Real Estate Issues

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EDITOR'S STATEMENT

This issue of *Real Estate Issues* is the first of two contemplated for 1977. In it we have tried to offer articles of real utility to a wide variety of scholars and practitioners in the broad field of real estate. Each paper reflects the serious thought of a specialist in the field whose ideas seem fresh and penetrating enough to warrant careful attention. We hope that you will benefit from at least some of them, and will feel stimulated and perhaps challenged by others.

Some of the articles are deliberately controversial. We hope and expect to hear from you about them, and would welcome reasoned rebuttals for possible future inclusion. The more we can encourage communication among specialists who until now have had no real forum in which to exchange ideas, the better *Real Estate Issues* will be doing its job.

Our range of topics in this issue is wide: from redlining in the inner city to a radical rethinking of real estate education. We are honored to include an article from Professor James Graaskamp, CRE, whose work is known to every serious counselor and academician in the field of real estate. We are equally pleased to hear from David Callies and Clifford Weaver, noted land use attorneys whose view of the Arlington Heights decision will be of interest to planners, zoners, and scholars everywhere. Gaylon Greer's clear-headed analysis of the impact of the tax preference provisions of the 1976 Tax Reform Act is timely and useful. And Pierre de Vise, a noted and controversial urbanologist, has given us an outspoken and informative debunking of the redlining myth that we are confident will shed new light on the subject as well as provoke a variety of ripostes.

From Milton Berger, whose job it is to keep track of these things for the U.S. Department of Commerce, we have an authoritative statement on foreign investment in U.S. real estate, and from Max Derbes, CRE, whose experience as a respected Counselor and practitioner makes his contribution important, we have a useful compendium of measures that can be taken to protect real estate against the pressures of inflation. Michael S. Young, a relatively youthful counselor, offers a penetrating analysis of real estate as an investment that should open many doors for real estate in the financial community.

Over and above whatever educational benefit you may derive from reading *Real Estate Issues,* I truly hope you will enjoy it. We will be working issue by issue to develop material that is not only provocative and informative but also, we hope, consistently interesting and occasionally even amusing. Stay with us, please. We think you'll find the trip worthwhile.

Jared Shlaes, C.R.E.
Editor-in-Chief

Real Estate Issues, *Summer 1977*

Real

v of Redlining

Foreign Investment in U.S. R
Scope and Policy Issues
U.S. policy toward foreign re cerns about foreign investmen have passed), major studies, anc of Commerce's report to Congre shows that foreigners owned 4.9 . acres in agricultural land—abou $45.6 billion worth of property, pl. report also studies applicable laws a real estate industry could contribut foreign investments required by the re

Philadelphia practice of led to ious d

An Approach to Real Estate Finance Ed
Risk Management Principles
Professor Graaskamp urges that risk ma surance department programs have signi ... educa- tion. As has happened in insurance, toda ... university level is changing from concern for the few studen ... the real estate business to virtually any user who will need to make ... ated decisions. The classics in real estate finance provide little analytical techniq ... sk management in the classroom provides a common point of departure for explanation and ties real estate finance to the mainstream of corporate finance and budgeting thought.

The Problem of Inflation in
Lease Negotiations **Max J. Derbes, Jr., C.R.E.** *Page 71*
The author explores the various options available to the counselor in advising his client so that the client will not sacrifice purchasing power of future rents provided in the long-term lease. There is no universal solution to this perplexing problem, which has been aggravated by the severity of the inflation rate in recent years. He shows the factors that affect the decision such as the fixed mortgage costs, costs of living, expenses of lessor, and suggests some modifications of current practices which may be more acceptable than the extreme measures now in vogue.

Real Estate Issues

The Professional Journal of the
American Society of Real Estate Counselors

The Devil Theory of Redlining

by Pierre de Vise

INTRODUCTION

Community activists from Chicago, Cleveland, St. Louis, and Philadelphia were in the forefront of witnesses who testified about the nefarious practice of redlining before the Senate Banking Committee in the hearings which led to the enactment of the Home Mortgage Disclosure Act of 1975. Conspicuous by their absence were representatives from Atlanta, Detroit, Houston, and Miami. Differences in housing production and market may account for differences in perception of redlining in these two sets of large urban areas. In the four areas with vigorous community protests, more than two housing units were built for every new household formed since 1960. In the four areas where redlining is not a community issue, less than 1.5 new housing units were built for every new household formed since 1960.

Excessive housing production in the suburbs and its depressing effects on housing submarkets in the central city are illustrated in the Chicago area, national capital of community agitation over redlining. Fairly typical of housing market effects in other urban areas suffering from excessive housing production, Chicago's black areas are self-destructing at an increasingly rapid rate. Only half of the housing occupied by blacks in 1960 is still occupied in 1976. The rest is vacant, abandoned, or demolished. (Demolitions, concentrated in the older ghetto, have climbed from 3,850 to 7,000 a year between 1960-65 and 1970-75.) So much housing has been lost that the tax base of Chicago has declined every year since 1970 (Chicago's first such decline in this century), despite the extensive construction of office buildings downtown and luxury high-rise housing along the north lakefront. Residential properties now make up only two-fifths of the city's property tax base as compared to three-fifths in 1960.

In previous reports, this author has discussed some of the factors which help explain the accelerating deterioration of Chicago's black neighborhoods. These include:

1) The dual housing market: Chicago remains the most residentially segregated large city in the U.S. Segregation increased between 1960 and 1970.[1]

Pierre de Vise is on the faculty of the College of Urban Sciences at the University of Illinois, Chicago Circle Campus. His analysis of the causes of the decline of Chicago and other large cities has been reported in the *New York Times* and *U.S. News and World Report* among others, and his findings were presented to the Senate Banking Committee's oversight hearings of November 23, 1976.

2) Demand factors: Blacks and the poor were the hardest hit by the doubling of welfare and unemployment rates in Chicago since 1970. One out of every two black household heads was either on welfare or unemployed in 1975.[2]
3) Supply factors: Record new levels of construction of housing, factories, and shopping centers in the suburbs have accelerated the flight of residents, jobs, and stores from the city to the suburbs. Between 1960 and 1970, 1.7 new housing units were built in the six-county area for every new household. Since 1970, 2.1 new units have been built for every new household.[3]

One would suppose that the effect of this combination of factors—building twice as much housing as is needed, pauperizing one half of the black population, and heightening the wall separating the black from the white housing market—could easily be anticipated; namely, the collapse of the black housing market. Such a prediction should have become hindsight, as the evidence of this collapse has become overwhelming. Such a simple faith in human intelligence and logic, however, does not reckon with the amazing resistance of social groups to face harsh reality, especially when that reality poses problems that have no easy solutions, and of the propensity of such groups to interpret reality in a way which assigns responsibility for problems to scapegoats and devils who can be ritually sacrificed or exorcised.

Although the author's point of view is supported by substantial market and ecological theories of community decline it is, politically, a minority view. Specifically, it is not a point of view shared by black and white community leaders in Chicago and many other large cities. These leaders have developed a "party line" on the causes of deterioration, eloquently expressed in the following statement by Henry Scheff, former research director of Chicago Citizens Action Program:

> CAP leaders came to understand the real forces behind urban decay and redevelopment—the decisions of the private investors and their influence at City Hall. These insights brought blacks and whites together for the first time in Chicago to fight neighborhood deterioration. Whites began to take action based on a real understanding of why their neighborhoods changed.
>
> First, the Realtors panicked the whites, in an effort to promote rapid, profitable sales with FHA mortgages. Conventional mortgages had already been cut off to the neighborhood. This brought down property values, then with local Realtors predicting an even gloomier future for the neighborhood, the whites were convinced to flee to the suburbs, where they had to pay inflated prices for inferior housing, far from their jobs. Their churches, ethnic, and neighborhood institutions would never be recreated.
>
> Slowly, they began to see that the enemies were the banks and savings and loans, the mortgage bankers, and the Realtors—those who exploited the changing neighborhood. Anger was focused at the financial institutions who translated their judgment that a neighborhood might change racially into a self-fulfilling prophecy.
>
> Meanwhile, blacks found that they were getting no bargain when they moved into the changing neighborhood. The FHA frequently certified that homes were in good repair when they weren't. Some of their new black neighbors were really too poor to own homes. Of course, many defaulted under the tremendous burden of the mortgage payments. The foreclosures and repossessions by FHA left dozens of abandoned, boarded-up homes. The neigh-

> borhood was fast becoming the slum they had moved out of only a few years earlier.
>
> With this understanding blacks and whites began to work together—out of common interest to stop neighborhood deterioration. Blacks and whites saw that if FHA abuses, redlining, and panic peddling were ended, a lot of the tension would disappear and the rapid racial turnover would end. Neighborhoods would have a chance to become stable where people would be able to move in or out without coercion.[4]

Different explanations of causes of problems yield, of course, different solutions and different implications for policy changes. This author's understanding of the causes of community deterioration would point public policy in the direction of alleviating urban unemployment and dependency, relaxing racial residential barriers, and moderating the excessive levels of suburban housing production. On the other hand, the attribution of blame to home lenders, Realtors, and the FHA would dictate policies of regulation over these male-factors.

Citizens Action Program (CAP) developed its most important issue—redlining—in 1973, and was joined the next year by Metropolitan Area Housing Alliance (MAHA), a coalition of westside community organizations concerned with housing. By early 1975, CAP was engaging in a "greenlining" pledge campaign, committing residents to invest only in savings and loans which agreed to reinvest in local home loans. For its part, MAHA negotiated and lobbied for state and federal laws to end both redlining and FHA abuses. In 1975, Illinois became the first state to prohibit redlining and require disclosure of mortgage loans by state savings and loans. The City of Chicago passed an ordinance requiring that banks with City deposits disclose mortgage and deposits data. The Home Mortgage Disclosure Act of 1975 may provide community groups with useful information to revive "greenlining" campaigns which are presently at a standstill.

This author contends that since redlining is caused by the weakening or collapse of the housing market in older black urban neighborhoods, mortgage disclosure will not induce lenders to reverse their policy of withholding loans from such areas. He also contends that redlining was a much more serious problem before 1963, when all lenders, including the FHA, were redlining. In some ways, it was the overzealous activity of FHA in redlined areas that first sparked the inner city ethnic groups to ask for a moratorium on FHA loans, essentially a return to the true pre-1963 redlining era.

Redlining has the effect of slowing down the process of racial change in transitional areas, while permissive FHA insurance has the opposite effect of speeding up the process. Thus, a joint attack on both redlining and conventional lenders and the anti-redlining FHA seems, on the face of it, contradictory. But if mortgage disclosure proves ineffective in curbing redlining, then the restriction of the FHA mortgage insurance program will result in fewer sales in such areas, which may indeed be the goal of ethnic groups seeking to slow down the process of racial transition.

The dual strategy aimed at redlining and FHA mortgages must also be seen in terms of the organizational interests of community groups, especially in

closed political cities like Chicago. Successful groups like CAP and MAHA must select issues and targets that will not embarrass or alienate City Hall. Although there is actually little that City Hall could do by itself to reverse the process of community decay, blaming financial institutions and FHA merely shifts the onus of responsibility from Democratic city officials to Republicans who become the scapegoats and devils. Unfortunately, distraction from the real causes of community decay retards legislation and government action to deal with the problem.

THE AMBIGUOUS NATURE OF THE REDLINING ISSUE

Because the discussion of redlining is largely rhetorical in character, the concept itself has remained fuzzy. There has been, to my knowledge, nothing written which deals with the subject in an empirical manner; definitions are either non-existent or contained in implicit theorizing. There is no methodological framework for testing the hypotheses which have been offered and the practices which have arisen from them.

The lack of substantiating evidence can be illustrated by drawing an analogy to the primordial concept of *habeas corpus* in Anglo-Saxon jurisprudence. The questions analogous to "Where is the body?" in the redlining issue are "Where is the map?" and "Which are the redlined areas?"

There are, admittedly, various means of denying someone a mortgage. In addition to outright rejection, the applicant may be disqualified by too high a downpayment, too short a loan term, too low an appraisal, or closing costs which are too high. It is still possible, however, to establish minimum criteria of creditworthiness to be used to winnow out the creditworthy among those who are denied mortgage loans.

For these reasons, I propose two definitions of redlining—a strict definition and a loose definition. Strictly construed, redlining is the denial of private mortgage funds to creditworthy home buyers in certain neighborhoods. Loosely construed, redlining is the denial of any mortgage funds (for whatever reason) to home buyers in certain neighborhoods. Most of the discussion of redlining seems implicitly to use the loose definition, which is the definition I have adopted in this report. The legislative remedies, however, implicitly assume that redlining in the strict definition exists and that it can be proscribed.

Symptomatic of the ambiguity of redlining is the name itself. The name "redlining" is derived from the former alleged practice of Chicago area FHA appraisers to use maps with red lines to delineate minority neighborhoods that were felt to be bad risk areas. Before 1963, all lenders and insurers, including FHA, avoided such areas. Since 1963, and especially since 1968, FHA has completely reversed its endorsement and appraisal policies and, in cities like Chicago, most FHA single-family loans are issued in the areas avoided by conventional lenders. Indeed, FHA is now accused of the reverse of redlining—of being excessively permissive and imprudent in its endorsement of both mortgagors and properties.

Oddly enough, there was no agitation over redlining when everybody, including the FHA, was redlining. The term itself was not even used until 1973, ten years after FHA became a massive insurer of mortgages in the redlined areas. Moreover, many of the present member groups of MAHA (including the charter Organization for a Better Austin and the Westside Coalition) were, from the outset, trying to stop or slow down FHA sales in their areas. These efforts culminated in charges by Gale Cincotta before the Senate Antitrust Subcommittee in May 1972 that the FHA was conspiring with mortgage, real estate, and insurance companies to bring about the "disruption" and "outright murder of our neighborhoods." She detailed the operations of blockbusters who panic white homeowners into selling cheaply and then resell the same houses to low income blacks at high prices. The partners in the conspiracy are the FHA, which insures appraisals, mortgage firms that refuse to make home repairs, and insurance companies that refuse to insure the homes, she claimed. Redlining by savings and loans was not mentioned in her tale of horrors.[5]

Father Lawlor on the Southwest side became the main proponent of an FHA slowdown and proposed that the FHA limit its endorsements to an annual level of five percent of an area's stock of houses. The FHA moratorium strategy was eventually dropped because of conflicting interests between the whites who wanted to stay, the whites who wanted to sell, and the blacks who wanted to buy.

Two years later, the redlining issue was taken up as an alternative strategy by MAHA, although it continued to charge FHA with excessive and imprudent insurance commitments, and of fostering fast foreclosures. The mutually contradictory nature of this dual strategy, however, did not seem to embarrass the MAHA coalition. Conventional lenders were accused of not making loans to creditworthy buyers of sound properties.

The FHA, was however, insuring a massive number of buyers with no more downpayment than the equivalent of a security rent deposit and with insufficient assets to maintain their homes. *No one ever asked why the creditworthy buyers being turned down by conventional lenders did not avail themselves of an FHA-insured loan.* The truth was not faced that a permissive FHA policy was the only means available of clearing a severely depressed housing market. Forcing the FHA to be more selective and prudent in its endorsement would have the same effect as the original demands for a slowdown of FHA sales, without directly antagonizing whites anxious to sell and credit-risky blacks willing to buy.[6]

THE GENESIS OF THE REDLINING ISSUE

Two variables that help explain the emergence of an issue that will generate community activism are: visibility and suddenness. Redlining, or withdrawal of mortgage money from deteriorating inner city neighborhoods, prevailed in many American cities through the period 1950-1965. After 1965, and increasingly after 1968, the FHA filled this vacuum, especially in racially changing areas. Mortgage activity per 1,000 properties actually was higher in racially changing areas than in most other communities in urban areas.[7]

Coincidentally, new suburban housing construction increased greatly. In the Chicago six-county area, for example, new construction climbed to 1.8 units per household between 1965-70, and 2.1 units between 1970-75.[8] In Chicago, as in other urban areas affected by excessive housing construction in the suburbs, the older black communities saw their housing market collapse. There is a strong presumption that the reversal of FHA's mortgage lending policies was partly responsible for the suburban housing boom. It is hardly likely that such construction levels would have been sustained in the absence of massive mortgage investments in the racially changing areas. Not as many whites could have joined the successive waves of moves to the new suburban housing. The housing elements that changed visibly and rather suddenly were the wholesale FHA mortgage activity in the racially changing areas, followed after a few years by wholesale foreclosures and abandonment because of the glut of owner-occupied housing available to blacks.

