

REAL ESTATE ISSUES

**Volume 7
Number 2
Fall/Winter 1982**

Urban Site Assemblage: Getting It All Together	James A. Austrian, CRE	1
The Context of Inner City Revitalization	Jack Harris	8
Race and Property Value: A Changing Concept	J. S. Fuerst & Susan Sarcone	14
Seldin on Change: Implications of Changing Land Prices	Maury Seldin, CRE	19
The Commercial Condominium	Henry Boeckmann, Jr., CRE	21
Noneconomic Factors in the Site Selection Process	Joseph Rabianski & Stephen W. Wright	25
Yields on Commercial and Industrial Real Estate Versus Other Assets	James R. Webb & C. F. Sirmans	28
A Lender's Viewpoint: Six Ways to Survive Today's Real Estate Depression (and Other Observations)	Donald J. Stratton & Barrett R. Bates	34
Foreign Investment in U.S. Realty: Prospects for the 1980s	Dudley S. Hinds	37
Choosing Real Estate Microcomputer Software	John Oharenko & Ruth M. Spiegel	43
Graduate Level Needs and Opportunities in Real Estate	Norman G. Miller & Gregory P. Gardner	47



Editor's Statement

This number's miscellany of articles brings together in somewhat disjointed fashion a host of related concerns. How are we to redevelop our city cores? Can real estate entrepreneurs, operating from market motives in a classic market environment, provide the sites needed to accommodate the growing service economy? Will revitalization trends now visible be enough to put our cities back into usable condition? Do racial issues, now seldom discussed, continue to impact the development patterns of our metropolitan areas, or have they been laid to rest — at least sufficiently to allow urban redevelopment to move forward without reopening old wounds? Will new devices such as the commercial condominium affect locational choices? What are the factors that actually determine those choices, and are the choices themselves serving the needs of the coming generation of companies and people?

Of at least equal importance are the financial conditions that underlie the real estate market. Will real estate be able to compete successfully for funds in the new financial environment? Can today's real estate professionals survive in tomorrow's marketplace without at least a change of costume? To what extent will foreign investment complicate, and perhaps enrich, the investment picture?

These broad questions, and others like them, are very much in the minds of thoughtful real estate professionals. Your own answers to them, and your comments on the ideas propounded in this number, would be very welcome.

We close with an examination of existing microcomputer software and a study of graduate level needs and opportunities in real estate, both aimed at students as well as teachers. If we have our own reservations about the adequacy of microcomputers and graduate schools in delivering the goods, and we do, we must at least acknowledge their growing importance in numbers and acceptance. If the real growth in real estate sophistication is occurring elsewhere, both those who are thinking of committing themselves to the microcomputer format and those who are programming our schools of higher education will need to hear about it.


Editor-in-chief

Urban Site Assemblage: Getting It All Together

James A. Austrian, CRE, Page 1

Drawing on his various experiences in New York City, the author presents a firsthand view of some of the positive and negative aspects in the acquisition of land and buyout of the tenants in an assemblage project. Comparing the process of assemblage to a jigsaw picture puzzle, he gives the reader some of his personal strategies and organizational steps in pulling deals together.

The Context of Inner City Revitalization

Jack Harris, Page 8

Revitalization is occurring in most large cities and has altered the outlook that inner city residential properties need to suffer inevitable decline in investment quality. The author examines the nature of revitalization, and uses the experience of the city of Atlanta to illustrate how various stages of the process may coexist with continued decline.

Race and Property Value: A Changing Concept

J. S. Fuerst and Susan Sarcone, Page 14

This study indicates that there are observable relationships between race and property values in American cities. The facts suggest that the introduction of some blacks into a neighborhood has little or no effect upon the movement of land and property prices, but where massive movements of minorities take place, prices do decrease and continue at the lower level. Exceptions are found in areas of recent in-migrations where properties have been in fine condition and the new population is entirely minority.

Implications of Changing Land Prices

Maury Seldin, CRE, Page 19

In his fourth article in this series, the author looks at the increases and decreases in land prices and how these values are influenced by the efficient use of land. He discusses some of the changes taking place in the demand for land and what impact the ecological movement has had on the issue of land use. He concludes by addressing land use policy and some of the problems and concerns faced by urban development managers.

The Commercial Condominium

Henry Boeckmann, Jr., CRE, Page 21

The commercial condominium has been profitable for the medical profession and in the toy and jewelry trades, and is now being tested in the general market. This article explores its potential in the real estate industry. After providing background information including history, advantages and disadvantages of condominium ownership, and defining terms, the author presents an overview of the costs involved in ownership as opposed to leasing.

Noneconomic Factors in the Site Selection Process

Joseph Rabianski and Stephen W. Wright, Page 25

Location decisions are made on the basis of economic and noneconomic factors. Although economic factors have received more analysis in the literature of real estate, noneconomic factors, both objective and subjective, are especially important when alternative sites are equal to

each other on the basis of transportation and production costs and market considerations. This article discusses several subjective, noneconomic factors that have played a part in recent site selection decisions.

Yields on Commercial and Industrial Real Estate Versus Other Assets

James R. Webb and C. F. Sirmans, Page 28

Two real estate yields (leveraged and unleveraged) are derived for five commercial and industrial property types, using data from a large institutional portfolio. These yields are compared via regression analysis to yields in the money and capital markets for 1966 through 1976.

A Lender's Viewpoint: Six Ways to Survive Today's Real Estate Depression (and Other Observations)

Donald J. Stratton and Barrett R. Bates, Page 34

The real estate market is predicted to rebound as general economic recovery begins and mortgage rates subside, but no one knows exactly when this will happen and how strong the market will be when and if it does take place. In the meantime, however, how should forward-looking investors approach problems and explore potential opportunities in the market? The authors offer several practical suggestions to help steer investors in the '80s.

Foreign Investment in U.S. Realty: Prospects for the 1980s

Dudley S. Hinds, Page 37

Foreign investors seem to be providing an increasing amount of capital for U.S. real estate. Although there are insufficient data to permit an adequate assessment of the importance of this type of investment, enough is known to warrant further study. This article explores the prospects for the continuing flow of foreign investment into U.S. realty during the 1980s, especially in the light of existing theories of foreign investment.

Choosing Real Estate Microcomputer Software

John Oharenko and Ruth M. Spiegel, Page 43

Microcomputers are becoming popular real estate investment analysis tools. The most frequent applications are discounted cash flow analysis, mortgage amortization calculations, rent roll computations, and other forms of investment planning. In this article, three types of software categories used for real estate financial analysis — prepackaged, custom designed and timesharing service programs — are presented.

Graduate Level Needs and Opportunities in Real Estate

Norman G. Miller and Gregory P. Gardner, Page 47

Real estate professionals, especially appraisers, have been concerned in recent years about the growing proportion of feasibility studies and sophisticated real estate consulting that is being performed by market research and accounting firms instead of by "traditional" real estate firms. This raises the question of whether or not traditional real estate education is up-to-date with the needs of the market. This article reviews and compares existing graduate level real estate programs with a survey of a cross section of real estate firms.

REAL ESTATE ISSUES

Editor-in-Chief

JARED SHLAES, CRE

Business Manager

ROBERT S. SUTTE, CRE

Executive Vice President

LOIS HOFSTETTER

President

GEORGE M. LOVEJOY, JR., CRE

First Vice President

F. POCHE WAGUESPACK, CRE

Vice Presidents

HAROLD R. BOWES, CRE

CHARLES W. BRADSHAW, JR., CRE

Staff Editor

MARY CHRISTENSON

This publication is provided as a medium for expression of individual opinion concerning empirical and theoretical approaches to problems and topics in the broad field of real estate. The articles printed herein do not necessarily represent the endorsement of the American Society of Real Estate Counselors or the majority of its members. The editors exercise only a general supervision of the material and assume no responsibility for opinions expressed by contributors whether or not the articles are signed.

Published semiannually by the American Society of Real Estate Counselors of the NATIONAL ASSOCIATION OF REALTORS®, 430 North Michigan Avenue, Chicago, Illinois 60611. Copyright 1982 by the American Society of Real Estate Counselors of the NATIONAL ASSOCIATION OF REALTORS®. All rights reserved. Third class postage paid at Chicago. Subscription rates: \$18 per year (\$32 for two years). \$14 per year to students and faculty; add \$2 for mailing for foreign subscriptions (submit in U.S. currency); single copy \$11. Remittances may be made by personal checks, drafts or post office or express money orders payable to the American Society of Real Estate Counselors. Remittances, change of address notices, undeliverable copies, orders for subscriptions and editorial material should be sent to Real Estate Issues, the American Society of Real Estate Counselors, 430 North Michigan Avenue, Chicago, Illinois 60611. 312/329-8257.

Library of Congress card number LC 76-55075

Printed in U.S.A.

URBAN SITE ASSEMBLAGE: GETTING IT ALL TOGETHER

by James A. Austrian, CRE

Most of Manhattan's modern skyscrapers occupy relatively large sites, typically 40,000 square feet or more. In nearly every case, those sites once were, and continue to be, created by adding together numerous small abutting parcels.

New York's north-south blocks in the midtown grid plan are mostly 200 feet deep and the typical turn-of-the-century lots had 25-foot frontages. It would thus not be unusual for a 40,000 square foot building site to be comprised of as many as sixteen 25' x 100' parcels. The more likely case, however, would have an assembler looking at four, five or six parcels to be acquired—and it's virtually certain that every parcel will be improved and occupied.

The urban site assembler is interested only in vacant possession. "Fee simple" is needed. To get it may require the purchase of five or six parcels of land and thirty or forty leaseholds. What is often overlooked, even by developers who are otherwise quite sophisticated, is that freeing the assembled land from those tenant leases is not only the most difficult aspect of assemblage, but can easily be the most expensive.

A Day In The Life Of An Assembler

Here's what happened yesterday. Before lunch I had reached a basic understanding with the last two vital tenant holdouts in a major midtown assemblage—an assemblage on which I (as the developer's consultant) and the developer had been working for a solid year. We had acquired eight fee estates to aggregate 25,400 square feet plus air rights, which under the existing zoning would yield about one half million feet of office space. Five of

the old buildings were already demolished; one other was being taken down some distance away from the small building still occupied by the two "holdouts." The deal just struck was a steep one, but palatable to us and still economically feasible in the master plan.

Because the new building density will be cut by 30 percent if we don't get all the buildings down in the next few weeks, THIS DEAL MUST CLOSE! (If it doesn't, the downzoning will reduce the capital value of this project by about \$15 million.)

At four o'clock this morning the demolition contractor made a little mistake and dropped the rear third of a 10-story office building smack dab on top of the space still under lease to our "holdouts" and occupied by them during the day. No one was hurt, but alas the errant rubble took out the top two stories of the wrong building. In fact, the actual office where yesterday's deal was concluded now enjoyed the greatest ceiling height available: straight up to Orion's Belt, and beyond!

The victim immediately undertook not only to rescind his buyout agreement, but also to seek a legal injunction halting our construction progress and concurrently to accuse us "jointly and severally" of intentionally destroying the demised premises. (If you are ever looking for a vivid example of "constructive eviction" . . . this is it!)

Today has been a nightmare. The tenants are screaming and suing; the demolition contractor is just shaking his head. The City is starting to scrutinize the entire project (and the requisite permits) through an electron microscope. We were an item on the *Today Show* local news segment. Our lenders are suddenly even more difficult than usual. Our leasehold acquisition budget is going right down the drain. Abutting property owners and tenants are making threatening noises and meanwhile, if we elect or are forced by circumstances to postpone completion of the demolition, the economics of the entire scheme will be out the window.

James A. Austrian, CRE, is a partner in the New York office of Jones Lang Wootton, an international firm specializing in counseling foreign and domestic investors on commercial urban property development, land assemblage and property investment. He is a graduate of Harvard University and has done post-graduate work at New York and Denver universities.



Getting down to two “holdouts” was an adventure in itself. We had started with 45 leaseholds with terms as long as 10 years, and sought vacant possession of every single space within eight months.

We did indeed acquire seven properties in fee and persuade 43 tenants to accelerate the termination of their leases (and in fact they had all long since vacated on that dismal night of the demolition mishap). That brings us to the questions of how these tenant negotiations were planned and carried out, and how those activities are coordinated with the purchase (or at least the contracting to purchase) of the various parcels.

I wish I alone held the secret of how to complete an assemblage, and that “the secret” were so astoundingly brilliant and complex that the account you are about to read would hit the literature like a bombshell revelation. The truth—I sheepishly reveal—is quite different.

Just as an aside, last summer I was described in a *Fortune* article on assemblage as a clandestine detective type, buying up fees and leaseholds with cavalier abandon,

paving the streets and corridors with red herrings, spending 30 million of my client’s dollars in the process, and ultimately delivering a ready-to-go building site—under budget! To be sure, there are aspects of assemblage that are creative, anecdotal, fun and even under some circumstances glamorous. But in the main, assemblage is a business of strategic planning, methodical tactics, common sense and luck.

Puzzling It Out

An assemblage is very much like a jigsaw picture puzzle—not only because it involves fitting together intricate elements, but also because the finished picture only emerges fully when the last piece is put in place. Imagine a puzzle of the Mona Lisa with the key piece missing right from the middle of that famous enigmatic smile. That’s certainly no work of art, but put in the missing piece and you’ve really got something.

Like the puzzle, an assemblage is almost the perfect example of a synergism—defined as a cooperative interaction of elements that creates a result or effect which is greater than the sum of the effects taken independently. Two and two equals five, so to speak. Think of DaVinci’s painting again—much greater than the sum of its parts. Compare an economically viable site for an important development with a hodgepodge collection of underutilized small parcels and obsolete buildings.

The assembler’s first act in contemplating an assemblage is quite like opening the box of scrambled pieces, dumping them all out on the card table, turning them all right side up and taking a measure of the problem. Step back and look generally at the colors, the shapes and the patterns. Devise a plan of attack (in attacking a jigsaw puzzle, usually you go for the flat-edged border pieces first; they’re easy, and provide a framework in which to work).

I recall doing exactly this “sizing up” in the very early days of planning the 1980 Morgan assemblage in New York’s financial district. One important building, occupied entirely by Wells Fargo Bank and owned by several investors who held a very boring long-term lease to Wells Fargo, was definitely not a candidate for the first parcel in the assemblage because those investors were thought to be difficult and unrealistic in their perception of the value of their position. I was certain we would never be able to buy the fee at an economic price even with the encumbrance of the long-term fixed rental yield. While I was putting these thoughts into a memo for my client’s consideration, I walked a solid, excellent broker who controlled the fee, asking if I’d like to buy it for one of our off-shore investors!

The sudden appearance of that broker on the scene added an entirely new dimension to the strategy. It was obvious that the owners had no idea an assemblage was afoot, and it appeared that an economic price could be negotiated because in the offering it was evident the sellers really *did* understand the burden created by the lease terms. The price for the leased fee might well be sufficiently attrac-

tive to leave big dollars in the till with which to entice Wells Fargo out of their leasehold.

The addition of this “border piece” to the assemblage greatly improved the site—yielding a larger, better-configured building and by virtue of its likely reasonable cost enhancing the economics of the whole scheme. The episode points up the need for the assembler to be prepared to adapt his strategy to unexpected opportunities.

When sizing up an assemblage project for the first time, I like to make several huge charts and keep them opposite my desk on an easel until the job is completed. Every single element that must be controlled in order for the assemblage to succeed will be included. To lose track of, or simply overlook, a small tenant with a lease can cause havoc. I get it all down in list form and also graphically.

The list indicates each parcel and each leasehold within that parcel, in an order running from the shortest to longest lease term, *not* in relationship to rental rate or area, but in relationship to term. This tells me how much leverage the tenants have in their ability to be spoilers or holdouts.

The graphic presentation is similar to a bar graph, with a month-by-month calendar across the top stretching out until the termination date of the longest lease in the entire package and with the same list of tenants down the left-hand side. This is presented also on a building-by-building basis. The graph provides a constant picture of the relative leverage of each tenant.

With the entire situation now on charts which are fully visible in one glance, we are able to make some immediate judgments concerning our attack on the problem. The order is always thus:

1. Tie up with acceleration options the land parcels with the longest reasonable contract terms, and try to tie up the crucial ones first;
2. Negotiate with the potential “spoilers” and “wind-falls” immediately;
3. Negotiate lease terminations with the longest term tenants, and then . . .
4. Grind it out with all the rest.

Steps 1 through 3 ideally take place in a climate of secrecy, before the owners or occupants are aware of a potential assemblage. At some point we must anticipate the escape of the proverbial cat, and thereafter it really is a matter of making deals from a somewhat disadvantageous position.

Need To Maintain Secrecy Of Assemblage

One of the proven tactics of the assembler is to treat each transaction separately—going to great extremes to disguise from each seller or tenant the fact that the buyer in each case is assembling the site. This is much easier than it may seem at first, but like everything else in assemblage it does require careful planning.

In the Morgan project three distinct corporate entities were created with different officers, expressed purposes, identities, addresses, lawyers, and agents. In one case the stationery read: “Robyncyn Land Co., Inc. . . . Diversified Investments for the Housing and Hospitality Industries . . .” to support the notion that the company wished to acquire the obsolete office property for conversion to condominium housing and a ground floor restaurant. It also permitted easy written communication with the only remaining tenants, both restaurants.

Legal representatives for each acquiring company had to be chosen with care, mostly as a safeguard against a future disaster. Once the fact of an assemblage has emerged, the big guessing game centers on the identity of the actual assembler. If that entity is a well-known institution such as Morgan Guaranty, the usual Morgan law firms, title companies and insurance agents cannot be used.

Tying up purchase contracts in the right order sounds easier than it is, of course. The trick is to maintain the secrecy of your intentions. Even though you want a long contract with the smallest possible deposit, in case of a total bailout, you are compelled to disclose your requirement for possession, so the contract must provide for permission or license to talk to the tenants and negotiate to move them around within the building or out completely. The requisite indemnification of the owner/contract-vendor against economic losses often puts a burden on the purchase negotiations and on the contract drafters.

The easiest situation involves a single owner/occupant-vendor or at least a single-user building. In putting together the site that now houses the AT&T World Headquarters on Madison Avenue, I confronted a small building occupied entirely by an up-market ladies wear designer. We sent a broker/confidant to see the agent for the property with the advice that the assembler, a consultant, had clients from Europe and he—the agent—had a feeling that the ultimate occupier was a French couturier starting out in the U.S. Coincidentally, an item reporting just such a theory appeared in a local gossip column at the time purchase negotiations were heating up.

At times it will be advantageous to acquire a fee position subject to the seller’s ability to give possession: Let the seller do your bidding. This is especially appropriate when the seller has a good or close relationship with his tenants and is prepared to enter into a conditional deal. In these instances I try to work out a “not-to-exceed” budget for the buyouts on an aggregate or individual basis, together with some sort of attractive incentive plan for the seller. Such negotiations are always structured *ad hoc* to fit the relative leverages of the tenants and sellers, the personalities, the time constraints and the budgets. I recently completed a major tenant buyout for an office building on East 52nd Street where the seller and I agreed to budget for each tenant, with my own participation and consent to each deal and with an agreement that if the budget didn’t fly, I would agree to increase the budget as necessary. This arrangement only suits a situation in which the seller

(your partner, as it were) is scrupulously honest and totally conscientious. It worked handsomely in this case.

A good rule is never to accept as gospel a seller's informal representations about the willingness of his tenants to give up their leaseholds. And *never* rely on a seller's concept of what vacant possession will cost. Violate that rule and look for a lifetime of explaining to your client how the budget went haywire.

On the same site where the demolition mishap occurred, we were badly "burned" by the misrepresentation of a contract-vendor. The rent roll indicated a particular full-floor lease expiring in June 1983, with the caveat that a renewal lease running until 1990 was in the tenant's hand, although *not* signed by the landlord (seller). We relied on this. The contract period dragged on, and indeed was extended by 60 days at one point. By some miracle the contract-vendor's signature ultimately appeared on the tenant's copy of the renewal and we ended up paying over half a million dollars more for that one parcel. Do your own homework.

Dealing With Spoilers And Windfalls

Identify the "spoilers" and the "windfalls" . . . then charge. In the early tactical days two special categories of tenant always seem to emerge: those who can hurt you if you don't make your peace with them first, and those you think may be "bought cheap."

"Spoilers" are the ones you had better get first. These are coffee shops where all the tenants go for lunch and exchange gossip, illegal operations (and there are such things, especially in the Big Apple), and very long-term leaseholds without which your whole plan has no viability.

On 52nd Street we had a tenant (call it the Hackensack Social Club) occupying the penthouse. Only a few months or so remained on the lease, but we heard rumors of some strange activity in the premises and decided to investigate. Our first indication that the social club was *not* used regularly for Bar Mitzvahs and confirmation parties emerged when we encountered a sophisticated-looking TV camera set up in the otherwise shabby and dingy lobby. We walked in one evening after a dinner next door at the Peking Duck and a voice from nowhere asked, "May I help you?" That was at nine at night in an unattended office building lobby. We said, "Oops, wrong building," and departed.

The next morning I ventured to the penthouse, taking an elevator to the top floor, then climbing up a flight behind a fire door to the roof. Where a rickety penthouse was supposed to be there was, instead, a completely self-contained fortress. All the windows had been replaced with mechanical metal louvers. Full utility lines ran up the outside of the building. Separate heat-pump air conditioners were mounted through the walls. The door to the space was a thinly-disguised version of what kept Indiana Jones from the Lost Ark. This was definitely *not* your usual "general business" office tenant.

I called on the local police precinct and two detectives came to see me. At one point in my conversation with Lt. Mulvey, who had a real gun in his real white cotton sock, I ventured to ask, "Is this really the biggest after-hours gambling operation in your district?" He replied, "No, it's the biggest in New York City!"

Lt. Mulvey and his partner tried recruiting me or my colleagues to go "under cover" into the club and collect evidence which would help the police get the operation closed down. We refused.

Fortunately, when served with a friendly request to vacate, the Hackensack Socials calmly agreed to move the floating club to another eastside office building. I watched them cart out the baize tables and other paraphernalia that Saturday morning.

"Windfalls" are those deals that simply fall into your lap. The earlier Wells Fargo story is an example. Like that one, many windfalls cannot be predicted but others often can.

Certain classes of leasehold seller or tenant have interests that can be acquired at a perfectly reasonable price either because they have no idea of the value of their interest to *you* or because the leasehold is not the tenant's most valuable asset. Often tenants are ready to retire, want to relocate for one reason or another, or simply recognize that they are not in the business of selling leaseholds.

A good example of the latter occurred on East 48th Street with a national chain shoe store. I went directly to the president of the company in Massachusetts, told him exactly what we wanted to do and that if he figured the total of all his out-of-pocket expenses for relocating to comparable space, we would simply pay it without haggling. He did. We did, and to this day I am confident it was a fair deal for both parties.

The Thursday after our "dummy" corporation in the Morgan assemblage took title to 25 Broad Street from the Helmsley-Wien syndicate, I (as the "new owner") received a call from an officer of a bank that had leased and then sublet about 40,000 square feet. He wondered if we would allow them to buy their way out of their master lease, which still had a year to run. By Friday—after only one face-to-face negotiating session—we shook hands on a deal, agreeing that for a consideration of \$200,000 we would take back their lease and relieve them of the obligation.

One of the top real estate lawyers in New York and his entire crew worked straight through the weekend on the termination and release agreements and about fifteen sublet assumptions. By Monday we were ready to close. The suspense was shattering because I knew that news of the assemblage was about to break at any instant. If the tenant learned of it, the roles would be reversed. Instead of collecting, say, a quarter million dollars for our generosity, we would have to pay perhaps half a million for the privilege of terminating that master leasehold! Net gain by way of "windfall" . . . no less than \$750,000.

A windfall situation can often be created by purchasing the business so that the lease just comes along as part of the assets. This may take a bit of role playing, but the rewards can be great. It helps to have many personal friends in disparate businesses who enjoy the occasional theatrics of assemblage. So far my friends and I have run restaurants, saloons, hardware and leathersgoods stores, a messenger service and a photostat business. In each of those cases the cost of the entire business, including operating losses, was substantially less than the likely cost of buying up the leasehold. Deals of this sort are only feasible before news of the assemblage leaks out. After that, the strategy must take a different turn.

My last restaurant fling worked out exceptionally well, and with an ironic twist which, I think, carries with it some message about fair dealing. On the 52nd Street assemblage, the existing coffee shop operator assigned his lease to two young Greek entrepreneurs just starting out who naively overlooked a demolition/termination clause in the lease. They had barely got their operation going when the owner, a contract-vendor to us, delivered the 60-day termination notice. A new and bilingual attorney confirmed the bad news, and when they learned of the pending sale the two entrepreneurs came to us hat in hand to see if they could stay open while they looked for another location.

Luck was with all of us because I had just then begun an assemblage across from Saks Fifth Avenue and needed to acquire the seedy Kenby Coffee Shop, which sat in the middle of the site with a lease running until 1990.

Fortunately for the two young men, for whom we felt genuine sympathy, we were able to arrange for them to buy the Kenby business and operate it for the six or eight months remaining while we completed the assemblage. They made a strong profit without any real investment; the seller of Kenby got a fair price for his failing business; and we bought the 10-year lease for a song. By keeping the Kenby shop open "under new management," we were able to maintain for months the illusion that no assemblage or demolition plan could possibly be underway. We saved a million dollars on the cost of the 48th Street assemblage through this combination of circumstances.

