REAL ESTATE ISSUES

Volume 9 Number 2 Fall/Winter 1984

The Return of the Grave Dancer

Disinflation and the Housing Market in the 1980s

Real Estate Syndication Investments: Risks and Rewards

Expanding the Products and Services of Financial Institutions: The Case of Third Party Real Estate Brokerages

Diffusing the Information Explosion

The Perils of Real Estate Counseling

Measuring Real Estate Returns

Overseas Investment in Chinese Hotel Joint Ventures

Shopping Center Responsibility for Security Force Maintenance

- Samuel Zell 1
- John C. Weicher 6
- David B. Blenko 15
- Austin J. Jaffe 19 & J. Randall Woolridge
- Robert B. Hulley, CRE 25
- David Forbes Haddow 30
 - John McMahan, CRE 33
 - Mary Alice Hines 45
 - Linda L. Johnson 48 & Robert L. Cherry



Editor's Statement

Samuel Zell, the fast-stepping chairman and CEO of Equity Financial and Management Company, opens this number of REI with a timely announcement of the Grave Dancer's return. Heralded by a concatenation of circumstances not seen since 1973-1975, this arrival coincides with projects of tax reform and deficit reduction that will surely make Reagan's second term an exciting one for the real estate industry. Zell's grave dancing, while "not for the faint of heart," may be the best available solution to the problem of what to do while the new record plays itself out.

From a slightly different perspective, John C. Weicher examines the implications of disinflation for the housing market in the 1980s. As Weicher points out, real house prices, while still high, are continuing to decline while real mortgage rates remain high. If he is right, that news is not all bad.

Background on the risks and rewards associated with real estate syndication - a major factor in today's investment picture-is provided by David B. Blenko, who offers a useful review of recent history in the field and some cautions to the prospective investor. From a different perspective, Austin J. Jaffe and J. Randall Woolridge describe the new competitive environment in housing finance resulting from greater involvement of both depository and nondepository financial institutions. Robert B. Hulley, CRE, offers a new and challenging analytical tool-"dissipative real estate analysis"- for the use of practicing real estate counselors, and David Haddow reminds us of the many perils confronting practitioners in that field. The measurement of real estate returns is examined in the light of current conditions by John McMahan, CRE.

We conclude with two articles that may seem relatively narrow in scope but that raise issues of real interest. In the first, Mary Alice Hines examines the growing overseas investment in Chinese hotel joint ventures; in the second, Linda L. Johnson and Robert Cherry analyze the responsibility of shopping centers for security force maintenance, a subject of growing concern for shopping center owners, managers and counselors.

The next number of REI will feature a special presentation by Dr. James A. Graaskamp, CRE, of the state of the art in real estate market research, along with other choice items. Be sure to stay tuned.

and Ahlans Editor-in-chief



Fall/Winter 1984

The Return of the Grave Dancer Samuel Zell, Page 1

now

The Grave Dancer is an active investor who assumes great risk by acquiring property in distress and anticipates a return of great potential reward if the investment is a success. He is awakening

Disinflation and the Housing Market in the 1980s John C. Weicher, Page 6

Disinflation has been the dominant factor in the housing market during the 1980s, just as inflation was during the 1960s and 1970s. Houses are no longer in demand as a hedge against inflation, and their prices are declining in real terms, although they are still higher than before inflation started. If the process of disinflation continues, the worst part of the adjustment may be over, and in retrospect the problems of the housing market during the early 1980s will be seen as transitional.

Real Estate Syndication Investments: Risks and Rewards David B. Blenko, Page 15

Attracted by the prospect of high after-tax returns, investors annually spend billions of dollars on real estate syndications. These investments have become popular due to the well publicized success of earlier syndications, as well as recent favorable changes in tax and securities laws. Nonetheless, due to increased competition for property acquisitions, syndications today cannot necessarily guarantee superior returns.

Expanding the Products and Services of Financial Institutions: The Case of Third Party Real Estate Brokerages

Austin J. Jaffe and J. Randall Woolridge, Page 19

The deregulated environment of the financial system during the early 1980s has changed the nature of financial institutions. Once regarded as completely independent agency firms, real estate brokerage offices are one of the latest available activities for savings and loan associations in this new environment. This paper examines the controversies over so-called third party brokerages and discusses the economic motivations of depository institutions to expand into this area.

Diffusing the Information Explosion

Robert B. Hulley, Page 25

The closed or lineal approach to solving problems has its limitations. Computerization has permitted appraisers, counselors, lenders and investors to see a greatly diffused picture by using what if logic when analyzing a property. The article introduces a theoretical structure of information as it applies to real estate, and uses the valuation of an income property to illustrate its use.

The Perils of Reat Estate Counseling David Forbes Haddow, Page 30

Real estate counseling is difficult work that becomes further complicated as business volume grows. This article discusses potential problem areas and suggests some remedies.

Measuring Real Estate Returns

John McMahan, CRE, Page 33

This article is a state of the art look at the problem of measuring real estate returns. The analytical model utilizes a sophisticated spread sheet computer program, with step-by-step discussion of how each variable is treated. Sensitivity analysis is used to measure the degree to which change in variables (e.g., construction cost; rental levels; expense; etc.) will impact total return. Returns are calculated in both real and nominal terms, for both the developer and the investor.

Overseas Investment in Chinese Hotel Joint Ventures Mary Alice Hines, Page 45

The People's Republic of China (PRC) needs transient housing for business and tourist purposes. They need hotels managed and equipped to international standards as they continue to expand their domestic and international business and their tourist trade from both abroad and within the country. To accomplish this now requires overseas managerial and construction expertise in the form of joint venture agreements with foreign developers and investors.

Shopping Center Responsibility for Security Force Maintenance Linda L. Johnson and Robert L. Cherry, Jr., Page 48

Prior to 1978, expenses incurred by shopping center owners for security force protection of customers were either minimal or lumped together with other miscellaneous operating expenses. Since 1978, a trend towards increased security force costs for shopping center and mall parking lots has been experienced. Within the last decade, courts in at least ten states have ruled on the question of store liability for customer harm in parking lots. The rulings indicate that customers have a right to be protected from attack by third parties, particularly where potential harm is foreseeable.



Editor-in-Chief JARED SHLAES, CRE

Business Manager JOHN W. STEFFEY, SR., CRE

President RICHARD M. ROBBINS, CRE

First Vice President WAYNE D. HAGOOD, CRE

Vice Presidents WEBSTER A. COLLINS, CRE ROBERT P. HACKSTAFF, CRE

Executive Vice President LOIS HOFSTETTER

Staff Editor LINDA MAGAD

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 Courselors 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 REALTORS⁹, 430 North Michigan Avenue, Chicago, Illinois 60611. Copyright 1984 by the American Society of Real Estate Counselors of the NATIONAL ASSOCIATION OF REALTORS⁹. 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.

THE RETURN OF THE GRAVE DANCER

by Samuel Zell

Like Rip van Winkle, the Grave Dancer hibernates from one real estate cycle to the next. He emerges from his long sleep when the real estate community violates George Santyana's 1906 admonition, "Those who do not learn from the past are condemned to relive it."

The emergence of the Grave Dancer reflects an alteration in the risk reward ratio of real estate investment. The classic motivation for real estate investment is passive reflecting a desire for stability, security, inflation protection and growth. However the Grave Dancer is an active investor seeking greater risk by acquiring property in distress, and even greater reward by earning the economic benefit from successful resurrection. The Grave Dancer's measure of reward is reflected by improving the value of real estate, which if successful far outpaces the performance of the economy.

The current state of the U.S. real estate market reflects an orgy of development that has followed the high inflation era of the early 1980s. Supply of space has been fueled by excess availability of funds, misreading of demand, hedging against inflation and geographic concentration of supply. The degree to which supply exceeds demand rivals, and in some cases, surpasses the conditions that existed from 1973 to 1975. During that era, oversupply caused widespread financial distress for banks, insurance companies and equity owners of real estate. This situation was aggravated by the creation of short term mortgage real estate investment trusts. These trusts infused approximately \$20 billion dollars of new funds into the real estate market. This infusion of capital, along



with conventional sources, led to excess speculation and an oversupply of space. The current situation and anticipated results are reminiscent of that era.

Availability Of Funds

Funds available for real estate expanded dramatically as a result of financial deregulation, the growth of syndication, pension fund participation, and institutional involvement in the development and ownership of real estate equities.

Expansion of the powers of savings and loans and the encouragement of their conversion from mutual to stock associations increased the funds available for real estate investments. In the past, as interest rates rose, Regulation Q ceilings created disintermediation and the withdrawal of funds seeking higher yields. Disintermediation reduced funds available for lending, thereby throttling excess development. Deregulation allowed continued access to funds, but at a higher cost. The advent of broker insured deposits also eliminated previous geographic barriers to the flow of funds.

Samuel Zell is founder, principal stockholder and chairman of the board of Equity Financial and Management Company, a Chicagobased nationwide real estate organization which owns and operates a national portfolio of residential and commercial properties. He is also chairman, president and chief executive officer of Great American Management and Investment, Inc. Mr. Zell is a frequent contributor to various real estate publications as well as a speaker and panelist. He is a graduate of the University of Michigan and the University of Michigan Law School.

As rates rose beyond historical precedent, the savings and loans with fixed rate portfolios saw their net worth eroded at an alarming pace. Federal policy encouraged conversion of mutual savings and loans to stock corporations. This replenished their capital, but also infused massive liquidity because each dollar of new capital could be leveraged into \$33 of assets.

Additional liquidity emanated from the creation of mortgage backed securities. These mortgage backed securities provided the savings and loans with a secondary market in which to unload their existing portfolio of single family mortgages. The combination of new equity and liquidity within existing portfolios pressured the institutions into national expansion in commercial real estate.

This set of circumstances is fraught with danger and reminiscent of the REIT experience of 10 years ago. As the ability to raise funds out-stripped the ability to make local, profitable investments, it sought national opportunities. The results have been predictable—too much money chasing too few deals.

Loan underwriting has suffered from pressure to invest funds. Higher levels of risk have been necessary to generate a positive spread over the cost of money. The accrual of significant portions of interest obligations defers those obligations into the future, the assumption being that inflation will increase cash flow to cover the shortfall. However since these are floating rate loans, future inflation will only increase the spread between the interest owed and the cash flow earned.

Syndications

The public syndication of real estate, from a base of \$200 million in 1970, will grow to \$6 billion in 1984. This exponential growth and the pressure to invest this tremendous flow of funds emanated from the acceptance by the general public of real estate as the best form of inflation hedging. Today's real estate market is driven more by the ability to sell the product than the user's demand for occupancy.

This growth has also encouraged a growing number of sponsors whose real estate expertise is second to their marketing capabilities. Although public syndication of real estate has proven to be a viable and intelligent investment alternative within a broader spectrum of financial and estate planning, excesses by sponsors have been and continue to be prevalent and have encouraged the escalation of prices and the creation of product for which there is insufficient demand. The creation of these organizations has been rapid and resulted in overhead burdens which require the constant creation of new funds in order to support the structure. Failure of the market to distinguish quality sponsors will continue to encourage over-investment.

Pension Funds

The pension funds, having been burned significantly in the 70's with heavy emphasis on bonds and common stock, have looked to real estate as an obvious area for diversification. This pool of funds, which represents the largest and fastest growing source of new capital, is slowly altering its objectives to reflect a specified proportion of total assets in real estate. These funds have been invested in commingled pools run by sophisticated real estate sponsors as well as through advisors with extensive real estate background. Although pension funds have adopted very conservative criteria for investment, the sheer size of the pool applies pressure to the market especially on "brochure" buildings where competition has driven yields down.

Economic Viability

The economic viability of the development process is dramatically different when the developer has the role of being a creator of the product to be sold as opposed to the creation of the product for long term ownership and management. When a real estate product is pre-sold prior to construction, with relatively minor lease-up responsibility, the supply-demand scenario within the market place is less of a consideration and leads to oversupply. This is particularly true in post-inflationary periods where rents have risen dramatically and the high point on the rental scale became the point of reference for new projects. Rents rise in response to scarcity of supply. New supply tempers or reduces rates, making viability assumptions suspect. Owner concessions, which materially reduce cost of occupancy, must be factored into achievable rates. Capitalization of income without such a discount distorts the rate of return and encourages oversupply. The conversion of real estate analysis, from capitalized rates on existing cash flow to internal rate of return, distorts the value of the property. Internal rates of return include inflationary assumptions which justify new development without adjusting them to the supply-demand situation in the marketplace.

The creation of new real estate projects and the financing thereof do not include any presupposition of need. Developers are creating a product that meets the developer's test of profitability, not necessarily the marketplace's test of economic viability. If the developer believes the creation and presale of the product assure him a profit, then the discipline of the marketplace disappears and oversupply follows.

The other element of economic feasibility reflects the type of product constructed. The type of product to be constructed has historically been economic rather than market driven. For example, unlimited markets exist for low-cost housing because developers are unable to economically build units that can be rented or sold at the low end of the scale. Consequently, the oversupply in the market not only reflects more square footage than can be absorbed, but is targeted toward the luxury or first-class end of the economic spectrum. This bias occurs because the rental rate differential between premier real estate and secondary real estate is greater than the costs related to such upgrading. Therefore, economic viability is further endangered by the greatest supply being in the smallest segment of the user market.

Inflation

The political and economic decisions of the 1960s and 1970s generated a period of very high inflation in the 1970s and early 1980s. The United States was facing double-digit inflation in an economy not prepared for the adjustment.

Despite the severe reduction of inflation, the expectation of its re-ignition continues. During the inflationary period, the consumer most visually recognized this phenomenon on his daily life by the escalation in single family costs and the monthly announcement of the Consumer Price Index. Just as those involved in the oil industry predicted the continued escalation in the price of oil, so too did the investor-consumer presume that double-digit inflation was only temporarily impeded and bound to return. The investor-consumer presumes that if everyone's portfolio includes real estate ownership, the benefits will continue from inflationary pressures as in the past. The natural outgrowth of this alteration in thinking has been the dedication of more funds to the ownership of real estate. This has contributed markedly to the seller's market in real estate and inevitably will lead to economic loss and market oversupply.

Herd Instinct

The current status of the real estate market is different than previous periods of oversupply. Along with the inflationary pressures of the late 1970s came a new perception that the future growth of the country was in the sunbelt. Consequently, a massive disproportion of new developments and construction occurred in a series of limited geographic areas. Investors in real estate directed their efforts toward these limited geographic areas, as did lenders and developers. Therefore, some of these cities are facing five to eight years of oversupply in housing and office space, whereas the rest of the country has a much smaller inventory.

Office Market

It is within this framework that one must assess and evaluate a standard approach to taking advantage of opportunities from those less fortunate. Real estate is unique, and despite significant weakness and oversupply in any given market, it does not preclude the possibility of existing opportunity. Perhaps at no time in any previous period of oversupply has the statement "no generalizations are relevant" been more applicable. The post 1973-1975 recovery made almost any acquisition in the prior period economically viable. Escalation of demand in a period of minimal construction rapidly filled the oversupplied markets. The absorption rate this time is likely to be the most critical element in any Grave Dancing scenario. Reliance on historic perspectives must be tempered by individual market analysis. For example, the energy boom impacted on office absorption in cities like Dallas, Houston, Denver and Oklahoma City. If one looked at those markets and presumed an absorption rate predicated on the past five years, he would see a distorted view of the needs for future space. Even after making adjustments for economic aberration, one would be prudent to study the markets looking for other telltale signs that could impact on future needs.

As a broker recently commented, a major consideration must be the "sublet curse". Many firms committed themselves to significantly more space than was immediately required. The logic for such moves was to protect against further rate increases and guarantee availability of expansion space. These tenants now find a diminished need and are adding this extra space back to the inventory.

The 1982 recession forced corporate management to evaluate and reduce overhead, with particular focus on reduction in middle management personnel. Although this reduction is most glaringly exemplified by the automobile manufacturers, it is a situation that is prevalent throughout corporate America, resulting in a reevaluation of space requirements and the creation of sublet requirements. The rise in cost of services and occupancy to service firms has also lead to a reevaluation of personnel requirements and space needs. The business community has made a permanent shift toward less strata of management.

Any review of the market must also include an assessment of the developable sites. In many parts of the country, land assemblages are currently being carried at high cost awaiting the next opportunity to develop. Identifying these land holdings is a critical element in assessment of the absorption rate. High cost assemblages will be developed at the first sign of recovery in those markets, usually before the strength of such recovery is confirmed. Thus, these assemblages should be included in any evaluation of future supply.

The Grave Dancer's greatest ally is time. Aggressive negotiation with existing tenants for lease extensions, even at concessionary rates, is preferable to seeking new occupancy. The leasing focus should be current income to bridge the trough in the current market of oversupply.

Any market assessment must include the nature of competing ownership. The office market today primarily reflects institutional ownership. Market timing and quick decisions are not the hallmark of ownership by committee. Nimble movement and creative pricing give the Grave Dancer a definite market advantage which is necessary in order to overcome the deep pockets of institutional capital. Institutional deals have been sold using internal rate of return calculations. These calculations presume a sale in 10–15 years. Thus a rent-up philosophy reflects short term give-ups for long term "market rates". In competing, the Grave Dancer must tailor his approach to the market by seeking alternatives to the institutional competition.

The Grave Dancer also has the opportunity to lower operating costs. Properties acquired at a sharp discount or with extensive below market financing can achieve reductions in real estate taxes based on the purchase price as opposed to original cost. Further expense reductions can be achieved by controlling where space in the

ZELL: THE RETURN OF THE GRAVE DANCER

building is rented, or in multiple family projects, which building may be occupied. Concentration of partial tenancy can materially reduce the cost of operations during periods of extensive vacancy.

In assessing the advisability of any project, its competitive position is as important as the condition of the market. The number one criterion must be replacement cost. It is now possible for new buildings to be created at a total cost that is less than identical structures built two or three years ago. This phenomenon exists because land prices and interest rates were inflated during the development phase. Thus, competitive position evaluation must be based on current experience rather than historical costs. Potential tenant mix impacts competitive position. New jobs and therefore, new demands for space are more likely to be created in areas of entrepreneurial activity than those dominated by major corporate users. Buildings with large square footage per floor are less suitable to multiple small users than small floor buildings which have more window space and lend themselves to executive rather than clerical use.

Residential Market

Many of the same considerations that apply to the office market are also applicable to the residential market. Evaluation of the current state of occupancy must not only include multiple family statistics but also condominium and single family construction. Although the disparity in after-tax cost of occupancy between the multi-family rental and home and condominium ownership continues to be great, the urge to own bridges that gap and makes both forms of ownership very competitive to the rental market. The residential market is the most cost sensitive and thereby the best able to attract additional tenants using price as the inducement. Residential real estate marketing sells square footage and atmosphere. This provides the opportunity for superior marketing to create a competitive edge. Amenities and ambiance can often keep a rental project filled against a very weak market. Tenant satisfaction often overcomes price competition. Residential absorption analysis must include sources of potential growth in tenants. In the post 1973-75 era, cities like Atlanta and Orlando recovered slower than the rest of the country because a high proportion of rental tenants were directly related to the construction boom. Consequently, the cessation of new development, which should have accelerated the pace of fill-up, accelerated the vacancy rate.

Retail Opportunities

The retail aspects of the Grave Dancer's opportunities are much more limited. Large regional shopping centers do not commence construction until major anchor tenants have signed long term leases. Thus the anchors instill discipline on the market creating few examples of oversupply. The neighborhood, off-price or community centers present a very different picture.

There has been tremendous growth in off-price retailing in the last four years. This retailing concept is predicated upon the discounting of name-brand merchandise. The viability of these malls is dependent on price maintenance by the majors, a dubious assumption at best. It is unlikely that major retailers will be willing to merchandise goods that establish a base for the off-price retailer. Casualties among these retailers will be high, suggesting surplus retail space in off-price malls.

The number of strip centers has grown exponentially in the last three years. This growth has been fueled by investor demand rather than tenant demand. Current construction is in anticipation of growth rather than in meeting existing demand. Inadequate consideration is being given to competition already established.

Traffic is the only consideration relevant to a retailer. Whereas office and residential are, to varying degrees, price elastic, this is not true in the retail area. Concessions in the cost of occupancy can not overcome a lack of traffic. Pioneering attempts or off locations, provide little hope for justifying the Grave Dancer's efforts. Reliance on site selection by majors, rather than by demand, is not prudent policy. Majors often designate sites for future development with the expectation that the rest of the chain will carry the new stores until they mature.

The Time Frame

Grave Dancing is not for the faint of heart. Opportunities arise from the distress of others, but such distress does not assure success for the Grave Dancer. Careful assessment of the risk/reward ratio will increase probability of success. The institutionalization of real estate has brought many investors to real estate. The short term perspective of today's lenders materially reduces the size of any potential reward which may be achieved by a successful effort. In past periods, lenders were willing to alter the terms of their loans and leave them for 15– 20 years. Now concessions are achievable, but only in a short term perspective of five to seven years.

Institutional Investor

Many distressed properties are owned by well funded investors. Pension funds and insurance companies are more willing to take a longer perspective on the real estate. Rather than accepting a short term loss, they are willing to hold for recovery. Faith in the future is as much motivated by confidence as it is a reflection of fear in acknowledging a mistake. The institutional influence should make distressed markets more stable and able to avoid panics and severe price cutting. Quick reaction to market opportunities and creative approaches should give the entrepreneur Grave Dancer a distinct advantage. Staying power is often substituted by the discipline of a present value analysis. Previous experience by institutions of selling too early and seeing the Grave Dancer's profit is likely to encourage over-holding of property.

Despite the "deeper pockets" of institutional owners, opportunities will abound. The Grave Dancer will trade expertise and some capital for ownership and control. These arrangements, mostly in the form of joint ventures, will also transfer tax benefits. Since the IRS no longer allows an allocation of profits and losses, the arrangements will require conversion of institutional equity into debt. This conversion will make available tax benefits to subsidize the economics of Grave Dancing.

Syndications

Syndications represent an opportunity different from institutions. Real estate syndications raise a finite amount of money for investment. Even though most funds provide reserves, these reserves are not sufficient for major market weakness. The staying power of institutions allows them to ride-out periods of difficulty by committing additional funds. Public syndications do not have the ability to go "back to the well". Grave Dancing opportunities in the syndication area are commensurate with the amount of leverage. The more leverage, the more likelihood of cash flow deficits and Grave Dancing opportunities. The Grave Dancer's role is the funding of operating deficits and market and management skill in return for an ownership position in the project. Dilution in ownership is much more appealing to a syndicator than the prospect of selling the property at a loss.

Real estate knowledge and expertise cannot overcome poor financial structure. The success or failure of the Grave Dancer is dependent upon the financial structure of the transaction. Grave Dancers taking on distressed properties with short bullet loans, high accruals and inadequate capital for rehabilitation or marketing, are unlikely to reap the rewards of their efforts.