The initial response by community groups to the increased rate of house sales in racially changing communities spurred by FHA's anti-redlining policy was to attack the FHA and the real estate brokers and mortgage bankers who participated in this process. This is exemplified by the charges made by the Westside Coalition in the Senate Antitrust hearing of May 1972. No doubt, the influx of low-income blacks into previously middle-class occupied housing had much to do with the resentment of the remaining whites. It was the rapidity of racial change made possible by easy FHA mortgages, however, that was the main disruptive factor. This brought to the forefront conflicts of interest between the whites who were staying and those who were leaving. The former preferred a redlining policy to exclude low-income blacks, whereas the latter preferred an easy mortgage policy that would enable low-income blacks to buy middle-class housing. Moreover, as blacks became the dominant group in the changing areas, white-black coalitions could not continue to attack the FHA for insuring low-income blacks. Many of the blacks were middle-class and even more regarded themselves as middle-class.

It did not take many years before many of the new black households became hard pressed to keep up mortgage payments and make repairs. Many of the FHA homes were abandoned and boarded up, inviting vandalism and arson—another result of the anti-redlining policy of FHA. But the real problem was seldom identified—the weakness of the black ownership market in many of the racially changing areas. Not just the housing options of whites, but those of blacks were multiplied by the excessive level of new housing construction. Many suburbs developed soft housing markets and became accessible to middle-class blacks for the first time. Most blacks with assets and income for conventional mortgages preferred to buy in these communities and tended to shun the racially changing belt.

The cause of the weak housing market—excessive housing construction—was similarly ignored. Instead, the myth of a black housing shortage was perpetuated. Even the symptoms of the housing surplus—abandonment in the racially changing zone and demolition in the older black core—were perversely transformed into evidence that there was a housing shortage. The

scapegoats became the redlining savings and loans who refused to accommodate creditworthy house buyers, and mortgage bankers who, in collusion with the FHA, packed uncreditworthy households into the racially changing neighborhoods.

Although the era of real redlining had come to an end a decade earlier, community activists started drumming up evidence of redlining, first in Philadelphia, Baltimore, and Cincinnati around 1972, then in Chicago in 1973. The quality of documentation left much to be desired. Academic support was meager: David Harvey and Karen Orren at Johns Hopkins, Calvin Bradford at Chicago Circle, and Leonard Rubinowitz at Northwestern.[9] Most of the evidence produced in hearings of the Senate Banking Committee and the Illinois Legislative Investigating Commission in May 1975 was anecdotal in nature.[10] There are further, serious flaws and fallacies in the data, methodology, and policy recommendations.

A number of federal court suits deal with charges of redlining, panic-peddling, and exploitative real estate speculation in minority communities. Most of these are pending, but one is completed. The Contract Buyers League was not able to persuade the court of similar charges, and their case against the defendants—FHA, VA, mortgage lenders, and sellers—was dismissed in April 1976. The same month, the Justice Department filed suit in U.S. District Court against four national associations of home lenders and appraisers for allegedly underappraising homes in racially changing neighborhoods.

DISCUSSION

Much of the rationale behind the anti-redlining campaign is based on rhetoric rather than sound economics. The idea that government regulation of the movement of capital is necessary to insure that sufficient savings be reinvested in the community harkens back to the pre-Adam Smith policies of mercantilism. Under this doctrine, the State restricted the free movement of goods and capital in the mistaken belief that this would serve to maximize the community's wealth.

The year 1976 marks the bicentennial of the publication of Adam Smith's *Wealth of Nations,* with its revolutionary doctrine that it is the free movement of goods and capital which yields the greatest wealth to individuals and to the nation as a whole. This nation and its large cities, like Chicago, grew into economic giants because of the huge importation of capital, which resulted from the widespread acceptance of Adam Smith's doctrine. This massive flow of capital from capital-surplus to capital-short areas, which reached a peak in the 19th century, *could* have been called "disinvestment" and, if today's attitudes had prevailed then, it would have been stemmed by state regulations and public disapproval.

The flow of capital from capital-surplus communities to capital-poor communities might be labelled disinvestment, but in reality this is no more sinister than the actions of a household investing its savings in a bank or savings and loan. In both instances, the investor is exchanging the use of money for income in the form of interest payments.

In gradually coming to disregard the sound principles of Adam Smith's philosophy, we have substituted hysteria for history. In the last generation, the real estate industry has served as an ideal scapegoat for social problems such as racism and neighborhood decay. Depending on the purposes of individual critics, real estate institutions have often been blamed for a variety of evil practices, some of which are mutually exclusive: they are castigated for slowing down and for speeding up racial transition, for gilding and for blighting neighborhoods.

In the 1940s, Realtors were typecast as segregationists because of their enforcement of racially restrictive covenants. In the 1950s and 1960s, they were feared as super-integrationists, speeding racial transition in neighborhoods through tactics of blockbusting and panic peddling. In the 1970s, these institutions are accused of both speeding up racial change by the indiscriminate sale of FHA-insured homes and of slowing down racial change by denying conventional mortgages to blacks and other minorities. Real estate institutions have also been accused of gilding some neighborhoods and blighting others in a sinister conspiracy which has come to be known as "suburban investment-urban disinvestment."

The casting of real estate institutions as the principal villains in neighborhood decay relieves us of the necessity to consider and to deal with the more complex social realities of racism, poverty, crime, slum schools, delinquency, and vandalism. Yet, when we look at other institutions in these neighborhoods, such as schools, where real estate interests have no influence, we witness rates of racial turnover and deterioration of quality that are much more rapid than those in the housing stock in which real estate institutions do intervene.

The practice of which the real estate industry is guilty is the maximization of its profits, which follows the cherished American tradition of capitalistic free enterprise. In the Chicago area, this means that home builders, home lenders, and real estate brokers have catered to a market of preference rather than to a market of need. As a result, two housing units have been built for every new household in the Chicago area since 1970. Most of this new housing has been built in the suburbs, in order to accommodate the 70,000 annual emigrés from Chicago.

Major arguments on both sides of the housing production versus conservation debate are given in a housing policy forum published in the October 30, 1976 issue of *National Journal.* Carla Hills, then Secretary of HUD, and Senator Proxmire (D. Wisc.), Chairman of the Senate Banking Committee, were the two protagonists. In this exchange of views, Secretary Hills contended that the recent housing production explosion had resulted in the abandonment of thousands of sound homes and "row upon row of boarded up homes left to decay, the most frequently cited symptom of illness in our cities." For his part, Senator Proxmire argued for the benefits of a high level of housing production—reducing high levels of unemployment for construction workers, supplying economic aid for our financially hard-pressed cities, insuring better housing quality, and making possible lower housing prices and rents.

In the production versus conservation debate builders, Realtors, city officials, and craft unions are joining the new Administration in advocating more new housing rather than the rehabilitation of existing housing. There is a rather fuzzy and unsubstantiated concept called the "filtering down" or "trickling down" process which gives credence to some of the benefits claimed by these supporters of a high level of housing production. As some housing economists have described it, this process is beneficial to all because of lower prices and the upgrading or elimination of substandard units. As housing built exceeds the number of new households, a price-depressing surplus is created in which lower income households can afford to move into previously unaffordable housing. The very worst housing becomes the residual of surplus housing, and must either be upgraded in quality or be abandoned, in either case reducing the stock of substandard housing.

In my own study of housing price and quality changes in the Chicago area between 1960 and 1970, I found that:

1) For every new household 2.1 new units were built.
2) Housing price increases for identical homes were lower in the inner city than in the outlying areas.
3) Rent increases were much lower in the older black ghetto and the contiguous white zone than in the racial transition zone and the outlying white areas.
4) Most of the area's 177,000 demolitions were in the older black ghetto: 27% of the housing occupied by blacks in 1960 was demolished by 1970, and 14% was vacant or abandoned.
5) Most of the City's substandard housing of 1960 was demolished, deconverted, or upgraded by 1970; only 20,000 of the 150,000 substandard units remained substandard in 1970.
6) There were 65,000 substandard units in 1970, of which 20,000 were inherited from the 1960 stock; thus, two-thirds of the 1970 substandard stock was downgraded from the 1960 standard housing stock.
7) There were 36,600 units with insufficient plumbing in 1970, a huge attrition of the 127,700 such units in 1960.
8) The number of dilapidated units, on the other hand, actually increased from 21,700 to 37,700 in the decade, of which about two-thirds were standard in 1960.
9) Urban renewal accounted for about one-third of the demolitions, and housing code enforcement was responsible for the great majority of deconversions and upgrading of plumbing facilities.

This massive housing deterioration was not anticipated by proponents of the filtering process. They were not prepared for the fact that the price decline in the inner city, resulting from the housing surplus created by housing construction in the suburbs, led to under-maintenance and abandonment. Price decreases in certain neighborhoods in the old black zone were so severe that many owners of rental housing no longer could make ends meet and walked away from their buildings. First, the owners with high mortgage indebtedness, and later other owners, could not collect enough rental income to meet rising costs of taxes, fuel, maintenance, and repairs. Finally, even owners with paid-up mortgages could no longer afford to maintain their buildings. In other

words, increasing operational costs set a price floor below which landlords could not descend without cash outflows. Eventually, thousands of public housing and publicly assisted housing units (with subsidized rentals as low as $50 a month) could no longer attract tenants and were vacated or abandoned.

As the black housing market expanded into lower density areas with higher proportions of single-family housing, the supply of such housing more than doubled during each decade since 1950. There is a large surplus of single-family dwellings in the black housing market because of the above factor, and also because single-family housing is more responsive to downward price pressures than is rental housing. Single-family housing, unlike rental properties, is not income property and is not subject in the same degree to high costs of upkeep. Therefore the epidemic of FHA home foreclosures is indicative of the surplus in this part of the black housing market. There are simply not enough blacks with assets, income, and inclination to own all the single-family housing in a black housing market, defined essentially by the rental market.

Since the 1970 Census there is mounting evidence suggesting that many parts of the racial transition zone are now experiencing the housing market collapse which the black zone suffered in the 1960 decade as a result of excessive construction. This evidence includes the continuing lack of synchronization between new construction and household formation, mounting abandonment, tax foreclosures, FHA and conventional mortgage foreclosures, FHA distress sales, urban homestead dollar sales, demolitions, and property tax reassessments.

The importance of excessive housing construction in the suburbs on housing demand in the central city is underlined by comparing housing changes in the 1960 decade between the Chicago and Detroit SMSA. The Detroit area had significantly less new housing built than Chicago—1.4 new units versus 1.7 new units per new household. There were substantially different impacts on housing demand and prices in the cities of Detroit and Chicago. During the decade, median home value (in constant dollars) went up by $900 in Detroit, but slipped by $600 in Chicago. In both cities, the housing surplus was in old black housing areas. But demolitions and vacancies were much higher in Chicago. Of all housing occupied by Chicago blacks in 1960, 27% was demolished by 1970 and 14% was vacant and abandoned. In contrast, of all housing occupied by Detroit blacks in 1960, 16% was demolished by 1970 and 8% was vacant or abandoned. Chicago gained 16,000 dilapidated units while Detroit lost 5,000 such units in the decade.

Further comparisons of housing changes in the decade between the six-county Chicago SMSA and the three-county Detroit SMSA are given below:

	CHICAGO		DETROIT	
	SMSA	City	SMSA	City
All housing units				
1970	2,292,400	1,197,300	1,327,400	521,100
1960	1,988,900	1,213,500	1,153,200	553,200
% change	15.3%	-1.3%	15.1%	-5.8%
Units added	568,600	197,700	270,100	24,500
% of 1970 stock	24.8%	16.5%	19.8%	4.3%
Units lost	176,600	138,600	95,900	56,600
% cf 1960 stock	8.9%	11.4%	7.4%	9.0%

CONCLUSIONS

I contend that neighborhood and urban decline are caused by a complex chain of factors associated with the city's growing attraction for poor and minority Americans and growing repulsion for middle-class majority Americans. Residential discrimination, urban unemployment, increased suburbanization, and an unregulated housing industry reinforce these processes. Governmental concern is indicated, yet the state and federal governments have no policies to directly slow down these processes by attempting to regulate or mitigate the exacerbating effects of residential discrimination, urban unemployment, suburban balkanization, and excessive housing construction.

The contribution to the search for political solutions of the anti-redliners to urban decay has been to blame financial institutions for deserting minority neighborhoods. By representing these groups as scapegoats and devils, the anti-redliners have effectively relieved local and national officials of the necessity to confront realistically the problems of urban decay.

This campaign against redlining in general and the FHA in particular has distracted public attention from examining the real causes of urban decay and has hampered the greatly needed establishment of programs and strategies to begin to deal with these problems. In fostering the folklore that urban decay is caused by institutional villains and devils, rather than by larger social and economic forces, the anti-redliners, however well-intentioned, have prevented us from viewing urban problems with economic realism.

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Preference Tax Changes: The Sleeper in the 1976 Tax Reform Act

by Gaylon E. Greer

The number of taxpayers affected by the minimum tax on preference items is expected to be increased tenfold by the 1976 Tax Reform Act. This promises to be the major revenue generating feature of the new law. Yet the flurry of commentary on the Act has generally ignored changes in the preference tax. This is particularly curious since real estate investors will supply the bulk of the one billion dollars of additional tax revenue the changes are expected to generate. Judicious planning will be required to minimize the consequences of the new rules, which may drastically alter the way the real estate investment game is played.

ORIGINS OF THE PROBLEM

The fortunate confluence of accelerated depreciation and long-term capital gain rules have traditionally made real estate a favored investment of high-bracket taxpayers. Rapid depreciation write-offs enabled "economic income" to escape immediate taxation, while the capital gain rules placed a premium on strategies enabling gains to be so characterized.

Stories abound of millionaires paying little or no income tax due to these and other special provisions generally available to the affluent. The Congress responded in 1969 by imposing a minimum tax on deductions popularly employed in "tax shelter" schemes. The initial preference tax rules were relatively innocuous. Liberal exemptions enabled most investors to avoid the tax without express planning to this end, and the rate itself was quite low. Consequently, the preference tax did little to alter the strategy of tax-oriented investment plans.

New Teeth for the Preference Tax

All this is changed by a little-heralded aspect of the 1976 Tax Reform Act, which both reduces the exemptions and increases the rate of taxation on pref-

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erence items. To illustrate the importance of these changes, consider an investor who has tax preferences of $125,000 and regular taxes of $90,000. His minimum tax on preference items, under both the old and the revised rules, is shown in *Exhibit 1.*

EXHIBIT 1

THE EFFECT OF CHANGES IN PREFERENCE TAX RULES

	Old Rules	New Rules
Tax preference items	$125,000	$125,000
Less exemptions	120,000	45,000
Amount subject to minimum tax	$ 5,000	$ 80,000
Tax rate	10%	15%
Minimum tax on preference items	$ 500	$ 12,000

This probably overstates the preference tax liability under the old rules, which permitted unused exemptions from prior years to be carried forward and offset against current preference items. This valuable provision has been eliminated by the 1976 amendment.

Overview of Code Section 56

All this suggests the wisdom of a fresh look at Section 56, which contains the rules for determining the minimum tax on preference items. In addition to the taxpayer's regular tax liability, there is a 15% tax on all preference items in excess of the greater of $10,000 or one-half the regular tax.[1] Preference items of particular interest to real estate investors are:[2]

1) Long-term capital gains. The 50% of capital gains which is ordinarily excluded from income subject to taxation constitutes preference income. This provision remains invariant even if the investor uses the alternative method of computing his capital gain tax liability.
2) Accelerated depreciation. Preference income includes the excess of accelerated depreciation deductions over the amount which would have resulted from using the straight-line method.

The "regular tax liability" for purposes of determining the preference tax exemption includes the total tax for the year, before accounting for the preference tax, minus the following items: foreign tax credit, retirement income credit, the WIN credit, credit for political contributions, and personal credits.

Exhibit 2 demonstrates how the preference tax is computed. The calculations assume an investor who has a regular tax liability of $18,000, with long-term capital gains of $30,000 and depreciation deductions of $24,000. It assumes further that had he used the straight-line method his depreciation allowance would have been only $15,000.