Budget Preparation Of Utmost Importance

Preparing a formal budget for tenant buyouts is critical to a sound assemblage strategy, no matter how it may ultimately be violated. It is where the plan must start, because it establishes the order of events.

Some initial assumptions are: that each tenant is basically honest and will be forthright in his dealings; that he is not motivated by pure greed; that he will recognize fairness when he sees it; and that there are no legal or *force majeure* reasons why he cannot give up his existing space and relocate to comparable accommodations.

In this budgeting process it doesn't matter particularly whether or not the tenants recognize the fact that an assemblage is occurring. What does matter is that they are

being asked to relocate to suit your convenience rather than theirs.

The framework I adopt provides that in my approach to a tenant I will promise to:

1. Indemnify him against any out-of-pocket expense created by the relocation;
2. Relocate him into better accommodations than he is leaving;
3. Make the relocation as trouble-free and painless as possible;
4. Help him physically to accomplish the move; and
5. Leave some real money in his pocket at the end.

Living up to the letter of those promises will cost the assembler only a tuppence compared to the large numbers that roll off a tenant's tongue if you just blindly ask what he wants in order to move out a year or two early.

Major items that need to be calculated carefully and realistically are:

- The rent differential
- The cost to improve the new space
- The cost of removal
- The cost of special removal unique to the tenant's business
- The cost of ancillary relocation expenses
- A contribution to defray business losses brought about by the sudden dislocation
- The "pocket money"

Rent differential is usually the biggest item and the most difficult to forecast. Compare the tenant's current monthly rental with market rentals for similar or better space, of the same area or slightly larger, available in the marketplace.

Multiply the differential by the number of months remaining on the existing lease, starting with the first date the tenant could realistically take occupancy of the new space.

The arithmetic in a typical situation might look like this:

New monthly rent for 4,000 square feet of office space @ \$27 per square foot per annum	\$9,000
Existing monthly rent for 3,800 square feet @ \$7 per square foot per annum	— 2,217
Monthly rent differential	\$6,783
Number of months (existing lease expires 6/30/84; new space could be ready 2/1/83)	× 17
Rent differential	\$115,311

The budget for *improving the new space* depends on the type of business being relocated and the standard acceptable to the tenant. For this exercise, let's establish that number at \$35 per square foot, or \$140,000.

An experienced *removal* company is a good friend in this business. In exchange for loyalty, they make prompt, accurate estimates and provide excellent service. Assuming this tenant runs an uncomplicated business that requires only the relocation of basic furniture, decor, files, office machines and the like, we may get an estimate of, say, \$4,000.

Do not overlook elaborate safes, alarm systems, computer equipment, photo editing gear, recording equipment, materials handling apparatus, etc. These can entail *special moving costs* to cover highly technical rigging and installation. If this tenant, an advertising agency, uses one very sophisticated and delicate videotape editor/splicer, the cost of shutting that down, dismantling, moving, reassembling, aligning, fine-tuning, testing, and finally putting it back in service could add an extra \$5,000 to the bill. Sometimes such equipment cannot be moved and may have to be completely scrapped and replaced.

Ancillary relocation expenses might cover such items as reprinting stationery and business forms, sending out removal notices to customers, relocating telephones, legal fees and all the little "extras" that no one thinks of in advance. We estimate \$6,000 for those items.

I often omit *dislocation costs* from the budget because a well planned and coordinated relocation should eliminate them. In the case of retail business, however, some losses may reasonably be expected and should be entered into the equation. (Caution: Agree to a loss of net profit, not of gross sales.)

The *pocket money* estimate should bear some relationship to the sum of the above items. In this example:

Rent differential	\$115,311
Leasehold improvements	140,000
Removal	4,000
Special removal	5,000
Ancillary removal expenses	6,000
Dislocation loss	- 0 -
Total reimbursable expenses	\$270,311

The first stab at a total budget to induce this ad agency to give up its lease a year and a half early should thus be \$370,000, or \$100,000 over the "actual expenses" faced by the tenant.

When I go to a tenant for the first time I have all these estimates in my pocket. My presentation will include at least the following firm statements, which contribute to a productive, mutually respectful negotiating atmosphere:

- We hope that we can persuade you to relocate from these premises to others, which we will help find.
- We will reimburse you for every conceivable reasonable expense you will face, including any differential in rental.

- We will pay to build out and decorate the new space to your satisfaction, a major cost which you would have to pay when your lease is up, and will pay to notify your customers of the move and reprint your stationery.
- Furthermore, as a "reward" for the aggravation and disruption and nuisance associated with moving before you intended to, we will put in your pocket—after taxes—\$50,000.
- If you disagree with the estimates prepared for your review and guidance, I will gladly adjust my budget upwards to reflect your closer knowledge of your firm's operations.

A simple form that I devised helps me make these preliminary budget calculations which are then entered next to each tenant's name on my list and bar graph presentation. The total is shown at the foot of the column and represents the least amount anticipated as the final acquisition cost of the leasehold interests. I would ordinarily advise my client that a more realistic budget should consider doubling that first column.

Often, after going through the entire analysis with a tenant in great detail, he will turn to me and say, "That \$370,000 sounds real great at first blush, Jim, but I am lucky enough to be holding all the cards in this game. I was planning to stay here for the rest of my business life, I like it here and I've been associated with this spot for 27 years. I see you'll pay the 17-month rent difference, but what happens in the 18th month and forever after? No thanks, Jim. Much as I respect and admire your straightforward approach and your client's limited resources, I'll just stay right here for another year and a half, unless you will put a million tax-free dollars in my pocket right now. In that case I'll be out of here and you'll have the keys by this weekend."

This scenario does not represent a total disaster, because it immediately defines the bracket within which your deal will ultimately fall. That knowledge, for each element in the assemblage, is essential to the economic strategy needed to pursue the project.

Issue Of Condemnation

I would like to cover briefly one aspect of assemblages about which there are widely divergent views. This is the possibility of condemnation for the intractable holdout whose obstinacy stands in the way of a totally cleared land parcel.

The Manhattan "holdouts" are legendary: P.J. Clark's, Nedicks, Joe & Rose's Restaurant, Hurley's Bar and (very recently) Reidy's. There are dozens more. Those owners (or in some cases, tenants) in their small, usually undistinguished one and two-story buildings, stayed right there while grandiose new skyscrapers rose up around them, up against them, on top of them or through the middle of them. The final effect was often visually disruptive, out of character or just plain ugly. Worse than that, the holdout

property, once passed up by the assembler, would probably never again have the high value it enjoyed as part of the assemblage.

Some of my colleagues believe that those holdouts represent impediments to the development of public spaces for the public good and that the city should be able to use its eminent domain power to condemn the holdout properties for “just compensation” in accord with established condemnation practices. I say no. The developer should cut a deal. Experience has demonstrated that in almost every case the holdout property could have been acquired at costs which at worst would have had only moderate impact on the economic performance of the

grand scheme. The assembler simply failed in the negotiation.

The holdout, in my view, has an absolute right to hold out for whatever he wants, without fear of condemnation, at the risk of losing out in the last analysis. My experience has shown repeatedly that office developments can always afford to come up with the bit extra necessary to meet the outrageous, despicable, greedy demands of the heartless holdout. What the developers object to is not the audacity of the holdout, but the fact that they themselves weren’t so lucky as to hold a 10-year lease on the most essential square foot of land in the middle of someone else’s assemblage.

THE CONTEXT OF INNER CITY REVITALIZATION

by Jack Harris

Inner city residential revitalization represents an important departure from the traditional "filtering down" experience of most older neighborhoods. An extensive body of writings has developed to promote, explain and even criticize the phenomenon.¹ It is time to examine the meaning of revitalization in the broader context of urban growth dynamics.

What made urban revitalization such a startling and exciting development was its apparent absence in the orthodoxy of neighborhood change. Old neighborhoods were supposed to be absorbed into the mixed urban center, as new development expanded outward in search of greener pastures. Along the way, these areas served to house successive waves of less discerning and less affluent residents. As Frederick Babcock observed over 40 years ago: "Neighborhoods tend to decline in investment quality."² The idea was reiterated in various theories of urban change, from "concentric rings" to "sectors," later to be formalized in the "filtering" process described by Richard Ratcliff.³

Richard Andrews expanded upon this idea to develop a life cycle concept for the neighborhood. He explained how site values rise to a peak as an area is developed and populated. After an indefinite period of stability, the area begins an inevitable decline, brought about by competition from newer and more attractive areas. The stage of decline is marked by the decreasing socioeconomic status of the area's residents. At some point, the predominantly residential character of the area is compromised. Depending on the success of this limited conversion, the area may achieve a new cycle and new type of development,

or continue its downward slide toward abandonment.⁴ Hoover and Vernon have documented this type of life cycle for New York City.⁵

The driving force behind the life cycle is the willingness of incumbent residents to relocate in newer, more spacious surroundings. Rising affluence encourages this movement, as proximity to the city center is relinquished in favor of greater space and amenities. As long as a ready supply of useable land is available, city services are expanding, and new construction is affordable, this outward movement will continue.

It was recognized that some neighborhoods could resist the filtering process if they were sufficiently insulated from mainstream urban dynamics. Fiery observed that neighborhoods in Boston had stubbornly resisted change, either due to strong attachment to old, elite families or introspective ethnic groups.⁶ Others have contended that certain areas are characterized by a form of "dualistic" economy, where paternalistic landlords view their properties more as personal estates than financial investments.⁷ Such uneconomic decision making leads to isolation from impinging market forces and adds uncharacteristic stability.

These cases are not typical in the traditional view of neighborhood change. Residential areas are expected to filter down and eventually succeed to some nonresidential use or outright abandonment. This pattern has provided the government with its basic rationale for urban renewal programs. The ability of an area to recapture a competitive position goes unmentioned. Yet recent experience shows evidence of this capability.

The Nature Of Revitalization

Today most metropolitan areas have at least one old neighborhood that is undergoing revitalization. The reasons for such activity are not difficult to find: Continuing expansion of suburban housing has met with resistance from high cost construction; land is scarce, expansion of

Jack Harris, PhD, is assistant research economist at the Texas Real Estate Research Center, Texas A&M University in College Station, Texas. He received his doctorate degree in business administration, land economics and a master's degree in urban studies from Georgia State University. He has written for the AREUEA Journal, the Appraisal Journal, Texas Business Review and Tierra Grande.

public infrastructure has slowed down; and the demand for close proximity to employment and retail centers has increased. Consequently, the value of existing housing has been enhanced.⁸

There has also been a coincidental shift in tastes and preferences. Inner city housing is no longer considered “off-limits” but is a realistic alternative to suburban living. Moreover, some of the unique attributes of inner city housing have taken on a value of their own. Such changes have led to stabilization, even significant appreciation in property values of the older housing stock, aided considerably by a favorable press.⁹

Much has been written in the popular literature on the virtues of inner city revival, as well as some suggestions of the dangers of “gentrification.”¹⁰ Because of the unexpected, though welcomed, appearance of the movement, the importance of revitalization may easily be exaggerated. When viewed in context with the experience of the entire inner city, however, revitalization is seen as highly selective and somewhat different from what is often characterized.

Even in its advanced stages, revitalization rarely extends beyond a few well-chosen neighborhoods, and is often confined to one or two blocks. This points to the fact that much of the inner city is too dilapidated, lacks historical or architectural significance, and is too entrenched in being the abode of society’s “undesirables.”

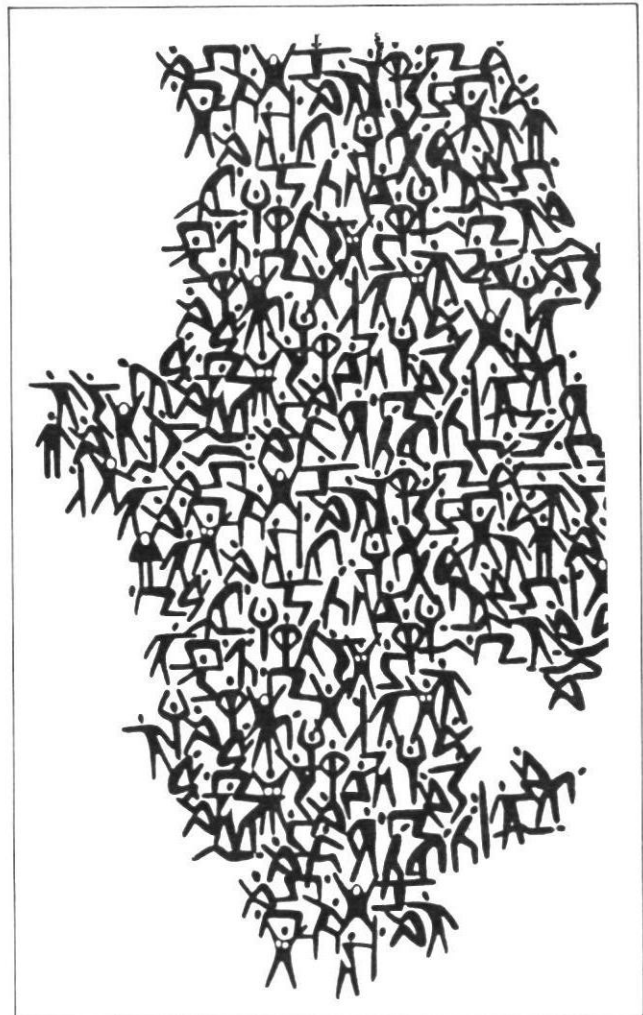
It is also indicative of the limited number of “pioneers” who are willing and able to rescue the older parts of town. Recent research shows that the typical renovator is not a disenchanted suburbanite but a young family that has moved from a rental unit in the city. Rather than a “back-to-the-city” movement, revitalization appears to be a “stay-in-the-city” phenomenon.¹¹

The areas selected for revival are not necessarily assured of a long running renaissance. Revitalization possesses a life cycle of its own, beginning from the time of discovery by urban pioneers to the arrival of affluent latecomers.¹² What happens when the final stage of this cycle passes is unknown. Examination of recent development in one city may provide some basis for speculation.

A Case Study

The city of Atlanta serves as a worthy case to show how various stages of revitalization may coexist with continued decline. The inner city area is compact yet possesses a variety of neighborhood types. The Central Business District remains a strong regional employment center, primarily attracting white collar professionals, government employees and retail store workers. The central area is serviced well by expressways, a limited rapid transit system and extensive bus routes.

Neighborhood revitalization is very active in the city. The movement began in a few northeast areas in the late 1960s and accelerated in the mid-to-late 1970s,¹³ spreading generally in southward and eastward directions. The affected areas are generally endowed with moderate vin-



tage (60 to 100 year old) housing and unique natural and man-made amenities, such as public parks, winding streets, extensive vegetation and rolling topography.

In order to derive representative quantitative measures, neighborhood boundaries are approximated by census tracts. Although this introduces some distortion, the procedure seems to provide more advantages than disadvantages. The choice of census delineations opens up the extensive collection of historical data collected by the Census Bureau. Data for 1976 are provided by a special local survey.

By examining the rankings of tracts on a variety of measures including median property value and income and over several time periods, it is possible to cluster the tracts into categories. This categorization, using a completely subjective method rather than rigorous statistical techniques, aims at describing the various dynamic processes at work throughout the inner city. The data seem to suggest, again from subjective analysis, the existence of five basic stages or processes, which are described in the following narrative as well as shown in the Table and Figure.

Prestige Neighborhoods

Located in the northeast corner of the inner city¹⁴ is a group

TABLE
Selected Characteristics of Inner City Neighborhood Categories, Atlanta

	Category				
	Prestige	Filtering	Stable	Gentrifying	Low Income
Number of tracts	5	22	3	9	12
Median housing value, 1976*	\$49,700	\$16,700	\$18,200	\$25,600	\$13,800
Median housing value, 1960*	\$19,200	\$ 9,400	\$ 7,800	\$10,400	\$ 8,500
Median household income, 1976*	\$23,600	\$ 8,800	\$ 8,000	\$ 9,000	\$ 6,300
Median household income, 1960*	\$ 8,500	\$ 4,800	\$ 4,700	\$ 4,700	\$ 3,000
Percent nonwhite, 1976	1%	74%	17%	26%	96%
Percent nonwhite, 1960	1%	28%	15%	25%	92%

*Unweighted mean of census tracts in category

of residential areas with some of the finest homes in the city. Endowed with attractive rolling topography, curvilinear street design and handsome architectural styling, these areas are in high demand and are easily accessible to the downtown employment center.

In spite of their amenities, these neighborhoods — primarily Ansley Park, Morningside and Druid Hills — once stood on the brink of decline. Developed in the early part of the century, these areas became an outpost for Atlanta's elite. For example, the governor's mansion used to be in Ansley Park. As new areas opened to the north, many of the fine old homes were converted to apartments.

The threat of decline was stemmed by design-oriented renovators who recognized the inherent appeal of an area interspersed with small neighborhood parks and in close proximity to the Memorial Arts Center, the Piedmont Driving Club and Emory University. The area became more stable in response to their efforts.

A potentially major problem was a planned limited-access freeway that threatened to split the area in order to provide better rush hour service to the expanding northeast sector. Neighborhood associations forged a successful fight to stop the development, and, in turn, greatly intensified the preservation cohesion within the areas. Today, these neighborhoods are relatively secure in the mature stages of the revitalization cycle.

Filtering Neighborhoods

Although revitalization is well advanced in Atlanta, much of the inner city continues to be subject to filtering accompanied by racial transition, as blacks move from their traditional neighborhoods in search of better housing. As depicted in the Figure, these areas are primarily on the southwest and southeast edges of the inner city, fanning out from the concentration of longtime black neighborhoods in the center. By 1976, most of these areas had long passed their "tipping point"—the level of racial in-

tegration where whites begin to rapidly vacate the neighborhood¹⁵—and property values had stabilized somewhat.

Stable, Moderate Income Neighborhoods

These "in-between" zones appear to serve as buffers between the downward filtering areas and revitalizing neighborhoods. Each has suffered decline in relative property values but has stabilized in recent years as moderate income residential areas. They are predominately white and consist of a large percentage of homeowners. Their future is uncertain, yet Candler Park and Grant Park are considered to be on the next wave of revitalization.¹⁶ Although few in number, these neighborhoods are important in understanding the relation between filtering and reviving areas of the city.

Revitalizing Neighborhoods

Areas located to the south of the northeast prestige neighborhoods and a few areas surrounding downtown are representative of the middle stage of the revitalization cycle. Their revival is rooted in the search by many youths in the 1960s for an alternative lifestyle. The midtown area, complete with "head" shops, food co-ops and communal living, became a center of this "counterculture."

As these individuals matured, they took responsible jobs and formed families but retained their preference for an alternative to the stereotypical American lifestyle. "Crash" pads became homes; co-ops became neighborhood associations. The old architecture and environment of areas such as Little Five Points and Inman Park evoked a sense of nostalgia, simplicity and freedom from the pressures of modern society.

Property values in these neighborhoods were beginning to respond by 1976 to the increasing demand for older housing. Many of these areas, notably Inman Park, are entering the final stage of revitalization, although there still

FIGURE
Atlanta Inner City Neighborhoods
D-1



exist pockets of unrestored structures and low income rental units.

Low Income Neighborhoods

These neighborhoods surrounding the downtown area, especially on the south and southwest side, contain the lowest property values in the city and traditionally have housed the bulk of Atlanta's moderate and low income blacks. Such concentrations have provided the impetus for much of the racial transition in surrounding areas.

Representing the later stage of decline in the traditional life cycle model, these areas, by and large, are losing population as blacks take advantage of better housing

in surrounding areas. This process of depopulation has been aided by the public clearance activities of urban renewal, model cities and highway construction, especially during the 1960s and '70s.

Lessons From The Atlanta Experience

Although Atlanta is used as an example, it is not meant to be presented as the epitome of the American city, or even of the revitalizing city. Atlanta has its own set of distinctions: It has enjoyed all the attractions and prosperity of the Sunbelt; it owes its relatively new physical development to its unique history; its downtown area has a strong professional, governmental and retail employment base;

and it is ideally situated as a transportation hub. All these features reinforce the value of central access and provide a strong economic appeal to close-in living.

Atlanta's older neighborhoods have been heavily impacted by highway construction and urban renewal, which has had the effect of uprooting many of the poor and stimulating conversion of these areas to nonresidential use. The threat of further highway development brought forth strong citizen organizations in many older neighborhoods, which have been instrumental in maintaining and improving the quality of the neighborhoods.

While Atlanta's distinctions may have helped to determine the pattern and pace of revitalization, they apparently were not critical factors in the emergence of the movement. As Lipton has demonstrated, revitalization has been a common experience in many large cities in the 1970s.¹⁷

These cities share certain attributes with Atlanta, which appear to be instrumental in the success of revitalization. The downtown sections of these cities retain a measure of economic vitality that serves as a magnet to draw young professionals who desire to live reasonably close to jobs. Ethnic minorities, traditionally confined to the inner city, have been provided access to older suburban areas, which relieves the pressure on some older neighborhoods to succumb to the filtering down process. These cities also possess older neighborhoods with sufficient amenities and architectural character to warrant extraordinary restoration efforts. Not to be undervalued is the fact that each city nurtured a small group of mavericks who sought out older neighborhoods as an environment compatible with their values and lifestyles. Thus, the seeds of revitalization were planted.

Future Of Revitalization

The interesting feature of revitalization is not what has happened in the past but what lies ahead. Beyond the euphoria of revival advocates is the reality that the movement has provided mixed blessings to city officials. Many of the constituents who supported or were indifferent to the current administration have been replaced by politically active groups demanding improvements in public services commensurate with their upgraded communities. As this transition takes place, official reaction to it will help determine the fate of the movement.

The Atlanta case allows us to speculate on this future direction. The central area provides significant attractions, and valiant efforts are being made to retain retail, cultural, entertainment and sports facilities in the downtown area. The urge to split the older neighborhoods by highway development has been blunted by construction of rapid transit. There are even plans to transform previously obtained, but unused, highway right-of-way into a massive park.

A key to the future lies in Atlanta's success in maintaining amiable race relations and countering the image of the city as crimeridden and hostile to white inhabitants. The re-

vitalized neighborhoods have effective representatives on the city council for this task.

Another key is the resolution of the problems of residents who are displaced by the revitalization process. Reports in some cities indicate organized efforts by groups who feel threatened by the rising values and rents in their old neighborhoods.

This does not appear to be happening in Atlanta. In most of the affected areas, residents have tended to be transitional and accustomed to change and redevelopment due to the rapid growth of the city. Furthermore, there is little advantage for low income workers to reside close to the center, since there is a lack of unskilled employment in the downtown area. Also in the areas experiencing revitalization, little racial transition has occurred. Therefore, gentrification does not present the problem of affluent whites running off disadvantaged blacks, who are, in turn, left to crowd into what remains of the ghetto.

These factors would seem to indicate an amiable future for Atlanta's older neighborhoods. Several areas have reached a point in the revitalization cycle where long-term stability is assured. Other areas are on the threshold of a significant revival. Much effort and money have been invested to reach this point, and more will be required to continue the progress.

Even under favorable conditions and with dedicated proponents, however, neighborhood revitalization is impacting only a small portion of the inner city housing stock. Filtering and land use succession remain at work for the larger part of the urban core. This should not be considered a failure or even an adverse development. While the re-creation of high quality living environments in the central city is a positive development, there is still a need for inexpensive, low quality housing that no public housing program could satisfy. This need must continue to be met through the traditional recycling of existing housing.

It should not seem so surprising that some inner city neighborhoods have managed to revitalize. The economics for recycling housing were favorable, and a relatively mobile and affluent group of homebuyers to take advantage of the economics existed. Also, organizations readily emerged to reinforce these efforts. Furthermore, the activity developed as a result of market forces in contrast to the largely failed efforts of governmental urban renewal.

The long-term dream of city planners to maintain a middle-class presence in the city has been realized, though possibly not as they envisioned. It is time for revitalization to become a part of the economic theory of neighborhood change.

NOTES

1. See for example, J. Thomas Black, Allan Borut, and Robert Dubinsky, *Private-Market Housing Renovation in Older Urban Areas* (Washington: Urban Land Institute, 1977); Shirley B. Laska and

Daphne Spain, *Back to the City* (New York: Pergamon Press, 1980); Dempsey J. Travis, "The Black Ghetto: New White Frontier," *Real Estate Issues* 4 (Summer 1979); Rolf Goetze, *Understanding Neighborhood Change* (Cambridge, Massachusetts: Ballinger, 1979).

2. Frederick M. Babcock, Maurice R. Massey, and Walter L. Greene, "Techniques of Residential Location Rating," *Journal of the American Institute of Real Estate Appraisers* 5 (April 1938), 133-140.

3. Robert E. Park, Ernest W. Burgess, and Roderick D. McKenzie, *The City* (Chicago: University of Chicago Press, 1925), 73-79; Homer Hoyt, *The Structure and Growth of Residential Neighborhoods in American Cities* (Washington: Federal Housing Administration, 1939), 14-16; Richard U. Ratcliff, *Urban Land Economics* (New York: McGraw-Hill, 1949), 321-322.