One must not forget that all debt must ultimately be repaid, prior to realization of any profits. Accruing of interest without adequate regard for the consequence of compound accruals on debt is not a sound premise. Projections with built-in rate escalations must reflect individual market conditions, not anticipated escalation in the Consumer Price Index. In an over-built market there is a minor correlation between existing rates and national inflation rates. Inflation's impact on rental rates will be more affected by supply and demand than the Consumer Price Index. The impact of inflation tends to be a lagging factor on the rental scale. It raises rates when new supply, built with escalated cost, sets new thresholds in the market.

Grave Dancing is not limited to individual properties. Some of the best opportunities will occur in savings and loans, home builders and commercial real estate companies. Oversupply can distress companies as well as individual properties. Real estate companies have replaced long term fixed rate debt with floating rates and short maturities. The most rewarding opportunities are likely to emanate from Grave Dancing with distressed owners. This requires being able to undertake multiple assets and locations simultaneously.

Conclusion

The above admonitions reflect the most significant risk in the Grave Dancer's role at this time. In many respects, the complex conditions have made the potential risks to the Grave Dancer far greater than in previous oversupply cycles. The huge federal deficit has made the monetization of the currency much more difficult to achieve, thereby making an inflation bail-out highly unlikely. Without the engine of inflation absorbing supply and raising rates, the recovery will be much slower and not as uniform as in the past.

This set of conditions will require a higher level of sophistication than was previously necessary. In a period of low inflation, appreciation in real estate will come much more from intense management and intelligent acquisition than from the benefit of time.

The silver lining, namely the reward for the risk, is likely to be further in the future but none the less worth the effort. The current distressed situation is not likely to be repeated in the near future. The institutionization of the real estate business will reduce the volatility of the real estate market. Institutions are more likely to hold property longer. The lack of a supply of available acquisitions will ultimately raise prices. The future will see fewer participants in the business due to the damage wrought by this cycle of oversupply. The general level of activity is likely to slow down as the expectation for quick return disappears. Real estate has historically been a safe and secure harbor for long term funds. As the current excesses in the market eliminate the short term players and recent entrants, the remaining participants will be fewer, larger and more sophisticated. This will lead to a more orderly market with better information flows among the participants. Better information and perception of risk will stabilize the supply-demand scenario and avoid the current excesses.

The lack of discipline that creates the Grave Dancer's opportunity is contagious. The undisciplined Grave Dancer can easily become a victim rather than the savior. Taking risks today for tomorrow's reward is both the most challenging and difficult of tasks. Unbridled optimism must be tempered with reality. The Grave Dancer's motto must always be, "I suffer from knowing the numbers". His success will emanate from an understanding of supply and demand, the basic premise of Economics 101.

DISINFLATION AND THE HOUSING MARKET IN THE 1980s

by John C. Weicher

The rate of inflation has been the dominant factor in the housing market since the late 1960s. For 15 years, the economy suffered from erratic but persistent and accelerating inflation. This brought about many unexpected changes that culminated in a speculative housing boom from 1977–1979. Just as most housing analysts were beginning to recognize the significance of inflation, the country entered a period of disinflation at the beginning of the 80s. During that time prices rose at a much slower rate, and the inflation rate gradually but steadily decelerated.

This paper describes the changes in the housing market that have resulted from disinflation, and focuses on homeownership where the effects have been less quickly recognized. It also describes events that occurred during inflation, as well as more recent trends. The changes represent a slowing or reversal of the previous effects of inflation, and can therefore best be understood when placed in a longer perspective.

The relationship between inflation and the housing market is complicated and unique because housing is both a consumption and an investment good. In the case of rental housing the distinction is clear: the tenant pays rent while he or she lives in the apartment; the landlord owns the unit and receives the capital gains (or absorbs the losses). The homeowner is both landlord and tenant,



consuming and investing simultaneously in the same house.

During the late 60s and the 70s, the investment demand for housing as an asset increased substantially, particularly among homeowners who tried and were able to use their homes as a hedge against inflation. When inflation abated in the early 80s, this investment demand declined sharply. Meanwhile, the consumption demand—the demand for a house as a place to live changed little.

We know that houses are investments, but housing analysts have been slow to recognize the effect of inflation on housing investment. As inflation accelerated, most discussions concerning homeownership focused on the

John C. Weicher holds the F. K. Weyerhaeuser Chair in Public Policy Research at the American Enterprise Institute. He specializes in the areas of housing, urban economic problems, and state and local government finance. In 1981 he served as Deputy Staff Director of the President's Housing Commission. Dr. Weicher has taught economics at Ohio State University and the University of California at Irvine.

This paper is adapted from "Disinflation in the Housing Market," in Contemporary Economic Problems, 1983–1984: Disinflation, edited by William Fellner and published by the American Enterprise Institute in Washington, D.C. The paper was facilitated by the author's term as a Fellow of the Homer Hoyt School of Post Doctoral and Advanced Studies in 1983.

relationship between current costs (prices or monthly payments) and current incomes, concepts more appropriate to the analysis of rental housing or consumption. Only after more than a decade did analysts start to think systematically about home purchase as an investment decision. The shift in thinking can be dated to about 1978. At the Federal Home Loan Bank Board's annual forecasting conference in December 1977, most participants stressed the affordability problems caused by high prices and high interest rates (nine percent) and predicted a downturn in construction. Instead, the record production levels of 1977 were exceeded in 1978. At the 1978 conference, discussion centered on housing as an investment in an inflationary environment, and most forecasters expected price appreciation and a strong demand for houses to continue. Soon the process of disinflation began and this new line of reasoning became outdated.

Housing analysts were slow to understand what happened, but the press was even slower. During both the speculative boom of the late 70s and the steep recession of the early 80s, articles in the major newspapers and magazines consistently failed to mention inflation as a factor affecting the housing market.¹

Inflation And House Prices

The most publicized effect of inflation was its impact on housing prices; the reported increases were unprecedented. As shown in Table 1, the median prices for new and existing homes nearly tripled from 1967–1979. At that time increases were the source of much public concern about affordability.²

These prices, however, are somewhat misleading as they are simply medians for the homes actually sold each month, with no adjustment for quality changes. Since size and amenities have gradually increased, the change in the median price usually is larger than the change for the same quality house; comparing medians overstates the affordability problem. To put the problem in proper perspective, it is necessary to keep quality constant and to measure the change in price for the same house over a period of time. The best measure is the U.S. Census Bureau's, "New One-Family Home Price Index," which adjusts for size and for several of the most important attributes of the house.³

Table 1 also shows the census price index, and its yearto-year changes. Comparison of these changes with the movements in the median prices shows some interesting

			TABLE 1			
		Hou	se Prices, 1967–	1983		
		Actual Values		1	Percentage Chang	e
Year	Median New Home Price*	Median Existing Home Price	Census New Home Price Index (1967 = 100)	Median New Home Price	Median Existing Home Price	Census New Home Price Index (1967 = 100)
1963	\$18,000	NA	90.2	_	_	
1964	18,900	NA	91.1	5.0		1.0
1965 1966	20,000 21,400	NA NA	93.2 96.6	5.0 7.0	_	2.3 3.6
1967	22,700	\$19,400	100.0	6.1		3.5
1968 1969 1970	24,700 26,400 26,500	20,000 21,800 23,000	105.3 113.3 116.4	8.8 6.9 0.4	3.1 9.0 5.5	5.3 7.6 2.7
1971 1972 1973	29,000 30,400 34,400	24,800 26,700 28,900	122.7 130.7 142.1	9.4 4.8 13.2	7.8 7.7 8.2	5.4 6.5 8.7
1974 1975 1976	35,900 39,300 44,200	32,000 35,300 38,100	155.4 172.0 186.7	4.4 9.5 12.4	10.7 10.3 7.9	9.4 10.7 8.5
1977 1978 1979	48,800 55,700 62,900	42,900 48,700 55,700	210.5 241.1 275.4	10.4 14.1 12.9	12.6 13.5 14.4	12.7 14.5 14.2
1980 1981 1982	64,600 68,900 69,300 75100	62,200 66,400 67,800 70,300	305.7 331.4 339.8 347.6	2.7 6.7 0.6 8.4	11.7 6.8 2.1 3.7	11.0 8.4 2.5 2.3

*New Home prices adjusted for subsidized Section 235 homes between 1969 and 1973, as explained in text.

N.A. — Not Available

Source: U.S. Bureau of the Census, Statistical Abstract of the United States, 1982–1983, p. 749; Price Index of New One-Family Houses Sold, Construction Reports, Series C-27, February 1983, Table 1; John C. Weicher, "The Affordability of New Homes," American Real Estate and Urban Economics Association Journal, Vol. 5 (Summer, 1977), p. 214; U.S. Dept. of Housing and Urban Development, 1967 Statistical Yearbook, GS Table 89. and generally unrecognized patterns. During the inflationary years (at least to 1976), amidst the public concern over prices, the median prices of the homes sold were rising more rapidly than the price index. Despite the price rises, people were able to buy homes that were a little bigger and a little better. The 1976 home was four percent better than the 1967 house.

Between 1976 and 1979, however, the typical new home declined in quality. This is somewhat surprising because these were the peak years for housing production, but there are some explanations. Young families made up a very large share of the home buyers in these years, and they were buying less expensive homes. Also, there was a greater demand for the most expensive, highest quality homes, as shown by a rapid increase in the average sales price (as opposed to the median). Both of these were reactions to the accelerating inflation of the period.

The 80s have been different. During the recessions of 1980–82 prices continued to rise, but at a reduced rate, and slower than the census price index. The typical new home was smaller and of lesser quality than those purchased during the 70s. In 1983, however, as the economy recovered, buyers were again interested in better quality homes, and there was a quality improvement of six percent for the year.

Real Prices

These price changes in the housing market reflected the general inflation experienced throughout the economy. They attracted more attention because the dollar magnitudes were so much larger: a \$3,000 increase in the price of a \$50,000 house is more noticeable than a three cent increase in the price of a fifty cents loaf of bread, even though the percentage changes are the same.

But inflation had a further more important impact on housing. As inflation accelerated, house prices increased more significantly than the cost of other goods and services. Table 2 compares the census house price index with the cost of living. The latter is measured by a variant of the Consumer Price Index in which the homeownership component has been replaced by an estimate of the rental value for owner occupied housing. This approach is now generally recognized as more reliable especially during periods of inflation, and has been used in the official CPI since the beginning of 1983.⁴

From 1967–1979, except for two recession years, the price of a new home increased more than the cost of living. Moreover, the difference itself increased over time. Thus in 1977 and 1978, house prices rose at double the rate of the CPI; by 1980, real house prices were 35 percent higher than in 1967.

Then the pattern changed. Inflation continued, but the Federal Reserve and the Carter administration began serious efforts to bring it under control. By 1981, as the change in policy and the recession began to drive down the rate of inflation, house prices rose at a much slower rate, and this has continued during the recovery period.

Year	Nominal House Price	Consumer Price Index (CPI-U-X1)	Real House Price			
1967	100	100	1.00			
1968	105	104	1.01			
1969	113	108	1.04			
1970	116	114	1.02			
1971	123	118	1.04			
1972	131	122	1.07			
1973	142	130	1.09			
1974	155	143	1.08			
1975	172	155	1.11			
1976	187	164	1.14			
1977	211	174	1.21			
1978	241	185	1.30			
1979	275	204	1.35			
1980	306	226	1.35			
1981	331	248	1.33			
1982	340	263	1.29			
1983	344	274	1.27			

TARIE 2

Source: Nominal house price, U.S. Bureau of the Census, Price Index of New One-Family Houses Sold, Construction Reports, Series C-27; Consumer Price Index, Economic Report of the President, February 1983, Table B-56; 1983 data calculated by author.

By the end of 1983, the relative price of a home declined by eight percentage points bringing it back to its 1977– 1978 level.

There are two ways to view these real price changes. The standard approach for most of the inflationary period was to focus on the problem of the first time buyer. The rise in the real price of housing meant that it was harder for him or her to buy: down payments were higher, and the carrying cost of the home was onerous. This was especially true since prices were rising faster than incomes during the late 70s, and this situation had not been true earlier.

But from the standpoint of the current owner, the real price rise meant something very different. The value of his or her asset was increasing faster than the rate of inflation, and the house was therefore a hedge against inflation. The homeowner was more than hedged, because the entire increase in value accrued to him or her as a return on the equity in the home; none of it went to the mortgage lender. Crude calculations indicate that homeowners were earning tax free returns of 15–20 percent annually during the 70s on the money originally invested as a down payment on their homes.

More than 60 percent of American households—more than 75 percent of American families—already owned a home before inflation began. By the later 70s, many owners had already experienced extraordinarily large windfall capital gains on their own homes and were realizing them in order to buy larger and better homes. This fact helps to explain the rise in the average home price (relative to the median) mentioned earlier. At the same time, first time homebuyers also became more important in the market. They could not afford to buy a house, but also they could not afford *not* to buy. They found the money for down payments and bought whatever they could afford—usually smaller, less expensive existing homes, but also the less expensive new homes. Their participation in the new home market helped to hold down the median new home price and quality during the boom of the late 70s.

TABLE 3

Capital Gains in Owner Occupied Housing, 1961–1983 (1980 billions dollars) Capital Gains

Year	Houses	Land	Total
1961	-6.4	10.0	3.6
1962	-4.5	10.2	5.7
1963	-22.0	5.1	-16.9
1964	15.9	16.4	26.3
1965	2.1	13.0	15.1
1966	33.5	5.9	39.4
1967	11.7	5.7	17.4
1968	65.4	1.0	66.4
1969	37.2	-5.5	31.7
1970	20.5	-3.9	16.6
1971	45.2	-0.2	45.0
1972	69.9	30.7	100.6
1973	114.2	31.5	145.7
1974	66.9	4.9	71.8
1975	17.8	15.2	33.0
1976	91.9	40.4	132.3
1977	122.7	22.5	145.2
1978	180.1	40.0	220.1
1979	21.5	2.4	23.9
1980	-15.7	3.9	-11.8
1981	-4.5	-32.7	-37.2
1982	-83.2	-37.6	-120.8
1983	-4.0		

Source: For houses: U.S. Department of Commerce, Bureau of Economic Analysis, Fixed Reproducible Tangible Wealth in the U.S., 1925–1979, Tables A–11 and A–12; later data provided by John C. Musgrave of BEA. For Land: Board of Governors of the Federal Reserve System, "Balance sheets for the U.S. Economy, 1945–1981," issued in October 1982, Table 700 and 702. Capital gains calculated in the same manner as Philip Cagan, Robert E. Lipsey, The Financial Effects of Inflation, Table 2–11, p. 41.

Some idea of the magnitude of the capital gains in owner occupied housing may be seen in Table 3. This reports accrued (not realized) capital gains both for the land and the house which are calculated differently. These are real capital gains expressed in 1980 dollars. Very large capital gains, by historical standards, accrued in all of the cyclical upturns after inflation began in the mid-60s. The gains were larger in each cycle than in the one before. During the last half of the 70s, capital gains on owner occupied houses accounted for almost a quarter of the increase in the wealth of all Americans, and for over five percent of their *total* wealth. It is not surprising that more and more households tried to buy homes in the later 70s, driving up real house prices.

The disinflation of the 80s has translated directly into capital losses for homeowners. By the end of 1982, homeowners had lost about half the gains of the 1976–1979 boom period. In 1983, even though the economy recovered, real house prices did not rise, and the capital losses continued, although the change was very small (per owner occupied unit, less than \$100).

Homeownership Costs

Inflation and disinflation have affected the costs of owning a home as well as the price. These costs include the monthly mortgage payment, property taxes, maintenance and also implicit costs such as depreciation and the foregone return on the owner's equity.

Inflation brought some of these costs down and made ownership less expensive. At the same time it drove up house prices through its interaction with the federal income tax laws and the housing finance system. This section describes these interactions. It begins with the relationship between inflation and the tax system under the assumption that the inflation is forecast, correctly, by both borrowers and lenders. In reality, of course, this was not the case.

Taxes, Inflation and Real Interest Rates

The main federal income tax provisions affecting owner occupied housing are:

(1) the deductibility of mortgage interest and property taxes;

(2) the exclusion of the imputed rent on the home;

(3) the exclusion of capital gains arising from the sale of a home, if another home of equal value is purchased;

(4) since 1978, the one time exclusion of capital gains of up to \$125,000 for households whose head is over 55 years old.

When prices are stable, these provisions encourage homeownership by lowering the net after-tax cost of the capital invested in the home and exempting virtually all the returns from taxation. In addition, the progressivity of the tax system provides a greater incentive for ownership to higher bracket households.

Inflation accentuates both effects. Table 4 shows how inflation lowers the real after-tax interest rate, even if the before tax interest rate is unchanged. Essentially, the nominal interest rate is assumed to be the inflation rate plus three percent, a normal pattern in the past. When the inflation rate rises, lenders are able to raise the rate they charge by the same amount so they are fully compensated for the decline in the value of the dollars in which they will be repaid.

However, the real after-tax rate paid by the borrower will be reduced by inflation because the mortgage interest is deductible, and it is equally deductible whether it is the "real" payment or the inflation premium. The real

Nominal Rate	Inflation Rate	м	arginal T	ax Brack	et:
		30%	40%	50%	60%
3%	0	2.1%	1.8%	1.5%	1.2%
4%	1%	1.8%	1.4%	1.0%	0.6%
5%	2%	1.5%	1.0%	0.5%	0.0
6%	3%	1.2%	0.6%	0.0	negative
7%	4%	0.9%	0.2%	negative	1
8%	5%	0.6%	negative	1	
9%	6%	0.3%			
10%	7%	0.0			
11%	8%	negative	1		

Note: Assumes real mortgage rate of 3%. After-tax rate calculated as: Nominal Rate (1 – Marginal Tax Bracket) – Inflation Rate.

rate becomes lower as inflation rises. Consider, for example, the family in the 50 percent marginal tax bracket. If there is no inflation, the after-tax mortgage rate is 1.5 percent, and the remainder of the mortgage is in effect "paid" by the taxpayers in general. If the inflation rate is two percent, the after-tax mortgage rate is 2.5 percent or 0.5 percent after subtracting inflation. At rates above three percent, the borrower's real rate is negative and the taxpayer pays *more* than three percent.

Inflation makes ownership more advantageous in all tax brackets, but more so in the higher ones. For those in the highest bracket in Table 4, real after-tax mortgage rates were negative for over 15 years; for those in the lowest bracket, they were negative only in the late 70s. (At present, with the highest tax rate being 50 percent and inflation about five percent, the real after-tax mortgage rate is positive for all households.)

Inflation also affects the real after-tax rate paid by a particular household over time. If it continues for a few years, it pushes the household into a higher marginal tax bracket increasing the value of the deduction. Thus a household in the 30 percent bracket initially could expect to be in the 40 percent bracket after a few years of inflation at five percent, and the real mortgage rate would be cut in half. Despite higher home prices, inflation clearly encouraged homeownership, especially for higher income households.

Unanticipated Inflation

The reality of the last 20 years has been quite different from the assumption in the preceding section. Inflation was generally not expected, particularly by mortgage lenders. As a result, borrowers have received windfall gains as they were able to make their mortgage payments in cheaper dollars than originally expected, and lenders correspondingly suffered windfall losses.

		and the Real	Cost of Capital to H	ousing, 1968–1	983	
Year	Mortgage Rate	Consumer Price Index (CPI-U-X1)	Difference (Cur- rent Real Rate)	Expected Inflation	Difference (Ex- pected Real Rate)	Real Cost of Capital
1968	7.0%	3.7%	3.3%	2.9%	4.1%	1.4%
1969	7.8	4.4	3.4	3.6	4.2	1.5
1970	8.4	4.9	3.5	4.3	4.1	1.3
1971	7.7	4.3	3.4	4.4	3.3	0.1
1972	7.6	3.1	4.5	4.0	3.6	0.5
1973	8.0	6.2	1.8	4.2	3.8	1.0
1974	8.9	10.1	-1.2	6.8	2.1	-0.9
1975	9.0	8.3	0.7	8.2	0.8	-2.4
976	9.0	5.7	3.3	7.0	2.0	-1.6
977	9.0	6.4	2.6	6.2	2.8	-0.9
978	9.6	6.8	2.8	5.9	3.7	0.3
979	10.8	9.6	1.2	7.3	3.5	-0.2
980	12.7	11.2	1.5	8.9	3.8	-0.2
1981	14.7	9.5	5.2	9.3	5.4	1.4
1982	15.1	6.1	9.0	7.9	7.2	1.9
1983*	13.3	2.9	10.4	6.6	6.7	2.1

* First half

Source: Mortgage rate, Federal Home Loan Bank Board Journal, Effective interest rate on all conventional home mortgage loans made, all major types of lenders; Consumer Price Index, Economic Report of the President, February 1983, Table B–56; expected inflation rate and real cost of capital to housing, provided by Robert Van Order, calculated as explained in Anne Dougherty and Robert Van Order, "Inflation, Housing Costs, and the Consumer Price Index," American Economic Review, March 1982, pp. 154–164.

Table 5 reports the movements that actually occurred in the real mortgage rate. The first panel compares the mortgage rate to the current inflation rate—a reasonable practice when inflation is stable. Prior to the mid-60s. the nominal mortgage rate ranged from three-five percentage points above the inflation rate. In 1965, for instance, they were 5.9 and 1.7 percent, respectively, and the difference, the real rate, was 4.2 percent. But as inflation took hold, mortgage rates did not respond quickly. Real rates were usually over three percent until the sudden acceleration of inflation in 1973-75. Nominal mortgage rates did not respond to that episode at all; the average real mortgage rate for all of 1974 was negative. This behavior was sensible only if lenders were assuming that the high current rate of inflation was a temporary aberration. The rate did drop in 1975 and 1976 confirming that view. Thus in the late 70s, lenders once more did not react quickly to the renewal of inflation. The nominal rate began to rise in early 1979; by early 1980, it had gone from 10 to 13 percent. This however, only kept pace with inflation. But the mortgage rate kept rising in the early 80s, reaching a peak of over 17 percent in early 1982. At the same time, inflation began to come down sharply. The real rate quickly rose to its traditional level and then beyond; the rates in 1982 and 1983 were probably higher than at any other previous time.

The current inflation rate may not be the most appropriate to compare with the interest rate on a 30-year mortgage. Rather, the mortgage rate should be compared to an expected inflation rate over the period that the mortgage will be outstanding. Nobody can be sure just what borrowers and lenders think the inflation rate will be for such a long period, but several economists have attempted to estimate inflationary expectations by inference. The second panel of Table 5, developed by Anne Dougherty and Robert Van Order of HUD.5 compares the mortgage rate to one measure of inflationary expections. These are inflation rates expected by economists for the next five years-not necessarily by mortgage lenders or homebuyers-but they are probably reasonably accurate. The expected real mortgage rate declined until the mid-70s; then it slowly rose, but did not get back to the pre-inflation level until 1981. If Table 5 does measure the expected inflation rate among homebuyers, then clearly the nominal mortgage rates of the 70s looked like a good deal, and they were until the 80s.

The final column is the broadest measure of the real cost of capital to the homebuyer. It includes the expected inflation rate in the general economy, the expected capital gains to owner-occupants above and beyond the general inflation (resulting from the rise in the real price of housing), and the tax deductibility of nominal interest and property taxes. By this measure also, housing was indeed a bargain in the middle and later 70s, but not in the 80s.