EXHIBIT 2

COMPUTATION OF PREFERENCE TAX LIABILITY

Preference Items:		
One-half long-term capital gains		$15,000
Excess depreciation:		
Total depreciation deductions	$24,000	
Straight-line depreciation	15,000	
Excess over straight line		9,000
Total preference items		$24,000
Less Exemption:		
(a) One-half regular tax	$ 9,000	
(b) Minimum exemption	10,000	
Greater of (a) or (b)		10,000
Preference items subject to minimum tax		$14,000
Preference tax (at 15%)		$ 2,100

THE LEAK IN THE TAX SHELTER

The new rules have stripped real estate of much of its tax shelter allure.[3] Perhaps the greatest impact has been on the tax consequences of accelerated depreciation, which in some cases may actually reduce the after-tax rate of return on an investment. To see how this might be, we have analyzed the tax consequences of accelerated depreciation deductions under both the new and the old preference tax rules, using the following example:

> Joe Dough purchases a new residential income property for $300,000 financing the acquisition with a $240,000, 8½%, 30-year first mortgage loan. Eighty percent of the value is attributable to the improvements, which have an estimated useful life of 40 years with no salvage value. The property generates net operating income of $27,000 per year throughout a five-year holding period. Dough sells the property at the end of the fifth year for $300,000. He uses the 200% declining balance depreciation method during the first four years of ownership, shifting to the straight-line method during the year of sale.
>
> Dough, who is married and files a joint return, has $10,000 of preference items each year, before accounting for the effect of this investment. He has taxable income, after all other deductions and exemptions but before including the results of this investment, of $55,000 per year.

Accelerated Depreciation under the Old Rules

Joe Dough's taxable income after inclusion of the net operating income from the investment, but before deducting depreciation and interest expense, will be $82,000. The first-year interest deduction will be approximately $20,203, while that of the fifth and final year will be approximately $19,459. Depreciation deductions range from a high of $12,000 in the first year to a low of $5,430 in the last year. Dough will therefore be in the 53% incremental income-tax bracket both before and after accounting for the effects of depreciation deductions in excess of straight line.[4]

Before 1976, Dough would have incurred no preference tax liability as a result of using accelerated depreciation. The additional tax savings from use of accelerated rather than straight-line depreciation would therefore have been equal to 53% of the excess depreciation. The annual savings under these assumptions are computed in *Exhibit 3.*

EXHIBIT 3

TAX SAVINGS FROM ACCELERATED DEPRECIATION

	Year 1	Year 2	Year 3	Year 4	Year 5
Accelerated Depreciation	$12,000	$11,400	$10,830	$10,289	$5,430[2]
Straight-Line Depreciation[1]	6,000	6,000	6,000	6,000	6,000
Excess Depreciation	$ 6,000	$ 5,600	$ 4,830	$ 4,289	$(570)
Tax Savings (at 53%)	$ 3,180	$ 2,968	$ 2,560	$ 2,273	$(302)

[1]The straight-line depreciation rate is 1/40, or 2½% per annum. The original depreciable base is $240,000.
[2]The undepreciated balance when Dough shifts to the straight-line method is $195,481, and the remaining useful life is 36 years. The revised straight-line depreciation deduction will therefore be 1/36 x $195,481, or $5,430.

The cumulative tax savings in *Exhibit 3* are more than offset by the additional tax upon sale, due to the recapture of excess depreciation. *Exhibit 4* shows the computation of the tax consequences to Dough of recapture of excess depreciation upon sale of the property in our example, before consideration of the minimum tax on preference items.

EXHIBIT 4

TAX CONSEQUENCE OF RECAPTURED EXCESS DEPRECIATION BEFORE CONSIDERATION OF PREFERENCE TAX

Joe Dough's taxable income before accounting for sale of property[1]			$57,111
Add recapture of excess depreciation:			
Cumulative depreciation	$49,949		
Less straight-line depreciation	30,000		
Excess (100% recaptured)			19,949
Total ordinary income subject to tax			$77,060
Income-tax liability			$31,635
Less tax on $57,111			20,769
Tax consequences of recapture of excess depreciation			$10,866

[1]Taxable income before accounting for sale of property:

Taxable income from other sources			$55,000
Add income from operations:			
Net operating income		$27,000	
Less:			
Fifth-year interest expense	$19,459		
Fifth-year depreciation	5,430	$24,889	
Net income from investment			$ 2,111
Total taxable income before results of sale			$57,111

The $10,866 increase in Dough's tax liability due to the recapture of excess depreciation exceeds the cumulative tax savings from excess depreciation over the holding period, because lumping the recapture in the year of sale moves him from the 53% to the 58% incremental tax bracket. The "rate of interest" on the funds made available through accelerated depreciation deductions is that discount rate which equates the present value of the annual tax savings from claiming excess depreciation over the straight-line amount with the present value of the tax consequences of recapture of the excess depreciation upon sale of the property. This can be expressed as:

$$\sum_{t=1}^{n} \frac{S_t}{(1+d)^t} = \frac{P_n}{(1+d)^n}$$

where t ranges from one through five, S_t is the differential tax effect of using accelerated depreciation rather than straight line in year t, and P_n is the tax consequence of recapture of excess depreciation upon sale. The common discount rate, d, is the "rate of interest" on these funds. Solving for d results in a rate of discount only slightly above zero. Using income averaging in the year of sale would reduce the incremental tax rate to 53% and result in a discount rate of exactly zero. The funds provided by the tax savings from the excess of accelerated over straight-line depreciation deductions are essentially costless.

Preference Tax Introduces a Cost

So far we have reckoned without the impact of the minimum tax on preference items. This was a perfectly legitimate approach before 1976, because the preference tax generally was of no consequence. In our example, Joe Dough would not have incurred a minimum tax on preference items at any time during the projection period, under the old rules.

The preference tax rules now in effect introduce an additional tax liability in each year accelerated depreciation is claimed, reducing the amount of funds provided by the depreciation deductions. This reduction in funds provided, with no corresponding decrease in tax liability from recapture of excess depreciation upon sale, constitutes an added cost.

Our example stipulated that Dough has preference items of $10,000 other than those resulting from the investment under analysis. Since there is a $10,000 exemption always available to the taxpayer, no preference tax liability would exist were it not for inclusion in preference income of accelerated depreciation in excess of straight line. But the entire amount of Dough's excess depreciation each year will be subject to the 15% tax on preference items. *Exhibit 5* shows his preference tax liability from excess depreciation for each year of the holding period.

EXHIBIT 5
PREFERENCE TAX ON EXCESS DEPRECIATION

	Year 1	Year 2	Year 3	Year 4	Year 5
Excess Depreciation (from *Exhibit 3)*	$6,000	$5,600	$4,830	$4,289	$ (570)
Preference tax liability (at 15%)	$ 900	$ 840	$ 725	$ 643	$ 000

In the year of sale Dough's preference tax liability (on the capital gain) will be *reduced* as a consequence of the recapture of excess depreciation, which increases the preference tax exemption by one-half the resultant increase in his regular tax liability. The tax on the recapture of excess depreciation must be offset by this reduction in preference taxes on the capital gain to determine the tax consequence in the year of sale, of having used accelerated depreciation. These calculations are presented in *Exhibit 6.*

EXHIBIT 6
TAX CONSEQUENCE OF RECAPTURED EXCESS DEPRECIATION WITH PREFERENCE TAX CONSIDERED

Tax due to recapture of excess depreciation (from *Exhibit 4)*		$10,866
Less consequent reduction in preference tax on capital gain:		
Increase in preference tax exemption (one-half the tax on recapture)	$5,433	
Preference tax rate	15%	$ 815
Net tax increase due to having claimed excess depreciation		$10,051

The annual tax savings and the additional tax liability from the use of accelerated depreciation in our continuing example can now be summarized. The starting point is the annual savings from the use of accelerated depreciation instead of straight line, before the effect of the new preference tax rules, as presented in *Exhibit 3.* From these savings must be subtracted the resultant preference tax liability, as illustrated in *Exhibit 5.* Finally, additional taxes in the year of sale due to the recapture of excess depreciation, adjusted for the consequent reduction in the preference tax on the capital gain, must be considered.

These calculations are all brought together in *Exhibit 7:*

EXHIBIT 7

ANNUAL TAX CONSEQUENCE OF ACCELERATED DEPRECIATION AND THE PREFERENCE TAX

	Year 1	Year 2	Year 3	Year 4	Year 5
Reduction (increase) in regular tax liability[1]	$3,180	$2,968	$2,560	$2,273	$ (302)
Less:					
Increase in preference tax[2]	900	840	725	643	–
Tax on recapture of excess depreciation, net of preference tax savings[3]	–	–	–	–	$10,051
Net tax saving (additional tax liability)	$2,280	$2,128	$1,835	$1,630	($10,352)

[1]From *Exhibit 3.*
[2]From *Exhibit 5.*
[3]From *Exhibit 6.*

Calculating as before the rate of discount which equates the present value of the annual tax savings from the use of accelerated rather than straight-line depreciation with the differential tax consequences on sale due to the recapture of excess depreciation, the "rate of interest" on the funds made available is approximately 10.7%. It is important to note that this is an "after-tax" cost of making the funds available. Borrowed funds have an after-tax cost of:

$$(1 - t)\, i$$

where t is the borrower's incremental tax rate and i is the rate of interest charged by the lender. Thus, the after-tax rate on funds made available through the use of accelerated depreciation, to be made comparable with before-tax rates on borrowed funds, must be divided by (1 - t). In our example, Joe Dough's incremental tax rate (t) is 53%, so (1 - t) is 47%. Dividing the discount rate of 10.7% by .47 results in a before-tax equivalent rate of interest of 22.8%.

The example used here is, of course, deliberately structured to generate the results achieved. The cost of taking accelerated depreciation was demonstrated, among other ways, by assuming a relatively short projection period. The longer the property is held the less will be the cost, as a per-annum rate, of generating funds by claiming accelerated depreciation deductions. The cost will also vary with the amount of other tax preference items, and with the level of the taxpayer's ordinary income. But whatever the assumptions employed, it is clear that the new preference tax rules have the potential to transmute accelerated depreciation benefits into an expensive proposition.

LIVING WITH THE NEW RULES

This analysis of the implications of the revised rules governing the minimum tax on preference items is by no means exhaustive. An important dimension which has been excluded is the effect on capital gains. Also ignored is the increased interdependence of various tax provisions.

Whatever their influence on resource allocation, the new rules will most assuredly effect changes in the relative emphasis placed on various aspects of investment analysis. When coupled with the more stringent tax provisions in other investment-related areas, they may render many traditional investment strategies obsolete.

New Emphasis on Basic Economics

Tax shelter alone was, of course, never sufficient reason to ignore the economics of an investment proposal. Implementation of the revised revenue code makes it less likely that this truism will be ignored. In addition to the increased minimum tax on preference items the amendment tightened the rules governing investment interest deductions, discontinued the more favorable recapture rules applicable to excess depreciation on residential income property, and eliminated the current deduction for construction-period interest and taxes. While these changes are relatively mild compared to the treatment afforded investment outlets other than real estate, we can expect to see greater emphasis placed on basic economic analysis of real estate investment proposals.

Added Value in Tax Planning

Paradoxically, individual tax planning has been given added importance. Increased complexity of tax rules combined with greater potential tax liability places a premium on careful advance planning to minimize the tax consequence of investment portfolio decisions. Changes in carryover rules and exemption provisions give added importance to timing of recognition of revenue and expense items.

Moreover, the analysis now more than ever must be based on a total portfolio approach. Analyzing a single investment opportunity out of the context of a particular investor's composite portfolio will inevitably misstate the true tax consequences of the proposal. The interdependency of tax factors in the asset portfolio, both realty and personalty, gives added impetus to integrated investment analysis.

Analysis of Incremental Rather Than Average Consequences

The reform bill lowered the threshold for incurring a tax liability on preference items and for disallowance of investment interest deductions. It is more than ever the case that the incremental tax effect may greatly exceed the investor's average tax liability, due to crossing these thresholds. Rather than simply applying average tax rates, accurate analysis requires a comparison of the total tax bill both with and without the proposed investment, to determine the incremental income tax consequences of the decision being rendered.

New Lustre for Old Tax Management Tools

The seasoned tax strategies of controlling the timing of recognition of gains by using like-kind exchanges and installment sales reporting become increasingly valuable under the new tax rules. They increase the investor's flexibility in managing his affairs to avoid "bunching" deductions or gains in a manner that will trigger the preference tax liability or investment interest deduction

limitations. Recognition of their increased potential in light of the new tax rules should give these strategies greater prominence in tax-wise investment plans.

SUMMARY

Changes in the minimum tax on preference items is a little-noticed aspect of the 1976 Tax Reform Act which promises to have a big impact on investment strategy. It will decrease the value of both capital gains and accelerated depreciation provisions. Accelerated depreciation will no longer be an unmixed blessing, because the tax deduction attributable to excess depreciation may prove to be a costly source of funds.

Anticipation of tax preference items in excess of preference tax exemptions calls for advance planning to enable rescheduling recognition of the items. This places a premium on judicious use of like-kind exchanges and installment sales. It also increases the importance of an incremental approach to analysis of the tax implications of all investment proposals.

SCHEDULE A

FIVE-YEAR AMORTIZATION SCHEDULE

	Year 1	Year 2	Year 3	Year 4	Year 5
Annual Principal Payments	$ 1,944	$ 2,088	$ 2,280	$ 2,448	$ 2,688
Annual Interest Payments	$20,203	$20,059	$19,867	$19,699	$19,459
Annual Debt Service[1]	$22,147	$22,147	$22,147	$22,147	$22,147

[1]Assumes $240,000, 8½%, 30-year loan with level monthly payments.

REFERENCES

1. The preference tax rules for corporations are similar to those for individuals, except that the exemption is equal to the greater of $10,000 or the total corporate tax liability.
2. Other tax-preference items of less immediate concern to real estate investors are the excess of market value over the option price of stock received under a qualified stock option plan, depreciation in excess of straight line on personalty under a lease, the excess of rapid amortization of certain items over the amortization otherwise permitted, depletion in excess of cost of the depletable item, and bad-debt deductions allowed financial institutions in excess of actual bad-debt experience.
3. Other changes wrought by the 1976 Tax Reform Act which reduce the tax benefits of real estate investments include additional limitations on investment interest deductions, elimination of the current deduction for construction-period interest and taxes, and elimination of the more permissive recapture provisions formerly applicable to excess depreciation on residential income property.
4. Interest expense calculations are presented in *Schedule A*, at the end of the article. All tax calculations are based on the tax rate tables in effect in 1976.

The Arlington Heights Case: The Exclusion of Exclusionary Zoning Challenges

by David L. Callies and Clifford L. Weaver

On January 11, 1977 the Supreme Court of the United States delivered its long-awaited decision in *Village of Arlington Heights v. Metropolitan Housing Development Corporation*, 45 U.S.L.W. 4073 (Case No. 75-616). Stripped to its essentials, the decision means that a land use policy carried out through zoning may be discriminatory in effect and yet be immune from constitutional challenge in the federal courts under the Equal Protection Clause of the 14th Amendment unless there is ample proof of a racially discriminatory intent or purpose. The decision does not, however, mean that such a policy is legal. This apparent anomaly we will discuss later. First, the facts.

THE FACTS: PASSIVE DISCRIMINATION AND PLANNING

In 1971, the Metropolitan Housing Development Corporation (MHDC) sought rezoning of a 15-acre parcel of land in the village of Arlington Heights, Illinois from a single-family to a multiple-family zoning classification. With the aid of federal financial subsidies provided under Section 236 of the National Housing Act, MHDC planned to construct 190 townhouse units in 20 two-story townhouse buildings: 100 single-bedroom units for senior citizens and 90 two, three, and four-bedroom units for families with low or moderate incomes. The development was to be called Lincoln Green.

Following a recommendation of the Arlington Heights Plan Commission, the village board of trustees denied the zoning request. MHDC and other named plaintiffs brought suit in the United States District Court alleging that the denial was racially discriminatory, violating the 14th Amendment as well as

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the Fair Housing Act of 1968. The District Court upheld the decision of the board of trustees but was reversed by the Seventh Circuit Court of Appeals in June of 1975 which was, in turn, reversed by the U.S. Supreme Court. So much for the bare bones.