4. Richard B. Andrews, *Urban Land Economics and Public Policy* (New York: Free Press, 1971), 100-123.

5. Edgar M. Hoover and Raymond Vernon, *Anatomy of a Metropolis* (New York: Doubleday Anchor, 1962), 183-198.

6. Walter Fieri, *Land Use in Central Boston* (Cambridge, Massachusetts: Harvard University Press, 1947).

7. Roger G. Krohn and E. Berkeley Fleming, "The Other Economy and the Urban Housing Problem: A Study of Older Rental Neighborhoods in Montreal," Joint Center for Urban Studies, MIT/Harvard, 1972.

8. Robert J. Mylod, "Revitalization/Gentrification Trend Brings Overlooked Values to Light in City Housing," *U.S. Housing Markets*, April 25, 1980.

9. Goetze, 63-65.

10. See, particularly, Travis.

11. Mylod, 9.

12. This cycle is described in Margaret S. Warner, *The Renovation of Lincoln Park: An Ecological Study of Neighborhood Change*, unpublished PhD dissertation, University of Chicago, 1979; and Parkman Center for Urban Affairs, "Young Professionals and City Neighborhoods," *Real Estate Issues* 3 (Winter 1978), 89-90.

13. Mylod, 10.

14. For purposes of this study, the inner city is delineated by those census tracts which comprised the city of Atlanta in 1940 and excluding tracts within the Central Business District which are predominately nonresidential.

15. Eleanor P. Wolf, "The Tipping-Point in Racially Changing Neighborhoods," *Journal of the American Institute Planners* 29 (August 1963), 217-222.

16. Mylod, 10.

17. S. Gregory Lipton, "Evidence of Central-City Revival," *Back to the City*, edited by Laska and Spain, 42-46.

RACE AND PROPERTY VALUE: A CHANGING CONCEPT

by J. S. Fuerst and Susan M. Sarcone

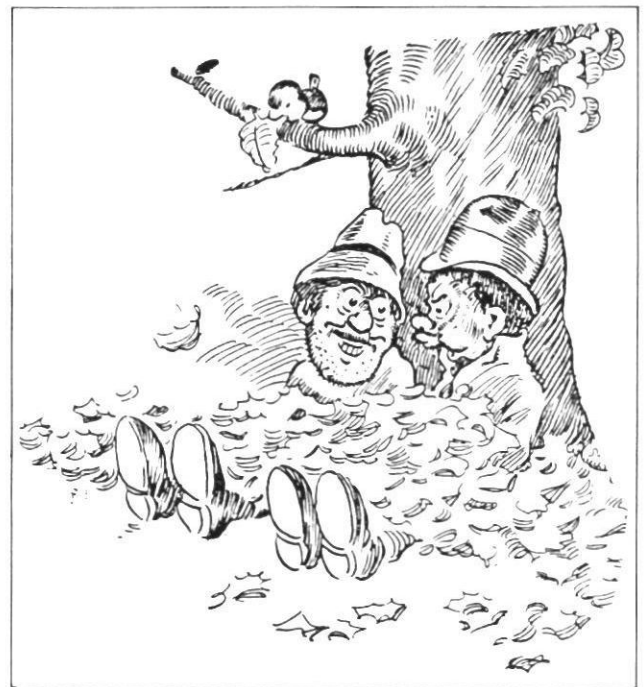
For years banks and real estate appraisers have taken the view that the entry of racial minorities, notably blacks, into neighborhoods, reduces the price of housing and property values. It is even more significant that their policies have reflected this attitude and have escalated any general effect that might have been present. Popular liberal thinking, on the other hand, has held that race has no effect upon property values.

Laurenti's Work

Because the earlier held attitudes and the resulting corollary actions such as redlining and exclusionary zoning were inconsistent with constitutional justice to minorities, there has been a concerted effort by the liberals to demonstrate the falsity of establishment views. To disprove conventional theory, a number of organizations and individuals undertook studies on the effect of race on property values. The best known study supporting the liberal stance was *Property Values and Race*,¹ by Luigi Laurenti.

Laurenti's work, based on comparisons of property values in test areas where nonwhite entry has occurred and control areas that have remained white, in San Francisco, Oakland and Philadelphia, showed that in four times out of five when blacks enter an area prices will keep up with or exceed those in areas that remained white.

One major limitation of Laurenti's study is that he selected test neighborhoods with mostly single family residences and areas not contiguous to existing black



residential areas. Both of these factors make the analysis inapplicable to many midwestern and eastern cities, where the movement of black families is primarily an expansion of the nonwhite central city ghetto. The study concluded without any proof that property price change was not dependent on the number of blacks that entered a test area.

What Laurenti's study demonstrated, according to an unusually incisive review by Anthony Downs in *Land Economics*,² was that the introduction of nonwhite families into a neighborhood, in contradistinction to the conventional wisdom, does not necessarily result in deteriorating neighborhoods and falling property values.

Other Studies

Other studies in Chicago and across the U.S. indicate rises

J. S. Fuerst is professor of social work and urban studies at Loyola University in Chicago. He is the author of several articles on housing, published in the *Journal of Housing*, the *Journal of Property Management*, and *Planning*.

Susan M. Sarcone is completing a master's degree in urban studies at Loyola University, and previously worked in housing rehabilitation with the Evanston Community Development Corporation. She currently resides in Arlington, Virginia.

in values in areas that have undergone racial change. E. F. Schietinger's article, "Race and Residential Market Values in Chicago,"³ indicates that while prices decline during the period when the threat of black entry is perceived, during actual entry values increased. He concluded that because of the type of financial commitment that it was necessary for a black family to make in purchasing or renting a home, overcrowding was often the only solution. Schietinger found that blacks paid more for real estate than whites did in an area.

A study by Martin J. Bailey, "Effects of Race and Other Demographic Factors on the Values of Single-Family Homes,"⁴ analyzed Chicago areas from 1948 to 1951 and from 1954 to 1956. These findings also indicate that although prices were low in neighborhoods adjoining black areas, the relationship between race and property values in black areas was insignificant.

Most of the studies undertaken during the 1950s and 1960s show results presaging no change in property values when blacks enter a neighborhood, regardless of the number of incoming families. Even a cursory examination of housing values in the Chicago area suggested that this was not completely accurate at that time.

For a number of reasons quite apart from color, immigration in large numbers did seem to result in a slowdown of the value rise or an actual decline in values in many communities. Differences in a black family's ability to obtain financing, annual income differences, and lack of experience in home purchasing create circumstances unlike those that the average white family faces in buying a home.

In addition, the entrance of blacks into an area often has resulted in the departure of white families. The conventional theory of "white flight" from a neighborhood undergoing racial transition is related to economic considerations. Attitudes of white residents during transition, in particular their fear of decreased property values, establish the pace at which black families enter a neighborhood. The tendency of whites in a neighborhood to sell their homes at the first sign of black move-ins creates a surplus of housing, which results in depressed prices. Thus, the threat of decreased values feared by white homeowners and potential white buyers materializes due to their own desertion or avoidance of the area.

Chicago Value Analysis

The current study of property values and race used land values as an indicator of property values but recognized that this measure is valid only to a limited extent. The land values used were obtained from Olcott's *Land Value Blue Book for the Chicago Area*⁵ and reflect a 30-year period for areas that are $\frac{1}{4}$ to $\frac{1}{2}$ square mile in size. According to Olcott, these values are based on existing zoning laws, tax records, sales price information and interviews with real estate people and area residents.⁶ While land values are merely a portion of property values, in general these values as given by Olcott seem to correlate with the fluctuation of selling prices.

There is no brief given for the validity or reliability of Olcott's land values; and there is some indication that in high property value areas his estimates are low, whereas in low priced areas the values appear high. Nevertheless, for 10 to 30-year trends, the relationship values assigned by Olcott seem to be realistic, which enables us confidently to infer relationships between property values and land values.

In order to test the correlation between land value as measured by Olcott's book and appraised property values, a comparison was made in a northwest Chicago residential area (7200 W-7600 W; and 6800 N-7600 N).⁷ In this area, land values rose 40 percent, from \$195 per front foot in 1964 to \$275 in 1970. Appraised property values on a selected group of houses in the same area increased from \$24,000 in 1964 to \$34,000 in 1970, slightly more than 40 percent. Similarly, from 1970 to 1973 average land values in the same area increased 27 percent from \$275 to \$350, while appraised property values rose from \$34,000 to \$39,000, an 18 percent increase. This comparison suggests that the relationship between these two factors is positive.

Data seem to lead to the conclusion that land values over substantial time periods are affected by racial factors.

For example, in areas that were exclusively white from 1950 to 1979, values jumped from \$48 a front foot in 1950 to \$337 in 1979. In North Side areas in Chicago such as those bounded by Irving Park Road to Addison Street, Central to Austin Street, land values went from \$57 in 1950 to \$415 in 1979. Another nearby area bordered by Seminoles and Foster, Oriole and Canfield, had a similar unbroken rise from \$35 in 1951 to \$425 in 1979, a 700 percent increase over 28 years. All neighborhoods selected from North and South sides that remained white throughout the 25-year survey period showed a consistent rise in values, often doubling or tripling from 1951 to 1970.

In areas that have remained black since before 1950, steady rises in value have occurred but at a greatly reduced level. Here the value went from \$30 to \$60 a front foot or in some cases to \$100. Examples of these all-black areas are Hamlin to Aberdeen in Morgan Park, with prices increasing from \$25 to \$75 per front foot; or the 63rd Street to Marquette Road, Cottage Grove to Vernon area in West Woodlawn, where prices increased from \$35 to \$100. In sum, all these areas had low land values for the 40-year period and none rose to a land value over \$100. This suggests that while land values reflect the reduced demand, they also rise, to some extent, with the general price level.

Perhaps the changes that can be attributed most to racial attitudes were those which occurred in areas where black families moved between 1970 and 1979 — areas which were all white from 1950 to 1970. These areas had shown virtually the same land value trends as many other all-white areas, increasing from \$50 to \$170 from 1950 to 1970. However, after the areas were populated by a substantial number of blacks, the land values fell from \$170 to \$100

per front foot. In most cases, these land values in 1979 were less than the land prices in 1960.

The tendency for prices to drop with racial change was also found in other areas, but the effect on land value was not always as immediate. A more important phenomenon was the relative amount of the increases. For example, in many areas where blacks moved in from 1950 to 1960 or from 1960 to 1970, land values continued to rise but at a far lower rate than in most of the white areas and at almost the same rate of increase as occurred in areas that had been black for many years.

Large Scale Transition

A cogent example of the differential effect of large scale or small scale black in-migration is observable in the contrast between the South Shore and Edgewater communities. The South Shore area (Chappel to Phillips, 75th Street to 79th Street) showed continued land value increases between 1950 and 1970, from \$81 to \$125. Clearly, the area had been one of the highest priced areas in Chicago in 1950 and remained above average in 1970. However, by 1979 when the population of blacks in the area had risen to over 90 percent, the average land value dropped to \$100 even though the physical condition of the area was still very good. In contrast, in Edgewater on the city's North Side where there were less than 5 percent blacks, the land price jumped from \$76 in 1950 (less than in South Shore) to \$475. Other upper middle class areas where blacks have moved in in large numbers from 1970 to 1979 were Austin from Central to Lockwood and Adams to Harrison. Land values in these areas have gone from \$74 per front foot in 1950 to \$216 in 1970 and back to \$75 by 1979.

These changes suggest that price fluctuations in areas of above average property evaluation where blacks move in are not necessarily related to differences in the quality of housing. Contrary to the conventional idea that blacks primarily move into deteriorated areas, black families have in recent years moved into areas that prior to their in-migration had high property values. Following these racial changes, several areas with a substantial black influx showed declines or small increases, while areas with some black but predominantly white occupancy continue to show sharp increases.

Stable Black Areas

One example, which may indicate a future pattern, is found in a South Side area where prices decreased for awhile as black families filtered in, but the loss was recovered in part as the upper middle class black families began to predominate. In one of the two most prestigious areas on the South Side, known as "Pill Hill" because many physicians built their homes there from 1950 to 1968, prices dropped from \$180 a front foot in 1960 to \$115 between 1970 and 1976. Although this loss was later partially recovered and prices rose to \$150 per front foot, it never reached the 1960 price and was still much lower than the prices of similar or even lesser quality housing on the all-white Northwest Side of Chicago. The signifi-

cant fact here seems to be that although values can rise with all-black occupancy, because of the limited market the values do not rise as much as in all-white or predominantly white areas.*

A further indication of the housing conditions in the areas where blacks moved in from 1950 to 1970 is derived from the Census Bureau Reports of 1960.⁸ These studies show no evidence that the areas that underwent racial transition were dilapidated or deteriorating when black families entered. All the areas studied, into which blacks moved in large numbers between 1960 and 1970, showed 1960 dilapidation figures for their census tracts of considerably less than the citywide average of 2.5 percent, which suggests that neither the original housing conditions nor any decline in maintenance practices by the blacks on the property caused the apparent slowdown in value increases. Rather, the white residents' fear during the transition of decreasing property values and the corollary actions of the families to leave the neighborhood created a surplus of rental and single-family housing on the market. This surplus together with a large fall-off of the demand due to an avoidance of the area by white buyers results in the slumped market prices.

Black Entrance Without White Flight

Laurenti's study pointed out that the number of black families entering an area have no effect on the price structure. As indicated above, findings in this study are at variance with Laurenti's work. On the other hand, it has been found that the introduction of black buyers or renters into an area, if done in moderate numbers, has no effect on prices because it has little or no effect on white demand. This is, in fact, the most important finding of the study. Where a moderate percentage of black families moved in, prices have continued their climb with no visible effect on land values.

Good examples of this are in Lincoln Park and Hyde Park where some black families have moved. There has been no mass exodus and no consequent substitution of black for white population in Lincoln Park. While Hyde Park experienced some substitution of blacks for whites in the 1950s, essentially the area has stabilized in the last 10 years. In both of these areas, as the table below shows, there has been a steady value increase despite black in-migration:

Year	Price Per Front Foot	
	Lincoln Park	Hyde Park
1950	\$ 70	\$ 80
1960	\$100	\$105
1970	\$400	\$300
1979	\$725	\$400

Whereas Lincoln Park on the city's Near North Side has fewer than 10 percent black families, Hyde Park had 40

*An interesting corollary to the maintenance of property values is the high reading scores achieved by the students in the public schools in this area as well as the boundary areas populated primarily by middle class black families (*Public Interest*, Spring 1981 issue).

percent as of 1970 and the same percentage in 1979. In addition, Hyde Park is on the South Side between virtually all-black South Shore and Kenwood. While it is the most stable integrated area in Chicago, the prices are clearly affected by its location in the middle of a mostly black South Side. Hyde Park, like Lincoln Park, is composed of white families of above average income and education. Most of the whites in Hyde Park have chosen to live in this diverse community although they could afford to live elsewhere.

The acceptance by whites of a greater number of black families may be, at least in part, due to these social factors. While income level does not necessarily correlate with racial attitude, the percentage of blacks a white area would tolerate is likely to be influenced both by the socioeconomic background and the previous exposure to integration of the white residents.

Hyde Park and Lincoln Park are only more obvious illustrations of what is happening in other areas as well. Middle class neighborhoods of the city are becoming more receptive to moderate black entrance. In the many areas where blacks have dispersed in differing numbers (the school populations include from 8 to 20 percent black youngsters in these areas),⁹ no effect is observable in the land value level. In a West Rogers Park area bordered by Western, Wolcott, Birchwood and Farwell, an unbroken escalation from \$85 to \$580 per front foot occurs. Correspondingly, in Lincoln Square in an area bounded by Ravenswood, Foster, Glenwood and Summerdale, the prices of land have escalated continuously from \$70 in 1950 to \$450 in 1979. Similarly, in an area bounded by Ridge, Glenwood, Sherwin and Morse, also on the North Side, the prices have risen from \$100 to \$490 despite the presence of a substantial number of black families.

Suburban Communities

An analysis of the land value change in two large suburban communities in the Chicago area, Oak Park and Evanston, illustrates the same pattern: The entrance of blacks in small percentages shows no effect on land value. By 1979, Oak Park was almost 10 percent black, while Evanston was about 25 percent black. While black families are largely concentrated in certain sections of these suburbs, a substantial number of black residents are scattered in areas that are predominantly white. In an area bounded by Garfield, Roosevelt, Maple and Oak Park avenues, with about 6 percent black families, land values changed from \$60 to over \$300 by 1970 — a continuous increase.

Areas in Evanston that have remained white since 1951 have shown a consistent rise in value comparable to white North Side areas of Chicago. These selected neighborhoods which have an overall average increase from \$65 a front foot in 1951 to \$270 in 1976 are southwest Evanston areas. Neighborhoods that have been black for 20 to 30 years in western Evanston show an average increase from 1951 to 1976 of \$28 to \$127. Areas that more recently have absorbed a small percentage of black fam-

ilies (1 to 8 percent) in southeastern Evanston had an average land value change from \$75 in 1951 to \$295 in 1976.

Black families have lived in Evanston for decades. Until the last 20 years, however, they have lived for the most part in a western section of the city, that has remained predominantly black. Over the last 28 years they have moved into many sections. In Oak Park the predominantly black population west of the Chicago Loop has expanded during the survey period. By 1960, the black population of the city's West Side had reached Central Avenue, less than a mile from Oak Park's eastern boundary. Oak Park, which bordered the western edge of the expanding black area on Chicago's West Side, was faced with the possibility of the entrance of large numbers of black families, many of them from nearby low income areas. The village, since 1970, has taken steps to plan for black entry. Recognizing that the entrance of a small number of blacks would not cause a mass white exodus, Oak Park attempted to protect property values to reassure doubters by establishing a quota system in the village. These efforts were legally blocked, but so far there has been no mass entrance or exodus of black or white families. The village board more recently sought to institute a guaranteed buy-back plan to assure homeowners who remain in the area that they would not lose money on home sales.

Planned Entry Of Black Families

Many suburbs, including Oak Park and Evanston, Park Forest, Calumet Park, Maywood, Bellwood and others, have recognized the need for balanced racial occupancy and have formed housing centers. These housing centers make every effort to see that black families are introduced into all parts of the community instead of being concentrated in one area. Perhaps the best example of success in this endeavor is in Calumet Park, a suburb on the Southwest Side of Chicago with a population of 10,000 people and mostly blue collar workers; the community has a 25 percent black population with 90 percent of the blacks being integrated throughout the suburb (see *Commonweal*, June 5, 1982, "The Town Where Integration Worked").

It is unrealistic to approach the field of buying and selling or renting with color-blind glasses. To say that racial factors play no part in property values is not only an illusion, but it is misleading. It is this kind of "democratic neutralism" that causes areas to resegregate from all white to all black, even when neither group particularly desires this direction. Ignoring race will neither make white people stay nor enter an area, and it will not keep black people from buying or renting in large numbers.

The establishment of race as a legitimate consideration in the areas of housing, employment or education has been validated time and again by the U.S. Supreme Court. Most recently in the Bakke case Justice Powell spoke for the Court, saying that race was a valid, even necessary factor in choosing students for a medical school. Actually employers, universities and government itself have, by their

selection policies, validated this expansion of opportunity for black people.

Despite statements to the contrary, in housing, too, as shown in the case of *Hills vs. Gautreaux*, the Supreme Court validated the action of the District Court which had placed a specific "quota" in four housing projects with predominantly white families, saying that not more than a fixed number of blacks could be admitted.

Conclusions

While the findings in any study on the effect of race on property values are not conclusive, this study suggests generally the introduction of a large number of black families into an area causes a slowdown in the increase or decrease in property values during the transition. At the same time, areas with small-scale population changes reflect no such value changes.

Until such time as a housing market and a society exist which are so open that black families can more freely move into white areas without prompting white fears and resulting disruption of real estate values, race must be considered in any attempt to prevent continuation or reinstitution of existing housing patterns in cities like Chicago.

Conclusions in a study of this nature are temporary, not permanent, since they depend so largely on attitudes as well as the economics of a particular time. If what is happening in a few places now, namely, the crystallization of strong black middle class areas, becomes widespread, there is no reason that all black areas may not have values and prices that approach, if they do not equal, values in white areas.

In any case, emphasis must be placed on positive solutions: revitalization of all-black stable areas for those blacks who wish to live in black areas, plus the introduction of blacks into all-white areas. Only then will a truly color-blind housing market exist in the United States.

NOTES

1. Luigi Laurenti, *Property Values and Race* (Berkeley: University of California Press, 1960).
2. Anthony Downs, "An Economic Analysis of Property Values and Race (Laurenti)," *Land Economics*, Vol. 36, No. 2 (May 1960).
3. E. R. Schietinger, "Race and Residential Market Values in Chicago," *Land Economics*, Vol. 30, No. 4 (November 1954), 300-308.
4. Martin J. Bailey, "Effects of Race and Other Demographic Factors on the Values of Single-Family Homes," *Land Economics* (May 1966).
5. George Olcott, *Olcott's Land Values Blue Book of Chicago* (Chicago: 1951, 1960, 1970, 1976, 1979).
6. *Ibid*, A26 (1970 edition).
7. *North Side Real Estate Board Appraisal Directory* (Chicago: 1964, 1970, 1971, 1972, 1973).
8. *Block Statistics for Chicago and Northwest Indiana Urbanized Areas*, U.S. Department of Commerce, Bureau of the Census, 1970.
9. Chicago Board of Education, *Student Racial Ethnic Survey*, Districts 2, 3 and 24, 1977.

BIBLIOGRAPHY

1. Bailey, Martin J., "Effects of Race and Other Demographic Factors on the Values of Single-Family Homes," *Land Economics* (May 1966).
2. Chicago Board of Education, *Student Racial Ethnic Survey*, Districts 2, 3, and 24, 1977.
3. Downs, Anthony, "An Economic Analysis of Property Values and Race (Laurenti)," *Land Economics*, University of Wisconsin, May 1960.
4. Laurenti, Luigi, *Property Values and Race*, Berkeley: University of California Press, 1960.
5. *North Side Real Estate Board Appraisal Directory*, Chicago: 1964, 1970, 1971, 1972, 1973.
6. Olcott, George, *Olcott's Land Values Blue Book of Chicago*, Chicago: 1951, 1960, 1970, 1976, 1979.
7. Schietinger, E. R., "Race and Residential Market Values in Chicago," *Land Economics*, Vol. 30, No. 4 (November 1954).
8. United States Department of Commerce, Bureau of the Census, *U.S. Census of the Population*, 1970.

Seldin On Change

IMPLICATIONS OF CHANGING LAND PRICES

by Maury Seldin, CRE

Land price increases generate a great deal of interest. Land price declines generate a great deal of concern. Currently, there is a great deal of concern about land prices.

The downturn in land prices is yet to be fully documented, but a few related points are of considerable interest:

First, the ratio of land value to building value has increased, at least for housing. In regard to land value as a proportion of land and building value, the housing market is experiencing a situation similar to the boom of the 1920s.

Secondly, the scale of projects and accompanying increases in intensity of land use have increased substantially. The skyline is seeing changes similar to those which occurred in the '20s.

And finally, there are some real questions as to how much additional land is really needed in order to add to the inventory of buildings. Construction activity has declined, which may be partially due to the high cost

of financing and may also indicate that much more space under current conditions simply is not needed. With the decline in construction activity, there is a resultant decline in the demand for land.

From an historical perspective it is interesting to note that according to Homer Hoyt's *One Hundred Years of Chicago Land Value*, land value peaked in 1836, 1856, 1873, 1892 and 1926. It may well have peaked again.

Significance Of Changes In Land Prices

Inflation and inflationary expectations account for a substantial portion of the change in land prices. In order to know and better understand how much of the change in land prices has been accounted for by inflation, it would be useful to know how much land is in speculative hands and how the quantity of this land changes with general price movements. Having this information in hand would sort out some of the factors influencing changes in land prices.

Our interest in land values is predicated on obtaining a more effective utilization of the urban land. Strangely enough, the most efficient pattern of land uses would give the least aggregate land value.

On a site-by-site basis, an increase in the efficiency of land use by increasing the intensity of use improves the land value. This may continue until the improvement becomes an overimprovement. Thus, within such limitations, we tend to think that the greater the land value, the more efficient the land use.

What is true of the individual parcel is not necessarily true of the aggregate. The value of the particular site depends upon the availability of competitive sites. Thus, a legal or other restriction on potential developable sites for a type of use will, by constraint of supply, push up values.

The extent to which values can be increased because of this artificial constraint is influenced by the availability of

This article, fourth in a series by Dr. Seldin, is based on a presentation he made at the Land Policy through Taxation Conference, held last July in Rindge, New Hampshire.



Maury Seldin, CRE, is president of Metro Metrics, 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, and president of the Homer Hoyt Institute. His books include *Real Estate Investment for Profit through Appreciation*, *Land Investment*, *Real Estate Investment Strategy* (co-author), *Housing Markets* (co-author), and *The Real Estate Handbook*. He received his M.B.A. from UCLA and his doctorate degree in business administration from Indiana University.

sites farther out, even though they are less desirable. The location differences, especially the transportation costs, will influence how high the values of the more favorably located sites are able to rise. Thus, the more restrictive the supply of close-in land, the greater the premium for the close-in land.

Such premiums are reduced by additions of freeways and rapid rail transit systems. The far-out land becomes close-in, and the competitive advantage of this land is eroded. Thus, an optimal system would utilize a spatial relationship of activities and a transportation/communications network which would give the least aggregate land values.

As previously discussed, it would still hold true that the more intense development of a specific would give a greater value to that site. But it is irrelevant if the question focuses on the pattern of land use and aggregate land values rather than the value of a particular site in various uses.

Current Trends

Forecasting by extrapolation will show good results, except for the turning points, and sometimes only the turning points count.