Homeownership

Americans have responded to inflation and disinflation

in a most dramatic way. They became homeowners in the 60s and 70s, and they have shifted back to renting in the 80s. The ownership rate increased from 63.3 percent of all households in 1965 to 64.7 percent in 1976, and then to 65.6 percent by 1979 after the speculative housing boom. These changes may seem small, but they are large by historical standards. Moreover, they occurred while basic demographic trends were running in the opposite direction. Net new household formation was concentrated within categories that have traditionally been renters such as single persons, one-parent families and voung married couples. According to one estimate, about four million more households became homeowners between 1965 and 1978 than would have been expected from demographic changes alone. This is five percent of all U.S. households.6

With the advent of disinflation, the homeownership rate began to decline. It peaked at 65.8 percent in the third quarter of 1980. A year later, it was still 65.6 percent. Then in the 1981-82 recession it dropped sharply to 64.5 percent by the fourth quarter of 1982. This is by far the largest decrease since quarterly data were first collected in 1964; declines in both 1970 and 1974 amounted to only 0.4 percent. About 900,000 households shifted tenure from owning to renting within 15 months. In 1983, the rate began to rise again with the recovery, but only slightly; it has not yet reached 65 percent.

TABLE 6

Tenure Shift b	Tenure Shift by Income Class, 1970–1980				
Income Class in 1970	1970 1980 Homeownership Homeowne Rate Rate				
Under \$5,000 (Under \$10,000)*	50.0	45.4			
\$5,000-\$7,000 (\$10,000-\$15,000)*	52.1	56.5			
\$7,000-\$10,000 (\$15,000-\$20,000)*	61.3	65.5			
\$10,000-\$15,000 (\$20,000-\$30,000)*	72.6	76.9			
\$15,000-\$25,000 (\$30,000-\$50,000)*	80.5	88.2			
Over \$25,000 (Over \$50,000)*	84.5	92.3			

* The numbers in parentheses are the 1980 income brackets approximately equivalent in real terms to the 1970 income values.

Source: U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Housing and Urban Development, Annual Housing Survey: 1980, Part A: General Housing Characteristics, Tables A-1, A-7, A-9.

Ownership Changes By Household Category

Within the population, homeownership rose substantially in groups where it was already high. It rose

TABLE 7

Tenure Shift	by Demographic	Group, 19	970-1980
--------------	----------------	-----------	----------

	1970	1980
	Homeownership	Homeownership
	Rate	Rate
Married Couples		
Head under age 30	39.4	52.0
Head age 30-44	73.1	80.8
Head age 45–64	80.8	86.8
Head age 65 or more	78.4	84.9
Other Male Head		
Under age 65	49.1	43.8
Age 65 or more	71.1	76.1
Other Female Head		
Under age 65	42.7	41.7
Age 65 or more	69.9	73.2
One-Person Households	, Male	
Under age 65	26.2	32.8
Age 65 or more	50.6	57.1
One-Person Households	, Female	
Under age 65	39.3	38.2
Age 65 or more	55.2	59.2
All Elderly	67.5	70.7
All Whites	66.3	70.3
All Blacks	41.6	43.9
All Hispanics	43.4	42.9
All Households	62.9	65.6

Source: Same as Table 6

less, or even fell, among those who were commonly renters. Table 6 shows the changes by income class. There were increases for all except the poorest, and they were greater in the higher income categories. Ownership also rose in most demographic groups, as shown in Table 7, with the largest increases among married couples. The elderly also shifted toward homeownership, while young single parents and single persons generally remained renters. Among ethnic groups, whites increased their ownership more than blacks, while Hispanic ownership declined probably as a result of the increased immigration.

The tables indicate that inflation induced a shift toward ownership among those who had the financial ability to own, but chose to rent for reasons of personal preference. The great exception to this generalization is the dramatic increase among young married couples. These households chose to move more quickly to ownership than they had traditionally done. The median age of first time buyers declined throughout the 70s, and the proportion of young families buying a home in any given year rose from eight percent in 1970 to 20 percent by 1978. That is, one of every five young families bought a home in that year. Because of their limited resources, they bought less expensive homes, as I previously mentioned in discussing the price and quality trends of the late 70s. But they bought and put themselves in a position to profit from future price inflation.

Unfortunately, detailed data on homeownership for the 80s has yet to be published, so we cannot tell which groups have declined in homeownership, a trend occurring in the country as a whole. It seems likely that it is concentrated among young families. The population of married couples under the age of 30 probably changes more rapidly than any other group, and the new households are less likely to purchase a home initially. These couples tend to remain renters for a longer period than their immediate predecessors. But any decline in ownership among young families is likely to be temporary, cyclical and resulting from the recession. The latest survev by the U.S. League of Savings Institutions indicates that first time homebuyers-predominantly young families-were very active in the housing market in 1983, as the economy recovered.7

Changes In Housing Production

The shifts in tenure were accompanied by shifts in housing production. Single-family homes accounted for an unusually large share of total new construction in the middle 70s. The housing recession of 1974–75 was especially severe in the multi-family sector, which remained depressed until the 80s. In the mid-60s, singlefamily homes amounted to two-thirds of new housing production; in the mid-70s, they amounted to threequarters. From 1980–82 houses again accounted for only two-thirds of new starts.

There was also a shift toward homeownership in the existing stock. This occurred in every type of structure except small apartment buildings. The largest percent change was in apartment buildings with five or more units: ownership rose from five to eight percent in the 70s. This reflects the development of the condominium, which appealed to younger, smaller households in the upper half of the income distribution enabling them to achieve the financial advantages of homeownership without the bother of maintaining the house and yard. By 1980, there were more than one million owner-occupied condominium units; in 1970, nobody bothered to count the negligible number.

In the 80s, the demand for condominiums has sharply declined. In Washington, D.C., for example, apartments offered for sale declined by nearly 50 percent from 1981 to 1982. In addition, reversions to rental status amounted to 15 percent of the total number of units offered for sale, and marketing was suspended in another eight percent for reasons such as developer bankruptcy or construction loan foreclosure.

Conclusion

The record of the recent past offers some guidance for the present and the future. The process of disinflation seems to be continuing even after 18 months of a strong economic recovery. Real house prices are still high but continuing to decline. The latest figures for the first quarter of 1984 indicate that nominal house prices are rising at less than 2.5 percent while the overall inflation rate is 5 percent. At the same time real mortgage rates remain high, and in the first half of 1984 they are rising. It is now more difficult to buy a home than it was during the 70s, and most people can now afford *not* to buy. That is an uncomfortable position for the housing market, but it is not likely to last. At this point there are essentially two plausible scenarios for the next few years: continued disinflation or renewed inflation. I want to conclude by speculating on the probable course of events under each scenario.

Disinflation

The rate of inflation is not likely to decline while the economy is growing. It is surprising that it has remained stable for so long. "Continued disinflation" will exist if the inflation rate does not greatly increase during the recovery and is lower than before in the next cyclical trough (it was under three percent at the end of 1982).

Real house prices seem likely to continue falling but at a slower rate. Nominal house prices could remain stable or rise only slightly through the remainder of the recovery. One analyst of inflation and house prices — Douglas Diamond of HUD—estimates that nearly all of the "inflation premium" in house prices already has been wrung out during the recession; he attributes the remainder of the real price rise to other factors such as growth controls in the west and quality improvements not captured in the available price indexes. If Diamond is right, then continued disinflation will not result in further price declines or capital losses for homeowners.⁸

If disinflation continues the mortgage interest rate has to turn down. The traditional real rate of three to five percent implies a nominal rate of nearly 10 percent at current inflation. Even if the real mortgage rate is higher in the future as a result of the loss of the protected position of housing in our capital markets, the nominal mortgage rate should be lower than it is now. There still is an inflation premium in mortgage rates thanks to the lessons that borrowers and lenders learned in the 70s.

Overall, the housing market would probably develop in a pattern somewhat like that of the 50s. At that time, also, the United States went through a period of disinflation as the inflation rate declined from its high early postwar levels. But this did not depress the housing market. Instead, there was an unprecedented surge of housing production, well above any prewar experience, concentrated in single-family homes. This resulted largely from rising real incomes and demographic trends; these were years of high household formation and high birth rates producing the postwar baby boom.

Renewed Inflation

A recurrence of inflation is likely to heighten inflationary expectations quite rapidly. It would signal the collapse of five years of effort by two administrations to bring inflation under control. Inflation would probably appear to be a permanent feature of the American economy, and the search for inflation hedges would begin again with perhaps greater intensity.

The impact on the housing market would be marked. House prices would undoubtedly resume their upward movement in real terms. The magnitude of the rise can be only estimated, but experience in the later stages of the 70s may offer a guide: from 1976–1979, prices rose by more than five percent a year in real terms. A similar rise with renewed inflation would not be unreasonable.

Nominal mortgage rates would probably rise also, even though real rates are now high. The fixed-rate levelpayment mortgage would probably disappear quickly, and the current caps on adjustable rate mortgages would come under pressure. For most homebuyers, the usefulness of their homes as hedges against inflation would be diminished. The value of the home would rise, but so would the mortgage payment. The investment advantage to homeownership would not be entirely eliminated because ownership still benefits from special tax treatment, but it would be reduced.

Many homeowners would probably find it difficult to meet the rising debt burden of an ARM. This has been a common experience in other countries with variable rate mortgages. A number of governments have responded by subsidizing the mortgage payments of existing homeowners.⁹ Thus the inflation-induced interest rate risk is shifted first from lending institutions to buyers, and then from buyers to the entire society.

Affordability

If disinflation continues, housing affordability will gradually improve. The urgency and even frenzy of the later 70s will not be repeated. People will buy homes because they want to live in them, not because house prices outperform the Dow Jones Average. But the improvement will be gradual, and for some time it will be harder to buy a home than it was during the 70s. Recent experience suggests, however, that the current high prices and interest rates are not insuperable obstacles to homeownership.

Affordability is a problem right now partly because we are still recovering from the inflation of the 70s and partly because of the stage in the business cycle. If the rate of inflation continues to come down, affordability will loom much lighter on the economic horizon.

NOTES

1. See for example, "Housing: It's Outasight," *Time*, September 12, 1977, pp. 50–57; "Housing's Roof Collapses," *Time*, August 17, 1981; "The Great Housing Collapse," *Newsweek*, March 29, 1982.

2. The median new home price is adjusted for the period between 1969 and 1973, because during those years the federal government subsidized some 350,000 homes under the Section 235 program. These were smaller and less expensive than the typical unsubsidized new home, and there were so many that they distort the median new home price. For a more detailed discussion of this problem, see John

C. Weicher, "The Affordability of New Homes," American Real Estate and Urban Economics Association Journal, vol. 5 (Summer 1977), pp. 209–26.

3. The Consumer Price Index until 1983 also contained an index of home prices, including both new and existing homes. This is less reliable than the Census index, because it is based only on FHA-insured homes, and therefore omits the upper end of the price distribution. The CPI index rose much less than the Census index, but the divergence is largely explained by the sample differences and by estimating procedures used in the CPI. See John S. Greenless, "An Empirical Evaluation of the CPI Home Purchase Index, 1973–1978," American Real Estate and Urban Economics Association Journal, vol. 10 (Spring 1982), pp. 1–24.

4. Philip Cagan and Geoffrey H. Moore, The Consumer Price Index: Issues and Alternatives (Washington, D.C.: American Enterprise Institute, 1981), especially pp. 32-43.

5. Anne Dougherty and Robert Van Order, "Inflation, Housing Costs, and the Consumer Price Index," *American Economic Review*, vol. 72 (March 1982), pp. 54–64.

6. Dwight M. Jaffee and Kenneth T. Rosen, "Mortgage Credit Availability and Residential Construction," *Brookings Papers on Economic Activity*, 1979, no. 2 pp. 333–76.

7. Economics Department, United States League of Savings Institutions, *Homeownership: Celebrating the American Dream*, (Chicago, IL: 1984).

8. Douglas B. Diamond, Jr., "The Impact of Inflation on New House Prices," Contemporary Policy Issues, No. 6 (May 1984), pp. 5–16.

9. Leo Grebler, "Inflation: Blessing or Curse?" Annals of the American Academy of Political and Social Science, vol. 465 (January 1983), pp. 21–34.

REAL ESTATE SYNDICATION INVESTMENTS: RISKS AND REWARDS

by David B. Blenko

Real estate syndication investments have become extremely popular in recent years. Annual sales of syndication interests have increased over 300% since 1979 and estimates are that the industry raised in excess of \$15 billion in partnership capital during 1983. This article examines the origins and impact of the heightened popularity of these investments. It focuses on risks inherent in tax oriented real estate private placements in particular, and recommends syndication evaluation criteria for the individual investor's use.

Reasons For Increased Real Estate Syndication Activity

Favorable tax laws have contributed a great deal to the recent popularity of real estate syndications. In 1978 legislation passed imposed "at risk" provisions on virtually all tax shelter oriented investments except real estate. This exemption provides the investor in a real estate syndication with the unique ability to deduct losses to the extent of not only his or her investment but also his or her prorated share of all nonrecourse partnership debt. Therefore, real estate tax shelters can offer more tax deductions per dollar invested than alternative tax oriented investments. At the same time, with the shortening of allowable depreciation lives for real estate under ACRS, the tax benefits associated with real estate ownership are proportionately greater than before. The combination of these two developments has enabled syndicators to structure partnerships which are very attractive to tax motivated investors. Sales of real estate limited partnerships have also benefited from the weak market for oil and gas partnerships, a traditionally attractive alternative for tax motivated investors.

Although favorable tax laws have benefited the real estate syndication industry, they do not fully explain the



recent popularity of these investments. From the investor's standpoint, not only do real estate syndications represent an inflation hedge, but also a number of syndications recently have had good performance records. Several public offerings have reported average returns to investors of 15–20 percent per annum and many private placements have reported even higher returns. Of course, many of these partnerships were formed during the mid-1970s and enjoyed substantial price appreciation during the inflationary years of the late 1970s. Property investments today may not enjoy the same degree of success.

A change in securities laws has also led to increased sales of syndication interests. While the number of investors in any private limited partnership formerly was restricted, Regulation D (effective April 15, 1982) established a number of exemptions which effectively enabled syndicators to sell to accredited investors an unlimited number of interests in a partnership. As a result, general partners can privately syndicate larger properties and avoid the more restrictive SEC

David B. Blenko is a second vice president in the Real Estate Department of Continental Illinois National Bank and Trust Company of Chicago. A graduate of Amherst College, he received an M.B.A. degree from Stanford University.

requirements which apply to public syndications. The marketing of syndication interests has also grown more sophisticated. Not only have major investments firms become active in the business, but also major syndicators have developed independent sales networks of their own. At the same time, sophisticated packaging and product differentiation are more prevalent as syndicators develop products directed at different investor markets (e.g., IRA/Keogh plans, and tax shelter oriented individuals).

All of the above factors have contributed to the increased public recognition of, and demand for real estate syndication investments. While a number of circumstances have changed and benefited the syndication industry, including changes in tax and securities laws, the investor should not necessarily assume that syndication investments today will perform as well as many did in the 1970s.

The Impact Of Syndication Industry Growth

As a result of their successful equity sales efforts, real estate syndicators have become increasingly significant players in real estate markets nationwide. For instance, recent articles have quoted insurance company executives as concerned about their inability to compete with syndicators for properties which would have sold in the institutional market before the marked increase in syndication activity of the past three years. As an indication to the extent of syndication involvement in real estate markets, assume \$15 billion of syndication equity capital was raised in 1983. If 20% of this capital went to syndication fees and the remainder was used to acquire real estate with 75% leverage, then syndications conceivably were involved in transacations valued at \$48 billion in 1983 alone. The following discusses the impact of this growth on the industry and opportunities for the investor.

One natural by-product of syndication industry growth has been the emergence of large syndication firms. Many of these syndicators have developed to the point where they are proficient in all the various syndication related disciplines (i.e., acquisitions, property management, investor relations, etc.). In fact, some firms are involved in a range of businesses of which syndication is only one. One large syndicator sponsors a REIT and develops real estate for its own account, in addition to syndicating. Other major syndicators have chosen to restrict themselves to a more narrowly defined business. One syndicator until recently was involved exclusively in the purchase, syndication and management of apartment properties. In any event, there has been a major change in the profile of the real estate syndication industry. At one time many syndicators were small operators and the industry, in general, had a somewhat unsavory reputation. Now a group of well capitalized and professional syndication firms have emerged where investors can buy prudent and profitable syndication investments. Some syndication firms have benefited from their association with the financial and management resources of a public company.

Despite the development of some capable and financially strong syndicators, however, there have been some worrisome consequences resulting from the recent growth in the syndication industry. In particular, the increase in the amount of equity raised for real estate syndications has led to upward pressure on real estate prices as syndicators compete for product in a seller's market. This phenomenon has led some syndicators to pay prices which many consider excessive. Such purchases are justified by their sponsors in terms of tax benefits to investors in the short term and property appreciation potential in the long term. However, substantial improvement in the operating performance of the acquired property is often necessary in order for such syndications to generate the returns to investors projected by the sponsor.

As a result of this increased price competition for properties, some syndication groups are likely to overpay for property and suffer poor returns on their investments. Some have even predicted the syndication industry will go the route of the REIT industry in the 1970s. However, while there are some parallels between REITs and syndicators, there are major differences. First, the REITs which experienced the greatest difficulties were in construction and development. These REITs generally were spread lenders and were lenders of last resort. As a result, they were vulnerable to upward movements in short term rates and many made loans secured by less than top grade real estate developed on a speculative basis. In contrast, many syndications today are conservatively capitalized with 30-40% investor equity and long term fixed rate debt, and are buying preleased institutional quality real estate. While there are obviously exceptions to these rules, there are enough differences that any problems faced by the syndication industry should be less severe than those of the REITs. This is especially true in the wake of changes in federal tax laws passed in 1984 which will discourage abusive real estate tax shelters.

While it seems likely that the syndication industry as a whole will not experience the kind of shakeout experienced by the REITs, there are likely to be some problems. As a result of price competition and the recent IRS crackdown on abusive tax shelters, some syndication investments inevitably will produce poor returns for investors. It is therefore the responsibility of the individual investor to analyze any syndication investment thoroughly before investing, preferably with the assistance of a qualified professional.

Risks In Real Estate Private Placements

A majority of the syndications sold in recent years have been real estate private placements. In contrast to public real estate syndications, which historically have been required to raise all investor equity in up front, lump sum payments, private placements can be structured so that partners submit their equity contributions in installments over a period of years. By staging partnership contributions in this manner, the syndicator can match investor payments with offsetting tax benefits and, in effect, minimize the investor's annual net cash outflow. For instance, an investor in the 50% tax bracket who receives \$2 or more of tax deductions annually for every \$1 contributed to a partnership should receive immediate tax savings sufficient to cover the cost of his or her contribution. While such investments can not totally eliminate income taxation, they do offer two potential tax benefits: (1) the conversion of ordinary income into long term capital gains, and (2) the deferral of tax payments until the sale of partnership property. Thus, these investments are popular for understandable reasons including the potential for tax savings in the short term and property appreciation and cash flow in the long term. However, they present several risks which investors should be aware:

Disallowance of Tax Deductions—Although The IRS rarely disallows a significant percentage of the projected tax benefits from a conservatively structured real estate syndication, it may do so when a gross overvaluation of a property or overly aggressive tax accounting practices lead to inflated write-offs for investors. In searching for such abuses, the IRS will direct special scrutiny to syndications offering write-offs in excess of 2:1. An investor can derive comfort regarding tax aspects of a syndication with a tax opinion from a reputable law firm which opines that "more likely than not" a majority of the projected tax benefits are likely to withstand any IRS examination. This assurance also can result from an MAI property appraisal.

Foreclosure by Lender—A lender's foreclosure on a syndication owned property is likely to have a more severe impact on investors than an IRS disallowance of tax benefits. Not only will a foreclosure result in the loss of tax benefits, but also it is likely to result in unexpected tax obligations for investors due to recapture of accelerated depreciation and penalties for debt forgiveness. Investors can protect themselves against the threat of foreclosure by carefully examining partnership pro formas to determine whether the partnership will be liquid enough to fulfill its scheduled debt service obligations in the short term, and by assessing the property's long term prospects to determine whether the partnership will be able to comply with the terms of its mortgage debt. This includes any requirement to make a short-term "balloon" principal repayment (often due three-ten years after acquisition of the property). It is especially important to focus on these points because, under certain circumstances the investor may lose more than the amount of his or her original cash investment.*

Excessive Purchase Price—Many syndicators today are paying such aggressive prices for properties that their syndications are not "economic" real estate investments in the traditional sense. Cash flows from their property acquisitions do not initially cover their related mortgage debt service. These cash shortfalls may be offset by investors' cash contributions in the short term. But the long term economic viability of such investments generally will depend on increases in net cash flows from the property. In the absence of such increases, the syndication group may face foreclosure or, even if a property is not lost to foreclosure, minimal returns to investors. This risk to investors is further heightened by the fact that syndicators' economic interests and theirs do not necessarily coincide. Because syndicators typically receive large up front fees regardless of the returns to limited partners, syndicators may have a strong incentive to syndicate properties even if the purchase prices paid are inflated. Again, to protect against this risk, it is important to carefully assess the property's short and long term prospects and to critically evaluate the syndicator's assumptions in these areas.

Reliance on Financial Strength of Sponsor—The investor also should realize that the general partner's financial position is important in determining the financial viability of a limited partnership investment. A limited partnership typically will run five to ten years. It is quite possible that there will be temporary cash flow shortfalls relative to budget during that period, even if the investment has been conservatively structured and performs well in the long run. Therefore, because the general partner typically will have a limited ability to make additional capital calls on limited partners, he or she must have the financial strength necessary to support not only the subject partnership but also all other such partnerships he or she has sponsored.

Reliance on Sponsor's Organization-Real estate syndication is a very complex business. To be effective a syndicator must be strong in a number of diverse functional areas including acquisitions, securities laws, tax planning, property management, investor relations, marketing and accounting. If any one of these areas is weak, it can hurt the syndicator's overall operation and eventually affect any partnership sponsored by the syndicator. For example, if a syndicator fails to provide timely tax information to investors, they may delay their installment payments. This causes liquidity problems for the general partner thereby hurting all affiliated partnerships. If the general partner does not ensure that partnerships he or she has sponsored are in full compliance with a myriad of IRS and SEC regulations, the consequences for a partnership can be very damaging. In addition, if the general partner does not remain actively involved in property management, partnership properties may not perform up to their full potential or may even suffer physical deterioration. The investor should determine that the sponsor of any potential syndication investment has the expertise required to maintain the viability of the investment.