The village of Arlington Heights is a suburb of Chicago located approximately 26 miles northwest of the downtown. It is primarily a bedroom suburb, zoned largely for single-family detached houses. According to the 1970 census the village's population was 64,000, only 27 of whom were black. The 15 acres in question are owned by the Clerics of St. Viator, part of an 80-acre parcel just east of the center of the village. While part of the site is occupied by St. Viator's High School and a three-story novitiate building, much of the site is vacant. The entire site and all of the surrounding area was, and is, zoned R-3, single-family detached. Single-family homes abut the property on two sides; on the other two sides is the vacant St. Viator's property. The proposed 15-acre development would have maintained much of the open space, with shrubs and trees screening the homes directly abutting the property, but would have required rezoning to the R-5 multiple-family classification to permit townhouses at the density proposed.

During the spring of 1971, the plan commission considered the proposal at three public meetings. At the hearings, MHDC submitted studies demonstrating the need for housing of the type proposed. Evidence offered at trial indicated many of those attending the plan commission were vocal and demonstrative in opposition to Lincoln Green, while others testified in its favor. Some of the comments from both opponents and supporters of the rezoning petition addressed the "social issue" of introducing low and moderate-income housing, that would probably be racially integrated, into Arlington Heights. But the Supreme Court found that most of the opponents focused on the zoning aspects of the petition, stressing the single-family character of the neighborhood, the reliance by neighboring citizens upon that character, and, perhaps most important, Arlington Heights' policy concerning multiple-family zoning. Adopted by the village board in 1962 and amended in 1970, the policy was that R-5 zoning should constitute a buffer between single-family and commercial, industrial, or other high intensity land uses. Lincoln Green did not meet this requirement, since the property is completely surrounded by single-family zoned property.

The trial court held that Arlington Heights was motivated by neither racial discrimination nor an intent to discriminate against low-income groups when it denied rezoning, but rather by a desire to protect property values and the integrity of the village's zoning plan. The Court of Appeals reversed.

THE COURT OF APPEALS DECISION: ACT AFFIRMATIVELY OR TAKE WHAT YOU GET

While sustaining the trial court's finding that Arlington Heights was "concerned with 'the integrity of the zoning plan,'" the Appeals Court decided, in the words of the Supreme Court, that "whether refusal to rezone was dis-

criminatory in effect was more complex." The Court of Appeals first noted that the zoning denial would have a disproportionate effect on blacks because of their disproportionate representation in the low and moderate income group. It held, however, that the Supreme Court's earlier decision in *James v. Valtierra,* 402 U.S. 137 (1971), precluded a reversal of the village's decision based on that disparity alone.

The Appeals Court, however, then went on to assess the disparate impact on racial minorities in light of "its historical context and ultimate effect." It found that northwest Cook County was enjoying rapid growth in employment opportunities and population while continuing to exhibit a high degree of residential segregation. In a finding that has been unfairly overlooked in some of the publicity surrounding this case, the Appeals Court conceded that "no direct action attributable to Arlington Heights created the segregated housing pattern. . . ." However, the court also noted that Arlington Heights, like nearly every other suburb in existence, had done nothing affirmative to deal with the problem. The court observed that the village had never participated in or sponsored any low-income housing developments and had no current plans for building low and moderate-income housing.

The court then went on to hold:

> "Because the village has totally ignored its responsibilities in the past we are faced with evaluating the effects of governmental action that has rejected the only present hope of Arlington Heights making even a small contribution toward eliminating the pervasive problem of segregated housing. We therefore hold that under the facts of this case Arlington Heights' rejection of the Lincoln Green proposal has racially discriminatory effects. It could be upheld only if it were shown that a compelling public interest necessitated the decision."

The Court of Appeals decided that neither the buffer policy nor the desire to protect property values met the "compelling public interest" standard and that, therefore, the Equal Protection Clause of the 14th Amendment was violated.

THE SUPREME COURT DECISION: IMPACT WRITEOUT PROVABLE INTENT

The Supreme Court did not agree. Relying primarily on its decision in *Washington v. Davis,* 426 U.S. 229 (1976), decided after the Court of Appeals decision but before oral argument in this case, the court reiterated that official action would not be held unconstitutional solely because it resulted in a racially disproportionate impact. In as plain words as can be imagined, the court held:

> "Proof of racially discriminatory intent or purpose is required to show a violation of the Equal Protection Clause."

Absent that showing, the high court said, the Court of Appeals' finding of a "discriminatory 'ultimate effect' is without independent constitutional significance."

If, then, secret motive rather than discernible effect is the critical factor, how is that motive to be shown? The court offers five possible approaches to this difficult problem.

First, the court suggests that while racial impact is not the ultimate test, proof of racial impact may in some cases be helpful in proving the required racial motive: "Sometimes a clear pattern, unexplainable on grounds other than race, emerges from the effect of the state action even when the governing legislation appears neutral on its face." However, it is clear that the pattern must be "stark" and that "impact alone is not determinative."

Second, the court suggests that motive might be demonstrated by an historical background which "reveals a series of official actions taken for invidious purposes." Apparently, however, the type of historic pattern of inaction and indifference to segregation found by the Appeals Court is unpersuasive to the Supreme Court.

Third, the court says the specific sequence of events leading to the challenged decision may be persuasive of racial motive if it betrays a departure either from normal procedures or from substantive standards usually considered important.

Fourth, if contemporaneous statements of the decision-makers reveal racial motive that, of course, would be relevant. Statements of citizens addressing the decision-makers seem, however, if relevant at all, to carry much less weight.

Finally, the court said:

> "In some extraordinary instances the members might be called to the stand at trial to testify concerning the purpose of the official action, although even then such testimony frequently will be barred by privilege."

Once the Supreme Court determined that the key fact is proof of discriminatory intent, its reversal of the Court of Appeals was a foregone conclusion. Indeed, both the District Court and the Court of Appeals agreed that the plaintiff's evidence did not warrant a finding that Arlington Heights was administering its zoning policies in an *intentionally* discriminatory manner. As the Supreme Court observed, statements by the plan commission and village board members reflected in the official minutes focused almost exclusively on the traditional zoning aspects of the MHDC petition.

Of course, it is not surprising that the plaintiffs had failed to carry a burden of proof that was first defined *after* they had tried their case on a completely different and, at the time, apparently sound theory. Indeed, after saying that motive was the critical element in the case, the Supreme Court, in footnote 20 of its opinion, sidestepped the plaintiff's argument that they had tried to prove motive in the trial court but were precluded from doing so by rulings based on what the law used to be. This anomaly seems in large part responsible for the dissents of three justices who argued that the whole case should

have been sent back to the Court of Appeals, and possibly to the federal trial court, for additional proceedings to be conducted in light of the newly announced rules applicable to such cases.

As it was, the majority of the court decided to review the evidence itself in light of the new standards and, not surprisingly, found the evidence insufficient to sustain a Constitutional claim of racial discrimination. The court did, however, remand the case to the Court of Appeals for the limited purpose of determining whether the evidence was sufficient to show a violation of the Federal Housing Act of 1968.

ANALYSIS: DIFFERENT ROADS TO OLD GOALS— AND MAYBE A SILVER LINING

As with many opinions of the Supreme Court, it is tempting to analyze this one on a narrow and technical basis and to point out the logical leaps and lack of tight reasoning. Perhaps the most glaring example is the difficulty of explaining why, in an area of such importance as the right to be free of racial discrimination, legislative motive is the test, when in other areas the rule has always been that motive is completely irrelevant and that governmental acts will be judged solely on the reasonableness of their observable impacts on constitutionally protected rights.

However, despite the temptation to analyze their legal logic, most Supreme Court opinions are more fruitfully analyzed as statements of policy and direction than as pieces of legal scholarship. In that context, then, what does this decision mean in terms of the direction of land use law and real estate development in the coming years?

Federal Law and Discrimination as a Bar to Land Development

The Arlington Heights opinion signals, above all, that the Supreme Court is not interested in having lower federal courts use the general language of the 14th Amendment of the Federal Constitution as a tool for "opening up the suburbs." In general, even before *Arlington Heights,* federal courts had not been as receptive as many state courts to claims of exclusionary zoning. Nevertheless, the reluctance of lower federal courts in this area never approached that evidenced in recent Supreme Court opinions, culminating in *Arlington Heights.* Indeed, a number of lower federal courts had shown some willingness to invalidate allegedly discriminatory ordinances based largely on proof of discriminatory impact on racial minorities.

However, before the Court of Appeals decision in *Arlington Heights,* most federal courts, unlike state courts, had refused to invalidate ordinances that discriminated merely against poor people—even though those poor people were usually also members of racial minorities. That tendency was made national law by the Supreme Court's opinion in *James v. Valtierra,* 402 U.S. 137 (1971). Most federal courts also showed a tendency to rely more on federal civil rights legislation than on the broad language of the 14th Amendment. Federal courts also tended to look very narrowly at the effect of zoning or-

dinances on people already living within a community; they did not demand that every community take "a fair share" of the region's minority population.

Against this background of federal reluctance, the Seventh Circuit Court of Appeals' invalidation of the Arlington Heights ordinance was quite a bold step. It specifically rejected statutory claims and rested its opinion squarely on the Constitution; it danced lightly, but effectively, around the Supreme Court's opinion in *Valtierra* and in essence found racial discrimination based on proof of economic discrimination; it went out of its way to say that proof of discriminatory effect was sufficient even with no proof whatever of bad motives; and, finally, it looked not simply at the local community but, rather, at the entire region to determine whether the local zoning ordinance had a racially discriminatory effect.

Seen in that light, the Supreme Court's curt rejection of the Seventh Circuit's effort carries a clear message—the federal judicial system is not going to open its doors to problems of local land use and zoning based upon vague allegations of economic or racial discrimination. The court seems to be saying that unless your proof of racial discrimination is so strong as to wipe out all other considerations, the federal courts are not the place to try zoning cases.

That probably makes good sense in light of the traditional roles and competencies of state and federal courts. In fact, one must wonder if some of the celebrated zoning cases recently lost in the U.S. Supreme Court when presented as civil rights cases could not have been easily won if presented in the state courts as routine zoning cases.

Despite the good sense of not opening federal courts to a flood of zoning cases cast in the mold of civil rights claims, the Supreme Court's approach to *Arlington Heights* and some of the other zoning cases that it has decided in the last two or three years is unfortunate. Instead of basing its opinions squarely on notions of the proper role of the federal judicial system in cases where federal claims are really secondary to local land use issues, the court has based its reversals on contorted constitutional logic and has seemed to sanction denial of important constitutional rights in the name of local zoning autonomy. That is less than might have been expected from a court that should function as the staunchest protector of those rights.

The State Courts and Discrimination

The retreat of the U.S. Supreme Court from this area comes at a time when many state courts are charging with renewed vigor into the exclusionary zoning fray. Most state constitutions have due process and equal protection provisions similar to those found in the U.S. Constitution and state supreme courts are showing an increasing willingness to ignore federal court interpretations of the federal constitution and to use state constitutional provisions to strike down local zoning ordinances on the basis of proofs and theories that clearly do not pass muster under *Arlington Heights.*

Among the most recent and famous of these are *Township of Williston v. Chesterdale,* 341 A.2d 46 (Pa. 1975), decided in Pennsylvania; *Berenson v.*

Town of New Castle (N.Y. 1975), decided in New York; and, perhaps most celebrated, the New Jersey Supreme Court's opinion in *S. Burlington County NAACP v. Township of Mount Laurel,* 336 A.2d 713 (N.J. 1975).

While each state has taken a slightly different approach, the tenor of the decisions was fairly captured by Justice Hall in his *Mt. Laurel* opinion:

> "It is plain beyond dispute that proper provision for adequate housing of all categories of people is certainly an absolute essential in promotion of the general welfare required in all local land use regulation. Further the universal and constant need for such housing is so important and of such broad public interest that the general welfare, which developing municipalities like Mount Laurel must consider, extends beyond their boundaries and cannot be parochially confined to the claimed good of the particular municipality. It has to follow that, broadly speaking, the presumptive obligation arises for each such municipality affirmatively to plan and provide, by its land use regulations, the reasonable opportunity for an appropriate variety and choice of housing, including, of course, low and moderate cost housing, to meet the needs, desires, and resources of all categories of people who may desire to live within its boundaries. Negatively, it may not adopt regulations or policies which thwart or preclude that opportunity."

The existence of such opinions from the state courts would seem to assure that the limited foreclosure of federal remedies wrought by the *Arlington Heights* case—primarily with respect to cases raising constitutional questions under the 14th Amendment—will by no means end the inquiry into whether communities can so zone themselves as to exclude all development within price ranges affordable by persons with low and moderate incomes. The forum will no doubt change from federal to state and the issues may be framed more like zoning issues than civil rights issues, but the debate will go on.

The Effect on Land Use Planning Procedures

It is arguable that the *Arlington Heights* decision at least in part rehabilitates the local comprehensive planning process, which had just been dealt a considerable blow by the Supreme Court's decision in the *City of Eastlake v. Forest City Enterprises,* 49 L. Ed. 2d 132 (1976). Elevating the local referendum to near constitutional status, the Supreme Court in that case declared it not unreasonable to require referendum approval before any land use decisions of the city's elected officials could take effect. In *Eastlake,* the court largely ignored opinions from the highest courts in a number of states which had found the comprehensive planning process to be the most reasonable means for making land use decisions, to which a referendum could have no possible application.

However, in reviewing the evidence for and against the allegation of racial motivation in *Arlington Heights,* the Supreme Court placed considerable emphasis on the regularity of Arlington Heights' planning and zoning procedure and on the fact that Arlington Heights had a buffer policy that on several prior occasions had formed the basis for the local legislative body's decision to deny other rezoning proposals. The court was apparently much moved by the trial court's findings of fact that the Plan Commission and Village Board, as reflected in the official minutes:

". . . focused almost exclusively on the zoning aspect of the MHDC petition, and the zoning factors on which they relied are not novel criteria in the village's rezoning decisions . . . the village originally adopted its buffer policy long before MHDC entered the picture and has applied the policy too consistently for us to infer discriminatory purpose from its application in this case."

To the extent that one believes in rationality in the process of making land use decisions at the governmental level, and comprehensive plans and planning as the embodiment of that rationality, there may be a silver lining, however tattered, in the United States Supreme Court's most recent foray into the field of zoning.

Comparative Investment Performance: Common Stocks Versus Real Estate— A Proposal on Methodology

by Michael S. Young

It is much easier for an institutional investor to operate in the stock and bond markets than in real estate because the information on these markets is so well-known and promoted and because the mechanics of investment are simple and routine. Real estate, on the other hand, requires far more analysis and marketplace involvement. Roulac cites a number of obstacles to real estate investment:

1) Objective information sources are lacking.
2) There is very limited usable research or comparable data.
3) Reliable price quotations available on a frequent basis do not exist.
4) Difficulty may be encountered in finding buyers and sellers.
5) Real estate transactions are cumbersome, time-consuming, and inefficient.
6) Because of the possibility of title imperfections, a title search and insurance policy usually is part of each transaction.
7) Negotiating the deal can be both difficult and frustrating.
8) The specialized legal aspects and the unique role of tax factors can add further complexity and cost.[1]

More serious, although curable, is the difficulty of comparing real estate and other investment media in equivalent terms.

Real estate investment performance is not now analyzed and presented in units of measure identical to those used with common stocks so that meaningful comparisons can be made by institutional investors. Neither does the traditional real estate literature conform to the general finance literature in its treatment of investment performance and market behavior. The task of upgrading our understanding of real estate investment is formidable yet necessary if investment real estate is to be accorded proper consideration by sophisticated institutional participants such as pension funds, bank trust departments, and insurance companies.

This paper will propose and describe a methodology that may be used to relate the performance of investment real estate to common stocks listed on the New York Stock Exchange. The procedure outlined has obvious limita-

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tions but, given the paucity of research on suitable methodologies, it may provide a useful first step to stimulate further study and development.

In 1968, the Bank Administration Institute sought to develop a measure of investment performance of pension funds that could be applied uniformly in order to make meaningful comparisons between the relative skills of asset managers. With BAI sponsorship an advisory committee directed by Professor James Lorie published a report[2] which concluded that the appropriate way to evaluate performance was to consider both the return and the risk dimensions simultaneously. Consideration of the return dimension alone was shown to be inappropriate and often led to erroneous investment choices.

Considerable research on common stocks over the past decade has resulted in generally accepted methods of analysis for this class of investment. The recent shift of sizeable portfolios into the so-called "index" funds is indicative of the investment community's acceptance of the latest concepts of portfolio theory which make both the return and risk dimensions explicit.