It is too early to tell if the back of inflation has really been broken. It is doubtful because many of the underlying causes have not been dealt with fully. While the cost push of the oil cartel and domestic suppliers of a wide variety of goods and services has softened, the lack of fully competitive markets still permits oligopolistic price pressures. Other impediments to a decline in inflation are the lack of productivity gains, wage and price increases tied to price indexes, and of course, the problem of the federal deficit. The attempt to deal with all these inflationary forces using mostly monetary restraint is at best optimistic — the better word might be foolhardy.

Nevertheless, the expectation surrounding inflation has changed and that tempers the rate of price increases in land. But there may also be some real changes in the demand for land.

The physical requirements for land use are changing. Smaller households along with some element of hard times tend to push people toward making do with less space in the housing unit and greater land use density. Also, the forces tend to favor a greater geographic concentration of activity.

The 1980 census showed more households living in two-unit structures than there were dwelling units in these structures. Illegal conversions of single-family units to include an accessory unit have been commonplace in many areas. This activity as well as other conversions exert less pressure to obtain additions to the supply of developable land.

The “back to the city” movement is not yet completely clear. The desire for a suburban environment and the shift of job locations to outlying areas are obviously a centrifugal force.

The big deterrent to efficient land use—the ecological movement—hit a watershed mark with the 1970 NEPA legislation. It may have hit another watershed with the 1980 elections. In any event, the decade of restraint constrained the land supply, fostered leap frogging, and hence pushed up prices.

Now, however, the rise in unemployment is for some communities an overriding concern. The decline in the relative strength of the environmentalists is a tempering force on the pressures for extensive land use.

The contribution of the environmental movement in enhancing ecological and aesthetic values has been qualitative. However, instead of a positive approach to an improved environment, the strategy of restraints brought a quantitative problem in developable land. That problem appears to be easing.

Land Policy Implications

The makers of land use policy are thus receiving signals from a variety of forces that land prices should be declining. A decline in inflationary expectations softens the land market. Demographics and the economy are softening the real demand for additional land; and, an ease in the environmentalist's impact is softening the supply constraint. Since the price of land is also an adequate indicator of misuse of land, there is great difficulty in sorting out which forces account for how much of a decline.

The greater the misuse of land, the higher the general level of prices. On the other hand, the more efficient the land use, the lower the level of land prices. In using land price measures as tools, it is necessary to couple them with a land inventory and budget. Urban development managers must determine how much land should be budgeted for conversion and whether or not the inventory is sufficient. Obviously, the inventory needs to be greater than the “budgeted” absorption. And, absorption will vary from year to year with economic conditions, especially interest rates. Land use managers should understand the system and maintain a management approach which utilizes price and quantity signals.

Land price indexes and land use budgets are only part of this system. It is also essential to plan, program and budget public improvements and coordinate these activities with the planning zoning systems so that there is an availability of developable land.

The supply of land has been unduly constrained in recent years. This imbalance has now lessened, probably due more to a fallback in demand rather than the improvement of land use management.

Land use management still needs to be improved through a better system of signals and better use of these signals. For example, taxation as well as regulatory authorities often send the wrong signals. Many of these signals come through land prices.

We have a lot to be concerned about.

THE COMMERCIAL CONDOMINIUM

by Henry Boeckmann, Jr., CRE

The condominium certainly is not an innovation. From an historical perspective, it has been traced to classical Rome, nineteenth-century France, and Latin America in the 1920s. An astute historian could probably identify some form of condominium ownership throughout mankind's progression, and the system will continue to evolve.



Although not extensive in the United States, the commercial condominium market is well established in Europe and South America. There are indications that this activity is now taking place outside the traditionally limited areas of commercial condominiums, in which medical office buildings seem to predominate.

Henry Boeckmann, Jr., CRE, is president of Henry Boeckmann, Jr., & Associates, Inc., a New York City firm specializing in the analysis of investments in income-producing real estate, appraisals, and feasibility and market studies. He also holds the MAI and SRPA designations.

In San Francisco, a new 23-story office condominium, approximately 102,000 square feet, is being developed; it is reported that sales are taking place at \$300 per square foot.

In New York, the potential conversions of 489 Fifth Avenue and 425 East 61st Street will join the limited number of existing commercial condominiums and commercial cooperatives.

By no means does this clearly indicate a trend. An article in the *New York Times* (January 6, 1982) quotes Wylie F. Tuttle, developer of the 1973 three-million-square foot office condominium, "Tour Maine Montparnasse," as citing operating and management difficulties as a major obstacle. It is apparent that the fragmentation of ownership has impaired the economy of operation normally associated with large properties.¹

As the opportunity becomes more available for small office users in the New York market to own their spaces, we intend to review the various aspects of this form of ownership and its impact on value. It has been traditional for commercial condominiums to appeal to the medical or jewelry trade; they are now being tested in the general market. The question posed to the real estate industry is limited to whether value implications on a before or after-tax basis are to be considered, not to whether a conversion is feasible or whether a specific property is suited for this use.

The final step necessarily may result in identifying investment value, not market value. If, for the sake of reference, one accepts the example of an industrial loft building that has potential for "back office" utilization and will be marketed as such, its retail value as a condominium may be identified through appropriate research and analysis. But, obviously, this is not present market value, nor does it answer definitively the questions of whether the project is feasible or what its value is to a specific investor.

Background And Definitions

Before proceeding further, it is necessary to provide background and define terms. In simplified form, feasibility refers to the relationship between costs and cash flow. A plan of action becomes feasible when the market, given the identified rewards, accepts the risks. Value is the dollar amount allocated to a given asset.

It would seem that the definition of condominium would be easy, but often it has been lengthy. An excellent study of condominiums, entitled *Commercial and Industrial Condominiums* (Washington, D.C., 1976) and prepared by John C. Melaniphy, Jr., presents this definition: "Condominium ownership is a system in which a person or organization owns a parcel of real estate—a unit, apartment, office, store, plant, or hotel suite—which is usually part of a multi-unit structure, and owns as well a portion of the development's common elements; these common elements are owned jointly by all the development's condominium owners. The owners of the individual units have fee simple titles to their units and to a certain percentage of the common elements.

"Common elements — all the components of the condominium development minus the individual owners' units — may include hallways, central heating and plumbing facilities, walls, lobbies, roofs, basements, stairways, elevators, all nonpersonal improvements such as recreational facilities, parking areas, and utility apparatus, the development's land, and any legal restrictions such as easements, appurtenances, and rights pertaining to the common elements. A monthly maintenance charge is assessed each condominium owner for the upkeep of the common elements and is based on the portion that each unit's size is of the total size of all units in the development."

More simply put, condominium ownership is a form of fee ownership that entails obligations involving common responsibilities.

A review of the advantages and appeal of condominium ownership is useful:

1. The Economic Recovery Act of 1981 provides for a 15-year depreciation schedule. Although some circumstances may justify accepting the recapture tax consequences of electing accelerated depreciation, in general, most owners probably will choose straight line depreciation. The impact is quite significant, since the eroding of the depreciation shelter due to inflation² is lessened. Another premise is that the land allocation of the acquisition cost may be minimized; it is hoped in the 10 to 15 percent range.
2. The owner enjoys the potential, given other favorable developments, of a benefit from an actual increase in value. A case could be made that the underlying real estate should be able to retain the purchasing power of the invested principal. But if inflation slows significantly and rates decline, the owner has the potential to obtain cash-free dollars and possibly create value through favorable

financing. A large mortgage at favorable rates should prove to be an asset.

3. Some economy may be achieved when acquiring a condominium as the title and attendant burden of the common area is typically held not by a single owner, but is shared by all of the fractional property owners.
4. An occupant may improve the premises without regard to a remaining lease term. This may be particularly appealing to those occupants whose businesses require such items as computer rooms, vaults, etc.
5. An owner, especially one with an accepted credit rating, can always consider a sale-leaseback to generate cash while retaining the utilization of the space.
6. Ownership allows for the avoidance of the rent increases resulting from various escalation provisions.
7. A pride of ownership may fill a need not usually satisfied as a lessee.
8. The owner of a relatively small space in a large building may benefit from the economy of operation generally achieved in larger buildings.
9. In New York City, where a substantial occupancy tax paid by the tenant exists, an owner/user avoids this cost of doing business.

There are also several disadvantages to condominium ownership:

1. An economic recession may cause a softness in market conditions, and the risk is then present that a decrease in value may occur. Liquidity, which is always a difficulty with real estate, may prove to be a problem just when cash is needed most.³
2. In order to maximize benefits under current tax regulations, real estate is often sold at designated holding periods,⁴ often five to seven years. If the majority of purchasers will be owners/users who may develop tenant fixtures or "goodwill" at their address and are faced with high moving costs, they will not be able to take advantage of a timely sale with favorable tax consequences.
3. Although each unit is held in fee, each condominium building is a collective risk, especially if a single trade or profession predominates. The building may acquire a depressed look or poor reputation, and the remaining viable owners may face increased operating costs and possible loss of value of their fractional asset.
4. The acquisition of a condominium usually requires a capital investment, which may result in lost opportunities in the business itself. Furthermore, the reduction of liquidity combined with added debt may have an initial adverse effect on earnings of publicly-traded companies.
5. For a tenant, all rent payments are tax deductible; it is conceivable that the amortization portion of the mortgage may prove burdensome, especially since no income is present to offset taxes due. The benefit from equity build-up will be realized in the future. In interim years,

however, cash may be needed to meet the current tax. For example, if one assumes an 18 percent, 15-year monthly loan, the debt service constant is .158662. Of this, roughly 94 percent is credited toward interest in the first year. In five years, it is approximately 87 percent and in 10 years, approximately 67 percent.

6. In newly-developed commercial condominiums, especially those of substantial size where a sales force exists and extensive promotion is done, it is possible that a decline in value may occur once sales are substantially completed and the promotional effort is curtailed.

7. A favorable lease may allow a tenant to gain the benefits of a rapidly rising market through subleasing, and, thus, not have to absorb increased operating expenses. Obviously, the circumstances of their current arrangement can answer the economics in ways a condominium would not.

Proving The Point

It is not the intention of this article to demonstrate explicitly the mathematics of buying versus leasing.⁵ Nevertheless, an overview is helpful.

We will use the example of a 5,000-square-foot floor in a 40-year-old former industrial loft building which may be conveyed at \$625,000 (\$125 per square foot). The floor is assumed to be suitable for office utilization. Since taxes have a substantial impact on value, it is wise to consider the investment or after-tax value. The various components (rounded to the nearest \$500) of the analysis on an annual basis over the first five years are indicated.

Property: 5,000-square-foot unit acquired for \$625,000	
Carrying charges:	
Operating expenses (\$6 per square foot)	\$ 30,000
Real estate taxes (\$3.50 per square foot)	17,500
Financing ($\$437,500 \times .2162$;	
70 percent of acquisition at 18 percent,	
10 years)	<u>94,500</u>
Annual carrying charge	\$142,000

An additional cost is the opportunity to have the equity reinvested in either the business or some other alternative. Twenty-five percent return on the equity (\$187,500) is \$47,000 per annum. Thus, the annual carrying charge (\$142,000) plus 25 percent return on the equity (\$47,000) equals the adjusted annual carrying charge (\$189,000), or \$37.80 per square foot.

The next step is to take into account the tax sheltering benefits accruing to the owner. Available average tax deductions over five years are:

Interest payment	\$ 69,000
Real estate taxes	17,500
15-year straight line depreciation ⁶	<u>35,500</u>
Total available	\$122,000

Assuming a combined federal, state, and city tax bracket of 40 percent, \$49,000 is the effective savings.

Two related factors should also be considered. First of all, over the five-year projection period, approximately \$127,000 of the loan will have been amortized. If the value of the realty has remained stable, then this may be recaptured tax free. Secondly, an additional benefit occurs if value begins to appreciate. Assuming the after-tax value having grown at five percent per annum, the \$625,000 base value rises to \$797,500. Deducting the mortgage balance of \$310,500 leaves a future benefit of \$487,000. Because the risk of achievement is present, utilizing a 20 percent discount converts this fixture to a present value of \$195,500, or \$39,000 per annum. This can be summarized as:

Carrying charge	\$189,000
Tax saving	(49,000)
Appreciation	<u>(39,000)</u>
Cost of ownership	\$101,000

For a condominium, the cost to own equals approximately \$20 per square foot. Whether this should be compared to before-tax or after-tax rent is debatable. Also, the presence of intangibles such as pride of ownership, corporate goodwill, etc., may skew the logic.

Nevertheless, if one looks at rent as a before-tax item, then the offering is competitive as long as the market is interpreted as moving past \$20 per square foot. If one treats rent as an after-tax item, then the level approaches \$33 per square foot.

The mathematics are projected forward with the assumption that the realty is operated successfully as a commercial condominium.⁷ As alluded to previously, certain subjective influences are present, and a prudent investor should blend the insight gained through the exercise in arithmetic with an interpretation of market trends and corresponding values.

This case has focused on the buyer's viewpoint. Value may also be viewed from the position of the sponsor or converter.

The preceding methodology will assist in the pricing of the units, which when spread over the time necessary to sell them shows the gross cash flow from sales. (If rent-paying tenants are present, then this is added in.)

Expenses include not only ongoing operating and consulting fees but also sales commissions, legal and administrative expenses, and perhaps additional maintenance to encourage sales or fees to lenders in order to ensure financing. As the expenses are incurred, they are deducted from the flow. The present worth⁸ of the cash flow reflects the value of the realty. A decision may be made as to whether to proceed with the condominium offering after comparing it with the property value and assuming it is held as a rental. The opportunity for a rapid return of a profit is present⁹ at the sacrifice of the long-term benefits of ownership.

Conclusions

It would be ideal to draw this review to an end in a fash-

ion that would allow everyone concerned to grasp whether or not there is a profitable future in commercial condominium conversion. I suspect that there is, especially in the initial stages in specialized and concentrated areas such as the toy and jewelry industries and in the medical profession. There are other potential fields that may benefit by being pulled together, such as the real estate industry, the accounting and legal fields, or perhaps the entire service sector.

In the early phase of any new concept that is testing an uncertain market, risks are present. Considerable education must be provided, and most do not want to be the first to incur this expense.¹⁰ I believe that several of the prejudices against condominium ownership are not well-founded. It is difficult to believe that an established business would commit to a 15-year lease when ownership may prove to be even more flexible, that is, option to sell or sublet if space requirements change. Also, there is the element of pride of ownership which, through value appreciation, carries a strong factor of the potential for gain, especially for smaller, closely-held businesses.

I suspect that a considerable portion of what is defined as value in the first group of successful condominiums will lie not in the real estate but perhaps with the entrepreneur. Any analyses must combine this element with an understanding of investment value in order to

evaluate successfully the benefits of the commercial condominium.

NOTES

1. Tuttle's suggested solution is to keep the developer in the project as an equity partner with a substantial position. This should ensure quality and efficient management, but it would certainly subjugate any small owner to the decisions of the "large" one.

2. Nevertheless, it is still significant that even a "modest" inflation rate of 5 percent will halve the purchasing power benefit of straight line depreciation in the fifteenth year.

3. A case could be made that it is still better to be an owner in difficult periods as the asset may have some value, but an obligation such as a long-term lease remains a liability.

4. These holding periods are related to the amount of interest and depreciation available to shelter income.

5. We originally became aware of this basic procedure from a format utilized by Citibank in its underwriting procedure.

6. Although subject to negotiation with the Internal Revenue Service, if 85 percent of this price were available for depreciation — $\$625,000 \times .85 = \$531,250$, over 15 years — the annual write-off would be approximately \$35,500.

7. Thus, the analysis must be careful to account for probable changes such as an increase in the assessment.

8. The discount must be sufficiently attractive to compensate the entrepreneur as well as to provide for the risk of capital.

9. The option to fall back to a rental, perhaps the starting point, is a form of insurance.

10. The same scenario faced those who first purchased old loft buildings with the intention of renovating them for residential use.

NON ECONOMIC FACTORS IN THE SITE SELECTION PROCESS

by Joseph Rabianski and Stephen W. Wright

Did a major corporation choose Nashville, Tennessee as the site for a new branch plant location because the wife of the CEO was a country music fan and "preferred Nashville?" Whether or not this rumored incident is true, it illustrates an important point: After the analytical factors of site selection are examined, the final decision may be based on subjective factors such as feelings, personal preferences, and the attitudes of those recommending or selecting the final location.

Factors In Selection Process

A number of publications discuss the analytical techniques and variables involved in the site selection process.¹ These discussions typically include the following factors as part of the selection process:

1. Definition and a detailed analysis of the firm's requirements for an additional site or sites. The firm evaluates economic factors such as proximity to markets and materials, production processes (labor versus capital intensity), transportation systems, and energy requirements.
2. An explicit statement of the objectives, both long-term and short-term, of the company.
3. Development of criteria to be used in the evaluation and site selection process. These standards can include required acreage, the ratio of building to land, buffer zone specifications, setback requirements, speculative landholding, accessibility, utilities, etc.

Joseph Rabianski, PhD, is chairman of the Department of Real Estate and Urban Affairs at Georgia State University in Atlanta. He received his doctorate degree from the University of Illinois-Urbana.

Stephen W. Wright is a vice president of the Arthur Rubloff Company of Georgia. He has been active in industrial and investment brokerage in Atlanta and the Southeast for several years and holds the SIR and CCIM designations.



4. Definition of the scope of the facilities in relation to the company's objectives. These can include factors such as floor space by function, production floor layout, etc.
5. Examination of the objective community and site specific characteristics in light of the firm's requirements and objectives.
6. Analysis of the subjective community factors and the decision makers' preferences.

The first five items can be described in quantitative terms and either wholly or at least partially measured against each other.

After a thorough analysis of these analytical factors, companies often end up with several sites that are "cost or profit comparative".² In other words, several sites are evaluated and yield an acceptable profit level.³ Then, if there is an insignificant difference in cost or the profit level, the decision maker is often indifferent about which sites to choose.

If the analysis of the first five items cited yields several equivalent and acceptable sites, then what differentiates these locations? What tips the scales in deciding on one location over another? The subjective community factors do. Each of these factors — the quality of life, educational facilities and opportunities, the property tax rate on residential units, the quality of housing by price, age and location of the units, climate, scenery, recreational opportunities, quality and amount of local transportation, social problems such as crime, etc. — is weighed differently depending upon the person making the subjective evaluation.

Subjective Factors Influence 'Key People'

Through the direct experience of assisting companies in the site selection process and from interviews with consultants who likewise assist in this process, we find that the final site selection decision is often made on a subjective basis and is influenced significantly by the person or persons involved in making the final recommendation and/or selection. In a number of cases, the individuals involved in the selection process will also be relocating to the new site. Thus, the decisions will affect them directly.

If the relocation is a move for a manager and "key people," then personal financial factors and the nonfinancial subjective factors will be important. Financial factors include differential state and local tax rates such as personal income, property and sales taxes, and cost-of-living differences which include housing cost differences in sales prices and mortgage interest rates. The nonfinancial subjective factors include the availability and quality of new housing, commuting time, recreational and hobby facilities, the educational system, professional sports, and the climate.

Each company defines its "key people." The ease of transition which the company can provide for these people will depend upon the personal financial and nonfinancial factors that the new locations hold for these individuals. Certain employees will make the transfer regardless of the location, in order to keep their pension, to retain job security, or for a number of other reasons. However, most decision makers desire to minimize the trauma of a relocation by making the new site attractive to the majority of employees who are relocating.

How do the company's decision makers obtain information about these subjective factors? When they determine their final recommendation and selection, they undertake a series of visits to the locations being considered. At this stage, they become familiar with the community leaders such as the officers of the Chamber of Commerce, bankers, real estate brokers, and civic leaders. These individuals, who either officially or unofficially represent the community, provide a major portion of the information about these subjective factors. They convey information about business attitudes, political attitudes, labor climate, union influence, and the quality of life in the community.

The site selection decision maker usually receives accurate information from these people but sometimes it is inaccurate and biased. Whatever information is received, it should be verified by visiting with individuals who are not identified as official contacts and representatives. Often people with a vested interest in a favorable decision by the company may go overboard with undue praise.

More often than not, the community representative who is factual, knowledgeable, personable, and willing to supply thorough and detailed information, will be the one who makes the strongest impression on the decision maker. People, in general, and especially decision makers fear uncertainty. It is better to disclose deficiencies than to skirt the issue. What the community might perceive as a deficiency may be unimportant to the firm and the decision maker. No site is ideal with all the characteristics, and site selection personnel know this.

Important Subjective Noneconomic Factors

The following subjective noneconomic factors have been singled out because they have not received adequate coverage in the literature. Selected for special coverage are discussions of the educational opportunities, neighborhood selection trade-off, hometown loyalty, recreational/cultural interests and interpersonal relationships in the communities.

In terms of benefits to those making the move, educational options are important for several reasons. First, the educational institutions of the area affect the firm's labor force. The post-secondary technical schools, the colleges, and the vocational high schools train prospective employees and increase the skill level of the labor force. Secondly, the quality of the elementary and secondary school systems is important to those managers and key people with children. For people who have children with special educational, athletic, and cultural abilities as well as handicaps, these schools become even more significant. It is common to find the wives of managers and key people visiting the residential areas and schools while the managers are touring available plant sites.

Another subjective factor is the neighborhood selection trade-off which is a twofold phenomenon. First, there seems to be a tendency to locate the plant in reasonable proximity to the better residential areas where the managers are more likely to live, since they will have less commuting time. Secondly, there is a need to minimize the commuting costs for the employees of the plant. Thus, a balance must be drawn between the decision maker's desire for increased leisure time by minimizing commuting time, and the proper positioning of the plant in the community to attract and retain employees.

Each decision maker will view this trade-off differently. Each firm may have a unique balancing point because it uses varying types of labor. For example, consider a regional corporate headquarters versus a labor-intensive production plant. If management has similar desires regarding the neighborhood, then they rely on various

labor pools which may be distributed differently in the community.

Another reason for selecting one community over another is the hometown consideration of the corporation's key executives. A hometown roster of the company's decision makers can provide information which would have a high subjective value, given comparable evaluations of several sites based on objective factors. There appears to be a tendency, given a choice of locations from economic analysis, for the decision maker to "return home." These people base their decision on how comfortable they are in a particular locale, city or region, and how they perceive that area. Often the "return home" factor becomes an important subjective variable due to nostalgia.

Cultural and recreational facilities typically are discussed in the literature as important subjective factors in the location or site selection decision. At issue here is the range of the consideration. At the most obvious level, there is the desire by the manager and site selector for cultural facilities such as theaters, museums, symphonies, etc., and the desire for leisure activities such as professional sports teams, golf courses, tennis clubs, etc. The added dimension is the fact that the hobby interests of the decision makers can influence the site selection.

Often the existing cultural and recreational facilities in a community coincide with the desires of the decision makers. But in some cases the factors that dominate are such considerations as proximity to the mountains or the beach, proximity to a small private airport, white water canoeing, etc. These items may not be mentioned or listed as secondary factors in information on the community. However, they are important personal hobby interests and play a role in the selection process. The dominant consideration is not the cultural and recreational profile of the community but the match between the facilities of the community and the decision maker's hobby and recreational interests.

Another significant dimension are the preferences of the family of the decision maker. Items such as quality little league programs and music and dance instruction for the children can be important. Social clubs and active charitable organizations for the spouse may also tip the scales in favor of one community over another.

At times the decision to locate near cultural and recreational activities may not reflect the decision maker's personal recreational preferences or hobby interests. Instead the decision favors the clients or customers of the firm, since cultural and recreational amenities are used as part of the marketing plan.

Finally, interpersonal relationships have an effect on the final selection process. In the end, individuals are selecting the community and its intangibles, not just "real estate or brick and mortar." As stated earlier, those who represent the community are often perceived as *the community* to the decision maker. During the selection process, which could last on the average from three months to one year, there is ample time for relationships to develop and friendships to form between the decision maker and individuals in the community. The effect of these friendships on the decision making process cannot be overlooked.

In conclusion, there are many factors in the site selection process. The techniques and analytical methods used in making objective comparisons are published in articles and texts. But in most cases where the requirements of the company are general, more than one site will be suitable given economic cost and profit comparisons. When this occurs, the subjective factors become paramount in the final decision. It is important to recognize these subjective factors and their role in the site selection process.

NOTES

1. The following materials discuss the industrial site selection process and are good background reading:

- W. Kinnard and S. Messner, *Industrial Real Estate* (3rd Edition)
- E. Whitman and W. J. Schmidt, *Plant Relocation: A Case History of a Move*
- G. Whitlatch and W. Dodson, "Selection and Development of Industrial Sites," and L. C. Hoch, "Community and Social Environment," *Guide to Industrial Development* (ed. by D. Howard)
- James H. Thompson, *Methods of Plant Site Selection Available to Small Manufacturing Firms*
- L. Mandell, *Industrial Location Decisions*
- Society of Industrial Realtors® and the National Association of Industrial and Office Parks, *A Guide to Industrial Site Selection*
- R. Struyk and F. James, *Intrametropolitan Industrial Location*

A body of literature on location theory discusses the economic underpinnings of the location decision. Providing a detailed bibliography of these items would be difficult in these notes, but the key phrases to check for are "industrial location theory," "location analysis," "retail location theory," "regional economics," "regional analysis," etc.