Investor Defaults—In real estate private placements, deferred investor equity contributions represent a significant source of partnership funds. If a large number of investors in a partnership defaults on these payments,

^{*}Pilzner. "You Can Lose in the Wrong Syndication Investment", Real Estate Review (Spring 1984).

the partnership's liquidity position will be impaired. Although investor defaults have not been a major problem for the syndication industry, and the historical default rate has been less than one percent, the investor can verify that the syndicator has minimized this risk by establishing adequate minimum financial standards for investors. Also, investors are more likely to be well qualified for future payments if their first year down payment is substantial (20-25% of the total investment). This risk will be further mitigated by the fact that investors have a significant incentive not to default because a default triggers adverse personal tax consequences. Also, in the unlikely event that an investor does default after making one or more installment payments, the general partner should be able to remarket the limited partnership interest if the syndication continues to meet projections. Surety bonds or letters of credit backing investor notes will provide even greater security for the partnership. Of course, the best protection against investor defaults will be a conservatively structured syndication which meets investor expectations.

Syndication Evaluation Criteria

To minimize the above risks, the investor (or a qualified professional acting on behalf of the investor) should thoroughly analyze the merits of any syndication investment just as a lender would in considering a loan to a real estate investment partnership. This analysis can include an assessment of the general partner's organization strength, track record and financial position to insure that he or she has the capacity to manage the property investment; a verification that the general partner has not had any prior significant disallowances or problems with the IRS or SEC; an evaluation of each property acquired; an analysis of underlying mortgage debt and its terms; and a verification that the gualification standards for investors are stringent enough so that other investors would be likely to make future required equity contributions. In addition, the investor can reguire a complete legal opinion covering tax aspects of a syndication, as well as an MAI appraisal.

It will be particularly difficult for the investor who is not a real estate expert to evaluate a syndicator's property cash flow projections, especially when the projections assume a substantial improvement in net cash flows from a property. It is essential for the investor to determine these assumptions are not overly aggressive. This analysis will be difficult because it will be prudent in some cases for a syndicator to project that there *will* be significant increases in property cash flows. For instance, the syndicator acquiring the subject property may have a property management capability which is far superior to his or her predecessor's. Alternatively, rents in the vicinity of the subject property may be escalating far faster than expenses. Nonetheless, the risk to the investor is that the syndicator has assumed a series of annual increases in net cash flow which cannot be sustained, and are not warranted given the specifics of the property and its market. Such syndicators may be doing nothing more than unwittingly betting on inflation. Just as with oil prices, this can be a very dangerous area in which to speculate. In cases where the assumed annual increases in net property cash flow appear excessive, the reason simply may be that the syndicator overpaid for the property. In other words, in such cases substantial increases in cash flow may be required to justify the purchase price. Of course, what are reasonable assumptions in this regard will depend on the subject property and market as well as the capabilities of the syndicator. Again, it is recommended that the investor enlist the services of a qualified professional in this evaluation.

A complete due diligence examination of a syndication investment as outlined above should establish with a reasonable degree of certainty that: any IRS disallowance of tax benefits should not have severe adverse consequences for the investor; the partnership owned property's performance should at least come close to meeting operating projections; to the extent that the property does underperform versus budget, the combination of operating reserves built into the deal and the financial strength of the general partner should be sufficient to maintain the viability of the deal; and if the above conditions are met, the partnership should not suffer from large-scale defaults by investors unwilling or unable to make their deferred equity contributions. If these conditions are met, the chances of a major disappointment with a syndication investment will be minimized.

Summary Recommendations

Investors should consider investing in real estate syndications on a selective basis because they offer the potential of very attractive after-tax returns. Moreover, due to the growth of the syndication industry, there are any number of sophisticated and well capitalized syndicators. However, because of the substantial risks inherent in many syndication investments, investors should not make any investment without a thorough analysis of the syndicator, preferably with the assistance of a qualified professional.

The reputation of the syndicator should be a major consideration in the underwriting process, particularly since the success of the syndication will depend on the syndicator's ongoing involvement in property management and investor relations. It is also important for this analysis to determine how aggressive are the syndicator's property cash flow projections, and to evaluate the strengths and weaknesses of the property and its surrounding market. Such a careful examination will help protect the investor against a major syndication disappointment.

EXPANDING THE PRODUCTS AND SERVICES OF FINANCIAL INSTITUTIONS: THE CASE OF THIRD PARTY REAL ESTATE BROKERAGES

by Austin J. Jaffe and J. Randall Woolridge

In recent years, the deregulation of depository financial institutions, coupled with an expansion of products and services offered by nondepository financial institutions, have significantly altered the competitive environment of the financial services industry. Today, depository and nondepository institutions compete in many different areas in the services they offer to the public. The housing finance sector of this market has not been immune to these developments. Depository and nondepository institutions are beginning to compete in several levels of the housing finance market.

This paper traces the evolution of the housing finance market and the strategic moves made by depository and nondepository institutions to expand their respective roles in this fast changing market environment. The primary focus in this paper centers on the debate concerning the decision by some state chartered savings and loan associations to engage in third party real estate brokerage activities. This strategic shift in policy, fought at both the state and federal levels by various real estate trade associations including the National Association of Realtors, is currently under consideration by the Federal Home Loan Bank Board as a permissible activity for service corporations of nationally chartered savings and loan associations.



The Financial Environment For Third Party Real Estate Brokerages

Deregulation — As deregulation of depository institutions has evolved and in the wake of the 1980 and 1982 acts (see Exhibit 1), a continual concern has been expressed by bankers, legislators, regulators and the public about the impact of a deregulated financial environment on the mortgage market and on the role of savings and loan associations as the primary lender to the housing sector.

During the late 1970s, piecemeal deregulation on the liability side of savings and loans' balance sheets occurred with the creation of a new type of deposit accounts. These actions were intended to permit consumers to earn money market interest rates and to help ease disintermediation pressures during periods of increasing interest rates. This proved to be very harmful to savings and loan associations. It was especially true during the period 1979–1982 when interest rates were relatively high and volatile. Over those years, the net worth of the industry declined by about \$10 billion, and more

Austin J. Jaffe is an associate professor of business administration at The Pennsylvania State University. He has frequently contributed to numerous academic and professional journals on topics including real estate investment analysis, valuation, and legal issues. He is also the author or co-author of several books including The Complete Real Estate Investment Handbook (2nd Edition, 1984).

J. Randall Woolridge is an associate professor of finance at The Pennsylvania State University. He currently teaches and researches in the financial markets and institutions area. His research expertise is in dividend policy, financial innovation and assorted banking topics. He also has testified on banking issues before the Pennsylvania Department of Banking and on the fair rate of return for the Pennsylvania Public Utility Commission.

EXHIBIT 1

Major Provisions of The Depository Institution Deregulation and Monetary Control Act of 1980 and

The Garn-St. Germain Depository Institution Act of 1982

The 1980 Act

- 1. Permits NOW Accounts Nationwide.
- 2. Increases Deposit Insurance Ceiling to \$100,000.
- Expands Thrift Powers to Include Consumer Loans, Credit Cards, Trust Departments, and Checking Accounts.
- Provides for Uniform Reserve Requirements on Transactions Accounts at all Depository Institutions.
- Gives all Depository Institutions Access to the Federal Reserve Bank Discount Window.
- Sets up the Depository Institutions Deregulation Committee.
- 7. Phases out Interest Rate Ceilings on All Deposits.
- 8. Simplifies the Truth in Lending Laws.

The 1982 Act

- 1. Gives Deposit Insurance Agencies New Powers and Methods for Handling Problem Institutions.
- 2. Creates Money Market Deposit Account(s).
- 3. Expands Thrift Powers in Areas of Consumer and Commercial Lending.

than 700 savings and loan associations disappeared nationwide.

The 1980 and 1982 acts effectively lifted interest rate ceilings on virtually all savings and loan deposits, and to enhance competition among financial institutions, empowered savings and loans to offer various forms of consumer and commercial credit. These new asset powers, combined with the relatively new forms of adjustable rate mortgages, were available to associations since 1981. They were expected to permit the industry to diversify its asset base and void a repeat of their previous problems.

However, deregulation also meant that savings and loan associations would be operating in an increasingly more competitive environment for consumer savings and loan originations. Consequently, the 1½ percent spread between asset yields and liability costs which savings and loans had historically maintained (prior to 1979) was likely to decline in the years ahead. In order to compensate for this lower spread, savings and loan associations were forced to look for new profit making opportunities. One such opportunity was third party real estate brokerages.

The Evolving Mortgage Market—Like other financial markets, the housing finance market has gone through a significant transformation in recent years. In addition to the large number of different types of adjustable rate mortgages (ARMs) resulting from deregulation and the more volatile interest rate environment, the primary and secondary mortgage markets have experienced considerable changes. In the case of savings and loans, a most notable development has been the emergence of relatively unregulated financial service and real estate franchise firms which operate much like mortgage bankers and help link the primary and secondary mortgage markets.

Recent patterns in the primary and secondary mortgage markets provide some indication of this trend. In the 1-4 family mortgage origination market (FHA/VA and conventional), the market share for thrifts, the largest originators of these mortgages, has dropped from a peak of 60% in 1976 to 40% in 1982. The thrift drop-off has largely been picked up by mortgage bankers whose market share rose from 14% in 1976 to 30% in the early 1980s.

The most significant development in the secondary mortgage market, beyond the tremendous growth in programs such as GNMA, FHLMC, and FNMA mortgagebacked securities (MBS), has been the large change in the percentage of loans which are originated and then immediately sold as MBSs. Prior to 1981, an average of about 30% of the loans originated by primary real estate lenders each year were sold off in the secondary market. However, in 1982 the ratio of originations to secondary market sales showed a dramatic increase to 63 percent.

Some observers have speculated that in the years ahead. it is likely that up to 75 percent of all mortgages originated will be sold in the secondary market. This figure seems entirely reasonable especially if Congress passes two bills that have recently been introduced into the Senate's Committee on Banking, Housing and Urban Affairs. These are: 1) S. 1821 — The Secondary Mortgage Market Enhancement Act, and 2) S. 1822-Trust for Investments in Mortgage Act. These bills have the support of the National Association of Realtors, the Mortgage Bankers Association, the United States League of Savings Associations, and the investment banking industry, among others. They should tremendously enhance private initiatives in the MBS's market by amending securities, banking, and tax laws. The MBS's market growth has been accomplished with little private sector participation. The support for the two Senate bills stems from the belief that the secondary mortgage market has been developed to such an extent that additional private sector activity is feasible and that such development is also necessary to meet the future home financing needs of our society. Passage of these two bills will dramatically increase private MBS's activity.

Examples of New Competitors for Savings and Loans

In this environment, a number of financial service and real estate franchise firms have entered into the loan origination market in the past few years. Many of these firms originate mortgages in real estate brokers' offices, package the loans through a related mortgage company and then sell MBSs on either a wholesale or retail level. Some examples of this type of arrangement are provided below:

1. Merrill Lynch Realty Corporation. In its Network 50 program, the firm has mortgage loan op-

erations available to its 350 offices of Merrill Lynch Realty Associates through the Merrill Lynch Mortgage Corporation. In addition, Merrill Lynch will accept nonaffiliated brokers as participants. The real estate salespersons retain origination fees on all loans while Merrill Lynch Mortgage Corporation gets the loan servicing fees. The firm has a subsidiary which pools the loans and then sells MBSs to investors in various denominations.

- 2. First Boston Corporation. This firm is a major New York City investment banking concern with an established program called "Shelternet," a computerized mortgage-banking network with a planned 150 real estate brokers nationwide. Shelternet's arrangement for origination and loan fees is the same as Network 50's.
- 3. Coldwell Banker. As the real estate subsidiary of Sears, Roebuck and Company, this visible concern has offices in 39 states and has mortgage banking operations available through Coldwell Banker Residential Mortgage Services, Inc. The firm recently began a program entitled, "The Sears Home Buyer's Program," whereby Coldwell Banker's homebuying customers receive discounts ranging from 10-25 percent on Sears' household merchandise and customer services.
- 4. Century 21 Real Estate Corporation. This large real estate franchise has recently established Century 21 Mortgage Corporation to act as a mortgage broker for financial institutions interested in investing in home mortgages originated by Century 21 real estate offices. On October 1, 1983, the firm also established a discount program for individuals who buy and sell homes through Century 21 franchises.
- 5. Electronic Realty Association (ERA). In 1982 this brokerage organization, with 3,000 nationwide affiliated offices, began offering first mortgages to customers through a subsidiary of its parent Commercial Credit Company. The company sells MBSs in the secondary market.
- 6. Better Homes and Gardens Real Estate Service. As a subsidiary of Meredith Corporation, this franchise has a network of independent real estate firms with more than 1,000 offices nationwide. The Meredith Mortgage Corporation should be nationwide by mid-1984, and will use the conventional secondary market to sell its mortgages.

Basically, these initiatives represent vertical integration efforts on the part of largely unregulated firms. For real estate brokers involved with these firms, they offer a conduit to the capital market for obtaining home financing funds and an opportunity for earning fee income from loan originations. For the mortgage banking concerns involved, they offer a steady stream of mortgages to be pooled and sold as MBSs in the expanding secondary market. For both groups, the integration of the primary and secondary markets should provide economic benefits.

For savings and loan associations, these initiatives represent competition on both sides of the balance sheet. On the asset side, due to the larger number of loan originators and to the corporate structural relationship which links the originator with the secondary mortgage market, savings and loans will face greater competition for loan originations. On the liability side, savings and loans will face additional competition for consumer savings and therefore will have to offer interest rates on deposits which are competitive with similar types of investments, including the small denomination MBSs of the financial service companies.

Economic Motivations For Third Party Real Estate Brokerages And The Concerns Of The Real Estate Brokerage Industry

Savings and loans have numerous motivations to engage in third party real estate brokerage services. As the largest originator of residential real estate loans, savings and loans have developed considerable expertise in the financing of housing. The decision to enter the real estate brokerage business through subsidiaries is a strategic move to vertically integrate in much the same manner as the financial service and real estate franchise companies previously discussed. If savings and loans are to remain competitive with these "one-stop homebuying" shops in the years to come, the ability to offer real estate brokerage services is of critical importance. Furthermore, as already mentioned, savings and loans must look for alternative fee income activities such as real estate brokerage services to offset their lower yields on funds.

The traditional institution of brokering housing, as represented nationally by the National Association of Realtors and the parallel state associations, has consistently resisted both actions by depository institutions and fullservice firms to enter the real estate brokerage business. There are a wide variety of claims made by the real estate brokerage industry.

The following is a sample of the court testimony from a complaint filed by an individual who, at the time, was the elected president of a state association of real estate brokers. The suit was filed on behalf of himself and the state association against the state department of banking. The latter had authorized a limited number of third party brokerages (*I. Marvin Miller and the Pennsylvania Association of Realtors vs. Department of Banking, Commonwealth of Pennsylvania vs. Great Valley Savings Association, No. 1317, C.D. 1983).* The following testimony was given in May, 1983. It is apparent that the plaintiff regards the establishment of a service corporation (third party brokerage) will result in greater but "unfair" competition.

Q: Assuming that there was within your trading area a broker affiliated with a service corporation of a savings and loan association and you were not, would you feel that would be harmful to you in your efforts?

A: I certainly would feel that way.

Q: And in what way do you feel that that would be harmful to you?

A.: Well, that broker that is affiliated with an s and I's service corporation would be able to take listings from me without any difficulty ... Just the potential conflict, the word-of-mouth advertising, if you will, that goes on, "Hey, list with me because I can get it for you wholesale. I can guarantee you a mortgage. Don't worry about it, we'll get it for you, and down the street can't."

One of the major issues of contention is the existence of federally insured deposits. Consider the following testimony:

Q: Distinguish a difference between a service corporation and an affiliation with a private source of funds, such as Sears Roebuck or whoever it might be.

A: Well, Sears Roebuck is a private operation. Merrill Lynch is a private operation. It doesn't fly the flag of government ... All of the ads that you see now on television, in the newspaper or hear on the radio show "our deposits are federally insured"—especially now that they are trying to get the money back from the money market funds. ... The ads say that they are federally insured. It's the same thing with the service companies of s and I's. "We are federally insured." You see it on television all of the time ...

(Under cross-examination)

Q: In the area of private mortgage companies that are affiliated with real estate brokerage activities, did you direct your counsel to see whether there would be any legal attack on those types of affiliations?

A: No, we did not.

Q: Why?

A: We saw no reason to. Our concern was with the blessing of government, and the s and l's are going under that benefit as opposed to private.

Q: Are you familiar with the Coldwell Banker-Allstate Mortgage Corporation program where you can get funds to finance real estate transactions only if you deal with Coldwell Banker?

A: I'm aware of that, not the specifics or details, but I'm aware of the general situation.

Q: And you think there is a material difference between the type of affiliation which guarantees funding available versus having an affiliation with an s and I that has some sort of government insurance?

A: I am fully convinced that there is a major difference, the difference being the government, who is allknowing and will take care of everything, and we are federally insured. The other is still private. Knowing people over a lot of years, that's what people think. That's what people know. They think it and they know it. The government is there, and the government will back us, and the government will take care of us. Another concern is the possible misconceptions the public might employ regarding the affiliation of the third party brokerage office and the s and l.

Q: You have been at the same address for a long time?

A: Since 1948 ...

Q: And you are familiar with the people in the neighborhood of your office and your trading area?

A: Yes, sir.

Q: And you spent your daily business life there for the last 30 some years?

A: Yes, sir.

Q: What effect do you feel in the minds of the people in your trading area would there be if a broker were to advertise—if he was to use a name—the same name or a similar name to a savings and loan association and advertise that he was a part of that organization?

A: The people in my marketing area would feel that that person is part of that s and l and can get a better deal.

In the end, it seems that the fundamental element of the argument is the potential loss in business resulting from increased competition.

Q: Would you describe the specific harm to you, if any, as a real estate broker, from the grant of authority to the [limited number of] service corporations referred to in this proceeding to engage in third party brokerage operations?

A: The potential loss of access to credit, the potential conflict of interest, the so-called guarantees of availability for mortgage financing at better than competitive rates to those people in direct competition with me, the potential loss of listings and the potential loss of income to all those things.

Q: My question to you was the harm to you as a broker. You have previously testified that you do not engage in your brokerage business in the areas where these [limited number of] service corporations are located, yet you are now saying that there is a loss of business to you as a result of that grant of authority?

A: It's a potential loss of business to me.

Q: What actual loss of business or actual harm has there been as a result of the authorization for the [limited number of] service corporations to engage in third party brokerage?

A: In dollars and cents at this moment, there is none. I reiterate, sir, that it's the potential great loss.

The Federal Home Loan Bank Board is currently considering new competitive financial service activities for savings and loan service corporations. These activities, as authorized by 12 U.S.C. 1464(c)(4)(B), have been limited by board policy in the past. The regulations have permitted only those activities that are reasonably related to the activity of the parent firm. In this regard, the board is currently considering three applications on a case-by-case basis as to whether service companies of federally chartered savings and loans should be permitted to offer real estate brokerage services for property owned by third parties. According to the board (12 CFR Part 545, 82-136, pp. 6-7), "real estate brokerage is an essential part of the process of marketing and financing homes and, for that reason, may be reasonably related to the activities of federal associations whether or not the property is owned by a third party. For that reason, allowing federal associations to provide real estate brokerage services on a wider scale may foster significant economic and competitive benefits for both the public and the savings and loan industry."

As stated by the board, the primary benefit to the public would result in increased competitition for real estate brokerage services. Presumably, this would include both the pricing and quality of these services.

The National Association of Realtors has expressed several concerns over permitting savings and loan service corporations to offer real estate brokerage services. First, they have argued that it would allow unfair competition because savings and loans hold governmentinsured deposits. In effect, it has been argued that the real estate subsidiary would fly "under the flag of federal government." This argument seems to lack reasoning since the two sides of the balance sheet are being intermingled. There is no logical relationship between the existence of government-backed insurance for savings and loans' depositors and the performance of real estate brokerage services by a service company subsidiary. In effect, it is the proverbial "apples and oranges" situation.

Second, it has been stated that savings and loans would be using funds obtained in the form of governmentinsured deposits for investment in the real estate subsidiary of the service company. This is alleged to be another form of unfair competition. However valid the proposition, where investment is permitted, a savings and loan is normally limited in size to about 2 percent of the association's assets and the same statement is true concerning all the activities of a savings and loan service company.

Third, there is a concern regarding the potential for conflict of interest. It has been argued that the decision by a parent savings and loan to offer financing in a home purchase would be affected by the fee a service corporation would receive by such a sale. However, as the board has stated (12 CFR Part 545, #82-136, p. 7), "...after reviewing several applications for approval of this activity, the board considers this potential conflict sufficiently remote so as not to offset the advantages of increased service to the public and profit opportunities of federal associations. Any actual conflicts of interest can be identified and monitored in the supervisory process."

It should also be noted that during this same period of de- and re-regulation of the financial system, a series of fundamental changes have taken place in the real estate brokerage industry. Beginning with the franchise movement in the 1970s, the development of national real estate firms was the logical next step. What was formerly regarded as relatively loose professional affiliations during the franchise era, may prove to be the beginning of national networks of data sources, standardized operating practices, and perhaps most importantly, an institutional framework for making funds available nationwide for residential brokerage activity.

At the same time, the last decade has witnessed numerous court actions, largely against multiple listing services, which have alleged antitrust actions against the real estate industry. The major problems are with the settling of commissions and the alleged discriminatory practices of the local multiple listing organization. Some observers believe that the development of national real estate brokerages may further dirty the already muddy waters by providing further evidence of interstate commerce activity in the real estate business. Two well known cases, Goldfarb v. Virginia State Bar 423 U.S. 886 (1975) and McLain v. Real Estate Board of New Orleans 444 U.S. 232 (1980), have been widely cited as evidence of the court's recognition that real estate brokerage activity does involve interstate commerce or at least, affects commerce between states. Thus, the Sherman Antitrust Act may apply to this industry.

Finally, technological developments in information processing are likely to have a profound impact on the real estate brokerage business. Where once the market data relevant to pricing and sales activity was difficult and costly to obtain and manage, such activities in the future are certain to be more economical. As brokerage compensation is a function of market information used and obtained by the party to the brokerage contract, so are returns to brokers likely to fall as technological developments reduce such frictions. In the case of real estate brokerages, the expected reduction in information costs is expected to be substantial.

Therefore, given the changes that have taken place in the real estate brokerage industry, those in the process of occurring and the new financial environment since 1980, it is not surprising that real estate associations and their members have objected to states permitting third party brokerages. It appears that most of the objections from the real estate industry are not based on sound economic analysis. It is not surprising that several states have approved applications to permit state associations to engage in third party real estate brokerage activities.

A Survey Of Third Party Brokerage States

A growing number of states permit state-chartered savings and loans to offer third party real estate brokerage services through a service corporation. During the late months in 1983, we conducted a survey of state banking departments in order to identify the extent third party brokerages were and would be permitted throughout the United States. Exhibit 2 presents the survey results.