To close the gap between modern approaches to common stock analysis and traditional approaches to real estate investment analysis, we will show how the current techniques derived from common stocks can be applied to investment real estate. Among the new ideas offered are:

1) A workable measure of investment returns,
2) A suitable measure of central tendency,
3) An appropriate measure of variability of returns about the measure of central tendency,
4) An index of comparison,
5) A measure of sensitivity of rates of return on a real estate asset or portfolio to the general market,
6) A measure of the risk premium on the real estate asset or portfolio, and
7) A measure of the degree of efficient diversification provided by a portfolio or asset.

Throughout the discussion that follows we will assume that the real estate held is in the form of a diversified portfolio. There are some problems associated with the analysis of highly undiversified portfolios or single assets[3] that are beyond the scope of this article.

MEASURE OF INVESTMENT RETURNS

The starting point from which to compute the periodic rates of return on a portfolio or individual asset suggested in the BAI report and provided in data supplied by the Center for Research in Security Prices (CRSP), for instance, is the so-called "wealth relative." The wealth relative is defined as the ratio of the value of a portfolio or asset at the end of a period to the value at the beginning of the period. For example, if a stock is purchased for $100 on January 1 and has a market value of $105 one year later, the wealth relative for one year would be $105/$100 or 1.05. The wealth relative minus 1.00 equals the rate of return achieved during the period, on the basis of the price at the beginning of the period. In this case the rate of return would be 0.05 or 5% for one year. If, in addition to a market value of $105 one year hence this stock

had paid a dividend of $2, the wealth relative would be $107/$100 or 1.07, indicating a 7% rate of return for one year.

Unlike stocks, real estate generally does not have any readily identifiable market value. Appraisals are, at best, a crude measure of value and always are subject to differing interpretations. To overcome these obstacles we will make the simplifying assumptions that the starting value is the purchase price of the asset and that the income generated adds dollar-for-dollar to the value while money to cover operating losses decreases the value. If periodic appraisals are conducted, their effect can be incorporated into the changing value picture by altering the then current wealth relative. This refinement does not change the overall methodological approach but it does add another step.

This apparently naive measure of the value of real estate may strike some industry practitioners as overly simplistic and unrealistic. Rather than dwell on a debate about the realism of the model, we will take comfort in Professor Milton Friedman's comments:

> ". . . the relevant question to ask about the 'assumptions' of a theory is not whether they are descriptively 'realistic,' for they never are, but whether they are sufficiently good approximations for the purpose in hand. And this question can be answered only by seeing whether the theory works, which means whether it yields sufficiently accurate predictions."[4]

MEASURE OF CENTRAL TENDENCY

The early writings on portfolio theory by Markowitz,[5] Sharpe,[6] and others used the standard deviation of annual rates of return as the statistical measure of risk. The standard deviation of returns, while not the only possible measure of risk is, at least, a measure of that component of an investment which is of most concern to its owner.

The measure of central tendency must be appropriate to the available data if the measure of dispersion represented by the standard deviation is to have meaning. Other investigators have found that the geometric mean of wealth relatives minus 1.00 yields an appropriate measure of the mean rate of return. The geometric mean is used to avoid an upward bias which, in all but one special case, results when the simpler arithmetic mean is used for a compound time series. The geometric mean is not perfect but it is suitable for most practical purposes.

The geometric mean rate of return is the nth root of the product of n wealth relatives minus 1.00. For example, if we had the four quarterly wealth relatives 1.03, 1.07, 0.98, and 1.01, the geometric mean quarterly rate of return for this series would be as follows:

$$\overline{R} = (WR_1 \times WR_2 \times WR_3 \times WR_4)^{1/4} - 1$$
$$\overline{R} = (1.03 \times 1.07 \times 0.98 \times 1.01)^{1/4} - 1$$
$$\overline{R} = (1.09085)^{1/4} - 1$$
$$\overline{R} = 1.04198 - 1$$
$$\overline{R} = 0.04198 \text{ or } 4.198\%$$

Instead of quarterly wealth relatives, we could have chosen monthly or annual wealth relatives. The choice is a matter of convenience, accuracy, and availability.

MEASURE OF VARIABILITY

Just as the geometric mean presents a measure of central tendency on a logarithmic scale, the measure of variability of the rates of return must also be treated logarithmically. What concerns us is a measure of the variability of returns of a given portfolio relative to the variability of returns of a general market index or market portfolio. It is this relative, not absolute, measure that must be used for comparisons.

In terms of the hypothetical real estate portfolio discussed in the *Appendix*, the measure of variability or risk will be the standard deviation of the natural logarithms of the quarterly wealth relatives of the portfolio for a sufficiently long series of quarters immediately preceding the time for which the comparison of the portfolio to the market is made.

The formula for the standard deviation thus expressed is as follows:

Equation 1

$$\sigma_i = \left[\frac{\sum_{q} (\ln X_{iq} - \ln \overline{X}_i)^2}{q\text{-}n} \right]^{\frac{1}{n}}$$

where σ_i = standard deviation for returns of portfolio *i*; X_{iq} = wealth relative for quarter *q* of portfolio *i*; $\overline{X}_i$ = geometric mean plus 1.00 of the quarterly wealth relatives of portfolio *i*; and n = number of quarters over which the standard deviation is measured.

We will also have use for the statistic called the variance at a later point so it should be remembered that the variance (Var_i) is merely the square of the standard deviation.

INDEX OF COMPARISON

Several researchers have devised indices more or less suitable to stocks, bonds, or some combination of assets for which price movement information is relatively easy to obtain. Much work remains to be done to arrive at a suitable and workable index incorporating a variety of investment vehicles so that comparisons may be made with some reliability. Lacking any better source at this time we will choose to use an index of New York Stock Exchange (NYSE) common stock returns as a reasonable proxy for an all-inclusive investment index.

Fortunately for the investment community, the Center for Research in Security Prices at the University of Chicago maintains monthly data on every common stock listed on the NYSE from 1926 to the present. The composite monthly rates of return are prepared in four ways:

1) Value weighted with reinvestment of dividends,
2) Value weighted without reinvestment of dividends,
3) Value equally weighted with reinvestment of dividends, and
4) Value equally weighted without reinvestment of dividends.

Since we will assume that our hypothetical real estate portfolio is held for the production of current income to meet pension fund obligations or the like and since real property is generally purchased in one lump, i.e., not divisible into small fungible parts, we will use the portion of the monthly rate of returns table which shows value weighted results without reinvestment of dividends.

It has been found that many commonly published indices such as the Standard and Poor's 500 Stock Index and the Dow Jones Industrial Average march together in fairly close lock-step. When one index rises, others generally do likewise. This happy result makes the selection of an index for comparison a matter of little consequence in most practical managerial applications provided that NYSE stocks are the subject of investigation. Naturally, a more comprehensive index incorporating other investment media would be helpful and desirable but, as yet, there is no such index.

SENSITIVITY OF AN ASSET TO THE MARKET

The pioneering work by Markowitz in the 1950s concerned the construction of efficient portfolios of risky assets. Unfortunately, Markowitz's solution made it necessary to know the expected return on each security, its variance and its covariance with each other security. The computational burden was clearly impossible to overcome until Sharpe suggested a simplification that would substitute the covariance of a security to the market for the covariance of each security to all other securities. For a list of 100 securities, Sharpe's simplification reduces the number of estimates required from 5,015 to 302. For 1,000 securities the reduction would be from 501,500 to 3,002.

Although the simplifying assumptions in Sharpe's model turn out to have no serious detrimental effect upon the usefulness of the model when NYSE securities are investigated for conformance to predicted behavior, some assumptions may cause difficulty when analyzing less than efficient portfolios or less than efficient markets. Sharpe presumes that rational investors:

1) Are averse to risk,
2) Have identical time horizons,
3) Have identical expectations about the future,
4) Are immune to taxes and pay no transaction costs, and
5) Attempt to hold efficient portfolios.

By efficient portfolios we mean portfolios perfectly correlated with the market which, for a given amount of risk, yield the highest return. In theory all investors would have to hold the market portfolio if perfection were attainable in all five aspects mentioned in the paragraph above.

An efficient market is one in which all known information about a security in the market is instantaneously reflected in the market price of that security. Many investigators have concluded that the NYSE is for all intents and purposes efficient in this sense.

The general form of Sharpe's capital asset pricing model is:

Equation 2

$$E(R_i) = R_f + [E(R_j) - R_f]\beta_i$$

where $E(R_i)$ = expected return on asset or portfolio *i*; R_f = risk-free rate; $E(R_j)$ = expected return on the market *j*; and β_i = measure of the sensitivity of the return on the asset *i* to movements in the market.

The so-called "beta coefficient" is our measure of sensitivity. For efficient portfolios where the variability of each asset is perfectly correlated with the variability of the market, beta is equal to the ratio of the standard deviation of the portfolio return to the standard deviation of the market return, but in general, beta is given as follows:

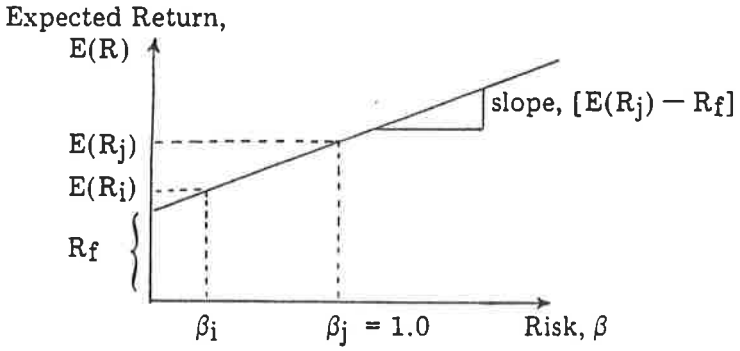
Equation 3

$$\beta_i = \frac{\rho_{ij}\sigma_i\sigma_j}{\sigma_j^2} = \frac{Cov_{ij}}{Var_j}$$

where ρ_{ij} = correlation coefficient between the asset or portfolio *i* and the market and all other terms are as defined previously.

Notice that Sharpe's capital asset pricing model has the form of a straight line, $y = a + bx$. *Figure 1* is a graphical representation of the model.

Figure 1



By definition, beta for the market is 1.00. Thus, it is easy to determine the expected value of a portfolio or asset return given just the risk-free rate, R_f; the expected value of the market return, $E(R_j)$; and the beta for the portfolio or asset, β_i. For instance, if $R_f = 3\%$, $E(R_j) = 12\%$ and $\beta_i = 0.5$, the expected return on *i* would be:

$$E(R_i) = 0.03 + (0.12 - 0.03)\ 0.5$$
$$E(R_i) = 0.03 + (0.09)\ 0.5$$
$$E(R_i) = 0.075 \text{ or } 7.5\%$$

Our analysis in the *Appendix* will show that the covariance and beta coefficient for our hypothetical real estate portfolio are 0.00165 and 0.20320 respectively. The absolute value of the covariance has little significance for us except to note that the return on our real estate portfolio generally increases

when the return on the market increases but the covariance is only slightly positive and not statistically significant.

The beta coefficient does provide more useful information, namely that the real estate portfolio in our example exhibits considerably less systematic risk or volatility than the market.

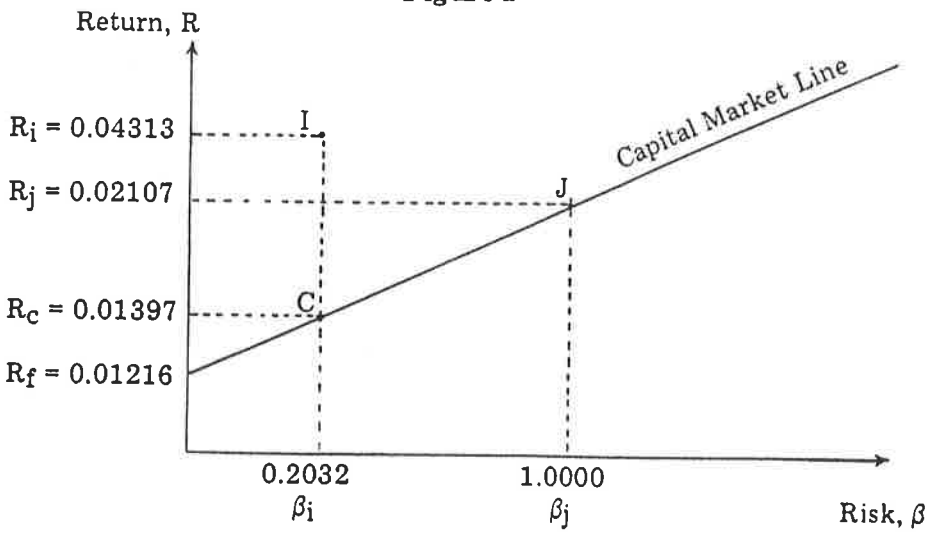
THE RISK PREMIUM

The total risk or variability of an asset or portfolio is comprised of two components: nonsystematic risk and systematic risk. Nonsystematic risk can be eliminated by diversification, i.e., the inclusion of additional risky assets to make the correlation of the portfolio to the market as close to 1.00 as possible. Systematic risk, on the other hand, is that risk which remains associated with the portfolio and cannot be eliminated through further diversification.

The theory of price in capital markets argues that since investors seek to hold efficient portfolios, the market will not pay a premium for risk which may be eliminated through diversification. The risk premium, or the amount the market will be willing to pay for an asset or portfolio above the risk-free rate, will depend entirely on the level of its undiversifiable risk. For portfolios which fall along the capital market line, the undiversifiable risk will be the total risk for naively selected efficient portfolios. Clearly superior management will be that management which can pick portfolios that in their undiversifiable or systematic risk produce a return greater than that of a naively selected efficient portfolio of identical risk.

We may understand the nature of the risk premium and its relationship to managerial performance by examining the results of our sample problem as shown graphically in *Figure 2.*

Figure 2



The risk-free rate, R_f, that we have supplied is the mean quarterly rate of return on three-month Treasury Bills which generally serves as a good proxy.

Points I and J represent the risk-return coordinates of our hypothetical real estate portfolio and the NYSE market index respectively. Point C represents the risk-return coordinates for a naively selected efficient portfolio with the same beta coefficient as our real estate portfolio.

Clearly, our portfolio has exceeded the performance of the naively selected efficient portfolio by an amount equal to $R_i - R_c$. This vertical distance between R_i and R_c is a measure of the portfolio manager's ability to select a portfolio which outperforms a naively selected portfolio but it says nothing about whether the performance results from a well-diversified portfolio or from a poorly diversified portfolio.

MEASURE OF DIVERSIFICATION

We have said that total risk is comprised of systematic (diversifiable) risk and nonsystematic (nondiversifiable) risk. The risk premium for a given sensitivity to the market, i.e., the rate of return premium above a naively selected efficient portfolio for a given beta coefficient, is attributed entirely to the amount of nonsystematic risk. Therefore, it is useful to be able to measure the fraction of total risk attributable to the lack of diversification in the portfolio. The proper unit of measure is derived from the correlation coefficient, ρ_{ij}, of the portfolio under investigation to the comprehensive general market index.

If we consider the earlier equation for the beta coefficient, we will notice that the covariance of the portfolio with the market is equal to the product of the correlation coefficient, the standard deviation of returns of the portfolio and the standard deviation of returns of the market. Symbolically, the equation is as follows:

Equation 4

$$Cov_{ij} = \rho_{ij}\,\sigma_i\,\sigma_j$$

Rearranging this formula we have the equation for the correlation coefficient:

Equation 5

$$\rho_{ij} = \frac{Cov_{ij}}{\sigma_i\,\sigma_j}$$

The square of the correlation coefficient ρ_{ij}^2 (or more popularly called R^2) is the coefficient of determination. It measures the fraction of the total variance of the portfolio under investigation that is explained by the portfolio's movement with the market. In other words, the coefficient of determination, R^2, is the fraction of the total risk which is systematic. One minus R^2 would be the fraction of the total risk which is nonsystematic and attributable to the lack of complete or efficient diversification. In the following section we will argue that specification of both the correlation coefficient (and by implication the coefficient of determination) and the beta coefficient are proper, appropriate, and sufficient descriptions of an operational investment policy.

INVESTMENT POLICY

Despite the fact that investment policies of large institutional investors are generally contained in a written statement, the methods of choice among investment opportunities tend to be arbitrary and the manner of control of the portfolio risk or variance is, at best, vague. Lorie and Hamilton cite three criteria commonly included in traditional investment policy statements:

1) A list of securities eligible for purchase—the so-called "buy" list.
2) A diversification requirement, usually specifying the maximum percentage of a portfolio that can be invested in the securities of a single company and the maximum percentage that can be invested in a single industry.
3) A maximum percentage that can be invested in equities.