2. Phrases enclosed in quotation marks are actual statements made by location decision makers.

3. This statement is equivalent to the economist's concept of profit satisficing instead of profit maximizing.

YIELDS ON COMMERCIAL AND INDUSTRIAL REAL ESTATE VERSUS OTHER ASSETS

by James R. Webb and C. F. Sirmans

The freedom of professional investment managers to invest in alternatives to the normal common stock and bond portfolios has created a demand for information on yields of other types of investment. However, this yield information is often not readily available. Even for real property, which is undoubtedly the predominant alternative to financial assets, little empirical evidence is available on rates of return.

Even though the measurement of rate of return in real estate investments has been the subject of much theoretical literature over the past decade (3, 13, 23, 24), most returns studies analyze common stocks, maybe some form of bonds, and occasionally money market instruments (2, 6, 9, 10). The few available studies of real estate returns use a sample of few properties (15, 24), primarily a result of data limitations on real estate yields over time. It is generally believed that real estate returns are higher due to increased risk (16, 19).

In addition, there is even less empirical evidence on the relationship of investment yields in the money and capital markets to investment yields in the real estate markets. Kinnard, Messner, Boyce, Sprecher, and Starr (12, 19, 20) illustrate the descriptive approach generally utilized.

This study aims to alleviate both problems by adding to the meager empirical evidence on investment yields of commercial and industrial real property versus other assets and their relationships. The data for real estate yields come from a large institutional sample from the American Council of Life Insurance (1).

James R. Webb, PhD, is an associate professor of finance at the University of Akron in Akron, Ohio. He is a frequent contributor to Real Estate Issues and other leading real estate journals.

C.F. Sirmans, PhD, is an associate professor of real estate at the University of Georgia in Athens. He has published extensively in various real estate journals including Real Estate Issues.

This data set is a rich source of information on real estate yields that has largely been ignored.¹ Two annual rates of return on real estate are compared to annual returns on common stocks, long-term government bonds, long-term corporate bonds and U.S. Treasury Bills for the period from 1966 to 1976.

Measurement Of Rates Of Return

The latest and most comprehensive study done on rates of return in capital and money markets is that of Ibbotson and Sinquefeld (9), who studied the returns on common stocks, long-term government bonds, long-term corporate bonds, and U.S. Treasury Bills from 1926 through 1974 with a later update through 1976 (10). Their estimates are used here in conjunction with two measures of return on real estate.

In the Ibbotson-Sinquefeld study, the common stock return measure is based on the Standard and Poor's (S & P) Composite Index. Return measured is total return (appreciation plus dividends) and is calculated as:

$$R_{m,t} = [(P_{m,t} + D_{m,t})/P_{m,t-1}] - 1 \quad [1]$$

where $R_{m,t}$ is the common stock total return during time t ; $P_{m,t}$ is the value of the S&P Composite Index at the end of time t ; and $D_{m,t}$ is the estimated dividends received during time t .

For long-term U.S. government bonds, a portfolio was constructed using bond data from the U.S. Government Bond File at the Center for Research in Security Prices (CRSP). Returns were calculated by:

$$R_{g,t} = [(P_{g,t} + D_{g,t})/P_{g,t-1}] - 1 \quad [2]$$

where $R_{g,t}$ is the long-term government bond total return during time t ; $P_{g,t}$ is the average between the bid and ask flat price (includes actual interest) of the bond at the end of time t ; and $D_{g,t}$ is the coupon payment received during time t .

To measure returns for long-term corporate bonds, the high grade long-term Corporate Bond Index constructed by Solomon Brothers was utilized. Returns were calculated according to:

$$R_{c,t} = [(P_{c,t,19} + D_{c,t})/P_{c,t-1,20}] - 1 \quad [3]$$

where $R_{c,t}$ is the bond return for a series during time t ; $P_{c,t-1,20}$ is the purchase price at the end of time $t-1$ for the yield series bond given a 20-year maturity; $P_{c,t,19}$ is the sale price of the yield series bond at the end of time t given in the example as 19 years to maturity, and $D_{c,t}$ is the coupon received.

U.S. Treasury Bill returns were measured with the U.S. Treasury Bill Index with data in the CRSP U.S. Government Bond File. An index was constructed that includes the shortest-term bills with maturities of not less than one month. Holding period returns for a one-bill portfolio were measured rather than compute yields. Actual calculations were done according to:

$$R_{t,t} = [P_{t,t}/P_{t,t-1}] - 1 \quad [4]$$

where $R_{t,t}$ is the return for period t ; $P_{t,t}$ is the price in period t ; and $P_{t,t-1}$ is the price for period $t-1$.

The two measures of return on real estate used in this paper are an implied equity rate and an overall capitalization rate (OR is an annual percentage rate that expresses the relationship between net operating income and present worth or value for the entire investment or property).

Data used for this study are from "Mortgage Commitments on Multi-family and Nonresidential Properties Reported by 15 Life Insurance Companies," published by the American Council of Life Insurance. Aggregate data are shown in Table 1. Note that beginning in 1967 almost three billion dollars a year on the average were being committed to these loans and the average L/V (loan to value) increased from just over 70 percent in 1966 to about 74 percent in the 1970s. Life insurance companies represent the single most important source of institutional mortgage lending on multifamily and commercial real estate. In 1976 this institutional group had 38 percent of the total of this type of outstanding loan.

The 15 reporting companies represent a major portion of the lending of the life insurance industry. In the fourth quarter, 1977, the reporting companies represented 53 percent of nonfarm mortgages held by U.S. life insurance companies, which amounts to income-property mortgage loan commitments aggregating over \$52 billion. The companies included are Metropolitan, Prudential, Equitable, New York Life, John Hancock, Connecticut General, Mutual of New York, Mutual Benefit, Connecticut Mutual, Penn Mutual, National Life (Montpelier), Provident Mutual, and Fidelity Mutual. It is believed that this is the most comprehensive and largest sample of commercial and industrial real estate

TABLE 1
Real Estate Data: 1966-1976*

Year	L/V (average)	f (average)	Overall Rate (average)	Number of Loans	Amount Committed
1966	70.0	9.0	8.4	2,706	\$2,515,720
1967	71.0	9.2	8.6	2,726	\$3,027,200
1968	73.6	9.5	8.0	2,569	\$3,244,300
1969	73.3	10.2	9.6	1,788	\$2,920,690
1970	74.7	11.1	10.8	912	\$2,341,120
1971	74.9	10.4	10.0	1,664	\$3,932,550
1972	75.2	9.8	9.6	2,132	\$4,986,500
1973	74.3	10.0	9.5	2,140	\$4,833,270
1974	74.3	10.6	10.1	1,166	\$2,602,990
1975	73.8	11.2	10.8	599	\$1,717,010
1976	73.6	10.8	10.3	1,059	\$3,570,530

*From the American Council of Life Insurance Report (1). These are aggregate figures for all property types. They offer an indication of the magnitude of the sample.

information available anywhere. The specific figures given are aggregate by necessity.

The best measure of rate of return on real estate would be to solve for y in:

$$E = \sum_{t=1}^n \frac{BTCF}{(1+y)^t} + \frac{BTER}{(1+y)^n} \quad [5]$$

Where:

E = equity investment = total value less mortgage value

$BTCF$ = before-tax cash flow = net operating income less debt service

$BTER$ = before-tax equity reversion = selling price less selling expenses and unpaid mortgage

y = internal rate of return to equity or in Ellwood's terminology (4), the equity yield rate, and

n = holding period

Wendt and Cerf (23) argue that the cash flows should be on an after-tax basis. However, the other returns used are on a before-tax basis. Therefore, in order to be comparable, before-tax yields were used for the real estate returns also. Certain assumptions about reversion, holding period, taxes, could have been made [as Ricks (14) did in his study] and after-tax yields easily calculated.

However, since the data set does not provide details of reversion or holding period, the simple mortgage equity concept is used to calculate the implied equity rate (ER). These rates would therefore be *ex ante* rates (expected in the future) whereas the money and capital market rates are *ex post* (actual).

TABLE 2
Equity Rates of Return on Real Estate†

Property Type	Year											Mean
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
Commercial warehouse	4.39	4.51	4.73	6.32	6.42	8.04	7.24	6.77	8.67	10.34	7.53	6.81
Other commercial	7.46	6.44	7.43	6.98	17.52	9.29	12.57	12.05	12.64	*	9.44	10.18
Industrial warehouse	7.00	6.54	6.72	6.79	8.68	7.90	7.57	7.25	6.85	8.13	8.19	7.42
Manufacturing plant	5.80	5.85	5.76	6.26	8.29	7.82	8.27	6.56	7.42	7.50	7.20	6.98
Other industrial	6.30	6.50	7.61	*	7.04	10.60	8.94	9.99	7.51	7.51	9.17	8.12

†Derived using equation [7]

*Insufficient data available

TABLE 3
Overall Annual Rates of Return on Real Estate†

Property Type	Year											Mean
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
Commercial warehouse	7.90	8.20	8.43	9.63	10.75	9.95	9.45	9.23	10.33	10.90	10.00	9.52
Other commercial	8.85	8.40	9.80	10.30	12.60	10.70	10.85	10.90	11.40	*	10.30	10.11
Industrial warehouse	8.80	8.75	9.43	9.48	10.93	10.08	9.68	9.65	9.88	10.60	10.30	9.78
Manufacturing plant	8.40	8.55	8.85	9.50	11.20	10.13	9.78	9.48	9.97	10.50	10.30	9.70
Other industrial	8.05	8.80	9.15	*	11.05	10.60	9.70	10.40	9.75	10.30	10.20	9.80

†Net stabilized earnings divided by the property value (from the American Council of Life Insurance Report)

*Insufficient data available

The simple mortgage-equity concept defines the overall rate as:

$$OR = (L/V) (f) + (1-L/V) (ER) \quad [6]$$

Where:

OR = the average overall rate

L/V = the average loan to value ratio

f = the average annual mortgage constant

1-L/V = the average equity to value ratio (E/V), and

ER = the average equity rate

Thus, the implied equity rate (ER) is:

$$ER = \frac{OR - (L/V) (f)}{(1 - L/V)} \quad [7]$$

It can be easily shown that this measure of rate of return is equal to y in equation [5] if it is assumed that the reversion is equal to the present value of the equity, that is, if selling price = $(1 - L/V)$ value and if the BTCF is constant throughout the holding period of n years.²

The assumption that the value of the property declines to the present value of the equity is probably a pessimistic assumption given the appreciation in property values. If this were true, then the equity rate, calculated from the simple mortgage-equity equation [7], would tend to understate the true rate of return on equity. This is seen in the rates of return on equity in Table

2 since they are consistently less (using leverage) than the overall rate. This technique for developing the overall rate for valuation purposes, however, has enjoyed widespread acceptance among appraisers (7, 8, 18).

Since average L/V, f , and OR are given in the data set, ER is then derived by using equation [7], as in Table 2. It is this ER that is used as the first measure of return to real estate. Note that it is an "implied" rate and is derived, not given in the data. The equity rate is that rate desired by the equity investor on his/her investment (the equity portion) and is, by definition, related to the overall rate but may differ significantly since leverage is used.

The overall rate is the second measure of returns to real estate that is used. It is given in the data set and is defined as net stabilized earnings divided by the property value, as shown in Table 3. The overall rate is a measure of return to the total property assuming debt-free ownership. That is, if there is no leverage involved, the owner's return would be the overall rate.³

All rates of return for common stock, long-term government bonds, long-term corporate bonds, Treasury Bills, and real estate (overall rate and equity rate) are shown in Table 4 for the years from 1966 to 1976. Note the rates on all items. Common stock varies from -26.5 percent in 1974 to 37.2 percent in 1975, a sample range of over 63 percent.

The other items have much smaller ranges. Long-term government bonds have a range of 26 percent (16.8 in 1976 to -9.2 in 1967); long-term corporate bonds, 26.8

TABLE 4

Annual Rate of Return on Various Assets: 1966-1976

Year	Common Stocks*	Govt. Bonds*	Corp. Bonds*	T-Bills*
1966	-10.1	3.7	.2	4.8
1967	24.0	-9.2	-5.0	4.2
1968	11.1	-.3	2.6	5.2
1969	-8.5	-5.1	-8.1	6.6
1970	4.0	12.1	18.4	6.5
1971	14.3	13.2	11.0	4.4
1972	19.0	5.7	7.3	3.8
1973	-14.7	-1.1	1.1	6.9
1974	-26.5	4.4	-3.1	8.0
1975	37.2	9.2	14.6	5.3
1976	23.8	16.8	18.7	5.1
Mean	6.7	4.5	5.2	5.6
Range	63.7	26.0	26.8	4.2
Standard Deviation	19.6	8.0	9.4	1.3

*Rates of return used are from (10).

percent (18.7 in 1976 to -8.1 in 1969); U.S. Treasury Bills, 4.2 percent (.038 in 1972 to 8 in 1974).

Relationships Between Rates of Return

The expectations are that rates of return evidenced in real estate markets for commercial and industrial property should be strongly related to rates of return in the money and capital markets. T-Bills, being a short-term instrument, should perhaps be less related than long-term assets such as stocks and bonds, since real estate is usually regarded as a long-term asset. Table 6 is the correlation matrix between the returns on commercial and industrial property and the money market and capital market returns. Generally, the previous expectations are confirmed.

Long-term government (L-T GOVT) and long-term corporate (L-T CORP) bond returns are significantly correlated ($\alpha = .10$) with the overall rate for all commercial and industrial property types. L-T GOVT and L-T CORP returns are also significantly correlated with every equity rate except other industrial. Common stock returns were not significantly correlated to either measure of return to real estate for any property type. T-Bill returns were significantly correlated with equity rate for every property type.

The lack of significant correlation for returns to commercial and industrial property and T-Bills is not surprising since T-Bills are short-term whereas real estate is usually a long-term investment. Real estate returns will, of course, adjust eventually if T-Bill rate changes persist. However, the lack of significant correlation for stock market returns and either measure of return to commercial and industrial property is more difficult to explain since common stock is often touted as a long-term investment. However, the wide fluctuations of common stocks in the last decade (in 1974, down 26.5 percent; in 1975, up 37.2 percent) may have altered this relationship and therefore explain the lack of significant correlation.

TABLE 5

Correlation Coefficient (r) Matrix for Money and Capital Market Rates of Return: 1966-1976

	Common Stocks	L-T Govt. Bonds	L-T Corp. Bonds	T-Bills
Common Stocks	1.000			
L-T Govt. Bonds	.279	1.000		
L-T Corp. Bonds	.552*	.891*	1.000	
T-Bills	-.672*	-.061	-.188	1.000

*Significant at 10 percent level of confidence. The critical value of the correlation coefficient, r , was calculated using

$$r = \frac{t}{\sqrt{t^2 + n - 2}}$$

where the t-statistic has $n-2$ degrees of freedom.

TABLE 6

Correlation Coefficient (r) Matrix for Overall Rates: 1966-1976

Property Type	Common Stocks	L-T Govt. Bonds	L-T Corp. Bonds	T-Bills
Commercial warehouse	.135	.625*	.586*	.458*
Other commercial	-.276	.535*	.503*	.542*
Industrial warehouse	.248	.764*	.806*	.327
Manufacturing plant	.190	.733*	.744*	.332
Other industrial	.132	.605*	.694*	.365

Correlation Coefficient (r) Matrix for Equity Rates: 1966-1976

Property Type	Common Stocks	L-T Govt. Bonds	L-T Corp. Bonds	T-Bills
Commercial warehouse	.205	.554*	.451*	.319
Other commercial	-.206	.493*	.546*	.404
Industrial warehouse	.412	.863*	.945*	-.035
Manufacturing plant	.203	.711*	.668*	.051
Other industrial	.045	.390	.300	-.067

*Significant at 10 percent level of confidence. The critical value of the correlation coefficient, r , was calculated using

$$r = \frac{t}{\sqrt{t^2 + n - 2}}$$

where the t-statistic has $n-2$ degrees of freedom.

Table 7 is the result of ordinary least squares (OLS) estimates of the simple linear relationship between the before-financing measure of investment yield to commercial and industrial real property used in this study, overall capitalization rate (OR), and the rates in the money and capital markets. The results are quite homogeneous. Common stock yields were never significant ($\alpha = .10$) with the OR of any type of commercial or industrial real property. T-Bills yields were significant with ORs for only commercial warehouses and other commercial.

In contrast to these results are those for L-T GOVT and L-T CORP where bond yields were significant with both measures of return to real estate for every type of commercial and industrial real property. R^2 terms

TABLE 7

OLS Estimates of Overall Capitalization Rates of
Return on Other Asset Returns: 1966-1976

Dependent Variable *Overall Capitalization Rate (OR) by Property Types	Independent Variable (Return on)			
	Common Stocks	L-T Govt. Bonds	L-T Corp. Bonds	T-Bills
Commercial warehouse	.0069 (.430)	.079* (1.991) [.037]**	.063* (1.867) [.035]**	.354* (1.459) [.133]**
Other commercial	-.019 (1.002)	.078* (1.940) [.030]**	.065* (1.826) [.027]**	.478* (1.968) [.256]**
Industrial warehouse	.0086 (.533)	.065* (1.647) [.030]**	.058* (1.733) [.031]**	.171 (.703)
Manufacturing plant	.0083 (.515)	.078* (1.986) [.036]**	.068* (2.016) [.037]**	.218 (.898)
Other industrial	.0060 (.362)	.071* (1.653) [.039]**	.072* (1.896) [.048]**	.251 (.997)

*See text for definition of dependent variable.

*Significant at the 10 percent level of confidence; t-values in parentheses.

**These are point elasticities. See text for definition.

for L-T GOVT and L-T CORP bonds are as follows respectively:

Commercial warehouse	.391	.344
Other commercial	.286	.253
Industrial warehouse	.583	.649
Manufacturing plant	.538	.554
Other industrial	.366	.481

The relationship between the first measure of yield to commercial and industrial property (OR) and both types of bonds is definite and strong. However, the rate of return for commercial and industrial real property is obviously influenced by other factors such as liquidity and risk.

The figures in brackets are point elasticities which indicate a percentage change in the dependent variable (investment yields to real property) that result from a percentage change in the independent variable. The point elasticity is equal to $OR / LTGB \cdot LTGB / OR$ for long-term government bonds, where OR = overall capitalization rate and $LTGB$ = long-term government bond yield.

For example, suppose the yield on long-term government bonds increases from 10 to 11 percent. This is a 10 percent increase. Thus, from the estimated equations, the OR for commercial warehouses, other commercial, industrial warehouses, manufacturing plants and other industrial would be expected to increase 3.7 percent, 3 percent, 3 percent, 3.6 percent, and 3.9 percent, respectively. The same reasoning would be applied to long-term corporate bonds. Since most of the common stock and T-Bill coefficients were insignifi-

TABLE 8

OLS Estimates of Equity Rates Return on Other Asset
Returns: 1966-1976

Dependent Variable *Equity Rate (ER) by Property Types	Independent Variable (Return on)			
	Common Stocks	L-T Govt. Bonds	L-T Corp. Bonds	T-Bills
Commercial warehouse	.019 (1.194)	.127* (3.228) [.084]**	.089* (2.627) [.069]**	.451* (1.858) [.368]**
Other commercial	-.041* (2.150) [-.015]**	.208* (5.163) [.082]**	.204* (5.716) [.086]**	1.027* (4.227) [.560]**
Industrial warehouse	.015 (.934)	.077* (1.954) [.047]**	.073* (2.139) [.051]**	-.019 (.079)
Manufacturing plant	.010 (.623)	.086* (2.187) [.055]**	.069* (2.054) [.052]**	.038 (.157)
Other industrial	.0033 (.197)	.074* (1.723) [.050]**	.051* (1.385) [.041]**	-.075 (.296)

*See text for definition of dependent variable.

*Significant at the 10 percent level of confidence; t-values in parentheses.

**These are point elasticities. See text for definition.

cant, the point elasticities were calculated for only significant coefficients. The point elasticities are more useful in forecasting how a change in yields for bonds, etc. should affect investment yields on commercial and industrial real property rather than the estimated coefficients.⁴

Table 8 is the result of OLS estimates of the simple linear relationships between the after-financing measure of real property investment yields (the equity rate) and the yield rates in the money and capital markets. The results are almost identical with those for the OR with one exception.

The coefficient for common stocks with other commercial property was significant at the $\alpha = .10$ level. No explanation can be offered except that it may simply be a Type I error. All other common stock coefficients were insignificant. All L-T GOVT and L-T CORP bond coefficients were significant. T-Bill coefficients were significant for only commercial warehouses and other commercial. All other T-Bill coefficients were insignificant. R^2 terms were more varied than those using the overall rate. They are as follows for L-T GOVT and L-T CORP bonds, respectively:

Commercial warehouse	.306	.203
Other commercial	.243	.299
Industrial warehouse	.744	.892
Manufacturing plant	.506	.446
Other industrial	.152	.090

Table 9 displays the mean investment yields, range and standard deviation for both measures of return to commercial and industrial real property.

TABLE 9

Return Measure	Property Type	Percent Mean	Percent Range	Percent Standard Deviation
Overall Capitalization Rate	Commercial warehouse	9.52	3.00	1.01
	Other commercial	10.11	4.20	1.21
	Industrial warehouse	9.78	2.18	.68
	Manufacturing plant	9.70	2.80	.86
	Other industrial	9.80	3.00	.91
Equity Rate	Commercial warehouse	6.81	5.95	1.84
	Other commercial	10.18	11.08	3.49
	Industrial warehouse	7.42	2.14	.72
	Manufacturing plant	6.98	2.53	.97
	Other industrial	8.12	4.30	1.47

Neither the range nor the standard deviation for the OR ever exceed that for either the money or capital market yields. The range and standard deviation for the equity rate exceed the range and standard deviation of only T-Bill yields, and only for both types of commercial property and other industrial. The range and standard deviation for both measures of return to commercial and industrial real property never exceed the range and standard deviation for long-term government bonds, long-term corporate bonds or common stocks for the same period.

Summary And Implications

A significant positive relationship has been demonstrated between two measures of return to commercial and industrial real property and investment yields of long-term government and long-term corporate bonds. No significant systematic relationship was found with common stock yields. A significant relationship, however, was found for commercial property and T-Bills, indicating a special sensitivity of investors in commercial property to money market yields for whatever reason.

Although the results are not unexpected, this is, nevertheless, the first study to estimate yields for a large sample of commercial and industrial real property that can be used by professional portfolio managers.

Caveats

The results of this study must be viewed relative to the data which are not representative of all real estate. A random sampling procedure was not used. The data are from large life insurance companies where people skilled in analyzing real estate have reviewed and accepted these specific properties. Others not included in these data were rejected.

Since the policy changes at the Federal Reserve Board, due to the installation of Paul Volker as chairman in 1979 and especially since the passage of the Depository Institutions Deregulation and Monetary Control Act of 1980, numerous structural changes in the economic system have occurred and more will follow. Therefore, these results must be regarded as preliminary and will have to be confirmed or modified through additional future research in this area. It is hoped that this study will stimulate such research.

NOTES

1. Gettel and Ricks (7, 14) are the only exceptions that could be found prior to 1979.
2. It is also equal to the "equity dividend rate." See (11), 257-258.
3. See Ricks (13); his Table 5 on before-tax, before-financing is simply the overall rate.
4. See Ferguson and Gould (5), 97-102, for a mathematical derivation and a more detailed explanation of point elasticities.