On a pre-approved basis, third party brokerage business is currently permitted in five states (California,

EXHIBIT 2

	Third Party Re Surve (as of No	al Estate Brokerage ey Results vember 1983)	
Alabama	None	Montana	None
Alaska	None	Nebraska	None
Arizona	None	Nevada	None
Arkansas	None	New Hampshire	None
California	Preapproved	New Jersey	First Approval
Colorado	None	New Mexico	Available
Connecticut	None	New York	Available
Delaware	None	North Carolina	None
Florida	Available	North Dakota	None
Georgia	None	Ohio	Preapproved
Hawaii	None	Oklahoma	None
Idaho	None	Oregon	First Approval
Illinois	First Approval	Pennsylvania	First Approval
Indiana	Available	Rhode Island	None
lowa	First Approval	South Carolina	None
Kansas	Available	South Dakota	None
Kentucky	None	Tennessee	None
Louisiana	Preapproved	Texas	First Approval
Maine	None	Utah	Available
Maryland	Preapproved	Vermont	None
Massachusetts	None	Washington	Available
Michigan	First Approval	West Virginia	None
Minnesota	None	Wisconsin	First Approval
Mississippi	Available	Wyoming	None
MISSOURI	rreapproved		

Note: Preapproved—States which have legislated preapproval: First Approval-States which require case hearings for approval:

Available-States where there is no third party brokerage activity but where it is not prohibited;

None-States which either prohibit third party brokerages or where no action in this area has been taken.

Louisiana, Missouri, Ohio, and Maryland). In addition, third party real estate brokerage applications are reviewed on a case-by-case basis in eight states (lowa, New Jersey, Michigan, Oregon, Illinois, Texas, Wisconsin, and recently, Pennsylvania). Finally, there are eight other states in which no requests have been made for this type of activity, but in the opinion of state banking officials, would not be prohibited (Indiana, Florida, Mississippi, Kansas, Washington, Utah, New Mexico and New York)

Therefore, presently 21 states have mechanisms whereby associations can enter the real estate brokerage service industry. This list is likely to grow in the next few years since the results of this survey indicate considerable interest nationwide in third party brokerages. It is probable that other states will follow.

Conclusion

The deregulation legislation has impacted the financial system. Several addresses and studies have predicted forthcoming changes for the system and financial intermediaries during the next several years. One clear result of the new regulatory environment is the prospect of financial institutions entering industries which formerly were precluded or were thought to be unattractive but now, may prove to be essential for survival.

The case of third party real estate brokerages is one of considerable interest to many. It is particularly interesting that the relatively strong real estate lobbies at both the federal and local levels have been unsuccessful in stopping the introduction of financial institution service corporations from entering the real estate brokerage business.

While the future is always difficult to foresee, it appears certain that the economic incentive for new market opportunities and increased competition for depository funds will provide a strong motivation for new subsidiaries to enter the real estate brokerage field. This will dismay some traditional real estate brokers and delight a new breed of innovative professionals offering new opportunities at service corporations of financial institutions.

DIFFUSING THE INFORMATION EXPLOSION

by Robert B. Hulley

There was a time when it was easy to forecast the future of real estate. You could judge where rents and interest rates were going, and when property values might increase. But today there is an endless variety of what-ifs that affect real estate. What's more, each deserves serious consideration.

Two events have occurred which help us understand and diffuse this problem. The first is a theoretical approach to information—how it expands and reacts on existing analytical structures. The other is the use of the computer to solve the very problem it helped create. In combination they are invaluable aids to institutional investors, mortgage lenders, counselors and appraisers who work with a multiplicity of interrelated information.

Dissipative Structures

"Most of us are poorly equipped to give satisfying and coherent responses to anything but quite simple conceptualizations of what may lie ahead," said William T. Morris of Ohio State University. "We are ill at ease if there is a marked dissonance between our conscious anticipations and our actions. Consonance seems to come more easily if we stick to elementary notions of what may occur. It is far easier to act if we deal with a single future than if we try to respond reasonably to a view which includes several possibilities and their associated probabilities."¹

A Belgium bio-chemist, Dr. Ilya Prigogine, won the 1977 Nobel prize for his theory of "Dissipative Structures"² While his theory deals with the thermodynamics of nonequilibrium systems, it has been used for such diverse undertakings as predicting traffic flow patterns and changes in the social order as detailed in



Marilyn Ferguson's best seller *The Acquarian Conspiracy*.³ His theory may also be restructured and paraphrased for the purpose of moving towards a theory of information as follows:

- Small changes in alternatives can be accommodated in old structures, larger fluctuations cannot. They change the structure and set up new connections.
- The greater the input of information, the more

Robert B. Hulley CRE, FRI, AACI, is a member of the American Society of Real Estate Counselors and chairman of the Canadian division of the Society. He is a fellow of the Realtors Institute and an accredited appraiser of the Canadian Institute, Mr. Hulley operates a real estate appraisal and counseling practice in Toronto, Canada.

interaction occurs. This means the greater potential for new connections, ideas and values.

• The more complex the structure, the greater the next level of complexity.

The structural theory of information is that it is expansive and interacts with itself becoming more complex. But, the practical answer is to develop the means to channel these characteristics into a usable form.

Open And Closed Systems

Computer technology has made it possible for real estate analysts to work with a wider range of alternatives than are found in a lineal approach or closed system. More information cannot be contained in the old structure: rather it must be expanded to a higher order. For example if an appraiser was considering the value of a small apartment building and could see a situation where the residual value might appreciate by 5, 10, or 25 percent depending on a series of very special circumstances, it would be impossible to reflect these alternatives in a traditional lineal income approach to value. Ordinarily the estimate would be based on a net cash flow projection, a rental increment forecast and a calculation of residual benefits. While consideration would be given to the various alternatives, the estimate would be based on a single set of most probable circumstances. (See Figure 1)

FIGURE 1

	Small Apartment Building Income Value Estimate
\$320,520.57 32,052.05	Original Investment Value Appreciation 10%
\$352,572.62	Equity Reversion Deferred 5 yrs.
215,000.00 7,955.00	Mortgage Less 5 years amortization
\$207,045.00	Mortgage payable in 5 yrs.
\$145,527.62	Equity Reversion deferred 5 yrs.
Present Value o	f Equity & Reversion at 10%
\$ 15,159.35 90,361.22 215,000.00	Cash Flow \$3999* × PW of 1 per A Equity Reversion \$145,527.62 × PW of 1 Mortgage
\$320,520.57 \$320,500.00	Original Investment Value Rounded
* Net \$33,360 -	Debt service \$29,361 = \$3,999.

When alternatives are added to any of the specific assumptions concerning a property's potential, the whole system is changed. An open system must be adopted to allow for variations in income and expense estimates, annual increments, tax shelter benefits, loan amounts and amortization, capital improvements and restorations and gains or losses from the eventual sale of the property. For instance suppose we wish to reflect the three variations in residual benefits mentioned earlier. This would result in three separate income value estimates of \$291,900 at five percent appreciation (residual benefit), \$453,900 at 25 percent benefit and our original estimate of \$320,500 at 10 percent.

This process is illustrated schematically by using a branching system where the circular nodes represent a probability branch and the rectangular nodes represent end values. The nodes have been numbered for reference purposes. (See Figure 2)

FIGURE 2

Values Using Alternative Residual Benefits



The alternative appreciation (residual benefits) shown in Figure 2 assume a uniform nine percent rental increment. The branch at nodes six, nine and 11 indicates the three variations in residual benefits. A further branch at node 11 is included to indicate no increase may accrue. Each alternative has a profound effect on the lineal value estimates (nodes 17, 18, 19 and 20) of the property. The range is from \$269,000-\$453,900.

Having formed a pattern of possible alternatives and produced a range of tentative values, let's now move to the probable effects on the property value used in the example.

Probability Of Future Events

New connections reflect significant alternatives perceived for the future of the property. These alternatives provide insight and form an overall picture of a property's potential. For example, in Figure 2 we developed income value estimates based on four assumptions about future residual benefits. We did not however provide a concept of the environment in which each would have the best chance of success. "Until we develop a notion of what futures are possible and probable, one course of action tends to look as good as any other. If we don't anticipate it hardly matters what we do". William Morris said in his book Management for Action.⁴ In today's market we are seldom provided with a clear set of circumstances that prevail no matter what happens although some outcomes always seem more plausible than others.

"There is no disagreement among appraisers on the fact

that their estimates of market value are markedly judgmental and do not represent certainties", wrote Richard Ratcliff, while professor of Urban Land Economics at the University of British Columbia. "The prediction of market value as the probable selling price of the subject property leaves open the question of the reliability of this prediction. The conventional and almost universal practice of expressing the appraiser's findings as a single figure lends to it an aura of certainty which is accepted as real by many uninformed clients, and for the sophisticated client leaves unanswered an important aspect of the value analysis," said Ratcliff.⁵

A structure must be formed to work with uncertainty through the use of probability qualifications. It is here that the computer can be of great assistance. We have used a program designed by John M. Nevison called "Decide"* which is fully detailed in his book *Executive Computing*. However, it is believed the only way the idea could be clearly explained is by a coherent example. Therefore the following illustrations identify all the variables and probability assumptions in sufficient detail for the reader to produce the final numbers from his own calculations.

Probabilities are used to express the degree of belief about the future. If we are certain something will happen the probability is 100. If we are certain something will not happen the probability is zero. If we are neither certain or uncertain we express the degree of belief somewhere between zero and 100. The choice is usually a progression of choices between two alternatives.

Using this method to establish the probabilities in the example (see figures in brackets in Figure 2), we can calculate their effect on the value at each node and a collective value for this segment of the analysis. Up to this point we have been working from left to right in assigning probabilities, but now in order to calculate the node values we must work backwards from right to left. Using this method the indicated value at node 6, the last in the series in this example, is \$340,544. (See Figure 3)

FIGURE 3

Calculation of Node Values



* ©1980, John W. Nevison Associates.

If we were to end here the collective value of the property would be \$340,544, but we want to take a larger view of the future possibilities for the property. We will expand the system further to allow for the other alternatives we are considering. Each alternative in turn will produce a greater potential for new connections based on sound investment analysis.

Potential For New Connections

Returning to our information theory once again, the more complex the structure the greater the next level of complexity. Each transformation makes the next one more integrated and connected than the one before requiring more probabilities. The elements of the structure cooperate to bring about a transformation of the whole and a new value. In such a shift assumptions interact with one another and a coherent behavior of all value making factors is exhibited. The greater the instability and mobility in the economy, society and the investment community, the more interaction occurs. Interaction produces more information and a greater variety of action is suggested.

This concept is illustrated by expanding the previous example showing the interactions of new factors. Suppose under certain very specific circumstances we see the possibility of escalating annual income not by nine percent as in Figure 1 but by six and 12 percent. The structure would dissipate to create an entirely new pattern and the range of lineal values would increase from four to 13. (See Figure 4.)

FIGURE 5

Table Showing Node Values

1.	344,815	2.	336,066	3.	423,558	4.	325,617
5.	323,128	6.	340,544	7.	329,786	8.	297,640
9.	312,205	10.	299,208	11.	287,320	12.	285,880
13.	466,600	14.	329,500	15.	300,100	16.	275,500
17.	453,900	18.	320,500	19.	291,900	20.	269,000
21.	452,100	22.	319,200	23.	290,600	24.	267,000
25.	246,400						

However it can be seen that the variations multiply rapidly and the system can be easily expanded to a position where manual calculations become difficult and confusing. The computer works well in these circumstances and Nevison's program with some modifications, calculates the lineal values of each outcome at the end nodes (13–25) through the odds at each node to the beginning where a collective or final estimate is outputted. Our example would have have an estimated collective income value of \$344,815. (See node 1 Figure 5).



Dissipative Analysis



The system has thus provided values of various alternatives as well as a single collective value for the property under a specific set of circumstances. The structure of alternatives far exceeds the lineal approach because of the system being expanded to reflect a number of positive interactions which may be perceived but not included in the original lineal estimate. The analyst formulated a new series of connections and probabilities that could not be contained within the old structure.

In this way the analyst not only has the opportunity to develop a more explicit and coherent style for deciding uncertain situations, but he allows the client the opportunity to see the total picture and the significance of the various alternatives and their effect on value. For example, a banker may be more conservative in his loan commitment realizing the value is predicated on an increase in income which is subject to a decision by the rental commission. A Realtor may set an asking price based on the best projections of income in order to leave room for negotiation.

In his best seller *Megatrends*, John Naisbitt said, "In our new information society, the time orientation is to the future. This is the reason we are so interested in it. We must learn from the present how to anticipate the future." (The) "level of information is clearly impossible to handle by present means. Uncontrolled and unorganized information is no longer a resource in an information society. Instead, it becomes the enemy of the information worker."⁷

NOTES

1. Morris, William T., Management for Action, Reston Publishing Company, Inc.

2. Prigogine, Ilya, Order Out of Chaos, Bantam Books.

3. Ferguson, Marilyn, The Acquarian Conspiracy, J. P. Tarcher, Inc.

4. Morris, William T. Management for Action, Reston Publishing Company, Inc.

5. Ratcliff, Richard U., Ph.D., Valuation for Real Estate Decisions, Democrat Press.

6. Nevison, John M., *Executive Computing*, Addison-Wesley Publishing Company.

7. Naisbitt, John, Megatrends, Warner Books Inc.



THE PERILS OF REAL ESTATE COUNSELING

by David Forbes Haddow

Real estate counseling is a dangerous profession because many problems await even the most successful practitioner. To offer well-reasoned advice consistently in the face of mounting business pressures is a constant challenge. The purpose of this article is to identify potential problem areas and suggest some remedies.

Snap Judgments

Real estate consultants attempt to remain objective with each client, but it is only natural to apply previous findings when solving new problems. There is no substitute for experience in understanding real estate, but this can become a trap for consultants either too casual or spontaneous in their judgment.

For instance, a consultant may be called upon to determine why a condominium project has not sold. The natural tendency is to conclude that the units are overpriced. While this may prove correct, it is a hypothesis that should be confirmed not only by analyzing competitive pricing, but also by evaluating product features, locational attributes, marketing techniques and the market served. Lowering prices may do nothing to accelerate sales if the units are too small or the architecture too contemporary.

The best protection against hasty judgments is to establish a personal system of checks and balances. When appropriate, an internal alarm should signal the need for additional documentation. For example, information obtained from persons lacking full knowledge of a particular situation should be confirmed by more informed sources. This sort of discipline becomes even more

David Forbes Haddow is a divisional vice president in the Atlanta office of Landauer Associates, Inc. A former mortgage banker and city planner, he holds a master's degree in city planning from Georgia Institute of Technology and a master's degree in business administration from Georgia State University. He has previously contributed articles to Real Estate Issues, The Appraisal Journal, and Real Estate Review.



important as success produces increased confidence. Basically, one must learn to pause and reflect, making sure the conclusions are well founded and supportable.

Miss The Flavor

Consultants are frequently called upon to evaluate properties and markets seen for the first time. This is a difficult task regardless of previous experience or level of competence. Each market has peculiar features that are easily lost to an outsider.

For example, to assess the marketability of a project in a small town, one must become totally immersed in the ways of that town. Secondary information sources will not provide the necessary insight. A consultant who relies simply on published data, surveys conducted by the local chamber of commerce and a windshield view of the market remains ignorant of the real factors that will influence the project's success or failure. Yet many consultants adopt a set approach to evaluating projects that often overlooks the most relevant issues.

The only way to learn about a community is through its people. Consultants should make every effort to meet with political leaders, government officials, real estate brokers, developers, business leaders and other influential citizens. These meetings are supplemented by information gleaned from published sources, which actually should be reviewed in advance. Questions asked should pertain to the city's history, economic base, social composition, investment climate, community perceptions and future outlook. A broad cross section of the community should be sampled because one bad source could prove misleading.

Too Little Analysis

A common flaw of market and feasibility studies is an abundance of data accompanied by too little analysis. The consultant does exhaustive fieldwork and writes a voluminous report but spends inadequate time analyzing the critical issues. A thorough researcher can easily fall prey to this shortcoming without even knowing.

Consultants have limited time to interpret enormous amounts of information, and actually devote much of their efforts to identifying sources and collecting data. Once satisfied that sufficient information is available, the material is organized to conform to a report format. Unfortunately, adequate time is often not available to sit back and fully contemplate the meaning of what has been learned.

The most familiar cause of this dilemma is the acceptance of an assignment with too short a time frame for adequate completion. The most conscientious researchers are also frequent victims because they are so intent on covering every base. Some consultants simply lack the necessary analytical skills or are reluctant to offer too many opinions. The important thing to remember is that anybody can collect information, but consultants are paid to extract the correct interpretation.

The obvious cure is to budget one's time more efficiently,

but this is easier said than done. One way to overcome the big rush when writing the report is to complete sections of the report as the research is being conducted. For instance, the overview section can be drafted fairly early and modified later as more information becomes available. Sections of the report pertaining to the property, development plan and area of data can also be completed expeditiously. In this way, one can focus complete attention on competitive market factors and related issues at the culmination of the research effort when the mind is full of information and the tools of analysis are not yet frayed. Another alternative is to write the conclusions or recommendations prior to writing the body of the report.

Charmed By Client

The fourth peril is also faced by lenders, equity investors, prospective tenants and others exposed to the contagious enthusiasm of developers. Real estate consultants are employed by developers to evaluate projects often because a lender has required an independent opinion. The developer is obviously an advocate and strong supporter of the project. The problem faced by the consultant is the danger of being influenced by that conviction and thus less objective and critical in evaluating the project's downside risk.

The classic example is the developer who enters a new market with plans to build the same product that had been well accepted in another location. The consultant would have a natural propensity to believe in the project because of the developer's past success. If the developer touts the virtues of this new project with equal conviction, a consultant's judgment might be influenced. The obvious problem is that a successful project in one market may be totally inappropriate for another, and it is the consultant's job to test for market fit.

When evaluating a proposed development, it is possible to find supporting evidence for even the most ill-advised project. If one has a longtime relationship with a client, there might be a greater tendency to accentuate the good and minimize the bad. This hardly serves the developer in the long run.

The developer client is an advocate who is blessed with almost eternal optimism. His job is to conceive projects and sell them to lenders, investors and consumers. A consultant's job is to evaluate the match between project and market. Once charmed by a developer's vision, consultants lose objectivity or are less able to provide a critical analysis. Consultants should be devil's advocates and focus their attention on factors that could undermine a project's success. In other words, their function is to identify reasons why the project might fail and determine whether these are strong enough to justify modifications or project abandonment. The client is much better served by this approach.

Business Before Professionalism

Success introduces the greatest danger, that of placing new business development ahead of quality work. This

problem manifests itself in many ways. First, assignments are accepted even though there is inadequate time to properly complete the task. Second, consultants accept an assignment for which they are not qualified because the fee is attractive. Third, unqualified personnel do all of the research in order to enhance the consultant's production capabilities. Fourth, the work load becomes so heavy that the consultant's energies and talents are spread too thin.

These problems are not unique to the real estate counseling profession, yet they can lead to disastrous consequences. For example, suppose a developer is required by a lender to get a short opinion letter from an independent real estate consultant prior to closing a construction loan. The closing is scheduled for Friday and the request comes on Tuesday. The developer explains to the consultant that all he needs is a one-page letter. Since he is a longstanding client and a cherished account, the consultant accepts the assignment and writes a favorable opinion based on one day's research. If the project is built and winds up a dismal failure, the consultant's reputation is tarnished and many people suffer. Why do consultants prostitute themselves in this way? Any service profession compensated on a fee basis faces this risk. To retain clients, one is often called upon to produce on short notice; however, neither party is well served by reaching beyond the bounds of professionalism.

There is no simple solution. The best approach is to establish consistent quality standards and operating rules. For instance: a junior associate should be given proper guidance and not be called upon to perform tasks for which he is unprepared; an internal review process can help ensure consistent quality throughout the organization; compensation should not be based solely on fee production, but also should reward work quality and timely performance. While emphasizing the importance of production, office managers should inspire a sense of professionalism, and constantly remind associates that reputation is a consultant's best asset.

In summary, the perils described in this article can be avoided by maintaining professional standards and active interest. Loss of reputation is a real threat, but the chief motivation should be the prospect of continued self-improvement. After all, real estate consultants are given a great deal of responsibility and should do what is necessary to accept that position of trust.

MEASURING REAL ESTATE RETURNS

by John McMahan

The entry of pension funds into real estate has generated increased concern about the accurate measurement of real estate returns. The impetus comes primarily from plan sponsors desiring to report asset performance on a consistent, portfolio-wide basis in order to forecast asset/ liability relationships accurately. As most assets are securities, there is strong interest in measuring real estate returns on a reasonably comparable basis, combining both current income and changes in asset value to reflect the "total return" of/on investment.

The Measurement Problem

There is little problem in measuring current income from real estate. Income is received on a monthly or quarterly basis, typically comprising 50% or more of total return. In fact, traditional real estate analysis relies exclusively on current income in measuring investment return.

The more difficult problem is to forecast changes in current income and to measure appreciation (depreciation) in the value of the asset over the holding period. Appreciation is particularly difficult as the real estate market does not clear on a daily basis and may not clear (as in the case of overbuilt markets) for a period of years. The true performance of real estate investments, therefore, is not really known until the assets are sold and cash proceeds received. In the case of pension fund investors, the problem is further compounded by the pooling of assets in vehicles such as closed-end funds and limited



partnerships where assets may not be liquidated for a period of years, or open-end funds where, conceptually, the market is never cleared.

This measurement problem is of particular concern to real estate investment advisors who must select assets for pension fund portfolios many years in advance of the clearing process. The advisor requires an analytical

John McMahan, CRE, is president of John McMahan Associates, Inc., a San Francisco based real estate investment advisory firm. Mr. McMahan is also a lecturer in business administration at the Stanford Graduate School of Business. He was a contributing editor to the Encyclopedia of Urban Planning (McGraw-Hill, 1974); authored Property Development: Effective Decision Making in Uncertain Times (McGraw-Hill, 1976); the McGraw-Hill Real Estate Pocket Guide (McGraw-Hill, 1979); and a monograph on "Institutional Strategies for Real Estate Equity Investment."

Mr. McMahan was assisted in his research for this paper by Jean DeFries and Douglas Kessler.

technique that can compare candidate investments to each other and to overall portfolio investment objectives. The technique must take into consideration the initial capital requirements of the investment, varying cash flows over the holding period, and the termination value of the asset at the end of the holding period.

Analytical Solutions

The analytical technique used by most advisors is some form of discounted cash flow analysis (DCF) in which annual flows and anticipated terminal values are compared with the initial capital investment. The discounted cash flows may be compared against a predetermined minimum investment standard (target rate; hurdle rate; etc.) in which a positive Net Present Value (NPV) indicates an acceptable investment. More commonly, discounted flows are translated into an Internal Rate of Return (IRR) which is then compared to a minimum percentage standard.

In recent years, there has been considerable criticism of the use of DCF analysis. Interestingly, the criticism originates not so much from pension managers, but rather from the real estate community. The intensity of the criticism often surprises one who has worked with discounted cash flow analysis for some time (I began applying the technique to real estate in 1961). Paradoxically, the critics generally do not offer an acceptable alternative except to substitute traditional measures of return such as pay back, cap rate, spendable return, etc. which present even more difficult conceptual problems.

The purpose of this paper is not to defend DCF analysis as there have already been many fine dissertations on the subject.¹ Rather, the paper attempts to build on the conceptual work of the past in order to establish overall levels of total return that an institutional investor might expect in today's market, as well as explore the sensitivity of certain key variables in terms of their impact on return. The conclusions of the paper are based on a research model which examines investment return characteristics under a variety of circumstances.