No matter how detailed these criteria are, it is easy to see that the control that they might exert over the behavior of an asset manager is minimal. Within the constraints imposed by traditional investment policy statements there are a number of possible portfolios that will satisfy the stated objectives but will have widely different risk characteristics. For instance, it would be possible for an asset manager to choose to include all high beta stocks from the "buy" list into the portfolio which would result in a much riskier posture than the investment policymakers intended. If we are to believe that risk aversion is a primary goal of most investors, then it is incumbent that we have a good measure of relative risk and an operational means of monitoring that risk.

Thus, we believe that a more precise specification of investment policy must include two measures: the beta coefficient and the correlation coefficient. By specifying a range of beta coefficients for an investment portfolio acceptable to management, we would have an explicit statement of the desired risk position relative to the market and the direction that adjustments might take from time to time to adhere to a stipulated policy. For instance, if the beta coefficient were greater than desired, we would then seek to remove high beta assets from the portfolio or add lower beta assets to bring the sensitivity of the portfolio to the market back into line. Beta would help us identify the assets which could best accomplish our objectives and would offer an early warning system to alert managers to unfavorable changes.

The correlation coefficient is our measure of diversification. Above average returns which are the result of superior performance of a diversified portfolio are to be preferred by risk averse investors to above average returns from an undiversified portfolio. Also, when rating the relative skill of various asset managers and the portfolios they operate, it is important to know whether their apparent skill is achieved through undiversified investments which typically do not sustain a high level of performance or through diversified investments which react less erratically to fluctuating economic conditions.

Thus, we have in the beta coefficient and the correlation coefficient a set of specifications which will enable the institutional investor 1) to define an investment policy, 2) to monitor compliance with the policy, and 3) to evaluate the performance of asset managers.

TO BUY OR NOT TO BUY REAL ESTATE

One of the most prevalent myths circulating among investment managers today is that a pension fund should not have more than 10% of its assets invested in real estate. It is thought that real estate is too "risky" and therefore should only be accorded a minor role in institutional portfolios.

Notice that we were able to completely specify the desired performance characteristics of an investment portfolio with just the beta and correlation coefficients. Not once during the foregoing discussion was it necessary to mention the proportion of total assets to be invested in any one category of assets. Indeed, we used a hypothetical real estate portfolio for analysis but the methodology would have been identical had we chosen stocks, bonds, antiques, old cars, sea shells, or any other investment for which value determinations over time are possible.

The whole point of our discussion has been that there exists a standard analytical method for investigating performance characteristics of investments. By employing a common language we can remove the myths and mysticism surrounding different investment vehicles and thereby make more rational investment decisions.

To demonstrate the fallacy of such intuitive judgments as limiting a portfolio to only a given percent of a particular asset, we will use the results of our hypothetical real estate portfolio and the NYSE common stock index in a combined portfolio. Assume for the moment that we currently have a portfolio *j* represented by the NYSE market portfolio but are considering the addition of some of the hypothetical real estate portfolio *i*. We would like to analyze the performance that might be expected of the combined portfolio assuming that past performance is a sufficiently good indicator of future performance. Initially we will consider a combined portfolio made up of 90% NYSE market portfolio shares and 10% hypothetical real estate portfolio shares.

The expected quarterly return is just the weighted average of the quarterly returns of the NYSE market portfolio and the real estate portfolio.

Equation 6

$$R_p = \not{Z}_i \bar{R}_i + \not{Z}_j \bar{R}_j$$

Where R_p = expected quarterly return on the combined portfolio; $\bar{R}_i$ and $\bar{R}_j$ = quarterly returns on the real estate portfolio *i* and the NYSE portfolio *j*; $\not{Z}_i$ = proportion of the combined portfolio invested in *i*; and $\not{Z}_j$ = proportion of the combined portfolio invested in *j*.

$$R_p = (0.10)\,(0.04313) + (0.90)\,(0.02107)$$

$$R_p = 0.004313 + 0.018963$$

$$R_p = 0.02328 \text{ or } 2.328\%$$

The variance of returns of a combined portfolio is not the weighted average of the respective variances except in the special case where the two assets are perfectly correlated. The correct general form of the equation for the variance of returns for a combined portfolio of two assets is as follows:

Equation 7

$$\sigma_p^2 = z_i^2 \sigma_i^2 + z_j^2 \sigma_j^2 + 2 z_i z_j \mathrm{Cov}_{ij}$$

where σ_p^2 = variance of returns of the combined portfolio and all other terms are as previously defined. In our example, the variance would be:

$$\sigma_p^2 = (0.10)^2\ (0.00218) + (0.90)^2\ (0.00812) + 2(0.10)\ (0.90)\ (0.00165)$$

$$\sigma_p^2 = 0.00670$$

Two results are worthy of note. First, the expected return of the combined portfolio is greater than the return on the NYSE stock portfolio by itself (0.02328 > 0.02107). Second, the variance of returns of the combined portfolio is lower than the variance of returns on the NYSE stock portfolio by itself (0.00670 < 0.00812).

The same pattern of results would have occurred if we had chosen to include more of the real estate portfolio relative to the stock portfolio. The following are possible outcomes for combined portfolios made up of different proportions of the two assets:

Proportion Invested In		Combined Results	
Real Estate	Common Stocks	Rate of Return	Variance of Returns
0.10	0.90	0.02328	0.00670
0.20	0.80	0.02548	0.00581
0.30	0.70	0.02769	0.00487
0.40	0.60	0.02989	0.00406

As the proportion of real estate in the combined portfolio is increased the return and variance components improve. In general, the combined variance will decrease as uncorrelated assets are combined into a new portfolio. The combined rate of return may or may not increase but the reduction in overall variance may be sufficiently attractive to sacrifice some overall return for more income stability. Intuitive judgments concerning these factors could easily have resulted in incorrect conclusions and are clearly not definable or testable.

CONCLUSION

Fiduciary responsibility on the part of asset managers demands a high level of expertise, analytical ability, and factually-based judgment. There can be no excuse for using outmoded methods and seat-of-the-pants judgments when techniques are available to do a better job. Neither real estate nor any other popular investment medium need be considered a case apart; the methods and language of analysis do exist and they should be applied to real estate as well as to other assets.

Several tools have been presented which can be used to organize the necessary data gathering system for any investment portfolio. We have proposed a measure of wealth relatives as a starting point. The rest of the calculations are straightforward and result in two extremely important statistics: the beta coefficient and the correlation coefficient. These two coefficients enable us to describe investment policies in a clear and unambiguous way, to monitor the

performance of our portfolio over time and to make the task of evaluating different asset managers easy.

Just as participants in the stock market benefit from more information about individual stocks and the performance of the market in general, so too can real estate participants profit from more and better data presented in a standardized and understandable manner. This paper has suggested the kinds of information that are needed to make real estate analysis comparable to common stock analysis and therefore more acceptable and understandable to institutional participants. The task of upgrading information about real estate will not be easy, but it will be rewarding.

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APPENDIX A

Demonstration of the Proposed Methodology— A Hypothetical Example

We concluded that the specification of two parameters, the correlation and beta coefficient, was an appropriate description of an operational investment policy which uses the latest concepts in portfolio theory and provides clear advantages over heretofore traditional investment practices. Once the technique is understood, the application of the methodology becomes a routine matter of calculation.

In order to demonstrate the steps involved we will consider the comparison of a hypothetical real estate investment portfolio with an index of New York Stock Exchange common stocks. It may be helpful to think of the situation where a pension fund manager is considering the inclusion of our hypothetical real estate portfolio in a large pool of invested funds. The pension fund manager might like answers to questions such as:

> Will the proposed portfolio exceed the expected rate of return on the current pension fund assets?
> Does the inclusion of this portfolio contribute to a reduction in the overall riskiness of the current investment portfolio?
> What is the extent to which this proposed portfolio is diversified?
> Is the risk premium sufficiently large for a given level of risk for inclusion within our total portfolio?
> Is the manager of the proposed portfolio demonstrating real skill in picking a superior portfolio or is he just lucky?
> Does the proposed portfolio fall within the constraints imposed upon me, as the pension fund manager, with regard to the allowable beta and correlation coefficients to warrant further investigation of this investment opportunity?
> Has our portfolio (the hypothetical portfolio) deviated so far from past behavior to require some restructuring to bring it back into line with our explicit investment objectives?

The seven steps to arrive at the beta and correlation coefficients that can shed light on these questions follow.

Step 1: Determine the quarterly wealth relatives of the portfolio under investigation, X_{iq}, and the comprehensive index, X_{jq}.

Let us analyze the performances of a hypothetical real estate portfolio and NYSE common stocks over an identical three-year time period. *Tables A* and *B* illustrate computations required for later use beginning from a presumed sequence of wealth relatives for the real estate investment and from the reported monthly rates of return for the NYSE stocks. The real estate wealth relatives include all cash distributions, all expenditures to cover operating losses and periodic revaluations of the market value of the portfolio. The monthly returns on stocks reported by the Center for Research in Security Prices were first converted to quarterly returns from which the wealth relatives were deduced.

For convenience of notation we have denoted variables associated with the hypothetical real estate investment by the subscript i and variables of the market by the subscript j.

TABLE A
HYPOTHETICAL REAL ESTATE INVESTMENT

Quarter		Column I (X_{iq}) Wealth Relative	Column II Quarterly Rate of Return	Column III ($\ln X_{iq} - \ln \bar{X}_i$)	Column IV ($\ln X_{iq} - \ln \bar{X}_i)^2$
1970	1st	1.01131	0.01131	-0.03098	0.00096
	2nd	1.00123	0.00123	-0.04100	0.00168
	3rd	1.10836	0.10836	0.06066	0.00368
	4th	0.98001	-0.01999	-0.06242	0.00390
1971	1st	1.01652	0.01652	-0.02584	0.00067
	2nd	1.07617	0.07617	0.03118	0.00097
	3rd	0.99990	-0.00010	-0.04233	0.00179
	4th	1.07358	0.07358	0.02877	0.00083
1972	1st	1.13294	0.13294	0.08259	0.00682
	2nd	0.99358	-0.00642	-0.04867	0.00237
	3rd	1.09637	0.09637	0.04978	0.00248
	4th	1.04133	0.04133	-0.00173	0.00000
					$\Sigma = 0.02615$

TABLE B
NEW YORK STOCK EXCHANGE STOCKS

Quarter		Column I (X_{jq}) Wealth Relative	Column II Quarterly Rate of Return	Column III ($\ln X_{jq} - \ln \bar{X}_j$)	Column IV ($\ln X_{jq} - \ln \bar{X}_j)^2$
1970	1st	0.96654	-0.03346	-0.05488	0.00301
	2nd	0.79864	-0.20136	-0.24570	0.06037
	3rd	1.16928	0.16928	0.13554	0.01837
	4th	1.09049	0.09049	0.06578	0.00433
1971	1st	1.10125	0.10125	0.07559	0.00571
	2nd	1.00148	0.00148	-0.01937	0.00038
	3rd	0.98843	-0.01157	-0.03249	0.00106
	4th	1.03662	0.03662	0.01511	0.00023
1972	1st	1.06567	0.06567	0.04275	0.00183
	2nd	0.99741	-0.00259	-0.02344	0.00055
	3rd	1.02212	0.02212	0.00103	0.00000
	4th	1.06284	0.06284	0.04009	0.00161
					$\Sigma = 0.09745$

Step 2: Compute the respective mean quarterly wealth relatives, $\bar{X}_i$ and $\bar{X}_j$.

The mean quarterly wealth relatives are represented by the geometric mean of the individual quarterly wealth relatives plus 1.00. The results are as follows:

for the hypothetical real estate portfolio

$$\bar{X}_i = \left[\prod_{q-12}^{q} X_{iq}\right]^{\frac{1}{12}} = 1.04313$$

and for the market index

$$\bar{X}_j = \left[\prod_{q-12}^{q} X_{jq}\right]^{\frac{1}{12}} = 1.02107$$

These results are then utilized in Columns III and IV of *Tables A* and *B* to arrive at the numbers shown therein.

Step 3. Compute the respective mean quarterly rates of return, R_i and R_j.

From the mean quarterly wealth relatives it follows directly that the mean quarterly rates of return for the period under investigation are:

$\bar{R}_i = \bar{X}_i - 1 = 0.04313$ for the real estate portfolio

and

$\bar{R}_j = \bar{X}_j - 1 = 0.02107$ for the market index

Upon inspection of *Table A* we can see that individual quarterly rates of return for the real estate portfolio ranged from a high of 13.294% to a low of -1.999% about a mean of 4.313%. Corresponding results for the stock market index were individual quarterly rates of return ranging from a high of 16.928% to a low of -20.136% about a mean of 2.107%. The market index thus experienced both a lower mean return than our hypothetical portfolio and a much wider range in individual quarterly results.

Step 4: Compute the respective variance and standard deviation of quarterly returns, Var_i and σ_i and Var_j and σ_j.

The calculations of variance and standard deviation of returns about the mean are shown, in part, in Column IV in *Tables A* and *B*. The final computations are as follows:

for the real estate portfolio

$$Var_i = \frac{\Sigma\,(\ln X_{iq} - \ln \bar{X}_i)^2}{n} = \frac{0.02615}{12} = 0.00218$$

$$\sigma_i = \sqrt{Var_i} = 0.04668$$

and for the market portfolio or index

$$Var_j = \frac{\Sigma\ (\ln X_{jq} - \ln \bar{X}_j)^2}{n} = \frac{0.09745}{12} = 0.00812$$

$$\sigma_j = \sqrt{Var_j} = 0.09012$$

Step 5: Compute the covariance of real estate portfolio returns with market returns, Cov_{ij}.

Table C shows the computations required to arrive at the covariance. Columns I and II of *Table C* are taken directly from Column III of both *Tables A* and *B*.

TABLE C

Quarter		Column I $(\ln X_{iq} - \ln \bar{X}_i)$	Column II $(\ln X_{jq} - \ln \bar{X}_j)$	Column III Col. I x Col. II
1970	1st	-0.03098	-0.05488	0.00170
	2nd	-0.04100	-0.24570	0.01007
	3rd	0.06066	0.13544	0.00822
	4th	-0.06242	0.06578	-0.00411
1971	1st	-0.02584	0.07559	-0.00195
	2nd	0.03118	-0.01937	-0.00060
	3rd	-0.04233	-0.03249	0.00138
	4th	0.02877	0.01511	0.00043
1972	1st	0.08259	0.04275	0.00353
	2nd	-0.04867	-0.02344	0.00114
	3rd	0.04978	0.00103	0.00005
	4th	-0.00173	0.04009	-0.00007
				$\Sigma =$ 0.01979

The final computation of the covariances relies upon the product of the numbers shown in Columns I and II which result in Column III of *Table C*. Thus, the covariance is:

$$Cov_{ij} = \frac{\Sigma\ (\ln X_{iq} - \ln \bar{X}_i)\ (\ln X_{jq} - \ln \bar{X}_j)}{n} = \frac{0.01979}{12} = 0.00165$$

Step 6: Determine the measure of sensitivity of rates of return on the hypothetical real estate portfolio to the rates of return on the market, β_i.

The beta coefficient derives directly from results of Steps 4 and 5 shown above. Thus, the beta coefficient for this real estate portfolio would be:

$$\beta_i = \frac{Cov_{ij}}{Var_j} = \frac{0.00165}{0.00812} = 0.20320$$

Step 7: Determine the correlation coefficient and the coefficient of determination for this portfolio, ρ_{ij} and R^2.

When inserting the results of our hypothetical portfolio into the expanded and rearranged equation for the covariance we are able to determine its correlation with the market over the three year period under investigation.

$$\rho_{ij} = \frac{Cov_{ij}}{\sigma_i \sigma_j} = \frac{0.00165}{(0.04668)\ (0.09012)}$$

$$\rho_{ij} = \frac{0.00165}{0.00421}$$

$$\rho_{ij} = 0.39192$$

Since the coefficient of determination is merely the square of the correlation coefficient we have the simple calculation:

$$R^2 = \rho^2_{ij} = (0.39192)^2$$

$$R^2 = 0.15360 \text{ or } 15.360\%$$

Foreign Investment in U.S. Real Estate: Scope and Policy Issues

by Milton A. Berger

United States policy toward foreign investment in real estate has to be examined within the context of the general policy toward foreign investments here.