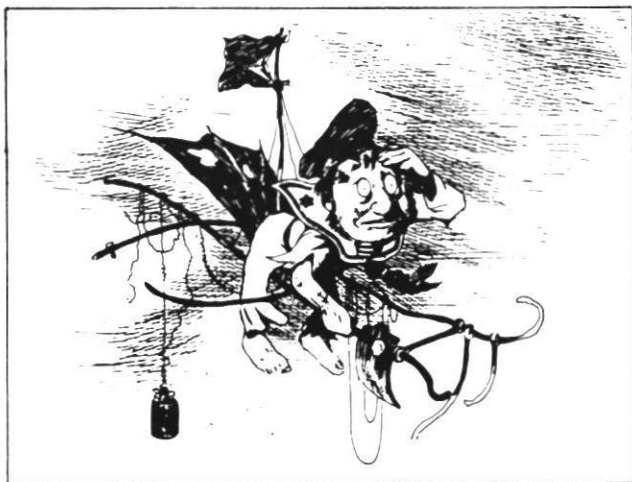
BIBLIOGRAPHY

1. American Council of Life Insurance, "Mortgage Commitments on Multifamily and Nonresidential Properties Reported by 15 Life Insurance Companies," No. 774 (May 4, 1978).
2. F. Brigham and L. Pappas, "Rates of Return on Common Stock," *Journal of Business* (July 1969), 302-316.
3. J. R. Cooper, "How Should Yield be Measured in Real Estate Investment," *Real Estate Investment Analysis*, Lexington, D.C.: Heath and Co., 1974.
4. L. W. Ellwood, *Ellwood Tables for Real Estate Appraising and Financing, Part I—Explanatory Text*, Chicago, American Institute of Real Estate Appraisers, 1974.
5. C. E. Ferguson and J. P. Gould, *Microeconomic Theory*, Homewood, Illinois: Richard D. Irwin, Inc., 1975.
6. L. Fisher and J. H. Lorie, "Rate of Return on Investments in Common Stock," *Journal of Business* (January 1964), 1-21.
7. R. E. Gettel, "Good Grief, Another Method of Selecting Capitalization Rates," *The Appraisal Journal* (January 1978), 90-100.
8. L. D. Hanford, "The Capitalization Process Revisited," *The Appraisal Journal* (July 1970), 393-401.
9. R. G. Ibbotson and R. A. Sinquefeld, "Stocks, Bonds, Bills and Inflation: Year-by-Year Historical Returns (1926-1974)," *Journal of Business*, 49, No. 1 (January 1976), 11-47.
10. ———, *Stocks, Bonds, Bills and Inflation: The Past (1926-1976) and the Future (1977-2000)*, Financial Analysts Research Foundation, 1977.
11. W. N. Kinnard, *Income Property Valuation*, Lexington, D.C.: Heath and Co., 1971.
12. W. N. Kinnard, Jr., S. D. Messner, B. N. Boyce, *Industrial Real Estate*, 3rd edition, Washington, D.C., Society of Industrial Realtors*, 1979.
13. S. A. Pyhrr, "A Computer Simulation Model to Measure Risk in Real Estate Investment," *Real Estate Investment Analysis*, Lexington, D.C.: Heath and Co., 1974.
14. R. Bruce Ricks, "Imputed Equity Returns on Real Estate Financed with Life Insurance Company Loans," *Journal of Finance* (December 1969), 920-937.
15. S. E. Roulac, "Can Real Estate Returns Outperform Common Stocks?" *Journal of Portfolio Management* (Winter 1976), 26-43.
16. W. F. Sharpe, *Portfolio Theory and Capital Markets*, Chapter 2, New York: McGraw-Hill Book Co., 1970.
17. C. F. Sirmans and J. R. Webb, "Investment Yields in the Money, Capital and Real Estate Markets: A Comparative Analysis for 1951-1976," *The Real Estate Appraiser and Analyst* (November/December 1978), 40-46.
18. ———, "Mortgage-Equity Analysis, Again!!!" *The Appraisal Journal* (January 1979), 44-52.
19. R. C. Sprecher, *Introduction to Investment Management*, Chapter 14, Boston: Houghton Mifflin Co., 1975.
20. R. Starr, *Housing and the Money Markets*, New York: Basic Books, 1975.
21. K. Villani, "The Flow of Retirement Savings to the Residential Mortgage Market," R. M. Buckley, J. A. Terccillo and K. E. Villani, *Capital Markets and the Housing Sector: Perspectives on Financial Reform*, Cambridge: Ballinger Publishing Company, 1977, 251-270.
22. J. R. Webb and C. F. Sirmans, "Yields and Risk Measures for Real Estate, 1966-1977," *The Journal of Portfolio Management* (Fall 1980), 14-19.
23. P. F. Wendt and A. R. Cerf, *Real Estate Investment Analysis and Taxation*, Chapter 2, New York: McGraw-Hill Book Co., 1969.
24. P. F. Wendt and S. N. Wong, "Investment Performance: Common Stocks Versus Apartment Houses," *Journal of Finance* (December 1965), 633-646.

A LENDER'S VIEWPOINT: SIX WAYS TO SURVIVE TODAY'S REAL ESTATE DEPRESSION (AND OTHER OBSERVATIONS)

by Donald J. Stratton and Barrett R. Bates

Investors who bought real estate between 1976 and 1979 were prepared to accept negative or zero returns, counting on unprecedented appreciation rates and pent-up demand to make up the loss and provide a tidy profit upon sale or refinance. The pent-up demand is still very much present, but the appreciation is not. When interest rates hit record levels, building becomes unprofitable, existing property is almost impossible to buy and formerly cash-productive property is difficult to hold.



Because of the continuing demand for housing and some types of commercial property, the real estate market should rebound as general economic recovery begins and mort-

gage rates subside. Yet no one knows when, with what strength, or even whether the market will show improvement; consequently, few property owners know how to approach problems in the meantime. Magical incantations, wishful prayers or supplications to the IRS may not suffice to solve these problems. The following suggestions should help as practical, preventive medicine for the ailments of forward-looking investors.

Identify your rescuers. The Loan Arranger is still the hero of the day, but its disguise has changed somewhat. Specialty lenders have entered the market to fill the vacuum left by institutional lenders who have exhausted their lendable funds or even their net worth. Some specialty lenders have been around for awhile, but are just now diversifying or expanding their lending programs. A partial list of currently active lenders includes:

- REITs (Real Estate Investment Trusts)
- Pension/Retirement Funds
- Insurance Companies
- Industrial Revenue or Mortgage Bonds (local)
- Corporate Lenders, Private Investors, Mortgage Bankers, Finance Companies

The primary advantages of borrowing from REITs, such as those sponsored by Consolidated Capital companies and others, are quick decisions and fundings, nontraditional flexibility in tailoring a loan to meet the borrower's special needs, minimal participation in comparison to partnerships, and a variety of payment programs designed to improve cash flow and the borrower's ability to ride calmly through the current trough in the real estate cycle.

Each type of specialty lender tends to orient itself to specific property types. Pension funds seem to like residential and resort property, insurance outfits and corporate lenders prefer offices and retail, and REITs are generally interested in commercial property. Private lenders, finance companies and mortgage bankers are most frequently involved in home mortgages.

Donald J. Stratton is vice president of Consolidated Capital, the San Francisco Bay Area-based real estate investment institution. He received his juris doctor (JD) degree from San Francisco Law School and is a member of the California State Bar Association.

Barrett R. Bates is assistant vice president/mortgage finance of Consolidated Capital, San Francisco, California. He is a graduate of the University of California at Berkeley.

These areas of interest are by no means fixed; there are wide variations between lenders with respect to property type, so the investor must do phone or legwork to find the lender best suited. It's helpful to know that real property is usually classified by lenders according to tenancy, purpose and whether or not income is produced.

Specialty lenders, because of their autonomy, are not usually subject to geographical limitations. With some, lending authority is in the "front lines," a circumstance that allows rapid processing. Others, notably insurance companies and pension funds, must often answer to many masters before a loan can be approved, and terms can change accordingly.

On the other hand, the slower lenders may offer longer-term financing, though equity participation and prepayment penalties may be substantial. Limitations on loan amounts vary according to the lender, each attempting to fit into an identified market sector. Each lender usually offers a specific structural advantage, with most involving some degree of negative amortization and/or the exploitation of older, lower-rate underlying loans.

Careful shopping will turn up some programs that have surprising and unique applications to real estate transactions. The fact that most creative financing takes advantage of older loans already in place leads to the next rule of survival.

Avoid 'wrap-o-phobia!' The hesitancy and even suspicion with which borrowers sometimes regard wrap-around loans are mostly due to lack of information and myths arising from coffee-break scuttlebutt. Wraparound loans are certainly nothing new; multi-family building sellers have used them for years to offer buyers seller-carried financing while enjoying the interest rate spread between it and the underlying first mortgage. A wrap-around is just a form of secondary financing in which the lender takes control of, and makes the payments on, the primary financing. Usually the borrower signs an all-inclusive trust deed (or mortgage) and note, pledging to make regular payments to the lender on the entire amount of the wrap. The lender takes the borrower's payment, deducts the amount of the first mortgage payment and pockets the rest. This way, the borrower has the convenience of making a single payment and receives a below-market interest rate; the lender can protect his or her secondary position by being sure the first is current.

The most prevalent misconceptions about wraps are that the lender always enjoys the underlying equity build, that the borrower remains responsible for payments on the wrapped loan and that wraparounds take precedence over the underlying financing.

In fact, an interest-only wrap will still give the borrower the equity build; the lender receives interest dollars on the total wrap amount, but must pay out principal dollars to amortize the underlying loan. As wrap equity is paid off, the borrower accrues the advantage because the underlying balance becomes lower than when the wrap was

originally placed. Thus, the borrower takes advantage of equity build, not the lender. As to the last myth, wraparounds saddle the lender with full responsibility for making payments on underlying loans. The legal consensus is that wraps never take priority over earlier loans.

To stay afloat in a sea of ambiguity, you must first acknowledge the imminent possibility of drowning. A successful real estate investor must stay in touch with the property and financial markets, especially now when they're in almost daily flux. King Lear, the U.S. railroad industry, the brontosaurus and Detroit automakers have at various times shared one common, tragic flaw: an inability or resistance to change with the times. Even though inflation and short-term interest rates are presently easing, the income property investor looking for a 14 percent, 30-year mortgage with a 2-point fee is wasting time.

This is presently more true of income property than of the single-family residential market. But the low-rate, long-term financing advertised by residential developers for end loans is usually subsidized by a profit sacrifice, short term buy-downs or are provided by an institutional lender who mistakenly issued a long-range, fixed-rate forward commitment in 1978 to '79.

Real estate lenders learned one permanent and extremely painful lesson in the last round of 20 percent or more interest rate inflation, and they will likely never allow themselves to be burned again by making long-term, low-yield loans while their own cost of funds soars to record levels. For instance, witness the current shake-out in the thrift industry, another segment of the financial community which has been unable to react quickly enough to the radical market changes.

Long-term, low-interest rate mortgages are already being called "dinosaur loans" by financial *cognoscenti*; some playful wags contend that old loans are being replaced by "neutron mortgages" which destroy the borrower but leave the property intact. Not only are long-term loans becoming extinct, but real estate loans from traditional lenders are hard to come by in any form. Experience tells us that the availability of so-called offshore money is usually a mirage; in fact, the money that is supposed to appear at the U.S. bank often turns out to be a letter of credit from a small foreign bank which the U.S. bank cannot honor. Creative financing has provided some breathing space for property owners, but asphyxiation may occur when all those balloon payments come due. The astounding rise in foreclosure rates over the past several months represents the tip of an iceberg composed of purchase money second mortgage defaults.

Understand the depression. On the surface, the depression in the real estate market is a function of unbearably high interest rates. Why have rates remained so high with inflation now on the wane? No one knows for sure, but there are a variety of variables influencing the situation. Some may be political; low unemployment and interest rates benefit an administration most when re-election time

rolls around and may take a back seat to other economic priorities in nonelection years. Other reasons involve the dynamics of the economy: Federal Reserve System credit policy has been elusive and is still suffering somewhat from a credibility gap over erratic money supply growth.

Another factor helping to boost rates has been the myriad of inflationary expectations, a market state of mind created by past experience. Only very recently have such anticipations been turning deflationary as the steep recession which began last July approaches the bottom of its chasm. According to Jude Wanniski, a prominent economist, author of *How The World Works* and a frequent contributor to the *Wall Street Journal*, deflation may ironically keep interest rates high as lenders seek to protect themselves from future defaults. During times of inflation, borrowers benefit because they can pay back loans with cheaper dollars than were originally advanced; in deflation, the borrower must scramble for more expensive dollars (in relation to gold), and the lender thus benefits to the extent that the borrower can continue to make payments.

Opponents of this view, however, complain that fear of defaults can't be the underlying factor in persistently high short-term real rates. As an example, they point out that rates on T-Bills are equally high despite the essentially default-free nature of the instrument. Opponents say rates will come down when people begin to believe that inflation is in check and that extraordinarily high real rates reflect an unprecipitated decline in inflation.

As inflation cools, a definite relaxation in rates takes place. But rates are declining at a very slow pace in relation to the drop in the inflation rate. It may take a long time for investors to give up their inflationary expectations, and many dark clouds remain on the economic horizon.

Many analysts believe that inflation will resume with a vengeance as soon as the economy begins to recover, and that the size of the federal budget deficits will provide disruptive competition by the government for funds in the credit markets. Whatever happens, most real estate professionals agree that the market will not improve until mortgage rates decline to 14 percent or below, a distant event by most measures. Henry Kaufman, a widely quoted and influential economist, has been predicting another upsurge in long-term rates during the second half of 1982 that will reach levels as high as those in 1981.

As lenders on medium-to-large income properties, we meet potential borrowers who have a plethora of difficulties, some of which are reoccurring frequently in today's market: a balloon payment or principal reduction is coming due, the deadline for a sale or purchase is approaching, a decision must be made on a once-in-a-lifetime opportunity.

Problems with timing are joined by problems with cash flow. Owners are being squeezed by the floating rate on

an existing loan, by increased operating costs and by record vacancy rates in some parts of the country, due mostly to migration and recessionary doubling up. Many borrowers simply need to cash out their holdings to obtain working capital.

Resign yourself to a cut along the bottom line. Loans from specialty lenders may cost more than conventional financing, but the latter is inflexible and scarce. Moreover, the temporal and structural flexibility available with specialty lenders frequently washes out any extra cost increment. If a proposed real estate transaction shows profitability at today's high rates, a premium rate or fee will not render the deal infeasible. Investors are realizing that lenders will no longer be content to watch borrowers reap all the profit.

Since lenders now require equity or income participation, why not just form a joint venture with a financial partner? The answer is that a loan is almost always cheaper. Even though lenders today insist upon and obtain a chunk of the profit, their bite is usually a lot less than the 50 to 75 percent share that a full financial partner will demand. Also there's less personal risk for both parties, greater recourse if something goes wrong and the latitude for the developer to run his or her own show.

There's a sad ring of truth to the definition of a joint venture presently making the rounds: a partnership between a person with money and a person with expertise wherein the two switch places after about a year.

Today's savvy investor lets the bottom line take second place to the quality and feasibility of the transaction. Time wasted shopping for dinosaur loans can be costly in lost opportunities. By the time a fundable loan is secured, the profit created by the lower-than-market financing may have already evaporated. The advent of short-term mortgage financing, albeit bemoaned by many, improves market liquidity and makes it easier to refinance when rates decline.

Look before you leap, but leap anyway. There's no question that real estate investment is a scary proposition these days, but that doesn't mean that good deals and profit are impossible dreams. There are plenty of opportunities for investors who are willing to look for them. Of course, it's in a realtor's and lender's best interests to dissuade investors from their wait-and-see attitudes, but their arguments are good ones: Long-term financing is past history; today's market favors the buyer and transactions that would have been difficult or impossible using traditional lending sources and techniques can succeed today.

Successful investors in the '80s will be those who concentrate on substance rather than form, who won't take "impossible" for an answer and who give up chasing the windmills of the rosy past for pursuit of a reasonable return. The investor who makes a profit will be the one who has earned it.

FOREIGN INVESTMENT IN U.S. REALTY: PROSPECTS FOR THE 1980s

by Dudley S. Hinds

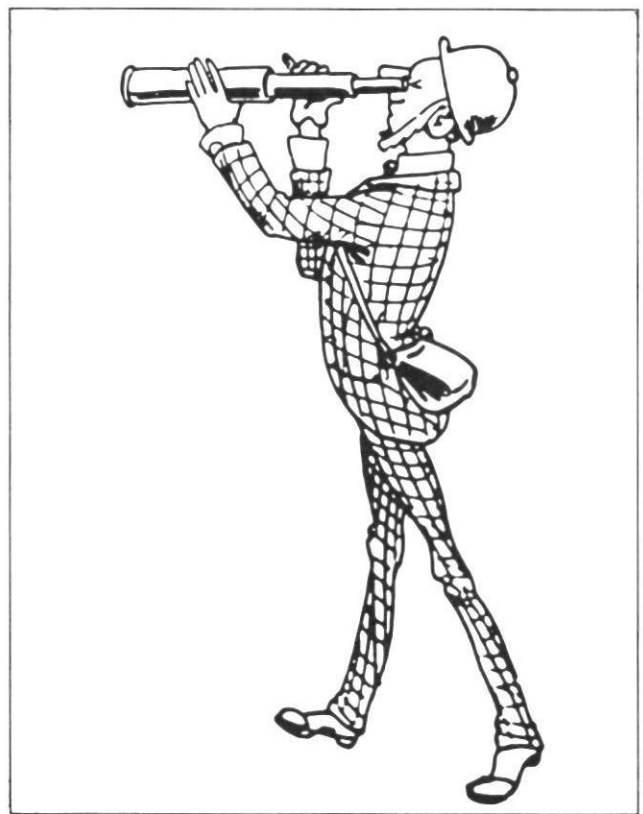
Foreign investment in U.S. real estate has become the subject of frequent articles in professional journals, trade publications, general business periodicals and the popular press. Matters discussed have included the sources of the funds, attributes of the investors, taxation of income and gains, financial structuring, and the possible impact on U.S. markets and communities.

If the volume of articles is any indication of the importance of foreign investors, then they are becoming a significant source of real estate capital. This article explores the prospects for the continuing flow of foreign investment into U.S. realty during the 1980s.

Two Types Of Foreign Investment

How much foreign money has been moving into U.S. real estate? Long-term foreign investment of all kinds is usually divided into two categories: portfolio investment and direct investment. The major difference between the two categories is that direct investment involves control by the investor while portfolio investment does not.

Foreign investment in U.S. real estate would seem to fall partly into each category. No data are available on portfolio investment in real estate from abroad. The U.S. Department of Commerce, Bureau of Economic Analysis has collected data on direct investment through its administration of the International Investment Survey Act of 1976, in which Congress defined foreign direct investment as being "the ownership or control, directly or indirectly, by one foreign person of 10 percent or more of the voting securities of an incorporated business enterprise



or an equivalent interest in an unincorporated business enterprise."¹

As of the end of 1980, the foreign direct investment position in U.S. realty was reported to have been \$2,429 million.² This represented an increase of \$609 million over the figure reported for 1979 and an increase of \$1,630 million (204 percent) over the figure for 1976. Foreign direct investment in U.S. real estate reported as of the end of 1976 comprised 2.6 percent of the total foreign direct investment position in the U.S. at that time. The corresponding figure for 1980 was 3.7 percent.

Dudley S. Hinds is an associate professor of real estate and urban affairs and an associate member of the Institute of International Business, College of Business Administration, Georgia State University in Atlanta. He is co-author of Winning at Zoning and International Real Estate Investment, and has published articles in the Real Estate Appraiser and Analyst, the Real Estate Law Journal and the Atlanta Economic Review.

When deflated, the increases in foreign investment in real estate seem less spectacular (see Table 1). Nevertheless, the increases in 1978, 1979, and 1980 were significant; the total increase in constant dollars between year ends 1977 and 1980 amounted to 109 percent. (It should be noted, however, that the increases indicated may be due partly to improved reporting as a result of compliance with the requirements of the International Investment Survey Act of 1976.)

TABLE 1

Foreign Direct Investment Position in U.S. Real Estate
(in millions of dollars)

Year End	All Industries	As Percent Of	Current Dollar	1967 Dollars*
1973	\$20,556	2.9%	\$ 600	\$451
1974	\$25,144	3.2%	\$ 806	\$546
1975	\$27,662	2.8%	\$ 777	\$482
1976	\$30,770	2.6%	\$ 799	\$469
1977	\$34,595	2.5%	\$ 853	\$470
1978	\$42,471	2.7%	\$1,161	\$594
1979	\$54,462	3.3%	\$1,820	\$836
1980	\$65,483	3.7%	\$2,429	\$983

*Deflated with Consumer Price Index

Sources: Chung and Fouch, *op.cit.*, 47. William K. Chung and Gregory G. Fouch, "Foreign Direct Investment in the United States in 1979," *Survey of Current Business* (August 1980), 46.

Gregory G. Fouch and L. A. Lupo, "Foreign Direct Investment in the United States in 1978," *Survey of Current Business* (August 1979), 46.

William K. Chung and Gregory G. Fouch, "Foreign Direct Investment in the United States in 1977," *Survey of Current Business* (August 1978), 48.

Ida May Mantel, "Foreign Direct Investment in the United States in 1976," *Survey of Current Business* (October 1977), 35-36.

The amounts of foreign investment reported include only equity positions. Furthermore, they include only investment in entities classified by the Bureau of Economic Analysis as being in the "real estate industry." Real property assets owned by firms engaged in manufacturing, petroleum, trade, finance, or insurance are classified as direct investment in those industries rather than in real estate. Investment positions by country of source are indicated in Table 2.

The future flow of foreign money into U.S. realty will be determined by numerous variables that are not easily quantified. The procedure here will be to identify as many variables as possible by applying existing foreign-investment theory and then to conjecture with respect to possible changes over time. There are two sets of theory: one dealing with portfolio investment and the other with direct investment.

Variables Affecting Portfolio Investment

The theory of portfolio investment hinges primarily on differentials in interest rates between countries. All other things being equal, nongovernmental monetary capital moves from countries with low rates to ones with high rates. The causes of interest-rate differentials have been

TABLE 2

Foreign Direct Investment Position in U.S. Real Estate
(in millions of dollars)

Source*	Year End 1977	Year End 1980
Canada	\$ 98	\$542
West Germany	\$ 30	\$120
Netherlands	\$ 38	\$504
United Kingdom	\$ 81	\$191
Other European	\$ 47	\$ 56
Japan	\$ 30	\$109
Panama	\$ 60	\$ 68
Other Western Hemisphere	\$281	\$519
Middle East	\$166	\$265
OPEC Nations (including Middle East)	\$182	\$280
All other countries	\$ 22	\$ 55

*Note: The sources listed are the countries of the first foreign parent of the U.S. investment entity and are not necessarily the countries of the ultimate owners of the investments. Panama, for example, is a popular intermediate country for the channeling of foreign capital into U.S. real estate.

Sources: Chung and Fouch, *op.cit.*, 47.

Fouch and Lupo, *op.cit.*, 46.

explained in a number of ways: differences in rates of savings, differences in demand for manufactured products,³ and differences in factor proportions used in production.⁴ In particular, capital may be substituted for labor in a growing economy where restrictions on immigration are greater than restrictions on the importation of capital.

Because capital tends to be scarcer in developing countries than in developed ones, capital movements generally should be *from the developed countries to the developing ones*.⁵ However, this is not necessarily the case. For example, external economies of scale that can be realized in developed countries tend to produce the opposite flow. As a matter of fact, for a number of years the U.S. has experienced investment flows in both directions.

The simplest form of portfolio investment theory assumes no risk, no uncertainty and no impediments to the international movements of capital. Refinements to the theory have considered risk, uncertainty and barriers, but once these considerations are introduced, "almost anything can happen. The extra empirical information needed to make predictions is very great and almost impossible to acquire."⁶

Differences in risk preference between investors in two countries can generate cross movements of capital. Risk-taking capital might flow out of a country at the same time that risk-avoiding capital is flowing in. With no differences in risk preference, cross flows can be motivated by diversification.⁷

Risk and uncertainty in international portfolio investment have several components. In addition to the components found in domestic investments, there are exchange-rate risk and various categories of political risk. Political risk includes not only the risk of diminished returns, or loss of

capital, through actions of the host government or the investor's home government; it also includes risks associated with war and civil strife. Capital tends to move from unsafe environments to safe ones.

Impediments to the movement of capital from one country to another include the added cost of obtaining information and making transactions in an unfamiliar investment climate. They also include exchange rates and barriers established by governments to restrict inflows or outflows of investment.

Variables Affecting Direct Investment

The theory of direct investment is focused upon the behavior of the industrial corporation and does not necessarily involve international movements of money. Direct investors may borrow funds in the host country, or they might transfer into the host country property in the form of patents, technology or machinery. Furthermore, they may reinvest earnings from past investments in the host country.⁸

The desire for control is at the heart of portfolio investment-theory, but control is not the only objective. Numerous variables have been cited to explain direct investment. Control presumably arises from a need to minimize risk and increase efficiency in attaining the other objectives. The other objectives may include diversification, shorter distribution lines, assured access to raw materials, assured orders from major customers, escape from high taxation and social legislation, cheaper labor, and strengthening of market position (gain in market share or prevention of market loss).⁹

In order to cover the additional costs incurred from operating at a distance from home base and in a different environment, a firm must be able to earn a higher return than is earned by a competing local firm. The higher return can be achieved by advantages arising out of product differentiation, special marketing skills, superior management, patents and technology, and superior credit standing.

Other variables in the theory of direct investment include: the product cycle, in the latter stages of which production tends to be moved to countries of lower-skilled and cheaper labor;¹⁰ and Knickerbocker's discovery of a tendency of large corporations to "follow the leader" in establishing branches abroad.¹¹ Aharoni¹² has approached the subject from the point of view of the corporate decision-making process, concluding that the decision to invest abroad involves many individuals and that, over time, it tends to accumulate momentum as more and more time has been invested in the decision by more and more executives with an increasing reluctance to reverse the process.

Applicability Of Theory Of Direct Investment To Realty

To the extent that direct investment in U.S. realty is in the form of manufacturing plants, much of the explanation for the investment can be attributable to the theory of di-

rect investment. The theory may also explain much of the foreign corporate investment in agricultural land. The investment from abroad in real estate, however, includes much more than the use of capital in the extraction of raw materials or in the production of manufactured goods. The real estate investment of most concern to the U.S. real estate industry is in housing, offices, hotels, shopping centers, warehouses and agricultural land.

Although some investment in agricultural land has been associated with large corporations, and some of it has been in timberland for use by pulp manufacturers, much has been made either by noncorporate investors or by small, privately-held, nonindustrial corporations. The nonagricultural investments have been associated generally with the service sector of the economy. Thus, a theory based upon the decisions of industrial corporations can explain only part of the foreign direct investment in U.S. real estate.

The theory of direct investment probably explains much of the investment of foreign developers who have become active in the U.S. Those from western Europe, for example, may be based in countries having relatively small and/or declining markets for their products. They may also have initial advantages over U.S. builders in their products, technology, marketing skills, and financing capabilities. For example, several Canadian developers now operating in the U.S. are subsidiaries of large Canadian corporations and can draw on relatively large lines of credit established in U.S. banks.