The Research Model

In developing a research model, I wanted to simulate an investment situation which:

- Represented the type of projects being acquired for institutional portfolios.
- Did not have a disproportionate relationship between land and building.
- Had a relatively straightforward construction program.
- Had a relatively simple lease structure.

A suburban office building was ultimately selected as most closely meeting the desired criteria. Other alternatives were considered, but rejected. Residential buildings are seldom purchased by institutional investors; shopping centers have overly complicated lease structures; inndustrial buildings are not complicated enough; hotels are more of a business than real estate. CBD office buildings were rejected due to the complicated nature of the construction program.

A development project was selected in order to explore the entire spectrum of return from the creation of the asset through disposition. It also allows more flexibility in sensitivity analysis since a broader range of variables can be tested.

The effect of leveraging was included because advisors are increasingly considering the use of leverage in developing portfolios, and it is timely to reflect on the impact of this strategy on investment return.

The effect of taxes was excluded from the analysis because most institutional investors are tax exempt, and also because I wanted to observe how variables interact in an environment unencumbered by the distortions of tax policy.

The investment position of both the developer and the investor was considered in order to measure the incremental return inherent in the development process.

In summary, the analytical model involves a suburban office building under development, analyzed on a pretax basis utilizing both leveraged and unleveraged assumptions, as viewed from the position of both the developer and the investor.

Base Case Assumptions

With the parameters established, I then made a series of base case assumptions based on current market information (Winter, 1984).

The building is a two-story, 100,000 s.f. office building set on five acres of land costing \$8.00 per s.f. Net rentable area is 92,000 s.f. with 350 parking stalls at grade. Construction is Type A with shell costs of \$60.00 per s.f. and tenant finish of \$15.00 per s.f. Architectural and engineering fees are 3% of construction costs; developer's overhead is 3% of land, construction costs, and A&E fees. Landscaping, property taxes, insurance, permits, leasing commissions, legal and miscellaneous interim costs are lump-sum items.

In terms of the timing of flows, the model assumes that construction is completed in the first year followed by a year to lease the space. It is further assumed that the building is 50% leased during the second year with the third year representing the first year of "stabilized" operations. The property is operated for 10 years and sold at the end of this period, based on a capitalization of Net Operating Income (NOI) for the following year.

The tenant mix is assumed to be 60% three-year and 40% five-year leases. Market rent in the stabilized year is \$21.00 per s.f.; parking is \$25 per month per stall. Operating costs are \$5.00 per s.f. with the tenant paying any increases over the first year. At lease turn, it is assumed that 50% of the three-year and 25% of the five year tenants leave the building. Space vacated is assumed to remain vacant for three months on average,

requiring payment of a 5% leasing commission upon releasing. Refurbishment costs are assumed to be \$2.00 per s.f. for space occupied by tenants who stay and \$6.00 per s.f. for space occupied by new tenants. The termination value is based on a 9.0% cap rate with 3% selling costs.

In the leveraged case, it is assumed that the project secures a \$9,500,000 construction loan for two years at 15.0% and 2 points. In the first year, 50.0% of the loan is outstanding; 100.0% in the second year. Permanent financing is assumed to be available at the beginning of the stabilized year. The amount of the permanent loan is also \$9.5 million with a term of 15 years (30-year amortization) at 13.0% for 1 point.

Market rent, parking, operating costs and refurbishment costs are inflated at an annual rate of 8% beginning in the fourth year.

A detailed description of the development and operation of the model appears in Appendix A.

Results Of The Research

Investment Returns

Table 1 summarizes nominal and real IRRs to both the developer and the investor on both a leveraged and non-leveraged basis.

Based on these results, we can make several observations. As more funds come into real estate and the amount of available product diminishes, many advisors have considered moving up the risk curve by integrating it into the development process. It has not been clear, however, whether this strategic move was worth the additional risk. This research would indicate that the incremental real return to the developer is almost double that of the investor and that such a move may indeed be worthwhile.

It is also clear from the analysis that the developer has much more to gain from leveraging than the investor. This is probably due to the fact that the developer's cash outflow is reduced in an earlier year than the investor, and the investor's cash outflow is greater, due to the development profit paid to the developer. The investor's small increase in return from leveraging would not seem to make it worthwhile, at least under current market conditions.

	TABLE 1	
Base	Case Investment R	leturns
	(IRR)	
	Developer	Investor
Nominal Returns		
Non-leveraged	19.8%	14.4%
Leveraged	26.1	15.5
Real Returns		
Non-leveraged	13.2	7.0
Leveraged	18.5	7.9

Sensitivity Analysis

Another objective of the research program was to measure the sensitivity of major variables. Table 2 illustrates the results of this analysis. Sensitivity is calculated in terms of percentage change in IRR as compared with percentage change in the independent variable. Real returns were utilized for comparison purposes, calculated for both the developer and the investor.

Clearly, the most sensitive variable is market rent where even small changes in assumptions can have a major impact on returns. For example, a 10% reduction in rent may impact return by as much as 16.0% in the case of the developer and 28.1% in the case of the investor. This is most likely due to the relatively high "margin" of most real estate projects where so much (76% in the base case) of changes in revenue drop through to the bottom line. This reinforces the importance of rigorous market analysis before proceeding with a project and a strong leasing program throughout the holding period.

Also of importance to the investor is the purchase cap rate. A 10% increase can increase returns by over 20%. This would support the old axiom about "buying right" and suggests that more intensive acquisition negotiations can pay continuing benefits over the holding period.

For the developer, the next most sensitive variable is construction cost where a 10% increase can reduce return by as much as 6.9%. This argues persuasively for careful selection of the contractor and effective cost control during construction.

The investor and developer are both impacted by the sale cap rate assumption with a 10% increase in cap rate reducing return by 9.4% and 4.2% respectively. This would generally support the argument against utilizing a sale cap rate different than that prevailing at acquisition.

Changes in operating costs appear to have a greater impact on the investor (6.8%) than the developer (4.0%) but the impact for both parties is lower than anticipated. This is probably due to the fact that, today, office building operating expense is typically 25% of rental income and increases are generally absorbed by the tenant. The situation was no doubt quite different several years ago when operating expense was 35–40% and the landlord bore the full impact of increases in cost.

Land costs are likewise not as sensitive as previously thought, with return falling approximately 2% for every 10% increase in land cost. This might be somewhat different in the case of more intensive land projects, such as shopping centers, although my guess is that the market adjusts accordingly.

Returns also do not appear too sensitive to longer average lease term. This was measured in terms of the percentage of tenants signing five-year leases as compared with those on three-year leases. The percentage of fiveyear leases would have to shift by almost 20% to have a 1% impact on return to the investor.

TABLE 2

SENSITIVITY OF RETURNS TO CHANGES IN VARIABLES

%									
Change									
in variable	Land Cost	Constr. Cost	Purchase Cap Rate	Market Rent	Oper. Costs	Lease Term	Turn- over	Sale Cap Rate	Vacancy
+30	-5.90	-19.26		+42.24	-12.38	+0.80	+2.44	-11.26	-0.77
+20	-3.98	-13.33		+28.93	- 8.12	+0.53	+1.63	- 7.95	-0.52
+10	-2.02	- 6.93		+14.91	- 4.05	+0.27	+0.82	- 4.23	-0.26
Base									
Case	-0	-0-	-0-	-0-	-0-	-0	-0-	-0-	-0
-10	+2.06	+ 7.55		-16.04	+ 3.98	-0.27	-0.83	+ 4.85	+0.25
-20	+4.17	+15.82		-33.56	+ 7.90	-0.54	-1.65	+10.50	+0.51
-30	+6.34	+24.97		-53.01	+11.76	-0.81	-2.47	+17.17	+0.76
+30			+58.29	+72.97	-20.93	+1.45	+4.36	-25.20	-1.34
+20			+39.87	+50.16	-13.80	+0.97	+2.91	-17.76	90
+10			+20.50	+25.94	- 6.83	+0.48	+1.45	- 9.42	46
Base									
Case	-0-	-0-	-0	-0	-0-	-0	-0-	-0-	-0
-10			-21.88	-28.14	+ 6.69	-0.50	-0.70	+10.75	+ .44
-20			-45.43	-59.12	+13.24	-0.98	-2.94	+23.21	+ .88
-30			-71.09	-93.91	+19.67	-1.47	-4.41	+37.85	+1.33

Percent Change in Real Returns*

* Non-leveraged; pre-tax

Tenant turnover was measured by varying the percentage of tenants who stay at the time of lease turns. A 10% increase in the number of tenants staying, as an example, increases the developer return by .82%. Likewise, the model is not very sensitive to increased vacancy at the time of lease turns.

In summary, the general categories of sensitivity are:

	Developer	Investor
Highly Sensitive:		
	Market Rent Construction Cost Sale Cap	Market Rent Purchase Cap Sale Cap
Moderately Sensitive	e:	
	Operating Costs Land Cost	Operating Costs
Largely Insensitive:		
	Turnover	Turnover
	Lease Term	Lease Term
	Vacancy	Vacancy

The bottom line of the sensitivity analysis is that a developer who does a thorough job of analyzing the market and controlling construction and operating costs has a relatively high probability of achieving pro forma returns. For investors, the research indicates the importance of market timing—buying and selling at the right time. It also reinforces the view that real estate is a managed asset and close attention to leasing strategy and the control of operating costs can pay big dividends over the holding period.

It is hoped that this research will contribute to a better understanding of how the various ingredients of a real estate project interact and impact investment return. Such an understanding should contribute to a more focused investment strategy and increased management attention to those variables that will most directly influence the attainment of a successful investment program.

APPENDIX A

Development And Operation Of The Model

The model was developed on an IBM PC, utilizing the Lotus 1-2-3 software program. Each of the steps in developing the model is discussed. Formula symbols are explained in the text and on the exhibits, as well as being indexed in Exhibit 1. The base case assumptions discussed previously are summarized in Exhibit 2.

	EXH	IIBIT 1	
	Formu	ula Index	
AE	Total Architecture & Engineering Costs	OHF	Developer Overhead Fee (%)
AEF	Architecture & Engineering Fee (%)	Р	Total Parking Cost
В	Total Building Cost	PA	Parking Area (# stalls)
BC	Building Cost (per s.f.)	PC	Parking Cost (per stall)
BR	Building Revenue	PR	Parking Revenue
DCAP	Disposition Cap Rate	PT	Points (amount)
GBA	Gross Building Area	PTF	Points (%)
GR	Gross Revenue	R	Refurbishment Costs
i	Interest Rate	RR	Replacement Reserve
IC	Interest on Construction Loan	S(3)	Space Occupied by Tenants on Three-Year Leases
L	Total Land Cost	S(5)	Space Occupied by Tenants on Five-Year Leases
LA	Land Area	SCAP	Cap Rate in Stabilized Year
LC	Land Cost (per s.f.)	SCOM	Sales Commission
LCOM	Leasing Commission	SE	Sales Expense
LCOMF	Leasing Commission Fee (%)	SP	Sales Proceeds
LS	Landscaping Cost	Т	Loan Term
MBR	Market Building Rent	T(3)	Percentage of space leased to 3-year tenants
MFS	Market Refurbishment Costs for Staying Tenants	T(5)	Percentage of space leased to 5-year tenants
MFL	Market Refurbishment Costs for Leaving Tenants	TI	Tenant Improvements (per s.f.)
MGT	Mortgage Loan	TL	Percentage of space occupied by leaving Tenants
MOE	Market Operating Expense	TOE	Total Operating Expense
MPR	Market Parking Rent (month)	TR	Tenant Reimbursement
n	Amortization (years)	TRL	Tenant Refurbishment Expense for Leaving Tenants
NOE	Net Operating Expense	TRS	Tenant Refurbishment Expense for Staying Tenants
NOI	Net Operating Income	TS	Percentage of space occupied by staying tenants
NRA	Net Rentable Area	V	Percentage of revenue lost to vacant space
OH	Developer Overhead	Y	Lease Term

EXHIBIT 2

Assumptions

Space				Leasing				
	Land (LA)		217,800 s.f.		Tenant Mix			
	Building				Thr	ree (T(3))	60.0%	
		Gross (GBA)	100,000 sf		Fiv	e (T(5))	40.0%	
		Net (NRA)	92,000 sf		Stay			
	Parking (PA)		350 stalls		Th	ree (TS)	50.0%	
					Fiv	e (TS)	75.0%	
Unit Costs					Leave			
	Land (LC)		\$8.00 per sf		Thi	ree (TL)	50.0%	
	Building				Fiv	e (TL)	25.0%	
		Shell (BC)	\$60.00 per sf					
		Finish (TI)	\$15.00 per sf		Months Vacant		3	0.5
	Parking (PC)		\$1,200 per stall					
	A&E Fee (AEF))	3.0%		Market Building	Rent (MBR)	\$21.00 per	sf
	Developer Ov	erhead Fee (OH	F) 3.0%					
					Market Parking F	Rent (MPR)	\$25.00 per	stall
	Refurbish							
		Stay (MFS)	\$2.00 per sf		Leasing Commiss	sion (LCOM)	5.0%	
		Leave (MFL)	\$6.00 per sf					
	Operating Exp	ense (MOE)	\$5.00 per sf					
	Replacement	Reserve (RR)	1.0% Gr. Rev.	Sale				
					Stabilized Cap R	ate (SCAP)	9.0%	
Finance					Disposition Cap	Rate (DCAP)	9.0%	
	Construction				Sales Expense (S	E)	3.0%	
		Amount	9,500,000				-	
		Tera (T)	2 years	Stabilized Year			3	
		Rate (i)	15.0%					
		Points (PT)	2.0%	Holding Period			10 years	
	Permanent						0.001	
		Amount	9,500,000	Inflation Rate			8.0%	
		Tera (T)	15 years				5 I ()(
		Amortiz. (n)	30 years	Convention			End of Year	
		Rate (i)	13.0%					
		Points (PT)	1.0%					

Project Cost Estimate

The first step in developing the model is to estimate the amount of initial capital required. This is accomplished by extending the various space/cost assumptions and applying lump-sum amounts where an extension is difficult or superfluous. All of the costs are first-year except for leasing commissions which occur in the second year. (See Exhibit 3).

EXHIBIT 3

Project Cost Estimate

Year		1	2
Activity		Construction	Leasing
Project Cost Es	timate		
Land (L)		\$1,742,000	\$
Construe	ction		
	Building (B)	7,380,000	
	Parking (P)	420,000	
	Landscaping (LS)	100,000	
	Architecture & Engineering		
	(AE)	237,000	
	Developer Overjead (OH)	296,382	
	Total	8,433,382	
Interim		000 B = 0.000 B = 0.000 B = 0.000	
	Taxes	50,000	
	Insurance	25,000	
	Permits	45.000	
	Leasing		200.000
	Legal	30.000	/
	Misc.	25.000	
	Total	175,000	200,000
Total		10,350,782	200,000

Land (L):

(Land Area × Land Cost/s.f.) = Total Land Cost (LA × LC) = L (217,800 s.f. × 8 = 1,742,400 Building (B): (Gross Building Area × Building Cost/s.f.) + (Net Rentable Area × Tenant Improvements/s.f.) = **Total Building Cost** $(GBA \times BC) + (NRA \times TI) = B$ $(100,000 \text{ s.f.} \times \$60) + (92,000 \text{ s.f.} \times \$15) =$ \$7,380,000 Parking (P): (Number of Parking Stalls × Cost/Stall) = **Total Parking Cost** $(PA \times PC) = P$ $(350 \times \$1,200) = \$420,000$ Landscaping (LS): Lump-Sum: \$100,000 A&E (AE): $((Building + Parking + Landscaping) \times A\&E Fee) =$ Total A&E Costs $((B + P + LS) \times AEF) = AE$ $((7,380,000 + \$420,000 + \$100,000) \times .03) =$ \$237,000 Developer Overhead (OH): ((Land + Building + Parking + Landscaping + A&E) × Developer Overhead Fee) = Total Developer Overhead $((L + B + P + LS + AE) \times OHF) = OH$ ((\$1.742.400 + \$7.380.000 + \$420.000 + $(100,000 + (237,000) \times .03) =$ \$296,382

Interim costs are input on a lump-sum basis, again noting that leasing commissions will be paid in the second year. Total project costs are the sum of land, construction and interim costs.

Space Analysis

The next step is to establish the amount of space that is leased in each period. (See Exhibit 4.) With the exception of the lease-up and turning years, it is assumed that the building is 100% leased. It is then necessary to distinguish between three and five-year leases.

EXHIBIT 4 Space Analysis (Square Feet)													
Year	1	2	3	4	5	6	7	8	9	10	11	12	13
Activity Three Year Leases (S	Construction (3))	Leasing	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Sale
Lease-Up Year Non-Turning Year Turning Years Stay Leave	5	27,600	55,200	55,200	27,600 27,600	55,200	55,200	27,600 27,600	55,200	55,200	27,600 27,600	55,200	55,200
Five Year Leases (S(5 Lease-Up Year Non-Turning Years Turning Years Stay Leave	5))	18,400	36,800	36,800	36,800	36,800	27,600 9.200	36,800	36,800	36,800	36,800	27,600	36,800
Total Space Leased*		46,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000

* Less three months vacancy on leaving tenant space.

Three-Year Leases	Five-Year Leases
(Net Rentable Area ×	(Net Rentable Area \times
Percentage of Space Leased	Percentage of Space Leased
to Three Year Tenants) =	to Five Year Tenants) =
Space Occupied by Three	Space Occupied by Five
Year Tenants	Year Tenants
$(NRA \times T(3)) = S(3)$	$(NRA \times T(5)) = S(5)$
$(92,000 \text{ s.f.} \times .6) =$	$(92,000 \times .4) =$
55,200 s.f.	36,800 s.f.

In the lease-up year, these formulas are factored by an occupancy rate of .5% (50%).

For the years involving lease turns, the total amount of rentable space is multiplied by lease mix and the percentage of tenants staying (TS) or leaving (TL).

Three-Year Lease	Five-Year Lease
Tenants Staying:	
$(NRA \times T\langle 3 \rangle \times TS) = S\langle 3 \rangle$	$(NRA \times T\langle 5 \rangle \times TS) = S\langle 5 \rangle$
$(92,000 \text{ s.f.} \times .6 \times .5) =$ 27,600 s.f.	$(92,000 \text{ s.f.} \times .4 \times .75) = 27,600 \text{ s.f.}$
Tenants Leaving:	
$(NRA \times T\langle 3 \rangle \times TL) = S\langle 3 \rangle$	$(NRA \times T\langle 5 \rangle \times TL) = S\langle 5 \rangle$
$(92,000 \text{ s.f.} \times .6 \times .5) = 27,600 \text{ s.f.}$	$(92,000 \text{ s.f.} \times .4 \times .25) =$ 9,200 s.f.

If actual leases are in place at the time of the analysis, the terms of the leases should be substituted with appropriate staying and leaving assumptions.

Net Operating Income

Physical space and leasing relationships are translated into Net Operating Income (NOI) projections in Exhibit 5.

Market Rent

Market building rent (MBR) is forecast for the stabilized year at \$21.00 per s.f. It is assumed that this rent level is the same in the leasing year. From the stabilized year forward, it is assumed that market rent increases at the 8% inflation rate given in the base case.

$(MBR \times 1.08)$

Parking rent (MPR) was developed in a similar fashion.

$(MPR \times 1.08)$

Gross Revenue

The gross revenue (GR) of most mixed tenancy office buildings tends to move in a "stepped" fashion—steady flows for two or three years followed by increases

					E	XHIBIT !	5						
					Net Op	erating I	ncome						
Year	1	2	3	4	5	6	7	8	9	10	11	12	13
Activity	Construction	Leasing	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Sale
Market Rent													
Building (MBR)		\$21.00	\$21.00	\$22.68	\$24.49	\$26.45	\$28.57	\$30.86	\$33.32	\$35.99	\$38.87	\$41.98	\$45.34
Parking (MPR)		\$25.00	\$25.00	\$27.00	\$29.16	\$31.49	\$34.01	\$36.73	\$39.67	\$42.85	\$46.27	\$49.98	\$53.97
Gross Revenue (GR)													
Building													
Three Year		579,600	1,159,200	1,159,200		1,352,091	1,352,091		1,703,245	1,703,245		2,145,598	2,145,598
Stay					627,823			763,834			962,211		
Leave					458,811			550,928			694,011		
Five Year		386,400	772,800	772,800	772,800	772,800		1,051,386	1,051,386	1,501,386	1,051,386		1,544,831
Stay							684,070					973,581	
Leave							162,312					227,975	
Parking		52,500	105,000	113,400	122,472	132,270	142,851	154,279	166,622	179,952	194,348	209,895	226,687
Total		1,018,500	2,037,000	2,045,400	1,981,906	2,257,161	2,341,324	2,520,428	2,921,253	2,934,583	2,901,955	3,557,050	3,917,116
Operating Expense													
Market Operating													
Expense (MOE)		\$5.00	\$5.00	\$5.40	\$5.83	\$6.30	\$6.80	\$7.35	\$7.93	\$8.57	\$9.25	\$10.00	\$10.79
Total Operating													
Expense (TOE)													
Three Year		234,600	276,000	298,080	321,926	347,681	375,495	405,535	437,977	473,015	510,857	551,725	595,863
Five Year		156,400	184,000	198,720	214,618	231,787	250,330	270,356	291,985	315,344	340,571	367,817	397,242
Total		391,000	460,000	496,800	536,544	579,468	625,825	675,891	729,962	788,359	851,428	919,542	993,105
Tenant Reimburseme	nt (TR)												
Three Year				22,080	22,963	25,754	53,569	41,804	32,443	67,481	52,661	40,869	85,007
Five Year				14,720	30,618	47,787	33,165	20,026	41,655	65,014	90,241	58,743	29,425
Total				36,800	53,581	73,541	86,734	61,830	74,098	132,495	142,902	99,612	114,432
Net Operating Expen	e (NOE)												
Three Year		234,600	276,000	276,000	298,963	321,926	321,926	363,730	405,535	405,535	458,196	510,857	510,857
Five Year		156,400	184,000	184,000	184,000	184,000	217,615	250,330	250,330	250,330	250,330	309,073	367,817
Total		391,000	460,000	460,000	482,963	505,926	539,091	614,060	655,865	655,865	708,526	819,930	878,674
Replacement													
Reserve (RR)		10.185	20.370	20.454	19.819	22.572	23,413	25,204	29,213	29,346	29,020	35,571	39,171
Not Operating					and the second								
Income (NOI)		617,315	1,556,630	1,564,946	1,479,124	1,728,663	1,778,819	1,881,163	2,236,176	2,249,372	2,164,410	2,701,550	2,999,271

(decreases) as leases turn.² The analytical challenge is to account for these flows in the year in which they occur. Fortunately, with new software programs such as Lotus 1-2-3, this is entirely possible, eliminating the need for the traditional "vacancy factor" approach in which an allowance is made against each year's gross revenue.