The guiding principle behind the international investment policy of the United States and other major industrialized nations has been that free market forces should determine the direction of capital flows throughout the world to maximize economic efficiency. The general premise that resources should be permitted to move internationally to their greatest economic usefulness applies equally to our trade policy. This policy recognizes that no nation can be self-sufficient, that we live in an economically interdependent world. Trade and investment barriers can deny us jobs, income, goods, and technology. We export 23% of our farm output and 8% of our manufactures. We import far more raw materials than we export. Our enterprises abroad account for a substantial part of our exports, provide us access to important raw materials, and are a critical factor in world economic development—so important to our own economic and political security. Foreign-owned enterprises here provide employment, increased income, new products, and new technology.

THE OPEN DOOR POLICY

The United States policy on inward investments from abroad is an open-door non-discriminatory policy. They are admitted freely and foreign investors are treated on the same basis as domestic investors. They are offered no special incentives to attract them to the United States and, with few exceptions, they are confronted with no special barriers. The few exceptions to this open-door policy involve limited federal restrictions on foreign investment in certain sectors of the economy which have a fiduciary character, such as banking, or relate to the national interest, such as communications and transportation, or

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This article is based on an address made by the author on November 10, 1976 in Houston at the International Counseling Conference presented by the American Society of Real Estate Counselors. In public domain.

Milton A. Berger, a lawyer and international economist, is director of the Office of Foreign Investment in the United States responsible to the Assistant Secretary of Commerce for Policy. Mr. Berger planned and directed the nine-volume report on Foreign Direct Investment in the U.S. submitted to Congress in June 1976. He received his J.D. degree from Harvard Law School.

involve the exploitation of natural resources, such as mining on federally-owned lands. In addition, some states impose restrictions on foreign investments, particularly in banking, insurance, and land ownership.

This general policy, which has prevailed over the 200 years of our republic, and which was responsible for much of our early economic development, was not seriously questioned until very recently.

However, about three years ago some apprehension about foreign investments here began to be manifested around the country. There was concern about concentration of foreign investment in certain areas and in certain fields, such as hotels in Hawaii. Dollar devaluations and the depressed value of shares of stock of U.S. companies made both investments in new facilities and acquisitions cheaper and more appealing to potential foreign investors. There were fears of significant foreign acquisitions of agricultural land and natural resources. And then the Middle East oil-producing countries emerged with massive amounts of petrodollars looking for uses. With most of these reserves held by the governments of these countries, many Americans were fearful they would make huge politically-motivated investments, taking over major firms and even industries and subjecting the U.S. economy to external political pressures.

These concerns were reflected in a number of bills in Congress to register, review, and control foreign investments here. The Administration has opposed the various measures that would impose any screening procedure or establish new barriers to such investments on the grounds that the scope, character, and motivation behind foreign investments do not justify such measures. However, the Administration agreed with the Congress that our knowledge of these activities was insufficient and that more data needed to be developed and analysis made to make sure that our policies were supported by the facts.

FOREIGN INVESTMENT STUDY ACT

In October 1974 Congress passed and the President signed the Foreign Investment Study Act which required the Commerce and Treasury Departments to conduct very intensive studies of foreign direct and portfolio investment in the United States and to deliver reports to the Congress within a year and a half. This June the Commerce Department submitted a nine-volume, 2,500-page report to the Congress. The principal findings are of interest to the real estate community.

Investors Named

First, we found that the foreign direct investment position in the United States was $26.5 billion at the end of 1974, the period of our statistical survey. It is now over $30 billion. Foreign direct investments are those where the foreign party owns 10% or more of the voting shares of a U.S. business enterprise. The foreign direct investment position is a net figure, setting off claims between foreign parents and their U.S. subsidiaries. The United Kingdom, Canada, and the Netherlands each account for about one-fifth of the total. Statistically Japan's interest is small, because of the very substantial loans the subsidiaries here make to their Japanese parents, but in fact the Japanese in-

terest is quite significant. Of all foreign investments here, Japanese subsidiaries account for one-fifth of their assets, two-fifths percent of their exports, a third of their imports, and a quarter of their total sales. While there is much speculation about Middle East investments here, we found that their interests represent a tiny fraction of foreign holdings of enterprises operating in the United States.

What kinds of investments do foreigners make? About one-third is in manufacturing—mainly chemicals, food and machinery. Another one-fourth is in petroleum and still another one-fourth is in the category of finance—mainly banking, insurance and real estate. Most of the rest is in wholesale trade.

Foreign-Owned Land

What did we find out about foreign ownership of real estate? As you know, beneficial ownership of land is often difficult to identify, and land recordation systems are generally not very demanding in this respect. The 1974 statistical survey required U.S. business enterprises, whenever at least 10% directly or indirectly foreign-owned, to file reports. If the enterprise was in the nature of real property not identifiable by name, the report had to be filed by the foreign beneficial owner or his representative. The survey provided us with real estate information in two forms—acreage owned and leased and the dollar value of a broader category, namely plant, property, and equipment.

According to the returns received, foreign-controlled business entities owned 4.9 million acres of land at the end of 1974. Slightly over 1 million acres was in agricultural land, only about 0.1% of the 1.1 billion acres of U.S. land in farms; 1.3 million acres were used in connection with manufacturing enterprises; 900,000 acres were in the real estate industry; 500,000 acres were owned by foreign-owned petroleum firms; and 1.2 million acres were held in an "all other" category which includes hotels, resorts, golf courses, timber, and mining other than petroleum.

In addition, foreign-owned U.S. enterprises leased 62.8 million acres of land. However, about half of the acreage leased was located abroad. Much of the remainder consisted of offshore mineral rights.

U.S. affiliates of firms in the European Economic Community—predominantly in the United Kingdom—accounted for two-thirds of the total of the foreign-owned land covered by the survey. Canada accounted for another quarter of the total.

Value of Holdings

The total value of property, plant, and equipment held by foreign-owned firms was $45.6 billion. It should be borne in mind that a substantial amount of the equipment would not be categorized as real estate. Property, plant, and equipment in agriculture and timber activity was valued at $491 million; in crude petroleum production at $8.4 billion; in other natural resources at $2.4 billion; in transient lodging, residential, and recreational activities at $1.7 billion; in industrial activity at $19.7 billion; and in other commercial and business activities including, among others, shopping centers and office buildings, at $10.7 billion.

In addition to the 1974 statistical survey information on foreign land ownership, the Commerce Department augmented its report to the Congress with 21 studies on a broad range of issues relating to foreign ownership of agricultural land and other real estate in the United States. These studies were carried out by economists, political scientists, sociologists, and lawyers from several universities and research organizations under the direction of the Department of Agriculture's Economic Research Service, with Commerce Department sponsorship. They are substantially reproduced in the report to Congress.

Still another analytical effort dealt with state and federal law affecting foreign investments in land. The findings were that land or property law is primarily state law. Few states have substantial restrictions on alien ownership of land. Most either treat aliens on an equal footing with citizens or they impose nominal restrictions. Several states have general prohibitions, but a variety of exceptions narrows their application and the general effect is to prohibit only the individual investor living abroad from purchasing agricultural property in his own name. Some states limit the acreage which a non-resident alien can own; others limit the period during which an alien may hold land. Aliens may avoid some of the restrictions by commonly-used disclosure avoidance techniques. Federal law establishes ownership requirements for certain uses of the public domain.

EVALUATING FOREIGN INTERESTS

What is the overall significance of foreign investment in the U.S. economy? It is important but is for the most part a minor factor in the various economic categories.

Foreign-owned manufacturing facilities account for less than 6% of the nation's output in each of the broad industry categories, although higher in some subsectors. For instance, these investments are fairly important in newsprint and several chemical industries—dyes, pharmaceuticals, and synthetic fibres.

Foreign-owned affiliates account for about 7% of our petroleum output. They have about 6% of our total bank assets and they account for about 5% of total insurance premium income. Foreign participation is not large on a national scale in non-energy minerals, forest resources, and the commercial fisheries industry, but the foreign presence is significant locally in some cases.

Why do they invest here? First is the pull of the large U.S. market, relatively favorable labor conditions, and the availability of raw materials and special technologies. Second is the push of comparatively less favorable economic conditions abroad and the increased financial, technological and managerial strength of foreign companies. Equalization of U.S. labor costs with those abroad and dollar devaluations have been important accelerating factors in recent years. The relative political stability of the United States is also a major attraction.

What about the financing, management, labor, and other business practices of foreign investors here? In the initial stages they tend to turn to foreign sources of funds. Later they make substantial use of the U.S. capital markets.

The degree of influence of the parent firm varies, reflecting parent company policies and the character of the operations. The parent companies are generally involved in major financial decisions, but production, marketing, and labor practices are largely decided at the U.S. subsidiary level. U.S. citizenship is held by 95% of the employees of foreign-owned firms, including the major share of managerial personnel. On the whole, these companies also adapt to U.S. business practices. Although hard data are not available on the role of foreign-owned firms respecting international flows of technology, we came to the conclusion from our inquiries that on balance the flow of product and process technology is into the United States, while in the area of management innovations and marketing techniques the net flow of technology seems to be outward.

ECONOMIC CONSEQUENCES

What about the economic effects of these foreign investments? While they are significant in size and scope, they are a relatively small factor in the nation's economy. Massive foreign takeovers of U.S. industry have not occurred and are not looming. Tracing all the consequences of foreign direct investment on the domestic economy is extremely difficult. In most respects they are generally beneficial to the nation in the same way as similar domestic investments. Both can create jobs, enlarge the nation's productive capacity, expand the availability of products, and stimulate competition. Foreign investments do have different international economic effects. They tend to strengthen our balance of payments in the short run through capital inflows and reinvested earnings. In the long run these are partially offset by remittances of earnings to the parent companies. Trade effects can be both positive and negative and differ from the short term to the long term. Factors involved are the degree of displacement of imports of finished products, imports of materials and capital equipment, and the extent the U.S. subsidiary markets its products abroad. Thus determining the long-term balance of payments effects of any individual foreign direct investment, let alone the aggregate effect of all such investments, cannot be readily accomplished. But their real significance is in broader terms. Foreign direct investments are only one element in our international accounts. More meaningful is that the inward flow of foreign investments reflects our policy of welcoming such investments. This policy is an important factor in the readiness of the other countries to treat our investments abroad favorably. Such investments are four and one-half times as large as foreign investments here. In 1974 they accounted for more than $20 billion in various forms of income.

Given these findings, the Commerce study concluded that a shift in policy toward increased restraint could be detrimental to the U.S. economy and to our relationships with other countries, and that existing laws and policies provide adequate protection of our national interests. The major recommendation was that we maintain surveillance over these investments through improved data gathering and analysis. This is the function of the Office of Foreign Investment in the United States in the Department of Commerce and of a Cabinet-level Committee on Foreign Investment in the United States. Neither function involves screening or restraints on individual investments.

IMPLICATIONS OF CURRENT LAWS

As we come to the close of 1976, we find that no new laws have been passed restraining foreign investments in the United States. The only new legislation bearing on foreign investment is Public Law 94-472, the International Investment Survey Act. This law, which was supported by the Administration, strengthens the Executive Branch's authority to collect foreign investment data on a mandatory response basis. It generally defines the content of a required data collection program. It provides for the preparation of statistical surveys and other studies on both inward and outward foreign investment, with the statistical studies to be produced at least every five years. Reports are required to the Congress and for general publication.

Finally, reflecting the continuing dissatisfaction with the scarcity of knowledge about foreign investment in real estate, the new law calls for a study of the feasibility of a system to monitor foreign direct investment in agricultural, rural, and urban real property, including the feasibility of establishing a nationwide multipurpose land data system. A report is due in two years.

Thus, in conclusion, while current policies provide for generally non-restrictive treatment of foreign direct investments, and while comprehensive studies have supported this policy, a new dimension has been added through administrative order and legislation in the form of on-going monitoring and analysis of such investments. Means to record foreign real estate ownership are to be intensively examined. The real estate industry has an important stake in future foreign real estate investments. It is uniquely equipped to contribute to a balanced assessment of the feasibility and desirability of a special monitoring system for such investments.

An Approach to Real Estate Finance Education by Analogy to Risk Management Principles

by James A. Graaskamp, C.R.E.

I. INTRODUCTION

Risk Defined

Real estate investment of either mortgage or equity money requires the investor to accept a set of assumptions about the future productivity of a property and its management, assumptions that may be facts presumed to be true or future conditions over which the investor has only partial control. The passage of time will always reveal some variance between expectation and realization, between pro forma budgets and accounting history, between management hopes and individual performance. It is this inevitable variance between assumptions and realizations that is termed risk. Virtually all devices of real estate finance are related to the strategic and tactical methods of holding the variance in expected receipts and outlays within acceptable limits of predictability. Surprise, unpredictable variance, must be allocated through negotiation among parties to any transaction. Within the concept of risk management can be found an analytical framework to structure and edit the morass of descriptive detail that otherwise smothers courses in real estate finance.

Risk Management and Real Estate Finance

The educational value of providing an analogy between real estate finance and risk management principles as taught in current college insurance department programs has significance to the basic philosophy of real estate education. In the late 1950s insurance education at the college level was shifting from courses on how to manage and market insurance companies toward how to control financial variance from a variety of potential contingencies for any enterprise, a process in which insurance plays some part. In short, the educational thrust shifted its primary concern from purveyors of insurance to users

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of insurance. Similarly, today's real estate education at the university level is changing from concern for the few students who plan to go into the real estate business to virtually any user who will need to make real estate related decisions.

At the classroom level risk management principles provide a base for textbook selection, analytical problem exercises, and explanation of the dynamic factors that fit together in the real estate transaction process. The classics in real estate finance, such as *Real Estate Finance* by Hoagland and Stone, provide rich mechanical detail and some view of the bargaining objectives of the parties but little analytical technique.[1] Case problems in mortgage loan underwriting and cash flow projections become manageable as the student is taught to discover implicit assumptions about the ability to pay, tolerance in the numbers for surprise contingencies, and security against specific contingencies. In class discussions the risk management viewpoint provides a common point of departure for explanation as it provides a comprehensive analytical viewpoint that ties real estate finance to the main stream of corporate finance and budgeting thought. These elements are missing or fragmented in recent textbooks.[2] The effort at the University of Wisconsin to structure the real estate finance course around the risk management analogy is the basis for this essay.

Broader Applications of Risk Management Insights

Continuing education for those in the real estate finance game would also benefit by an emphasis on risk management principles. The collapse of most mortgage investment trusts can be attributed to the lack of any semblance of management of their assumption about interest rates in a capital market, about effective demand in specific project markets, or about desirability of diversification even at the expense of reduced volume and increased administrative budgets. At the highest executive levels there is a willingness to ignore risk management concepts. In 1974 the Federal Reserve Board was willing to consider private mortgage insurance as an extension of credit rather than as a form of property insurance.[3] In another case a private guarantor had no concept of financial risks as an insurance company and challenged the Mortgage Corporation of the Federal Home Loan Bank as to minimum capital required to be eligible for participation in the secondary market.[4] Application of basic risk management techniques in both court cases led to straightforward and obvious resolution of the issues. Somehow educators as well as real estate professionals have forgotten that risk in financial management matters is an explicit and measureable phenomenon and not banal, conventional wisdom, a shrug of the shoulders, a simple perception that hotels are always riskier than apartments to everybody concerned.

Essay Outline and Purpose

Part II will review the principles of risk management and then apply these by analogy to a variety of topics in real estate finance. Part III will suggest an analogy to the residential mortgage-lending field, while Part IV will sketch income property lending as shaped by basic risk management tools. Part V will suggest the appearance of risk management concern in all sectors of real

estate institutions. A full real estate textbook could be written from the risk management viewpoint; this essay focuses only on cognate relationship of real estate finance and the basic principles of risk management. The conclusions in Part VI are limited to the tutorial values of the risk management theme in business school instruction and in the development of a critical viewpoint for land economics literature in general.

II. PRINCIPLES OF RISK MANAGEMENT

Control of Variance in Financial Expectations

The real estate process is the exchange of a space/time commodity, such as a room for the night or a tennis court by the hour, for a money/time commodity. Real estate always involves three cash cycle enterprises that are attempting to find cash solvency equilibrium, with land the nexus of tension between space users, space producers, and the public infrastructure. Accounting tools are capable of budgeting items fixed in time and amount such as rent, items of predictable frequency and severity such as machinery repair, or items providing a funded reserve to anticipate a future expenditure for replacement or repair. Accounting cannot prepare for the financial contingencies that are unpredictable in terms of frequency and amount or whose timing and consequential total cost could consume all cash resources of the enterprise, remote as these contingencies might be in terms of probability. Those contingencies and surprises that surpass the capacity of normal accounting and budgeting techniques are the concern of risk management control. The financial consequences of such contingencies must be funded or eluded in order to maintain the reality of balance sheets and to achieve the goals of financial budgets.