To some extent, the advantages of special marketing skills or other special knowledge may also explain investment in proven properties by nondevelopers. Some European investors reportedly found U.S. office and apartment rents to be low by comparison with rents in their own countries in the late 1970s. They invested in the expectation of "upside potential" to be realized through increases in rents.¹³

One German investor who has made substantial purchases of older apartment buildings has reportedly doubled rents in many of his projects upon expiration of existing leases, with little improvement to the properties. It has been claimed that the Dutch introduced to the U.S. office leases indexed to the Consumer Price Index based on earlier experience with double-digit inflation in their own country.¹⁴ Such special knowledge, though, is unprotected by patents or copyrights and can, at most, explain initial investments in real estate.

Knickerbocker's "follow-the-leader" tendency may be applicable to nonindustrial investors in real estate, and Aharoni's emphasis on the corporate decision-making process may explain, in part, the decision of large pension funds to invest in U.S. realty. As no empirical data have been gathered for nonindustrial investments in real estate, however, firm conclusions cannot be drawn.

In general, the theory of direct investment is inadequate to explain much of the recent foreign direct investment in U.S. real estate. It can be of limited help, therefore, in

conjecturing on prospects for further investment in the '80s. Thus, it is necessary to turn to portfolio-investment theory to see what help it can provide.

Applicability Of Theory Of Portfolio Investment

As indicated previously, differences in interest rates are at the heart of portfolio theory. It is unfortunate that it is almost impossible to relate interest-rate differentials to investment in real estate from specific countries, because data on investment by country of origin is available for a period of only four to five years. The most dramatic increase has been in investment from the Netherlands, but data for that country go back only to 1977. West Germany and Japan present the same data problems, and Canada, another source with a spectacular increase, has separate figures tabulated back only to 1976.

A cursory comparison of yields on government bonds as a proxy for long-term rates generally provides no explanation of the flow of real estate capital into the U.S. from those countries from 1976 through 1980. Although nominal yields were higher in the U.S. for most years, the differences were generally offset by higher rates of inflation in the U.S.

Another variable in portfolio theory is savings-rate differentials between countries. This has undoubtedly been a factor in some of the recent investment. For example, investment from the Middle East increased from a position of \$83 million at the end of 1976 to one of \$265 million at the end of 1980. Investment from OPEC countries grew from \$102 million at the end of 1977 to \$280 million at the end of 1980. For the most part, this money represents recent savings resulting from oil income in excess of what can be spent in the home countries. Between 1972 and 1977, the U.S. ranked sixtieth among 126 countries in its average savings rate (annual savings divided by annual Gross National Product).¹⁵ Of the 34 nations with the highest GNP per capita in the world, only Israel and Ireland had lower average savings rates than the U.S. during this period.

Countries having higher rates than the U.S. included all of the industrialized countries of Europe except Ireland, plus Japan, Australia, New Zealand, South Korea, Hong Kong, Singapore, the OPEC countries, and numerous other developing countries. The higher rates of savings in other countries are evidently a factor in the flow in investment to this country.

In the OPEC nations, oil wealth has simply accumulated more rapidly than the local economies could absorb. As the U.S. has had lower savings rates than almost every other developed country, it is understandable that, all other things being equal, much of the OPEC capital flow to developed countries would be to the U.S. Flows of savings from other industrial countries to the U.S. might be accounted for in part by a relative scarcity of land in those countries and by insufficient demand for office buildings, shopping centers, and other fixed assets used by the service sector.

TABLE 3
Savings as a Percentage of Disposable Income in Selected Countries

Country	Year								
	1970	1971	1972	1973	1974	1975	1976	1977	1978
United States	8	8	8	10	7	4	5	6	7
Austria	21	21	21	21	20	16	16	14	16
Belgium	19	17	17	17	17	14	14	13	12
Canada	11	11	12	15	16	12	12	11	10
France	18	18	18	18	16	14	12	13	14
Netherlands	20	20	20	22	21	15	16	15	14
South Africa	13	14	16	19	18	16	13	16	17
South Korea	14	11	11	18	14	13	18	19	22
Sweden	16	15	15	15	14	13	10	5	6
United Kingdom	14	11	10	10	6	5	7	9	8

Sources: Reprinted with permission from *Yearbook of National Accounts Statistics 1979*, Volume II, Table 12, (New York: United Nations, 1980), 553-576. Copyright © 1980 by the United Nations.

In non-OPEC, developing countries, on the other hand, the higher savings could probably be absorbed readily in the home market; the only explanation for flows to the U.S. lies in Hymer's observation about differences in risk preferences.¹⁶ Obviously, there are investors in the developing countries who wish to invest in a less risky environment.

It appears likely that differentials in savings rates will account for much of the investment flow into U.S. real estate in the remainder of the '80s. As Table 3 suggests, such differentials change over time. Any reasonable forecast would require a country-by-country analysis. Note the precipitous decline in the differentials with Sweden in 1977 and 1978, and the strong increase in the differential with South Korea during the late '70s. Note also that the figures for France might be severely altered in the '80s as a result of the accession to power of a socialist government.

The figures for the Netherlands suggest that caution should be exercised in using savings rates as indicators of investment flows from specific countries. Although differences in the rates in the U.S. and in the Netherlands explain the possibility of investment flows into U.S. realty, they do not explain the dramatic surge in Dutch funds toward the end of the decade.

The prospects for investment flowing from OPEC nations to the U.S. during the remainder of the '80s will depend largely upon the price of crude oil. As of spring 1982, spot prices were moving downward, and it seems unlikely that prices during the rest of the decade will rise at anything like the rate of increase displayed in the late '70s. In fact, prices in constant dollars may actually continue to fall for the next several years in the absence of any significant

disruption of supplies in the region of the Arabian/Persian Gulf. Even if investment flows resulting from oil-generated savings should drop, however, retained earnings on existing OPEC investments could be reinvested in U.S. real estate.

As many of the developing, non-OPEC countries in east Asia and Latin America continue to approach the state of development of countries having "developed" market economies, they should be watched as probable sources of additional real estate capital for the U.S. in the '80s. Several countries such as South Korea and the Philippines have savings rates considerably in excess of U.S. rates.

Differences in demand are another variable in portfolio theory. Although the U.S. is no longer at the top of the world in per capita disposable income, it still has by far the largest total disposable income. Short of a major depression, the total demand for real estate is likely to continue at a high level during the '80s. The large land area of the U.S. makes it possible to satisfy demand more easily here than in, say, Japan or the Netherlands. Furthermore, the diversity of the population, economy, and climate in the U.S. are attractive to foreign investors seeking to tap particular market segments or to diversify their holdings.¹⁷

The existence of large-scale, internal migration, for example to the Sunbelt, has increased total demand for real estate during the '70s more rapidly than would have been the case without the internal migration. A decline in this migration is conceivable during the remainder of the '80s. In other respects, however, the U.S. should continue to be a favored market for foreign investors. A Belgian investor, for example, will continue to have far greater opportunity for investment in the U.S. than will be the case either in Belgium or in some third country.

The worldwide demand for food, pulp, and fibers will most certainly increase during the '80s.¹⁸ Hearsay evidence from foreign intermediaries indicates that the awareness of the scarcity of good agricultural land in the world generally, and its relative plentifulness in the U.S., have helped to spur foreign investment in U.S. cropland and timberland. (The growing importance of the U.S. position in world agricultural markets may also have influenced nonagricultural investors to think bullishly about the future of the U.S. economy.)

The U.S. position in worldwide agricultural markets is likely to continue its increase during the '80s, stimulating further foreign investments. As farm labor is generally scarce in the U.S., and as farmland is becoming scarcer in the world generally, increasing proportions of capital will probably be applied to the land. Thus, the demand for foreign investment should continue to be high.

Portfolio theory, as refined, also emphasizes differences in risk and risk preferences and the existence of barriers to international investment. Judging from the comments of intermediaries quoted in trade publications and in the proceedings of conferences, political risk is one of the most

important influences on foreign investment in the U.S. Threats of civil strife, invasion and socialism, high rates of inflation, and confiscatory taxation have all been cited as reasons for capital to leave a source country.¹⁹

By contrast, the U.S. has generally been cited as a stable haven for the investment of capital.²⁰ The need to preserve capital supposedly has been such an overriding consideration for investors from some developing countries that they have invested in the U.S., at least initially, with much more concern for a quick transfer of their capital into a safe asset here than with the rate of return that they might earn on it. There may be other countries as safe from political risk as the U.S., but none approach the U.S. in size of market or in the diversity of investment opportunities.

The U.S. will undoubtedly continue during the '80s to be a haven for risk-averse investors from other countries. Because such investors are generally supposed to view real estate in their home countries as safer than most other asset holdings (except gold for example), they tend to invest in real estate in the U.S. Furthermore, real estate investments often provide the element of control that cannot easily be obtained in other forms of investment, except by large corporations.

Short of U.S. involvement in a third world war or of a major economic depression leading to a political upheaval, the U.S. should continue to provide a safe haven for foreign capital in the '80s. The intensity and location of political risks elsewhere in the world will most likely vary during the decade, but there is little sign of the achievement of anything like a stage of total world stability anytime soon. Even without differences in savings rates and exchange rates, inflows are likely to continue from countries considered to be risky politically. The sizes of the inflows thus generated will, of course, depend upon other variables.

Finally, portfolio theory includes the factor of barriers to investment flows. For investment in real estate, the barriers can include exchange rates, restrictions by the source country on capital outflows, restrictions on the host country on direct investment generally, and restrictions by the host country on land ownership. The U.S. government itself has no significant restrictions either upon direct investment generally or upon foreign ownership of land. Approximately 25 states do have restrictions on alien ownership. For a time in the late '70s such restrictions appeared to be on the increase, but since 1978, at least, interest in greater restrictions seems to have waned.

Ricks and Racster have compared the restrictions of the 50 U.S. states with the restrictions of 49 foreign countries.²¹ They found that 25 U.S. states had no restrictions as compared with only 11 foreign countries having no restrictions. Conversely, they found that only 9 states had general prohibitions or major restrictions as compared to 15 foreign countries. So far, state restrictions have not been a serious barrier to foreign investment in U.S. realty. Should

the restrictions become more severe during the '80s, however, an impact on inflows might be noticeable.

Numerous countries such as France, Italy and South Africa have imposed restrictions on the outflow of capital. The effectiveness of such restrictions has not been complete. It is known, for example, that Italian and South African capital has been invested in U.S. realty via intermediate countries. As the amount escaping controls cannot be quantified, it is not possible to predict the results of more effective enforcement. At the moment, there are no signs of either additional controls on outflows or of more effective enforcement of existing restrictions.

Exchange rates represent another potential barrier, although their past effects are not clear. For several years in the late '70s, the rates were quite favorable to inflows from several important countries. In the cases of the Netherlands and West Germany, the U.S. dollar lost value with respect to the currencies of those two countries from 1976 through 1979, and this change in the exchange rates may have encouraged an increase in the investment flow.

In 1980, however, the dollar advanced against both the German DM and the Dutch Guilder; investment from West Germany continued to increase, and the direct investment from the Netherlands more than doubled. To some extent, the increases may be a result of more complete reporting. It is also likely that much of the investment reported as originating in the Netherlands has actually been funneled through the Netherlands from other sources, either to avoid taxes or to avoid disclosure.

The value of the Canadian dollar fell relative to the U.S. dollar from 1976 through 1982, but except for a drop in 1977, Canadian investment in U.S. realty increased spectacularly during the period. This may have been attributable in part to the unrest in Quebec and a resulting flight of capital from the political risk being generated.

No attempt will be made here to forecast future exchange rates between the U.S. dollar and other currencies, but certainly such fluctuations will make it easier or more difficult for money to flow in from particular countries.

Summary

Foreign investment in U.S. real estate has been growing in importance. It is unfortunate that there are insufficient data to permit an adequate assessment of its importance, especially with respect to the relative importance of the various sources of foreign capital. Nevertheless, enough is known to warrant further study of foreign investment as a significant source of funds for real estate in the U.S. in the '80s.

NOTES

1. 22 U.S.C. 3102.
2. William K. Chung and Gregory G. Fouch, "Foreign Direct Investment in the United States in 1980," *Survey of Current Business* (August 1981), 40-50.
3. Ragnar Nurkse, "Causes and Effects of Capital Movements" (1933), Gottfried Haberler and Robert M. Stern, eds., *Equilibrium and*

Growth in the World Economy: Economics Essays by Ragnar Nurkse (Cambridge: Harvard University Press, 1961).

4. Bertil Ohlin, "Some Aspects of the Relations between International Movements of Commodities, Factors of Production, and Technology," Bertil Ohlin et al., eds., *The International Allocation of Economic Activity*, proceedings of a Nobel Symposium held at Stockholm (London: The MacMillan Press, Ltd., 1977), 25-56.

5. Hans O. Lundstrom, *Capital Movements and Economic Integration* (Leyden, Netherlands: A. W. Sythoff, 1961), 37.

6. Stephen H. Hymer, *The International Operations of National Firms: A Study of Direct Foreign Investment* (Cambridge: The MIT Press, 1976). A doctoral thesis originally written in 1960 at the Massachusetts Institute of Technology.

7. *Ibid.*

8. Lundstrom, *op. cit.*

9. Charles P. Kindleberger, *American Business Abroad: Six Lectures on Direct Investment* (New Haven: Yale University Press, 1969). Bertil Ohlin, *Interregional and International Trade*, rev. ed. (Cambridge: Harvard University Press, 1967).

10. Raymond L. Vernon, "International Investment and International Trade in the Product Cycle," *The Quarterly Journal of Economics* (May 1966), 190-207.

11. Frederick T. Knickerbocker, *Oligopolistic Reaction and Multinational Enterprise* (Boston: Graduate School of Business Administration, Division of Research, Harvard University, 1973).

12. Yair Aharoni, *The Foreign Investment Decision Process* (Boston: Graduate School of Business Administration, Harvard University, 1966).

13. Personal interviews with foreign intermediaries.

14. *Ibid.*

15. *World Tables* 2d ed. (Baltimore: Johns Hopkins University Press). Published for the World Bank from the data files of the World Bank, 1980, Table II.

16. Hymer, *op. cit.*

17. Dudley S. Hinds and Nicholas Ordway, *International Real Estate Investment* (Chicago: Real Estate Education Company, 1983), 9-11.

18. *Ibid.*, 253.

19. Stephen K. Weber, "How, Why and Where Foreigners Invest," *Foreign Investment in Sunbelt Agricultural Land* (Atlanta: Georgia World Congress Institute, Conference Series No. 1, 1979), 14-26.

20. Charles S. Ackerman, "Why Foreigners Invest in Southern Real Estate," *Foreign Investment in Southern Real Estate: Methods and Trends* (Atlanta: Georgia World Congress Institute, 1980), 22-31.

21. David A. Ricks and Ronald L. Racster, *International Investment in Real Estate: A Comparative Analysis of Restrictive Policies* (Columbus: Center for Real Estate Education and Research, College of Administrative Science, The Ohio State University, 1979).

BIBLIOGRAPHY

1. Fry, Earl H., *Financial Invasion of the U.S.A.*, New York: McGraw-Hill Book Company, Inc., 1980.
2. Haydel, Belmont, F., Jr., "A Synopsis of Some Theories on Foreign Direct Investment Decisions," unpublished paper, Graduate School of Business Administration, New York University, 1978.
3. *International Economic Indicators: A Quarterly Report*, U.S. Department of Commerce, International Trade Administration.
4. *International Financial Statistical Yearbook 1981*, Washington: International Monetary Fund, 1981.
5. Kahn, Herman et al., *The Next 200 Years*, New York: William Morrow and Company, Inc., 1976.
6. Kindleberger, Charles P., *Economic Development*, New York: McGraw-Hill Book Company, Inc., 1958.
7. Kindleberger, Charles P. and Lindert, Peter H., *International Economics*, Homewood, Illinois: Richard D. Irwin, Inc., 1978.
8. Lamfalussy, A., *Investment and Growth in Mature Economies*, London: MacMillan & Company, Ltd., 1961.
9. Ricks, David A. and Racster, Ronald L., "Foreign Ownership of U.S. Real Estate," *Real Estate Review* (Spring 1980), 111-115.
10. Rostow, W.W., *The World Economy: History & Prospect*, Austin: University of Texas Press, 1978.

CHOOSING REAL ESTATE MICROCOMPUTER SOFTWARE

by John Oharenko and Ruth Spiegel

Only 20 years ago, computers consisted of large rooms filled with vacuum tubes, wires, switches, gauges and other devices frequently costing millions of dollars. Today's computers are much more compact, resembling typewriters and desk cabinets, and costing anywhere from \$200 to several million dollars depending on operating capabilities, speed, sophistication, storage capacity and other variables.

In recent years a new class of business computers has emerged — the microcomputer or personal computer. These computers are becoming extremely popular among small business users because they are economical and can be used to perform wordprocessing, accounting, financial planning and budgeting, and other functions traditionally available only from the mainframe and miniframe computers which only large companies could afford.

A typical microcomputer business system consists of a desktop computer, a monitor which is equivalent to a TV set, a correspondence or draft quality printer, a 5¼ inch or 8 inch magnetic floppy disk drive set, and additional peripheral equipment. Some systems are small enough to fit in a suitcase.

While they can be used by almost all small businesses, microcomputers are especially useful for real estate financial analysis because their ownership/leasing and operating costs are greatly outweighed by performance capabilities. For example, a popular microcomputer system with all the hardware equipment necessary for real estate financial analysis has a retail cost in the range of

\$3,000 to \$12,000, depending on brand name, operating system, memory capacity, printer(s), monitor type, as well as a selection of other options. Software costs generally range from \$200 to \$5,000 per program. Electricity rates, service contracts, consulting fees and employee training are the only significant operating costs.

Total costs are minimal in comparison to the cost of making a financial calculation error on an important real estate deal which could result in loss of client confidence and goodwill. Thus, the importance of a microcomputer's role as an analysis tool is obvious.

A variety of real estate financial analysis applications are performed by the microcomputer. The most common applications include: cash flow analysis, mortgage calculations and tax planning. In general, three categories of software are available for these applications: 1) prepackaged real estate software programs; 2) custom designed real estate software programs; and 3) computer time-sharing services that offer real estate programs on a cost-per-unit basis such as computing time and minimum periodic user fees.

Prepackaged Real Estate Software

Prepackaged microcomputer real estate software includes a vast selection of programs that are typically designed and sponsored by real estate professionals including brokers, mortgage bankers, syndicators, academicians, accountants and lawyers. The commercially available software programs cover a wide variety of applications ranging from simple loan amortization schedules to sophisticated rent roll computations and multiple regression analysis for long-term financial planning.

Prepackaged real estate software programs usually cost from \$100 to \$3,000 per package. In comparison to custom designed software, these "canned" programs offer a structured format. As a result, the user simply follows the program instructions by entering the data according

John Oharenko is a registered investment advisor and licensed broker/salesman with the Real Estate Finance Group of Baird & Warner, Inc., a diversified real estate company based in Chicago. He has been largely responsible for introducing microcomputers to the company.

Ruth Spiegel is a real estate consultant and appraiser for R. Robinson & Associates, Inc., in Austin, Texas.

to a prescribed format. For example, an amortization table computation program would prompt the user to input each variable, then the table would be computed automatically.

In essence, the user is relying on the program for real estate financial analysis. In most cases, no programming experience is required since the authors have designed each program for a specialized use. The user, however, may not deviate from the program format and must become familiar with the operating instructions of each program in order to gain the maximum benefits offered from each program.



Relying on commercially available software programs has drawbacks as well as advantages. First of all, the user must understand basic real estate financing principles in order to judge the usefulness of various software packages. Otherwise, a qualified consultant needs to be hired for this task. Secondly, a large number of software programs are inadequate for many analysis purposes and/or are frequently poorly documented. As a rule the software program reflects the skills and talents of the people who developed it. In most cases software and its authors should be reviewed before purchase. Third, much of the lower priced, mass-market software lacks adequate customer support. Consequently, if any questions arise concerning software operation, the only source of information will usually be the operating manual. Fourthly, many real estate software programs lack flexibility, so the user is often limited to the financial structuring methods offered by the software vendors. In summary, as with any mass-marketed product, there is a wide variety of quality and price ranges in real estate financial software.

Custom Designed Software

In those cases where "canned" software can't meet the user's needs, the most suitable software may have to be

specially designed. Just like a tailored suit fits its wearer, specially designed software matches the exact needs of its user. As expected, this type of software is the most expensive and strong reliance is placed upon the programming team and the expertise of the real estate investment analyst or consultant. Often, development of a sophisticated program may consume weeks, months, and even years.

Furthermore, the development costs for such software are very high in relationship to the cost of the computer equipment itself. Unless these software costs can be spread out over high volume usage, custom designed software may be impractical and uneconomical. However, a popular and affordable alternative to this type of software is the electronic spreadsheet program.

Electronic spreadsheet programs (ESPs) are designed in the form of an accountant's worksheet. These electronic spreadsheets are composed of a matrix of "boxes," pegged into rows and columns and each having a unique coordinate. Furthermore, each box contains either an empty space, a numerical value, a formula, or nonnumeric characters such as title headings or symbols.

If a box contains a formula, this formula may refer to another value or formula that is located in a different box. Therefore, these boxes are interrelated when calculations are performed. If the spreadsheet format is saved, these calculations can be repeated as often as necessary. Consequently, almost no programming experience is required to create a spreadsheet; the only major requirement is a logical arrangement of formulas with corresponding data.

ESPs offer a wide selection of features. They are capable of performing simple as well as complex functions, ranging from summing and averaging values to analyzing discounted cash flows. In addition to these preprogrammed functions, spreadsheet programs can be tailored to perform specific mathematical and financial formulas in sequential order. Therefore, data and formulas can be easily modified for sensitivity analysis whereby one or more variables can be changed to answer "what if" questions regarding various assumptions and structural combinations.

Using popular financial analysis techniques, ESPs are adaptable for real estate investment analysis. The Payback Period, Net Present Value (NPV), and Internal Rate of Return (IRR) are the most frequently employed techniques for project profitability measurement. The Payback Period method consists of forecasting the future cash flows, calculating the cumulative annual cash flows, and matching the capital outlays against the year in which the cash flow equals or exceeds those outlays.

Using a more sophisticated technique that accounts for the time value of money, that is, Net Present Value, ESP software calculates the discounted cash flow value for each year's cash flows throughout the holding period, totals all these cash flows, and subtracts them from the initial cash outlay. If the cumulative present value cash flows exceed

the initial cost outlay, the project is further considered. Internal Rate of Return analysis is similar; however, the focal point of computation is the discount rate that equates the present value of the projected cash flows to the cash outlays (same as $NPV = 0$).

Most ESP software packages include preprogrammed NPV and IRR functions, resulting in simplified calculations. Other less frequently used cash flow analysis techniques such as Modified Internal Rate of Return and Financial Manager's Rate of Return can also be computed with ESP software.

Spreadsheet programs are often used for mortgage analysis. They compute amortization tables and yields for currently popular debt instruments such as variable rate, shared appreciation and wraparound mortgages. Changing variables such as the principal, interest rate, term or payment allows for virtually instant comparison of various mortgage instruments.

In addition to real estate financial analysis, ESPs are helpful for estate and tax planning which typically consists of real property as the major class of assets. Such planning differs for individuals, corporations, estates, and partnerships. Tax formulas and tables that apply to various ownership structures are suitable for spreadsheet program sensitivity analysis that can measure the variety of tax plan scenarios in the entire portfolio.

Although ESP software has a wide variety of real estate financial applications, it has some limitations. First, each spreadsheet must be individually designed, although commercially available real estate template overlay spreadsheets can be purchased. Secondly, depending on the computer model and internal memory capacity, a spreadsheet can easily absorb all of the available memory, limiting the usefulness for complex and lengthy calculations. Third, spreadsheet programs are impractical for real estate applications that use many conditional statements (GOTO, δ , $=$, $'$), such as rent roll calculations or other software where various options can be selected.

Timesharing Services

Timesharing services sell mainframe computer capabilities via telephone line transmission on a cost-per-unit basis to microcomputer users at a fraction of the cost of owning and operating a mainframe computer.

As opposed to prepackaged or custom designed software, these services typically offer the following benefits: 1) virtually unlimited off-line storage, not stored in the microcomputer; 2) accessibility to large data banks such as U.S. Census data; 3) customer training and support; 4) a complete library of software programs; 5) lower operating costs for efficient and infrequent users; and 6) convenience (hook-up to any telephone).

Subscribers usually don't have to worry about updating programs because these services regularly maintain and update the software library. Furthermore, a minimum of computer hardware is needed since the microcomputer simply acts like a "dummy" terminal — merely

transmitting, receiving, and printing results calculated by the timesharing computer. Microcomputer hardware obsolescence, however, is eliminated as long as the computer can efficiently communicate with the timesharing service network.

Timesharing services do have significant disadvantages. Subscribers who frequently use timesharing services during peak hours, usually regular business hours, must pay substantial fees. For example, a discounted cash flow analysis (IRR) computation could cost as much as \$20 to \$100 per run during a peak period. Many of the prepackaged and ESP software programs perform the same computation at a fraction of the cost. Thus, subscribers who plan the frequent use of repetitive computations such as mortgage amortization tables or discounted cash flow analysis would probably find it more economical to purchase prepackaged or ESP software programs.