In all years except the lease-up year and turning years, the formula is: (Example: Year 3)

Three-Year Lease	Five-Year Lease
$(S\langle 3\rangle_3 \times MBR_3) = GR\langle 3\rangle_3$	$(S\langle 5\rangle_3 \times MBR_3) = GR\langle 5\rangle_3$
$(55,200 \text{ s.f.} \times \$21) =$	$(36,800 \text{ s.f.} \times \$21) =$
\$1,159,200	\$772,800

Again, for the lease-up year, the formula is factored by an occupancy rate of .5.

In turning years, the model should reflect the fact that building space will turn in a manner consistent with the original lease-up pattern (base year). This is accomplished in the case of staying tenants by assuming that one-half of the revenue in the turning year will be at the base year market rate and one-half will be at the prevailing rate for the turning year. For leaving tenants, it is necessary to further account for the months the space will be vacant (V) before it is released. In the base case, it is assumed that this period is three months (.5).

As an example, the formula for space occupied by threeyear tenants, turning for the second time in the eighth year, is:

Staying Tenants

 $\begin{array}{l} (S\langle 3\rangle_5 \times TS_5 \times MBR_5 \times .5) \ + \\ (S\langle 3\rangle_8 \times TS_8 \times MBR_8 \times .5) \ = \ GRTS\langle 3\rangle_8 \\ (55,200 \ s.f. \times .5 \times \$24.49 \times .5) \ + \\ (55,200 \ s.f. \times .5 \times \$30.86 \times .5) \ = \\ \$763,834^* \end{array}$

Leaving Tenants

 $(S\langle 3 \rangle_5 \times TL_5 \times MBR_5 \times .5) +$ $(S\langle 3 \rangle_8 \times TL_8 \times MBR_8 \times .5 \times V) = GRTL\langle 3 \rangle_8$ $(55,200 \text{ s.f.} \times .5 \times \$24.49 \times .5) +$ $(55,200 \text{ s.f.} \times .5 \times \$30.86 \times .5 \times .5) =$ $\$550,928^*$

Note again that the rent for leaving tenants is adjusted for a three months' vacancy period (.5).

Gross revenue for five-year leases is determined in a similar fashion, utilizing the appropriate tenant mix and staying/leaving assumptions.

Parking revenue is a product of the number of stalls (PA) times the monthly charge per stall (MPR), converted into an annual number. For example, in the third year:

 $(PA_3 \times MPR_3 \times 12) = PR_3$ (350 × \$25 × 12) = \$105,000 No assumption was made regarding parking vacancy as it is generally negligible.

Operating Expense

Operating expenses flow in a somewhat different fashion than revenue because expenses are subject to change each year and tenant reimbursement may vary, depending upon the terms of each lease. There also may be a lag effect due to the billing of actual expense in the year succeeding the one in which they were incurred.

Total operating expense (TOE) is the product of the amount of space leased (S(3) and S(5)) times the market expense (MOE) in the year in which it is incurred. For example, expenses for the fourth year in space occupied by three year tenants would be calculated as follows:

 $(S(3)_4 \times MOE_4) = TOE_4$ (55,200 s.f. × \$5.40) = \$298,080

Operating expenses for the lease-up period are assumed to be 85% of the expenses in the stabilized year. No adjustment is made for vacant space at least turn due to the relatively fixed nature of operating expenses.

Next, we must calculate the effect of tenant reimbursement. Today, many property managers bill tenants on the basis of projected expenses, with an adjustment made when actual expenses are known. This permits a simplifying assumption that expenses are reimbursed in the year in which they are incurred, with no lag effect.

This leaves the problem of the amount of tenant reimbursement (TR) and the year in which it flows. In non-turning years, this amount is determined by subtracting the base year expense from the current year expense. Again, space occupied by three year tenants in the fourth year:

$$(TOE_4 - TOE_3) = TR_4$$

(298,080 - \$276,000) =
\$22.080

Reimbursements are then netted out against total expenses to arrive at Net Operating Expense (NOE):

 $(TOE_4 - TR_4) = NOE_4$ (\$298,080 - \$22,080) = \$276,000

In turning years, the formula is factored by .5 reflecting the fact that reimbursements would only flow from the last six months of expiring leases. The first six months of operating expenses for new leases would not be reimburseable as the base increases to the prevailing market rate. As an example, in the fifth year, tenant reimbursement from space occupied by three year leases would be:

 $(TOE_5 - TOE_3 \times .5) = TR_5$ (\$321,926 - \$276,000 × .5) = \$22,963

^{*} Numbers may differ slightly from manual calculations due to the fact that the Lotus 1-2-3 program rounds to the 15th decimal.

Net operating expense would be calculated as in nonturning years.

$$(TOE_5 - TR_5) = NOE_5$$

 $($321,926 - $22,963) =$
 $$298,963$

Replacement Reserve

The replacement reserve is utilized to provide a reservoir of capital to handle the replacement of items too large to expense (e.g. elevators, roofs, HVAC systems, etc.).

There are many thoughts on how to handle replacement reserves. Perhaps the most rigorous approach is to calculate the anticipated life of each component and reserve sufficient annual funds to meet these obligations, assuming interest income on the reserved funds. Clearly, once a property has been acquired, this is the preferred approach.

In the pre-acquisition mode, however, I believe it is sufficient to use a surrogate, such as a percentage of assets, or gross revenue. For the purpose of this discussion, I. have utilized a factor of 1% of annual gross revenue.

Net Operating Income (NOI) is then determined in Exhibit 5 by deducting net operating expense (NOE) and replacement reserves (RR) from gross revenue in the appropriate year: (Example: year 4)

 $((GR_4 - (NOE_4 + RR_4)) = NOI_4)$ ((\$2,045,400 - (\$460,000 + \$20,454)) =\$1,564,946

Cash Flow

Exhibit 6 transforms Net Operating Income into Cash Flow projections over the holding period of the asset by considering those expenses associated with lease turns and the proceeds from the sale of the asset at the end of the holding period.

Turning Costs

The first turning cost to consider is the cost of refurbishing the space. For staying tenants, this generally involves, at a minimum, cleaning the carpet and drapes, and may include painting. For space that is turning, it may be necessary to also rearrange partitions to suit incoming tenant needs.

The first step in calculating refurbishment costs is to estimate market costs of undertaking the required work, making a distinction between staying (MFS) and leaving (MFL) tenants. These estimates should then be inflated at the assumed inflation rate.

The amount of space turning is multiplied by the market refurbishment cost for the prevailing year. (Example: Three year lease, staying tenants, eighth year turn):

 $(S\langle 3 \rangle_8 \times TS_8 \times MFS_8) = R_8$ (55,200 s.f. × .5 × \$2.94) = \$81,107

Leasing commissions (LCOM) are calculated on leaving space only. As is the custom in most markets, the percentage commission (LCOMF) is applied against the market building rent (MBR) in the turning year for space occupied (S(3)) by leaving tenants (TL), multiplied by the lease term (Y). For example, space occupied by three year tenants, turning in the eighth year, would require leasing commissions as follows:

 $(S\langle 3 \rangle_8 \times TL_8 \times MBR_8 \times Y \times LCOMF) = LCOM$ (55,200 s.f. \times .5 \times \$30.86 \times 3 \times .05) = \$127,743

Total turning costs are the sum of tenant refurbishment costs and leasing commissions for each year.

	EXHIBIT 6 Cash Flow												
Year	1	2	3	4	5	6	7	8	9	10	11	12	13
Activity	Construction	Leasing	Operations	Sale									
Net Operating Income (NOI)		617 315	1 556 630	1 564 946	1 479 124	1 728 663	1 778 819	1 881 163	2 226 176	2 240 272	2 164 410	1 701 550	2 000 271
Turning Costs Market Refurbishment Costs		011,010	1,550,050	1,501,510	1,473,124	1,720,005	1,770,019	1,001,103	2,230,170	2,249,372	2,104,410	2,701,550	2,999,271
Stay (MFS)		\$2.00	\$2.00	\$2.16	\$2.33	\$2.52	\$2.72	\$2.94	\$3.17	\$3.43	\$3.70	\$4.00	
Leave (MFL)		\$6.00	\$6.00	\$6.48	\$7.00	\$7.56	\$8.16	\$8.82	\$9.52	\$10.28	\$11.11	\$11.99	
Tenant Refurbishment Costs Stay (TR5)					64,385		75.099	81 107			102 171	110 345	
Leave (TRL)					193,156		75,099	243,321			306,514	110,345	
Total					257,541		150,198	324,428			408,685	220,690	
Leasing Commissions (LCOM)					101,407		65,712	127,743			160,920	96,552	
Total					358,948		215,910	452,171			569.605	317 242	
Sales Proceeds (SP)													
Nominal Cash Flow	(10,350,782)	417,315	1,556,630	1,564,946	1,120,176	1,728,663	1,562,909	1,428,992	2,236,176	2.249.372	1.594.805	33,443,254	
Deflation Factor	1.0000	1.0000	1.0000	1.0800	1.1664	1.2597	1.3605	1,4693	1,5869	1,7138	1.8509	1 9990	
Real Cash Flow	(10,350,782)	417,315	1,556,630	1,449,024	960,370	1,372,268	1,148,785	972,548	1,409,170	1,312,487	861,624	16,729,953	

Sale Proceeds

Having accounted for operating flows over the holding period, it is now necessary to establish a termination value for the asset. The most common approach is to utilize some capitalization of Net Operating Income, reflecting the fact that this is the way in which investment properties are sold. While this approach mixes the more traditional capitalization approach with DCF analysis, it seems to make sense in light of the universal use of the technique. Conceptually, the alternative would be to calculate the present value of the succeeding 10 years of holding, but, as the reader will quickly grasp, this is a circular process that would be unending.

In utilizing the capitalization approach, it is necessary to determine: (1) the year of NOI to capitalize; (2) the determinants of NOI; and (3) the appropriate capitalization rate.

In most markets, properties are sold on a capitalization of the next year's pro forma earnings (13th year in the base case), and this is the approach utilized.

Traditional determination of Net Operating Income includes deductions from gross revenue for operating expense, vacancy and replacement reserves. Operating expense and replacement reserves are appropriately calculated in the model, but it is necessary to make an adjustment for vacancy since the model targets vacancy to the turning year rather than the more traditional annual allowance. The simple vacancy allowance (V) should be the same as that generated by the turning year approach, which in the case of the model, is approximately 3%.

There is considerable controversy as to what capitalization rate to use. One body of thought maintains that the disposition capitalization rate (DCAP) should be lower than the stabilized capitalization rate (SCAP) in order to reflect the market appreciation of a mature property. Another school suggests raising the capitalization rate to reflect functional obsolescence.

Clearly, lowering the capitalization rate builds in a distortion of investment return and would not be appropriate. In utilizing a higher cap rate, however, the analyst is faced with the magnitude of the adjustment—to what extent would the market discount a property for technical obsolescence?

In light of this dilemma, I believe the preferable approach is to utilize the market capitalization rate prevailing in the stabilized year and assume that similar market conditions will prevail in the year of termination.³ This approach, at least, neutralizes the impact of the sale cap rate assumption.

There is also the matter of sales costs such as sales commission, promotional brochure, advertising, seller's closing costs, etc. (SCOM). In the base case, I have assumed that these are 3% of the sales price. The formula to establish termination value therefore becomes:

 $[(\text{NOI}_{\overline{13}} (\text{GR} \times \text{V})) / \text{DCAP}] \times [1.00 - \text{SCOM}] = \text{SP} \\ [(\$2,999,271 - (\$3,917,116 \times .03) / .09] \times [1.00 - .03] = \\ [(\$2,999,271 - \$117,513) / .09] \times [.97] = \\ [\$2,881,758 / .09] \times .97 = \\ \$31,058,947 \end{cases}$

Nominal Cash Flow

The various flows in Exhibit 6 are then summed by year to arrive at nominal cash flow.

Real Cash Flow

Nominal cash flows are deflated at this point in order to eliminate any distortion brought about by the inflation assumption. It also allows comparison of results between inflationary periods.

The reader might ask "Why use an inflation assumption at all?—simply work with real numbers throughout." The problem is that this does not reflect the different ways in which inflation impacts independent variables in the management of a real property. The most extreme example is the leveraged case in which debt service payments continue in fixed terms while rental income, adjusted for inflation, is reported in nominal terms.

But there are also varying impacts in the non-leveraged case. Rents may increase at a different rate than operating costs. Tenant refurbishment costs may increase (decrease) at a different rate than rents (and leasing commissions based on rents). Tenant reimbursement is based on comparison with a base year in which costs could be substantially different (i.e. long lease). The solution, therefore, is to utilize an inflation assumption in developing the cash flow, but then to deflate the nominal cash flow to real terms.

Leveraged Analysis

Exhibit 7 explores the impact of leveraging on the base case based on current market conditions, Interest on the construction loan (IC) is determined by multiplying the amount of interest (i) times the average loan balance for the appropriate year. In the construction year, it is assumed that one-half of the loan is outstanding on average:

```
(MTG \times .5 \times i) = IC
($9,500,000 × .5 × .15) =
$712,500
```

In the leasing year, it assumed that the entire balance of the loan is outstanding.

Points are determined by multiplying the percentage fee (PTF) times the total amount of the mortgage (MTG) for both the construction and permanent loans.

Debt Service is calculated by use of an annual constant (13.28X) taken from standard payment tables which is multiplied times the total amount of the mortgage.

					EX	HIBIT 7							
Leveraged Analysis													
Year	1	2	3	4	5	6	7	8	9	10	11	12	13
Activity	Construction	Leasing	Operations	Sale									
Non Leveraged Cash Flow	(10,350,782)	417,315	1,556,630	1,564,946	1,120,176	1,728,663	1,562.909	1,428,992	2,236,176	2,249,372	1,594.805	33,443,254	
Mortgage (MTG)	9,500,000												
Construction													
Points (PT)	190,000												
Interest (IC)	712,500	1,425,000											
Permanent													
Points (PT)	95,000												
Debt Service			1,261,600	1,261,600	1,261,600	1,261,600	1,261,600	1,261,600	1,261,600	1,261,600	1,261,600	1,261,600	
Payoff												8,968,000	
Nominal Cash Flow	(1,848,282)	(1,007,685)	295,030	303,346	(141,424)	467,063	301,309	167,392	974,576	987,772	333,205	23,213,654	
Deflation Factor	1.0000	1.0000	1.0000	1.0800	1.1664	1.2597	1.3605	1.4693	1.5869	1.7138	1.8509	1.9990	
Real Cash Flow	(1,848,282)	(1,007,685)	295,030	280,876	(121,248)	370,769	221,471	113,924	614,148	576,356	180,020	11,612,607	

Investor Analysis

Thus far we have been analyzing the position of the developer who retains ownership of the property throughout the holding period. Exhibit 8 looks at the situation of the investor who acquires the property at the end of the second year, based on a 9% capitalization rate of Net Operating Income (less 3% vacancy) in the third year. All other assumptions through the holding period are the same as in the developer case.

Internal Rate Of Return

IRR for all cases was calculated utilizing the Lotus 1-2-3 internal program. The Lotus formula for IRR is based on an iterative scheme, starting with an initial guess as to the answer. If convergence to within .00000001 does not occur within 20 iterations, the program disqualifies the result.

There has been considerable discussion about the problems of utilizing IRR in discounted cash flow analysis.⁴ One problem is that the IRR process assumes that profit not recovered as cash before maturity is reinvested in the same project and earns at the IRR. Another problem is that alternating negative and positive flows after the investment year can result in multiple IRR returns. Several approaches have been suggested to resolve these problems. The modified internal rate of return discounts all negative cash flows back to the investment year and positive cash flows forward to the termination year.⁵ The adjusted rate of return approach offsets negative and positive flows, discounting the net result.⁶ The financial management rate of return discounts cash flows at a weighted average of the IRR consisting of a "safe" rate and a "reinvestment" rate.⁷

Unfortunately, each of these approaches has its own set of technical problems, ⁸ which, when combined with the added complexity of the calculations, raises a serious question as to their usefulness. There is also some evidence that the impact of reinvestment assumptions has much less significance in reality than in theory.⁹

Rather than attempt to modify the IRR analysis, I believe that the most practical answer is to simply substitute the Net Present Value approach in those situations where the reinvestment rates are unrealistic or where there are significant shifts in cash flow from positive to negative. Fortunately, most institutional grade investments do not have these characteristics and therefore the IRR approach will handle the vast majority of situations that the analyst will face.

	EXHIBIT 8												
Investor Analysis													
Year	1	2	3	4	5	6	7	8	9	10	11	12	13
Activity	Construction	Leasing	Operations	Sale									
Non-Leverage Cas	h Flow												
Nominal		(16,616,889)	1,556,630	1,564,946	1,120,176	1,728,663	1,562,909	1,428,992	2,236,176	2,249,372	1,594,805	33,443,254	
Real		(16,616,889)	1,556,630	1,449,024	960,370	1,372,268	1,148,785	972,548	1,409,170	1,312,487	861,624	16,729,953	
Leveraged Cash Fl	ow												
Nominal		(7,116,889)	295,030	303,346	(141,424)	467,063	301,309	167,392	974,576	987,772	333,205	23,213,654	
Real		(7,116,889)	295,030	280,876	(121,248)	370,769	221,471	113,924	614,148	576,356	180,020	11,612,607	

NOTES

1. Traditional measures of return and their shortcoming are reviewed in James R. Cooper, *Real Estate Investment Analysis* (Lexington, Massachusetts: Lexington Books, 1974), Chapter 1 and Stephen E. Roulac, *Modern Real Estate Investment: An Institutional Approach* (San Francisco, California: Property Press, 1976, Chapter 19).

My personal belief is that most of the problems associated with the use of DCF analysis are a result of (1) poor models; (2) faulty assumptions; and/or (3) misunderstanding of results. No doubt there also have been cases of the purposeful misuse of the technique to prove one point or another.

2. Unless, of course, the leases are subject to an annual inflation adjustment.

3. Note that it is the "market" cap rate that is important, not the purchase price cap rate, which could vary considerably from market.

4. See Paul E. Wendt & Alan R. Cerf, Real Estate Investment Analysis

and Taxation, Second Edition, (New York, McGraw-Hill, Inc., 1979) Chapter 3.

5. See James H. Lorie and Leonard J. Savage, "Three Problems in Rationing Capital", Journal of Business (October 1955).

6. See Donald J. Valachi, "More on the Arithmetic of Multiple and Imaginary Rates of Return", *Real Estate Appraiser and Analyst* (September–October 1980).

7. See Stephen D. Messner & M. Chapman Findlay, III "Real Estate Investment Analysis: IRR versus FMRR, *The Real Estate Appraiser*, Volume XXXXI, No. 4, July–August, 1976.

8. See Gaylon E. Greer and Michael D. Farrell, *Investment Analysis* for Real Estate Decisions (Chicago, Illinois: The Dryden Press, 1983, Chapter 15).

9. See C. Conrad Doenges, "The Reinvestment Problem, Practical Perspective," *Financial Management*, Spring 1972.

Contributor Information for Real Estate Issues

The journal is published twice a year (Spring/Summer and Fall/Winter), and reaches a lucrative segment of the real estate industry as well as an impressive cross section of professionals in related industries.

Subscribers to *Real Estate Issues* are primarily the owners, chairmen, presidents and vice presidents of real estate companies, financial corporations, property companies, banks and management companies; libraries and Realtor [©] boards throughout the country; as well as professors and university personnel; and professionals in s & ls, insurance companies and law firms.

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 doublespaced 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.

OVERSEAS INVESTMENT IN CHINESE HOTEL JOINT VENTURES

by Dr. M. A. Hines

Several high-quality hotels built according to international standards have been financed and constructed under overseas joint ventures with the Chinese government and its organizational entities. Among the newly constructed hotels are the Great Wall Hotel of Beijing, the Jinling Hotel of Nanjing, and the White Swan and the China Hotels of Guangzhou.

Beijing Hotels Including The New Great Wall Hotel

Since Beijing is the Chinese government and political center, it attracts many visitors who conduct government and political business with China and its various ministeries and departments. Beijing is also a tourist center because it offers a number of tourist attractions within its city, county and regional boundaries. For example, many tourists to China feel they must see the Panda bears of the Beijing Zoo, the Great Wall of China located two to three hours driving time to the northwest of Beijing, the Forbidden City, Mao's tomb, the numerous Ming tombs northwest of the city and the various shrines and temples located in various spots around Beijing. Therefore, visitors—business, government, political need transient and perhaps long-term housing while they take care of their business in the city.

Historically, the Beijing Hotel accommodated visitors to Beijing. It particularly catered to those visiting the government and political leaders whose offices were within three to four blocks of the hotel. Since the Forbiden City is across the street, the hostelry attracted individuals and groups of tourists who wished to view the immense

Dr. Mary Alice Hines holds the Clarence W. King fully endowed Chair of Real Estate and Finance at Washburn University, Topeka, Kansas. Following extensive real estate research abroad, including a roundthe-world research trip in 1984, Dr. Hines wrote International Income Property Investment, published by the Interntional Institute. In addition, Dr. Hines has written 13 other books and monographs dealing with real estate. Her Ph.D. degree in Business Organization was granted by Ohio State University and her M.S. and B.S. degrees in Business Education/Business are from Indiana University.



complex of the ruling families from former centuries. Today the Beijing Hotel consists of three distinct parts that together use the entire block of land on which the hotel is located. A central ground-level corridor links the three buildings together. The additions to the original hotel to the west have been made at different intervals by the Chinese government. The newest high-rise and most architecturally modern section lies to the east. The main driveway up to the door of the hotel is located now in this newer addition. The occupancy rate for the entire hotel is said to be unusually high. Part of the high occupancy status is due to the long visits of various foreign goverment and company organizations who do business in Beijing. Suites of rooms reportedly are being rented on a long-term basis by such organizations because appropriate office space is not available for purchase or rent in close proximity to the government and political headquarters. In some measure the Beijing Hotel, owned and managed by the People's Republic of China government, provides residential and office space for many of its clients.

In the eastern portion of the city, where the Beijing Hotel is located, lies the diplomatic section. Much of the central and northern sections of the east side of Beijing house the various diplomatic and military missions from all over the world. Some embassies have been located in Beijing for a number of years. One of the largest diplomatic complexes, that of the Soviet Union, is located in the central east side of the city. The transient and permanent members of the various diplomatic missions are housed according to their respective lengths of stay. Permanent members of the various diplomatic corps inhabit some of the luxury residential buildings. Their income levels normally far exceed that of the normal Chinese worker, and they may be the only prospective tenants or owners for many of the new and costly luxury apartment buildings in the area.

The Jianguo Hotel, Beijing's first joint venture hotel, was opened in 1982. It was designed by Clement Chen and Associates, a San Francisco-based firm for the joint venture group comprised of the Hong Kong and Shanghai Bank's subsidiary, the Overseas British Peninsula Group and a Chinese government entity. Some investment, made by the Hong Kong and Shanghai Bank through their subsidiary, complemented the investment in land and cash by the Chinese government. A mangement contract for 10 years was reportedly extended to the Overseas British Peninsula Group in order to train appropriate hotel management and staff to manage the hotel until the Chinese government would take full title and operation of the hostelry at the end of the 10-year period. The hotel operation utilizes the worldwide Peninsula Group reservations system. This mid-rise, fivestory hotel facility strings out along the main east-west thoroughfare, Jianguomen Avenue. It features an assortment of cuisine ranging from Chinese and Japanese to Western so as to satisfy the palates of foreign travelers. Since the management contract and the overseas investment runs approximately seven to eight more years, it is still too early to analyze the total investment returns of this well-known Beijing joint venture hotel. The Hong Kong and Shanghai Bank appears satisfied with the investment results through its Peninsula subsidiary. The company's representative banking office is housed in the premises of the hotel complex. The bank seeks more joint venture and direct income property investments in Beijing and other Chinese areas.

