ft. p.a.	10.26	Nil	R/R 3 yearly	Gross internal	A\$1.1395

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