Selecting A Software Package

Each software category offers advantages and disadvantages and software requirements depend on the specific needs of each user. Frequently, software packages have overlapping categories because they can be classified as prepackaged software, yet can be customized and/or may be available on a timesharing network.

Based upon the aforementioned categories, these tables

Prepackaged Real Estate Software	
Program Name/Vendor	Features
REAL ESTATE FINANCE PAC Palmer Berge Co. Computer Division 1200 Westlake Ave. N. Seattle, WA 98109	Real estate financial analysis including wraparound loans, graduated payment mortgages, and loan buydown analysis.
REAL ESTATE INVESTMENT PAC Palmer Berge Co. Computer Division 1200 Westlake Ave. N. Seattle, WA 98109	Real estate investment analysis including income and expense, cash flow, exchange recapture, and lease versus own analysis.
REALVAL Real Estate Evaluation Consultants P.O. Box 811 Bloomington, IN 47402	Real estate investment analysis including rental breakeven, sensitivity, tax, financial, and key ratio analysis.
RENT ROLLER Illinois Logic Co. 2500 West Iowa St. Chicago, IL 60622	Calculates projected lease schedules including income and expense stops, percent of sales and CPI escalators, and tenant lease summaries. Interchangeable with Visicalc Files using DIF format.
WORLDWIDE INVESTMENT SYSTEM Worldwide Institute of Valuation 366 Grand Ave. Oakland, CA 94610	Real estate cash flow analysis including sensitivity, ratio, and resale analysis.

list representative microcomputer software programs, the uses of each program, and its vendor.

Electronic Spreadsheet Programs (Custom Design)	
Program Name/Vendor	Features
SUPERCALC Sorcim Co. 405 Aldo Ave. Santa Clara, CA 95050	C/PM-based operating system software that is used for cash flow, mortgages, resale, and similar analyses.
T/MAKER Lifeboat Associates 1651 Third Ave. New York, NY 10026	Similar to above.
VISICALC Visicorp 592 Weddell Dr. Sunnyvale, CA 94086	Non-C/PM-based software that performs similar analysis as above mentioned programs.
REAL ESTATE ANALYST (Visicalc Templates) Colony Realty Co. 4243 Northlake Blvd. Palm Beach Gardens, FL 33410	Amortization schedules, depreciation, and investment analyses.
REAL ESTATE MODELS FOR THE EIGHTIES (Visicalc Templates) Commercial Software Systems, Inc. 7689 West Frost Dr. Littleton, CO 80123	Similar to above.

Conclusions

Microcomputers are becoming popular real estate investment analysis tools. Low cost, software availability, computing power, and portability are major reasons for their acceptance by the real estate finance community. However, they have limitations such as insufficient memory storage capacity and early obsolescence, and are unfamiliar to many real estate professionals.

Discounted cash flow analysis, mortgage amortization calculations, rent roll computations, and other forms of investment planning are the most frequent applications for microcomputer real estate financial analysis. Financial modeling using other flexible methods is also available, depending on software and hardware configuration.

Three types of software categories are used for real estate financial analysis: prepackaged, custom designed and timesharing service programs. Each software category has advantages and limitations. The selection of software depends on financial analysis needs, which vary within the real estate profession. Typically, the optimal software system includes a balanced combination of each type of program. Nevertheless, software and hardware should be matched with user's requirements and budget.

The talents, creativity and resourcefulness of the user are the most important variables for the successful use of a microcomputer. Computers are mindless instruments

Timesharing Services	
Program Name/Vendor	Features
ACCUFLOW Tymshare Inc. 20705 Valley Green Dr. Cupertino, CA 95014	Cash flow and sensitivity analysis including depreciation schedules, ITCs, tax shelter computations, and discounted cash flow analysis.
CYBERNET-IFPS Cybernet Services Control Data Corp. HQW051, P.O. Box 0 Minneapolis, MN 55440	Financial planning and modeling including cash flow, lease versus buy, sensitivity and sales forecasting analysis.
EDUCARE NETWORK General Electric Info. Systems Co. 401 N. Washington St. Rockville, MD 20850	Cash flow, sensitivity, depreciation, mortgage and appraisal analysis.
EMPIRE Computer Sharing Serv. 3 Illinois Center 303 East Wacker Dr. Chicago, IL 60601	Corporate financial modeling program adaptable for real estate investment analysis featuring risk, target value and sensitivity analysis.
PROJECT CALL/370 Control Data Business 500 Putnam Ave. Greenwich, CT 06830	Real estate financial modeling including forecasting, data base management, statistical analysis, and tenant lease calculations.
LAS National CSS, Inc. 300 Westport Ave. Norwalk, CT 06851	Lease analysis system interactive program for simple and complex cash flows and leases.

which perform routine calculations, thereby providing more time for the analyst to make important real estate financing judgements. Computers are not a substitute for thinking, but are able to help with ultimate decisions.

Note:

Several real estate, electronic spreadsheet, and timesharing vendors exist and no attempt has been made to include every manufacturer.

Errors and omissions may appear in software presentation tables. Furthermore, many of the aforementioned vendors sell or manufacture several various types of real estate software packages. For further details, contact respective vendors.

ACCUFLOW is a trademark of Tymshare Corp., Cupertino, CA.
CYBERNET is a registered trademark of Control Data Corp., Minneapolis, MN.
ILLINOIS LOGIC is a trademark for microcomputer sales and consulting services of Illinois Logic Co., Chicago, IL.
REALVAL is a trademark of Real Estate Valuation Consultants, Bloomington, IN.
SUPERCALC is a trademark of Sorcim Co., Santa Clara, CA.
T/MAKER is a trademark of Lifeboat Associates, New York, NY.
VISICALC is a registered trademark of Visicorp, Inc., San Jose, CA.
VISICORP is a trademark of software products made by Visicorp, Inc., San Jose, CA.

GRADUATE LEVEL NEEDS AND OPPORTUNITIES IN REAL ESTATE

by Norman G. Miller and Gregory P. Gardner

The increasing importance of productive asset management has caused an industry need for more highly educated real estate professionals. Most businesses today realize that prudent real estate management is especially important in an era of high interest rates and high inflation. This heightened prominence of the need for productive asset management is also due to the rising proportion of real estate assets on the corporate balance sheet and the many technical aspects involved in its control. Meeting these industry demands requires higher level real estate education.

University programs that were once up-to-date and in line with the needs of the industry often fail to adapt to the changing times. For example, the high cost of money and the multitude of financing alternatives have caused a need for emphasis on economic, financial and legal areas and a more careful analysis before entering into a major real estate transaction.

Also, there is recent concern, especially from appraisers, that a growing proportion of feasibility studies and other related work is being completed by those who are not real estate professionals, such as accounting firms and market researchers. It is our belief that more advanced education is required in order for the real estate practitioners to recapture these lost opportunities.

The goals of this report are to present a better understanding of graduate education which will meet the current needs of the industry, and to examine the opportunities

for and returns on the attainment of a master's degree in real estate.

Collection Of Data

In order to accomplish these goals, data was collected on some of the graduate level real estate programs currently being offered at major colleges and universities throughout the country. These course offerings were compared to the degree of importance that a multi-disciplinary sampling of real estate practitioners placed on many real estate areas. A recommendation of topical areas that should be considered in an evolving graduate real estate program based on industry emphasis is made, and the usefulness and opportunities gained from a concentrated, one-year master's program in real estate are examined.

Information was requested from 15 graduate schools in the 1980-81 *Guide to Graduate Management Education*, which were listed as offering both an MBA degree and an MS degree in real estate. Positive responses were received from 13 institutions. The Table shows a listing and frequency of the graduate level real estate course offerings at these schools.

The "core" courses — those that are most frequently offered — included advanced level real estate appraisal, investment, use and development, finance and law. Some of the other peripheral course selections included rehabilitation of residential real estate, and architecture and design factors in real estate at Golden Gate University, land resource regulations on enterprise management and real estate administration at the University of Wisconsin, and property management I and II at The American University. The preceding three universities appeared to offer the most comprehensive graduate real estate programs of the 13 schools observed.

In order to determine the needs and opportunities in the real estate industry, a two-page questionnaire was sent to 172 firms during the summer of 1981. These companies included a sampling of appraisers, property managers,

Norman G. Miller, PhD, is associate professor and director of the real estate program at the University of Cincinnati. He has authored numerous publications on the various aspects of real estate finance, economics and investments. He received his doctorate degree from The Ohio State University.

Gregory P. Gardner is currently working as a review appraiser for the Department of Transportation for the State of Florida. He received his MBA in 1981 from the University of Cincinnati.

mortgage lenders and market researchers and developers in five major U.S. cities. Also included within the sample were 63 corporate real estate executives in private industry throughout the country.

The response from the survey was most favorable: 53 firms or over 30 percent of the sample replied. This rather high level of feedback for this type of survey could indicate a large degree of interest in advanced real estate education. However, it is recognized that the results of this survey might be favorably biased due to the possibility that only pro-education respondents would bother to return the questionnaire. But the relatively high level of respondents and the observation of both positive and negative replies and comments tend to diminish this possible bias.

The response rate was higher than average from appraisers and corporate real estate executives, possibly indicating more concern or recognition of the need for graduate level education in those fields.

In addition to the high response rate, more than a few respondents sent letters of encouragement and advice. There were even requests for referrals of future graduates. Furthermore, above and beyond the survey, 17 positive letters of support and recommendations were received from various real estate practitioners and instructors throughout the country. They all expressed a need for better educated real estate people. A small sampling of excerpts from these letters follows:

"Having successfully completed an MBA program 10 years ago at Arizona State University, and recognizing the tremendous changes that have taken place in the industry during the past decade, I strongly endorse the concept of a master's degree in real estate analysis."¹

"A concentrated year-long program at the graduate level in real estate would be of definite value to the industry. Many real estate development firms actively seek and recruit qualified graduates with strong real estate backgrounds."²

"My concentration was real estate finance. Upon graduation, with no related work experience, my master's degree opened the door for numerous job interviews and subsequent job offers. Financial institutions as well as developers, appraisal firms, consultants, etc., search for individuals with these talents and pay them accordingly."³

"The increasing complexity of many of today's real estate investment decisions demands that the appraiser/analyst/underwriter/developer/manager be a skilled generalist aware of the interactions of the many functional areas of real estate analysis. A graduate-level program designed to develop real estate generalists capable of understanding multi-faceted proposals would go a long way towards 'professionalizing' a very segmented industry."⁴

"It is my opinion that an intense real estate program is needed to provide both a place for students interested

TABLE
Compilation of Graduate Real Estate Course Offerings*

Courses	Frequency of course offering by 13 respondents
Real Estate Appraisal	84.6%
Real Estate Investment	84.6%
Real Estate Use and Development	69.2%
Real Estate Finance	61.5%
Real Estate Law	53.8%
Land Development	46.2%
Housing Development	38.5%
Developing Commercial Properties (Feasibility Analysis)	30.8%
Current Problems (Financing, Zoning, Government Regulations)	30.8%
Property Management	23.1%
Current Urban Land Issues	23.1%
Real Estate Income Valuation and Investment	23.1%
Regional Economic Development	15.4%
Real Estate Concepts and Analysis	15.4%
Real Estate Taxation	15.4%
Real Estate Development of Commercial and Industrial Structures	7.7%
Rehabilitation of Residential Real Estate	7.7%
Architecture and Design Factors in Real Estate	7.7%
Intermediate Business Statistics	7.7%
Real Estate Administration (Procurement, Management, Disposal)	7.7%
Valuation Analysis and Report Writing	7.7%

*The 13 institutions that responded are: The American University, Arizona State University, Florida International University, Golden Gate University, Ohio State University, San Diego State University, Virginia Commonwealth University, University of Alabama, University of Arkansas-Fayetteville, University of Oregon, University of South Carolina, University of Tennessee and University of Wisconsin-Madison.

in real estate and to provide our industry with a source of quality personnel. Industry support is evidenced by the various scholarships and foundations currently available in AIREA and SREA."⁵

"There is no question in my mind that there is a tremendous need for a higher level of education in real estate analysis. From my perspective and that of my firm, one of the biggest problems we have is finding qualified people throughout the country capable of truly analyzing real estate ventures and markets. I feel very strongly that the time is right to expand the educational programs on a graduate level especially in the fields of real estate economics, finance and computer processing."⁶

Questionnaire Results

A topic survey questionnaire was developed using a four point scale. The respondents were asked to check the appropriate degree of expertise required in each subject area. In order not to influence individual responses, firm identification was optional, although over 70 percent of the respondents chose to reveal their identity. For analysis purposes, the questionnaire was coded according to professional category.

The responses were analyzed separately according to six professional occupations and on a total overall basis. Responses from the mortgage lenders and market researchers will not be individually presented due to the small number of respondents from these groups. Their input will be included in the total results. An analysis of the survey results and some interesting differences and similarities of the respondents follows.

Seventy percent of the respondents indicated that there is an industry demand for people with a graduate level education in real estate. Only 6 percent answered "no" and 24 percent said "maybe." It is believed that many of those who said "maybe" were exercising caution due to the unknown quality of the program. An exception to this generally positive response was noted by some real estate developers.

Fifty-four percent said "yes" to the question: In your opinion, would it be better for an individual to go through a concentrated one year real estate program rather than gain practical work experience during that year? Twenty-four percent said "no" and 22 percent, "maybe." These responses indicate that a high value is placed on related work experience and even greater weight is given to advanced education. Among the professionals responding, corporate real estate executives and appraisers were most positive and developers were the most negative.

In a question concerning tax knowledge, the real estate developers placed greater emphasis on this subject than did other professions. Relatively little importance was given to estate tax knowledge by both property managers and corporate executives. In fact, of all the subject areas this one received the highest response in the "not necessary" category. The consensus of the total sample indicates that a general income tax knowledge is helpful or essential.

The majority of all the respondents places legal knowledge in the helpful to essential range. Every profession strongly emphasized the legalities of leases. Eighty-eight percent of the corporate real estate executives regarded this area as essential.

The total number of respondents gave the question involving construction-engineering plan reading a high rating in the helpful and essential categories. The appraisal profession placed greatest stress on this area. Write-in responses included plan reading ability for plot, site, lease and architectural plans.

All the respondents, and especially the developers, placed slightly greater emphasis on economic base analysis in the area of general marketing research.

The question involving site and location analysis was rated essential by 71.4 percent of the respondents. This strong positive emphasis was especially noted in the appraisal and corporate executive groups.

Feasibility analysis was given strong overall support, with 58.8 percent classifying it as essential and 47.1 percent

classifying it as helpful. This subject area is particularly important to corporate real estate personnel.

The topic of surveying was not allocated much overall weight. The majority of the respondents felt that knowledge in this area was helpful to somewhat helpful, while a sizeable 20.8 percent responded that surveying knowledge was not necessary.

The areas of construction techniques and building material knowledge received most ratings in the helpful category. Appraisers and corporate real estate personnel especially emphasized knowledge of construction techniques.

The area of financial analysis received strong overall emphasis, with 68.1 percent of the respondents rating this area as essential. Cash flow and budgeting knowledge was almost unanimously rated as being essential to developers and property managers.

Knowledge of real estate portfolio theory was generally rated as helpful to somewhat helpful. Only one respondent regarded this area as essential.

It was generally felt that knowledge of government regulations is essential to helpful. Only a relatively small percentage of the respondents rated knowledge in this area as being somewhat helpful to not necessary. Overall strong emphasis was placed on familiarity of local government regulations. Knowledge in this subject area is stressed most by appraisers and is emphasized least by property managers.

The areas of accounting and economics were rated equally, with the greatest emphasis placed in the helpful to essential categories. Of the two, familiarity with accounting procedures was rated slightly higher than economics. Appraisers and corporate real estate executives, however, emphasized knowledge of economics.

The area of mortgage lending was rated almost the same between essential and helpful. Knowledge of mortgage types received the most support, especially by developers. They also gave strong support to familiarity of mortgage loan packaging.

The importance that is placed on managerial skills is shown by the high percentage of ratings in the essential to helpful categories, 49 percent and 44.9 percent, respectively. Skills and competency in this area were greatly stressed by corporate real estate personnel and property managers, with "essential" ratings of 73.9 percent and 71.4 percent, respectively.

In general, knowledge of insurance was rated as being helpful. The professions with the most support for knowledge in this area were property managers and corporate executives.

On an overall basis, general statistical knowledge and regression techniques were rated as being helpful to essential. The strongest support for this area came from the appraisers, while the least emphasis was received from corporate real estate executives and property managers.

Of all the subject areas, communication skills received the strongest positive response. The overwhelmingly high rating of essential placed on writing and speaking skills, 85.7 percent and 77.8 percent respectively, indicates that communication skills are extremely important to real estate professionals. Among the professions, appraisers and property managers placed greatest emphasis on writing skills.

The area of investment analysis also received a strong positive response, with 62.8 percent of the respondents rating it as essential. Almost all property managers rated this area as essential.

In the area of general computer operations, only a small percentage of the total number of respondents rated it as essential. The majority classified it between the categories of helpful to somewhat helpful. Nearly 20 percent of the survey respondents rated this area as not necessary. Of all the professions surveyed, developers felt that the area of computer operations was least essential to their occupation. These results are in conflict with the letters received which supported the growing importance of computers in the real estate profession. The computer languages most commonly used are Basic, Cobol, and Fortran.

The respondents indicated that the investment analysis methods utilized most frequently were internal rate of return, net present value and payback. The appraisal methods most frequently checked were income approach, market approach, cost approach, mortgage equity, Ellwood and residual. The appraisers expressed preference for the last three methods, while the other professions relied almost equally on both income and market approaches.

There was a wide range of replies to the question concerning the kinds of practical work experiences which would be most helpful. The responses most frequently cited were finance, sales, commercial-industrial real estate, real estate management, development, appraisal, leasing, brokerage, mortgage lending, marketing and construction. From the broad range of responses and the lack of repetition except in the first few areas, it appears that nearly any work experience in real estate would be helpful in obtaining career employment.

A large variety of responses were given for the question: What areas in the real estate field offer the most opportunities for advanced degree real estate personnel over the next 5 to 10 years? Some of the areas listed were management, corporate development, finance, corporate real estate, investment, appraising, tax planning and sales. Despite these many promising areas of opportunity, it is believed that entry into the more rewarding, interesting and challenging positions can only be attained through prior related work experience or advanced education. Since many people are interested in a real estate career but do not necessarily have the prerequisite experiences, further education may be their only alternative. It is then questioned whether the investment in an advanced education is "worth" the costs?

The expected benefits of graduate education must be compared to the expected costs. The benefits include any increased earnings which result from further education as well as non-quantifiable benefits such as the higher probability of obtaining job satisfaction and the enjoyment of additional education. The cost of additional education includes both the direct cost of the education, and the individual "opportunity" cost⁷ which includes the income foregone during the period required to complete graduate level work.

Summary

The results of this research indicate that there is a demand and need for individuals in the industry who have an advanced real estate education. While the majority of the graduate level real estate programs that were surveyed offer "core" courses in the areas needed, the emphasis in the industry seems to be shifting.

Based on this research, a good, up-to-date graduate program in real estate should: 1) seek to improve and develop the student's communication skills, especially writing skills; 2) continue to emphasize site and location analysis, financial analysis and investment analysis as well as cash flow and budgeting knowledge; 3) stress the financial and legal aspects of leases; 4) emphasize feasibility and economic base analysis; 5) include local government regulations such as zoning and building codes along with mortgage types and alternative financing; and 6) develop a course or seminar on the skills and techniques of negotiation, which could be a course incorporating all the real estate areas and requiring oral persuasive presentations.

This study has shown that each of the real estate professions that responded has emphasized different areas of importance. Therefore, graduate real estate education should be somewhat general and flexible and should include instruction in real estate law, real estate finance, real estate taxes, appraisal, investment, development, statistics, computer and business applications as well as the areas already cited.

The survey results also indicate that for most qualified students the returns of obtaining a master's degree in real estate would justify the investment.

NOTES

1. Jared N. Huish, MAI, SRPA, chief appraiser, The First Interstate Bank of Arizona, N.A.
2. Charles D. Davis, manager, Training and Research Division, The Equitable Life Assurance Society of the United States, New York, New York.
3. Philip D. Morse, appraiser, real estate investment analyst, New York Life Insurance Company, Arlington, Virginia.
4. Michael L. Galonska, assistant vice president, Society For Savers, Hartford, Connecticut.
5. Lee C. Burns, MAI, SRPA, Lee C. Burns & Company, Inc., Houston, Texas.
6. James J. Walsh, MAI, Merrill Lynch Hubbard Inc., New York, New York.
7. Parts of this section are referenced to an unpublished working paper, entitled "The Value of Graduate Education in Real Estate," by Norman G. Miller, C. F. Sirmans, and Wanda L. Riggs, 1980.

Contributor Information for Real Estate Issues

Real Estate Issues is published for the benefit of Counselors and other real estate professionals, planners, architects, developers, economists, politicians, scientists and sociologists. It focuses on approaches, both theoretical and empirical, to timely problems and topics in the broad field of real estate. Manuscripts are invited and should be addressed to:

Jared Shlaes, Editor-in Chief
Real Estate Issues
American Society of Real Estate Counselors
430 N. Michigan Avenue
Chicago, IL 60611

1. All submitted materials, including abstract, text and notes, are to be typed double-spaced with wide margins. No page limit is imposed. Submit three copies of the manuscript, accompanied by a 50-to 100-word abstract and a brief biographical statement.

2. All notes, both citations and explanatory, are to be numbered consecutively in the text and placed at the end of the manuscript.

3. Illustrations are to be considered as figures, numbered consecutively and submitted in a form suitable for reproduction. Type figure legends double-spaced on a separate page.

4. Number all tables consecutively and type double-spaced on separate pages. All tables are to have titles.

5. Every effort will be made to notify the author of the acceptance or rejection of the manuscript at the earliest possible date. Upon publication, copyright is held by the American Society of Real Estate Counselors. The publisher will not refuse any reasonable request by the author for permission to reproduce any of his or her contributions to the journal.

Office Building Rehabilitation: Key Ingredients for Successful Projects

by Webster A. Collins, CRE

NEW RELEASE



Using a case study approach, the Boston-based author and member of the American Society of Real Estate Counselors delves into the various elements necessary in the successful rehabilitation of existing office building structures. Areas covered in detail include: establishing objectives, studying the market, choosing a location and assessing potential buildings, developing a plan, and obtaining cost estimates.

ORDER YOUR COPY TODAY!

American Society of Real Estate Counselors
430 North Michigan Avenue
Chicago, Illinois 60611

NAME _____

FIRM _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Please send me _____ copies of *Office Building Rehabilitation: Key Ingredients for Successful Projects* at \$8.00 each.

☐ My check for \$_____ is enclosed.

☐ VISA

☐ MasterCard



Expiration date _____

The Appraisal Journal

OCTOBER 1982

Message from the President, 1932

Philip W. Kniskern, MAI

Message from the President, 1982

John D. Dorchester, Jr., MAI, CRE

The Growth of Japanese Real Estate Appraisal

Kazuo Ohkochi, CREA

Casualty Loss Valuation

Peter D. Armfield, MAI

Estimating Equity Dividend Rates Using Mortgage Commitment Data

John B. Corgel

The Decision-Tree Payoff: A Graphic Approach to Highest and Best Use

Brian Goodheim, RM

The Valuation of Real Estate under Conditions of Bilateral Monopoly

Joseph D. Albert, H. Stan Banton, and Thomas D. Pearson

Computerized Analysis of a Joint-Venture-Investment Office Building

Kenneth E. Peltzer, MAI

Valuation Decisions in a Turbulent Economy: Challenge to Tradition,

Opportunity for Distinction

Stephen E. Roulac

Is the Cost Approach Obsolete?

Max J. Derbes, Jr., MAI, CRE

Published quarterly:

January, April, July, and October by:

American Institute of Real Estate Appraisers

430 North Michigan Avenue

Chicago, Illinois 60611

Subscription rates (1 year): Members, \$20; Nonmembers, \$25; Foreign, add \$2.

Single copy, \$7.50.

The Real Estate Securities Journal

FALL/1982

History of the Formation of RESSI® As An Institute of the NATIONAL ASSOCIATION OF REALTORS®/

Burton E. Smith, SRS, CRE

Tax Incentives for the Rehabilitation of Real Estate/Frederic L. Cook

Legally Permissible Communications During the Sale of a Public Offering/Lynda L. Cole

Profile of a Successful Syndicator — An Interview With Donald G. Thomas/Cheryl B. Olson

Compensation to General Partners of Real Estate Syndications/Michael Constan and Richard D. Harroch

ACRS Versus Straight-Line Depreciation: A Critical Choice for Investors in Commercial Properties/

Jefferson Patterson

The Use of Forecasts — Evolution/Revolution/William C. Witting, CRE

An Analysis of Guide 5 Track Record Requirements for Real Estate Limited Partnerships/

Beth A. Maloney

Tax Issues — An Update/Richard A. Hanson and Jeffrey C. Rubenstein

The Real Estate Securities Journal/Author, Title Index: 1980-1982

Published Quarterly:

Winter, Spring, Summer, Fall by:

The Real Estate Securities and Syndication Institute

An Affiliate of the NATIONAL ASSOCIATION OF REALTORS®

430 North Michigan Avenue

Chicago, Illinois 60611

Subscription included in RESSI® membership. Additional copies are \$8.00 for RESSI® members, \$20.00 for non-members. (4 issues \$60.00, 8 issues \$100.00 for non-members. Group discount information available upon request.)