The Great Wall Hotel, opened in December 1983, is located in the northwest quadrant of Beijing along the main thoroughfare, North Donghuan Road. This business and tourist hotel—21-stories with 1,007 guest rooms—is located across the road from the principal section of Beijing devoted to foreign embassies. It is a natural location for a hotel serving visitors from most countries of the world with advanced industrialized economies. For example, the French Embassy lies within two to three blocks of the hotel's main entrance. This international-styled hotel housed U.S. President Ronald Reagan and his large staff during his 1984 Spring visit to Beijing.

The joint venture agreement was drawn up by a California construction company headed by an overseas Chinese representative and the China International Travel Service, an agency of the Chinese government. The mangement contract for the hotel calls for the overseas training of the hotel management and staff. At the end of the management contract the hotel and its complete operation will revert to the Chinese government. So far the management personnel have been acquired from foreign international hotel operations, and the training for this particular hotel's operations has involved the United States, Hong Kong and other worldwide training locations.

The Jinling Hotel Complex Of Nanjing

In the central business district of Nanjing lies the Jinling Hotel, 37-stories high and currently the tallest building in China. Nanjing, with a population of over three million people (a relatively short distance to the northwest of Shanghai), is the capital of Jiangsu Province (see Exhibit). The 760-room hotel has the first Chinese revolving restaurant and lounge, the Sky Lounge, on its 37th floor. The hotel is one part of a total income-producing complex embracing an apartment building, a multi-story parking facility and shopping center. This internationalquality hotel, opened in the Spring of 1983, is another example of an overseas joint venture. The current chairman of the board of the Singapore Land Company headed an investor group whose other members were located in Hong Kong. The chief equity partner was born and raised in Nanjing. A management contract for approximately 10 years was signed by a hotel management group from Hong Kong affiliated with the investor group. The hotel management and staff is sent abroad for three- to four-week training periods. Some of the chefs are sent to the United States to learn the preparation of Western cuisine. Japanese and Chinese dishes are also offered in the hotel dining rooms. Financing came from the Hong Kong and Shanghai Bank of Hong Kong. This foreign loan was paid off after one year and refinanced by the Bank of China. At present little foreign investment remains in the hotel's permanent financing. When the management contract ends, the Chinese government will take over the project's ownership and management.

When the hotel was constructed, separate and independent water and electrical systems were installed so the hotel does not rely on the city of Nanjing for treated water or electricity. Supplying good drinking water is still a problem for most Chinese cities. Electrical supplies adequate for a building's normal and peak operations are not always reliable at any location in the People's Republic of China.

Still to be constructed are a swimming pool, health club with sauna and massage facilities and a classic Suzhou formal garden. A retail building is scheduled to contain a department store, supermarket and small boutiques. Several government owned and operated department stores are located in the near vicinity. After nearly 18 months of operation, the hotel almost has a 55 percent occupancy rate. It caters to both the business and tourist trade. Nanjing, like many prominent cities of China, is an industrial, government, educational, and cultural center of the Jiangsu Province.

Guangzhou's White Swan And China Hotels

Guangzhou-often called "Canton" as an abbreviation-has approximately 57 hotels and guest houses that contain approximately 12,500 guest rooms. Overseas joint ventures involve two of the newest hotelsthe White Swan and the China Hotels. The White Swan Hotel, staffed by 2,000 people, was opened in February 1983. The 28-story international five-star hotel is a joint venture of the Guangdong Tourism Bureau and Goodyear Investments Co. Ltd. of Hong Kong. The Chinese government permitted this luxury hotel to be built on a picturesque point along the Pearl River on Shamian Island in an area previously inhabited by the British and French government and company representatives. This business/tourist hotel is located approximately 20 to 25 minutes driving time across town from the Guangzhou International Trade Exhibition Hall. Products and services of mainland China and the Shenzhen Special Economic Zone in Guangzhou are displayed and promoted at the hall by company representatives at two international trade fairs per year in the spring and fall. Visitors from all over the world attend the fairs. This grand hotel, with its shopping arcade, coffee shop and informal lounge on the ground level, monopolized the luxury hotel market in the city until the China Hotel opened in Spring 1984 across the street from the International Exhibition Hall.

This overseas joint venture hotel represents debt financing from Citibank of Hong Kong and ownership by an entity of the Chinese government. When the Citibank loan is fully repaid (including capital repayment and interest on the loan) and the management contract terminates, the Chinese government will own the unencumbered hostelry built to international quality standards. As cash flows are generated, Citibank's principal and interest are paid before the Chinese partner receives any portion of the cash flow. After the Chinese partner receives a specified amount, the residual cash flow is shared by the joint venture partners until China takes over the entire ownership and management.

The Future Of Overseas Joint Ventures For Chinese Hotel Development And Investment

Property developers and lenders from a number of countries including Hong Kong, Japan, and the United States are considering mutually profitable hotel investment in China along the lines of the Chinese-sanctioned joint venture. As the Chinese economy develops, more transient hotel accommodations will be needed to handle the expanding tourist and business trade.



EXHIBIT Major Tourist Cities and Sites of China

Source: THE CHINA GUIDEBOOK by Fredric M. Kaplan and Arne J. de Keijzer. New York: Eurasia Press, 1984.

SHOPPING CENTER RRESPONSIBILITY FOR SECURITY FORCE MAINTENANCE

by Linda L. Johnson and Robert L. Cherry, Jr.

Median levels of operating expenses reported for all types of shopping centers range from 26 to 40% of total operating receipts according to data published by the Urban Land Institute in its 1981 printing of *Dollars & Cents of Shopping Centers*.¹ Because of the trend toward increased operational expenses, in 1978 the Urban Land Institute's shopping center study incorporated a specific breakdown on controllable cost components which includes security, snow removal and heating, ventilation, and air conditioning (HVAC) expenses. Most notable among these are the security cost figures reported by mall type in Exhibit 1.

As seen in Exhibit 1, shopping center expenses for security do not appear large in relation to other more familiar operating expenses such as property taxes and administrative salaries. Those median costs may range as high as .57 and .28 per foot of gross leasable area, respectively. However, the mere fact that security costs have now been accepted as a line item in standard financial reporting for shopping centers deserves some comment. What has caused shopping center managers and developers to need security force protection for their premises? Although long term statistical data for this line item expense is generally unavailable, more recent studies published by the Urban Land Institute indicate that at

Robert L. Cherry, Jr. received an A.B. in History from the University of North Carolina, Chapel Hill in 1967; an M.B.A. from the University of North Carolina, Chapel Hill in 1973; and a J.D. from Wake Forest University. Winston Salem, North Carolina in 1979. Mr. Cherry is presently an assistant professor of Business Law at Appalachian State University, Boone, North Carolina.



least short term increases from 1978 to 1981 have occurred in security force expenses as seen in Exhibit 2. Why are these increases occurring? Are operating expenses of shopping centers entering a trend of continued increases in security costs? Do security force expenses really represent an area of controllable operational costs?

Linda L. Johnson is an assistant professor in the Einance, Insurance and Real Estate Department at Appalachian State University. She received a doctorate in Business Administration with a major in real estate from the University of Georgia in March, 1983; a J.D. from the University of Virginia, 1976; and a B.A. in Business Administration from William & Mary, 1972. Current research interests include PAC contributions, microcomputer applications to real restate, and ridge law legislation. In addition to contract research work, she has published articles in the Journal of Regional Science, Case & Comment, and the APEUEA Journal.

Purpose And Methodology

=

This paper will analyze the reasons behind the increase in shopping center expenses for security. The methodology to be followed is an analysis of various court cases litigated over the last decade on the issue of liability for shopper injury from third party assaults. Because the question of in-store responsibility for shopper safety has been overwhelmingly ruled on as a shopping center liability, only recent cases will be examined with decisions favoring the liability of customer safety in business parking lots.

EXHIBIT 1	
Security Expenses by Type of Shoppi	ng Center (1978)
(Dollars per square foot of Gross L	_easable Area)
NI- !-	

	No. in Sample	Median	Lower Decile	Upper Decile	
Super Regional	57	.05	.02	.16	
Regional	80	.06	.02	.13	
Community	46	.03	.01	.11	
Neighborhood	34	.02	.01	.07	

Note: A total of 521 United States shopping centers participated in this study.²

	EXHIBIT 2
Security Expe	enses by Type of Shopping Center (1981)
(Dollars pe	er square foot of Gross Leasable Area)

	No. in Sample	Median	Lower Decile	Upper Decile
Super Regional	65	.25	.12	.54
Regional	87	.16	.05	.44
Community	61	.04	.01	.21
Neighborhood	43	.10	.01	.39

Note: A total of 747 United States shopping centers participated in this study.³

Background Of The Law

The status of a person who goes to a business establishment to transact business (such as the purchase of goods) is determined by common law in the different states. The generally accepted principle is that a person entering a store for the purpose of trade occupies the status of an "invitee." It is not even necessary that the person has the intent to make a particular purchase in order to acquire the status.⁴ Moreover, the majority of states recognize the business parking lots as part of the total business premises to which "invitee" status is extended.⁵ Under common law, the owner or operator owes to all "invitees" in trade parking lots, as well as in the store, a duty to keep the premises reasonably safe and exercise reasonable care for the invitee's safety.⁶ This duty, however, does not make business property owners an insurer against personal injury caused by the wrongful acts of third persons not under their control which cannot be anticipated or guarded against.⁷ In other words, business owners were not considered responsible for such criminal acts since such conduct is beyond their control and cannot be anticipated. Protection against

attacks was not considered part of exercising reasonable care for customer safety.

Synopsis Of The Cases

During the last decade, only ten of the fifty state appellate courts have been asked to decide the liability of business property owners in these cases. However, of these jurisdictions, nine have modified the prior common law doctrines previously discussed. The courts indicated that parking lot protection is part of the reasonable care owed by a business owner to customers in certain situations. In these states, the courts said protection against criminal acts is warranted by a business owner whenever he has knowledge of prior criminal activity on the premises. Of the nine states to imply a change in common law, three did not find liability on the part of the business owner but made supporting statements which indicated that under different factual circumstances liability was possible. Only one court completely barred the property owner from liability.

No Liability Under Any Circumstances

Oklahoma is the only state to completely bar a criminally assaulted customer from bringing a negligence action against a property owner. In *Davis v. Allied Supermarkets, Inc.,*⁸ the plaintiff was physically injured and robbed of her pocketbook in a supermarket parking lot. The alleged negligence by the defendants was failing to provide adequate lighting and security personnel in a high crime area.

Oklahoma's Supreme Court's reasoning was brief. The court concedes that the criminal problem was serious but to hold a store owner liable for criminal attacks would put the business owner in the position of an insurer. Therefore, the court says the plaintiff's damages were caused by the independent, intervening criminal act of a third party and the business owner is not liable. A point of significance is that there was no mention of specific prior criminal incidents but merely an allegation of the store being in a high crime area. Knowledge of prior criminal incidents is an important factor in most of the other jurisdictions deciding in favor of liability.

Liability Possible Under Different Facts

Illinois, South Carolina and Tennessee denied a business property owner to be liable for criminal assaults on customers under each of the fact situations presented, but did not completely close the door on potential liability. In the Illinois case of O'Brien v. Colonial Village, Inc.,⁹ the female plaintiff was assaulted by an unknown male assailant in the parking lot of a 27-store shopping center with a ten-acre parking lot. The court dismissed the case against the shopping center after stating there may be circumstances which extend the duty of a property owner on property where the public is invited. A primary reason for dismissal was that the plaintiff did not allege any previous criminal incidents had occurred or that defendants had any knowledge of prior attacks which would have made the plaintiff's attack foreseeable.

In South Carolina's *Shipes v. Piggly Wiggly St. Andrews, Inc.*,¹⁰ a man in his mid-sixties was assulted by several persons in a supermarket parking lot in Charleston. No violent crimes had been committed in the neighborhood and the only crimes known to the manager of the store were shoplifting and theft of a tape deck in an employee's car. The South Carolina Supreme Court adopted the rule that a business property owner is not liable for criminal attacks unless he knows of or has reason to know of criminal attacks similar to the one which the plaintiff suffered. In other words, in South Carolina knowledge of general petty crime in the area or on the premises is insufficient to make a plaintiff's attack foreseeable.

The Tennessee Supreme Court in *Cornpropst v. Sloan*¹¹ was faced with the factual situation of a female shopper attacked and beaten by a third party in the parking lot of Eastgate Shopping Center, a 37-store complex in Memphis. The plaintiff filed the action against the owners and managers of the shopping center alleging negligence on their part for failure to exercise reasonable care to protect her from harm. The finding was in favor of the defendant. The court ruled more narrowly and held that there is no duty upon shopping center owners, whose manner of operation does not attract criminal elements to guard against third party assaults, unless prior knowledge exists that such harmful acts have occurred, are occurring or are about to occur.

Thus, in the Illinois, South Carolina and Tennessee cases, the business property owner was not held liable for third party criminal activity against patrons in the parking lot. Each case, however, contained supporting statements indicating that liability was possible given the correct circumstances.

Liability

North Carolina, New Jersey, Pennsylvania, Texas, Florida, and California all imposed liability on the business property owner from criminal assaults on customers under the factual situation of each case. While these jurisdictions each used a somewhat different reasoning for imposing the liability, there are many similarities in the courts' decisions.

Foster v. Winston Salem Joint Venture¹² is a 1981 North Carolina case where two unidentified males beat the plaintiff, violently pushed her onto the seat of her car and then threw her to the parking lot pavement continuing to beat and kick her. The plaintiff filed her action against the mall owners claiming they were negligent in failing to provide adequate security in the parking lot for the protection of patrons. Evidence presented showed that in the year preceding the plaintiff's incident, there were 31 incidents of criminal activity, including as many as five assaults on the mall premises. Further evidence showed that only one guard was assigned to patrol the lot on the day the plaintiff was assaulted. Using foreseeability as the test to determine the extent of a property owner's liability in such a case, the court held that the defendants had reason to know of the propensity

for customer harm to occur in the premises and that the defendants breached their duty to exercise reasonable care to maintain the mall in a secure and safe manner for customers.

The Texas Court of Civil Appeals in Walkoviak v. Hilton Hotel Corp.dl1 was faced with the factual situation where the male plaintiff was accosted by two unknown assailants, beaten, stabbed and robbed in the parking lot of a Hilton Hotel where he had been attending a convention. He filed an action against the Hilton Hotel Corporation based upon negligence of the hotel for failing to supply adequate security measures, failing to warn him of any danger and failing to protect him. In this case, there were only two criminal assaults within the preceding twelve months, both of which were in the area rather than on the premises. In overturning the lower court's ruling for the defendant, the court stated that the evidence was sufficient to raise issues of fact as to whether the hotel conducted its security in accordance with reasonable and prudent innkeeper standards, given similar circumstances. This Texas case is a departure from the other cases since the two prior occurrences were only in the vicinity and not on the business premises. As compared to rulings by other courts which found liability, the Texas court definitely broadened the area of foreseeability of customer harm.

The California case of *Taylor v*. Centennial Bowl, Inc.,¹⁴ involved a female plaintiff who was attacked in the defendant's parking lot after the plaintiff had been warned by employees of the defendant not to go outside unescorted. The attacker was a patron of the defendants and had made advances toward the plaintiff inside the bowling alley business premises. The court held that a businessman has the duty to take affirmative action to control the wrongful acts of persons that threaten invitees if the owner has reasonable cause to anticipate such acts and the probability of injury resulting therefrom. In this case, foreseeability and duty arise not from prior criminal activity but just prior acts on the premises.

Florida has had two cases within the last decade on the question of business liability for customer harm in parking lots. A 1974 case, Rotbart v. Jordan Marsh Company,¹⁵ involved a male customer of a Jordan Marsh department store who had parked his car on the second floor of a store owned parking garage. After discovering the garage elevator was not functioning, he searched for an exit but was attacked by two armed men who robbed him, beat him and left him unconscious. The plaintiff filed his action charging Jordan Marsh with negligence in failing to maintain the elevator in working order, failing to have the exit marked and failing to provide adequate security to prevent criminal assaults. Despite the fact that there were no references to any prior criminal assaults either in the area or on the premises, the court ruled that the defendant owed the plaintiff a duty of keeping its premises in a reasonably safe condition. Moreover, it stated that the store must guard against subjecting customers to dangers of which it is cognizant or reasonably might have foreseen. Unfortunately, the

court offered virtually no authority or reasoning other than the foregoing.

The second Florida case, Drake v. Sun Bank and Trust Company of St. Petersburg,16 was first decided in 1979 and reversed in 1981. In the Drake case, a widow brought an action against a bank to recover for the death of her husband. He was kidnapped from the bank's parking lot after transacting business with the bank, driven to a remote location and then robbed and murdered. The plaintiff alleged that the bank knew its customers often carried cash and other valuable items while using the parking lot, yet failed to have adequate security protection. Moreover, the complaint alleged that the bank was in a high crime area but provided less security than other area banks; the bank's security guards were negligent in allowing a dangerous condition to develop; similar crimes had occurred on or near the bank's facilities and thus the bank should know there was the chance of an assault against a customer on their property. The court, in a one sentence decision, held that the allegations were sufficient to state a cause of action against the defendant.

Conclusion

Before the early 1970s, the generally accepted common law was that an owner of a business establishment was not an insurer of his business guests and therefore not liable to these invited customers for injuries they received in parking lots from third party criminal attacks. As merchandising has undergone a change towards larger malls rather than smaller community shopping centers, so has this area of the common law. Ten states have decided this particular question of liability in the last decade, and all but one provided for possible liability to the customer by the defendant retailer.

After looking at the ten jurisdictions which have determined the legal question of a business property owner's duty and liability for criminal acts to customers in a parking lot, many unanswered questions and problems remain as to future applications of the trend to hold business owners liable by allowing the plaintiff a chance at trial and possible recovery. The decisions from the various jurisdictions lead to no absolute conclusion as to the exact number of prior criminal acts which create a duty and possible liability for the business owner. The main issue in all of the cases is the foreseeability of customer harm, but the factual situations run from two prior assaults in the vicinity in Texas to 27 car thefts in Pennsylvania. As a generalization, it looks as if the plaintiff would have the strongest case if he were the third, fourth or fifth parking lot assault victim within a year's period, and the business property owner failed to provide adequate security.

Looking at this from a mall owner's perspective, how can he protect himself from liability? In the foregoing cases, security measures employed by the owner were one of the factors considered. But how much of a security force is necessary? The cases indicate that if there has been prior criminal activity of any type in the parking lot, especially assaults, the owner should increase his security force and parking lot patrols. Ironically, however, increasing security may not be enough as sympathetic juries could convert possible liability to absolute liability in cases where there has been a history of heavy criminal activity in the area.

These types of legal actions will continue to arise with the high crime rate in the United States, the large number of businesses with their own private parking lots and the increase of regional and super regional shopping malls. Hopefully, further decisions will give better guidelines and answers for business owners to prevent this perplexing problem. Mall owners, as well as other business property owners, are well advised to increase spending in the area of security and customer protection as documented in *The Dollars & Cents of Shopping Centers*. The old common law precedent of the business property owner not being an insurer of customer safety definitely appears to be crumbling.

NOTES

1. Dollars & Cents of Shopping Centers. (Washington: Urban Land Institute, 1981).

2. Dollars & Cents of Shopping Centers. (Washington: Urban Land Institute, 1978).

3. Dollars & Cents of Shopping Centers. (Washington: Urban Land Institute, 1981).

4. 65 Corpus Juris Secundum. Section 63(119) (1966).

5. 65 Corpus Juris Secundum. Section 63(130) (1966).

7. 65 Corpus Juris Secundum. Section 63(125) (1966); W. J. Pro-

sser, Handbook of the Law of Torts. Section 30 (4th ed., 1971).
8. Davis v. Allied Supermarkets, Inc., 547 P.2d 963 (Okla. 1976).

9. O'Brien v. Colonial Village, Inc., 119 Ill. App.2d 105, 255 N.E.2d 205 (1970).

10. Shipes v. Piggly Wiggly St. Andrews, Inc., 269 S.C. 479, 238 S.E.2d 167 (1977).

11. Compropst v. Sloan, 528 S.W.2d 188 (Tenn. 1975).

12. Foster v. Winston Salem Joint Venture, 50 N.C. App. 516, 274 S.E.2d 265, aff'd in part, rev'd in part, 303 N.C. 636, 281 S.E.2d 36 (1981).

13. Walkoviak v. Hilton Hotel Corp., 580 S.W.2d 623 (Tex. Civ. App. 1979).

14. Taylor v. Centennial Bowl, Inc., 65 Cal.2d 114, 416 P.2d 793, 52 Cal. Rptr. 531 (1966).

15. Rotbart v. Jordan Marsh Co., 305 So.2d 255 (Fla. App. 1974).

16. Drake v. Sun Bank and Trust Company of St. Petersburg, 377 So.2d 1013 (Fla. App. 1979), rev'd. on rehearing, 400 So.2d 569 (Fla. App. 1981).

^{6.} Ibid.

OCTOBER 1984

Market Value: A Contemporary Perspective Peter F. Korpacz and Richard Marchitelli The Market in Market Value Jared Shlaes Shared Development of Historic Sties Martin M. Gross Monopoly Property-Monopoly Value Haskell Berry, Jr. Real Estate Cycles After the Valuation Perspective Gordon T. Brown Commercial Appraisals for Institutional Clients Mike Miles Dynamic Capitalization: An Income Approach in Real Dollars at Real Interest C. Gordon Blackadar 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/1984

The California Revised Limited Partnership Act / Richard D. Harroch and M. J. Pritchett The Deficit Reduction act of 1984-An Overview of Provisions Affecting Real Estate / David Corbett and Bruce L. Richman Post-Effective Due Diligence in Public "Blind Pools" Paul J. Derenthal and John D. Alspach Regulation T and Public C'ferings of Limited Partnerships: No Change Needed / William C. Tyson, Anthony Ain and Scott M. Freeman Do Tax Shelter Benefits Offset Rescission Damages? The Courts Disagree / Richard M. Fijolek and Sheldon I. Banoff Tax Issues—An Update / Richard A. Hanson, SRS and Jeffrey C. Rubenstein, SRS Some Uses of Microcomputers in the Real Estate Syndication Office / John Rucker Jones, Jr., SRS Condominium Conversions Factors Leading to High Presale Rates / Joseph S. Rabianski, Ph.D. and Barry A. Diskin, Ph.D. The Real Estate Securities and Syndication Institute (RESSI®) 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. Subscription rates are: \$60 for one year (four issues), \$100 two years (eight issues). Group discount information is available upon request.