The causes of such financial surprises are called perils, and perils can be static or dynamic.[5] Static perils always cause a loss. They are related to physical cause and effect, occur at random, and are beyond the control of the enterprise. Dynamic perils, on the other hand, are those that can mean either profit or loss. They are caused by variations in business expertise or entrepreneurial motivation.

The primary objective of those entrusted with the application of risk management to financial planning is to avoid loss of assets already in hand due to static or dynamic perils. Of secondary priority is the realization of net income through the stabilization of outlays and receipts relative to a financial plan. Thus the risk manager strives to reduce the maximum exposure of existing assets to direct loss and then to avoid consequential losses of future income that would erode expectations of future spendable cash and of growth in net worth.

The Process of Risk Management

The various risk management texts[6] describe the risk management process as:

1) Identification of significant exposures to loss in terms of frequency and severity.
2) Identification of alternative control procedures.
3) Selection of appropriate risk management methods at acceptable cost.
4) Implementation of the appropriate procedures.

While the definition of "significant" varies with the scale of the enterprise, the utility of money, and the degree of willingness to accept considerable variance in future financial outcomes, a significant event might be termed one that could cost the enterprise .5 of 1% of its present net worth or future income. The identification of exposure to the contingencies of a faulty assumption or an unpredictable future event might begin with the analysis of an enterprise balance sheet, profit and loss budget, or the underlying functions and activities of the enterprise itself. Does not a mortgage lender examine financial capacity, net operating real estate income assumptions, and the basic functional aspects of the real estate enterprise?

The Tactics of Risk Management

In the never-ending pursuit of certainty, enterprise management can choose procedural alternatives that will mitigate financial consequences of some risks. Nine of these tactics are listed below.

1) Avoid the risk by refraining from an activity, the ownership of an asset, or the pursuit of a future income when it exposes the enterprise to possible surprises of a character or amount that is unacceptable to the enterprise. For example, to avoid insolvency due to rent controls, lenders might avoid multi-family rental projects in certain communities.
2) Improve information since much uncertainty or financial surprise is due to ignorance of the facts rather than to any inherent unpredictability. An analysis of all available facts provides superior control on future expectations. Combinations for statistical predictability can advance data gathering to scientific rather than intuitive control. For example, because normal foundation costs can be affected by soil conditions, a factual study of those conditions in a property might permit a more accurate budgeting for rock removal or design of spread foundations.
3) Reduce frequency of loss by changing procedure or techniques once patterns have been identified from past experience. For example, careful loan servicing might reduce the frequency of loan delinquency just as fire-resistant construction reduces the frequency of fire.
4) Control severity of loss from static or dynamic contingencies regarding direct or consequential amounts. For example, a conservative loan ratio reduces the severity of loss in excess of foreclosure proceeds just as sprinklers do not prevent fires but do reduce the severity of fire damage.
5) Shift a risk by insurance contract, given the willingness of the risk manager to substitute the small, timely, but certain premium cost for the uncertain magnitude and untimely costs due to an insurable event. The insurer, of course, achieves predictability of financial outcomes through statistical combination, reinsurance to stabilize loss severity, and control through better information and expertise in drafting and executing the coverage. For example, the lender gives up ¼% to ½% of annual interest to secure mortgage guaranty insurance to indemnify for losses due to mortgage foreclosure of a specific loan.
6) Transfer an unpredictable dynamic cost by contract to the second party. Unlike insurance the second party may shift the burden of increased cost to others by subcontract, retail price changes, or absorption of the increase from discretionary resources. There is no previously established actuarial pool of funds behind the acceptance of risk by the second party. For example, in residential mortgages

it is common to find clauses permitting periodic increases in interest charges which shifts the increasing opportunity costs of money to the borrower.

7) Limit the financial consequences of surprise by operation of contract "hold-harmless" clauses, by the statutory characteristics of corporate or limited partnership forms, or by the pooling of capital fund risks in a single venture among multiple investors. For example, the exculpatory clause might limit recourse of the lender to retaking the property while use of private mortgage insurance might require the lender to relinquish pursuit of a deficiency judgment.
8) Hedge changing values of money by taking opposite but equal positions in present and future markets for a fungible good. Despite the physical uniqueness of real estate, the interests in real estate are often fungible as space/time units (i.e., square foot per year of office space or room per night in a motel) or as money equivalents of space/time in terms of rents per square foot or interest rates per dollar of investment. Thus any real estate investment is an exchange of present dollar values for future space/time values expressed in dollars, a subject to be explored more fully under the topic of income properties. To hedge in residential finance the Chicago Board of Trade has recently created an explicit futures market in residential mortgage interest rates by using $100,000 GNMA certificates at a stated interest at 8%.[7]
9) Motivate entrepreneurial execution of a plan by increasing incentives and penalties for management of dynamic risks. For example, much mortgage negotiation is concerned with defining the progressive levels of pain that can be applied to the delinquent borrower, ranging from late payment charges to court orders for specific performance and forfeiture.

Credit Extension versus Risk Assumption

In 1974 the Federal Reserve Board (FRB) was petitioned to permit bank holding companies to own and operate private mortgage insurance companies on the grounds that mortgage insurance was credit (a permissible function of the holding company) as opposed to property-liability insurance (presently not permissible).[8] The existing private mortgage insurance companies resisted the competitive threat by petitioning the FRB to carefully distinguish between credit risks and insurance risks. Credit risks involve the deviation in the program to collect the balances due on schedule at the least possible servicing cost; lenders nevertheless intend to incur zero net losses by proper substitution of collateral and lay off of the consequences of other threats to collection. This objective is significantly different from that of insurance, which is designed to absorb the losses of future contingencies, if not from budgets predicated for rate-making purposes, then from policyholders surplus.

Consider the mortgage lender at the closing of the loan as he covers each assumption which is the basis for credit and collection:

1) Marketable title is insured with a title insurer or a title search by a lawyer of means.
2) Location of improvements on the pledged title is assured by a bonded surveyor.
3) Destruction of improvements is insured against by required property coverages in specified amounts.
4) Loss of income of the borrower due to illness or death is compensated by income replacement or life insurance adequate to repay loan.

5) Indemnity is sought from government or private mortgage default insurance programs, should pledged collateral have a possibility of netting less in the event of forced sale than outstanding debt balance.

Both the mortgage creditor and the mortgage guarantor are explicitly involved in risk management but are utilizing decidedly different specialized techniques, thus demonstrating the need for institutional specialization in real estate finance.

The mortgage guarantor depends almost entirely on the certainty of outcome produced by the theory of large numbers applied to geographic dispersion, heterogeneity of property and borrower types, past foreclosure experience, and policy provisions to protect against casualty losses to the collateral or gross negligence on the part of the lender. To the degree that economic cycles overpower loss expectations, the guarantor depends on financial pooling of surplus premium and stockholder capital to create financial mass to underwrite the guaranty. The lender, to the contrary, is regulated to avoid all foreseeable losses and employs a wide variety of options to lay off the contingencies of error, change of conditions, or random upset of the assumptions on which credit was granted.

The Real Estate Mortgage Transaction

In his effort to provide a unified approach to the multi-disciplines of economics and the other social sciences, Alfred Kuhn has identified the subsystems of the decision-making process as detectors, selectors, and effectors (DSE).[9] Detection involves the process of gathering information, while the selection process involves the formation of values with which to choose among alternatives. Effectation is doing whatever course of action has been decided upon. A transaction occurs when two entities exchange positive values despite separate detector and selector systems. The devices to effect a transaction attempt to neutralize the doubts each party has regarding their assumptions or measurements of value.

A mortgage lender's selection depends on safety of principal, maximum return on investment, and liquidity. On the other hand the potential borrower seeks the use of someone else's money as a way to avoid the high risk in real estate investment, to exploit the leverage between cost of borrowed funds and their earnings invested in real estate, and to avoid the illiquidity of real estate in poor economic times. The selector values of lender and borrower are diametrically opposed, and a transaction could never occur if both parties did not perceive ways in which to control the risk attributes of real estate that were in conflict with their objectives. The inherent incompatibility between lender and borrower is essentially mitigated through the explicit and implicit risk management and allocation tools that are employed by each. The history of mortgage law is a struggle of lender and borrower, each trying to gain an edge on the other regarding potential of all future contingencies. Indeed, a mortgage is a straddle position for the borrower, giving him a call on future values but permitting a put to the lender under specified conditions. The lender negotiates to neutralize the straddle by making the cost of the put in terms of downpayment and other claims unacceptable relative to the advantages of the

call on future value benefits. The borrower negotiates to perfect the straddle with high loan to value ratios, exculpatory clauses, or other limitations on liability.

III. RESIDENTIAL LENDING AS A DEMONSTRATION OF RISK MANAGEMENT TACTICS

Introduction

The nine basic techniques of risk management in Part I are well demonstrated by the making and servicing of a residential loan and the assembly of a residential mortgage portfolio. A review of the mortgage loan process will illustrate the risk management approach applied almost subconsciously since the repetitive nature of a standardized residential mortgage loan has institutionalized financial risk management into a set of forms and procedures that are thought of as legal procedure rather than risk management administration. It is only when observing special features of the income property loan that explicit negotiation of who bears the consequences of variance is ever present. Although the borrower may shop alternative institutions for the best terms of the moment, the residential loan is basically a contract of adhesion. The security of any mortgage loan is a combination of the continued satisfaction of the borrower with possession of the property, of painful penalties imposed for delinquency, or ultimately of bail-out by repossession of collateral. Many contingencies can destroy the psychic income of home ownership so that the lender must look to risk management through pain and bail-out techniques.

Risk Avoidance

Risk avoidance by pre-selection of borrowers, property types, and terms is the first defense of the mortgage lender. The board of directors provides initial guidelines as to the percentage of funds managed to be allocated to residential mortgage loans, the acceptable range of loan ratios to property values, the acceptable range of housing costs to disposable income, and a variety of constraints intended to avoid those loan opportunities that statistical experience or intuition suggest as expansive to service and costly to foreclose. Information about the borrower might reveal uncertain family motivation or no capacity for penalties incurred for nonperformance—a borrower to be avoided.

In the past, the directors may have chosen to avoid some perceived risk by blanket prohibitions on loans for reasons of sex, race, or neighborhood location. Failure to discriminate on a case basis has been scored as against the public interest or as unsubstantiated bias in policies to control variance in mortgage loan returns and cost, to the injury of specific individuals. Indeed, mortgage lenders are now facing the same arguments that have long confronted insurance companies that attempt to discriminate among different classes of insureds, to offer rate preference, or to avoid some classes of business altogether. Allocation of the costs of risk by means of discriminate selection has always been a major social issue, whether one is attempting to avoid risk of military service, of neighborhood friction, of political fragmentation, or costs of financial services. The current dilemma of mortgage lenders is made more apparent to the student by analogy to the traditional pricing and selection issues of risk underwriting.

Risk Control through Better Information

Past experience might provide better information by cross distributions of the frequency of delinquency correlated with foreclosure losses, property attributes, or borrower characteristics.[10] To further improve the predictability of the individual mortgage loan outcome, the loan officer takes an application form and then attempts to verify it directly by contacting employers, relatives, or others, or indirectly through credit services and inferences from the interview, and so forth. Information gathering may include property inspection, a visit to the home of the borrower, as well as a review of existing neighborhood conditions. The object is to estimate the psychic income of the borrower from home ownership and the sensitivity or capacity for correcting delinquencies upon some painful stimulus. When the young family has no credit record from which to infer motivation to meet the terms of agreement, the loan officer attempts to improve the motivation and shift the risk by contract, using the relatives of the borrower as guarantors or the coverages of a public or private guaranty agency. The borrower might be required to provide income insurance as well as life insurance in the amount of the payments due to assure repayment despite the worst that might befall the income earner of the household. The ultimate product of the information gathering process is a set of facts that have been verified and a set of inferences (assumptions) about the future willingness or capacity of the family to repay the loan. Should recourse to the collateral asset be necessary, the asset or the equivalent must exist.

Closing the Residential Mortgage Loan

The closing process is a sequence of arrangements executing a risk management program for the collateral asset. While title has been verified, the possibilities of errors on the records upon which verification depended is shifted by title insurance. The lender requires affidavits from the seller or borrower regarding the absence of other liens or lien rights that have not appeared on the public record. Lest the improvements to serve as collateral are not properly located on the insured title, the lender requires inspection and survey by a bonded surveyor, the bond providing a cushion against error by the surveyor who is further qualified by licensing examination. In addition to basic property insurance to the benefit of the lender, destruction of collateral may be further insured against earthquakes, seiche, or other perils unique to the property. Payment plans provide for advanced collection of future premiums for continuity of insurance coverage to the benefit of the lender, as well as advanced funding of real estate taxes, nonpayment of which would undermine first lien position of the lender. Acquisition of the property by foreclosure is further protected when the borrower acknowledges that he was informed of various charges in advance as a requirement of truth-in-lending[11] and that he was charged for various closing costs within maximum limits imposed by federal law.[12]

Should the collateral in default provide less cash than required to meet the debt, the lender may anticipate the shortage by previous acquisition of public or private mortgage default insurance, supplementary collateral, or third

party endorsements. There is also the after-the-fact remedy of a deficiency judgment. All of these measures are intended to provide full recovery of both debt and collection expenses to produce zero net loss in dollars, if not in good will. At the closing the documents are shuffled around in careful sequence to maintain the defenses or priorities of each party. Filing of the documentation is required, but in addition prudent lenders might maintain insurance for sins of omission or commission in the documentation of the transaction. Is not this confusing myriad of documents best explained as risk management of the assumptions relative to credit collection in almost any future circumstance?

Servicing the Mortgage Loan

History has shown that the majority of defaults occur from a failure of the will to pay rather than the ability to pay so that servicing is involved in the dynamic risks of the mortgage loan relationship, as well as in the execution of the contractual shifts of risk found in the closing process.

The lender expects to control variance in repayment of the loan according to its terms by means of its mortgage servicing procedures, which depend on timely measurements of the significance of any delinquency or default. Servicing collects information (as well as money) about those liens, tax delinquencies, or other encumbrances that might erode the collateral or reveal some change in the borrower's intention to repay (permitting prompt corrective action). Should all these efforts fail to prevent a default on loan terms, the lender may look to public or private agencies that guarantee repayment of interest, principal, and other accumulated costs. Indeed, the guaranty insures against the consequences of an inaccurate appraisal on which the property loan was based and hedges the lender against property value deflation or a rate of inflation insufficient to recover balances due. Since these guaranties tend to encourage careless lending and servicing, the federal government has promoted coinsurance programs where the lenders could incur losses against current income expectations, an incentive device presumably of sufficient strength to motivate the lenders to do better.[13]

In summary, mortgage servicing monitors and executes the risk management plan surrounding the residential loan transaction. The first security is to maintain control of the dynamic risk by monitoring family pride, family satisfaction with neighborhood social and investment values, and the other psychic benefits of home ownership that are expected to maintain mortgage payments on schedule. In the absence of positive benefits perceived by the debtor in continuing to meet payments, the mortgage servicer might inflict increasing discomfort with various collection ploys to motivate payment on schedule. Ultimately when management of the dynamic risks fails, the lender seeks a bailout by liquidating his capital investment through a foreclosure sale, endorsement collection, or indemnity through some form of credit insurance. The significant fact is the heavy dependence of residential lenders on psychic income to equalize the value exchange in the transaction. That element is far more elusive than in the income property loan where income is essentially in cash or of little weight in the transaction.

Interest and Money Risks for the Mortgage Lender

The residential mortgage lender has at least four functional subsystems including:

1) A savings attraction system.
2) A lending transaction system.
3) A liquidity system.
4) A safety system.

To control variance in attracting savings flows, the lender needs to insulate dividends to savers from capital markets or to respond with competitive dividend rates. In the United States the risk management device has insulated the savings rate through Regulation Q, through concealment of interest returns by means of apparent benefits such as insurance, savings discipline, preparation for retirement, and so forth. In more capital-shy countries interest paid to savers must be more directly comparable with capital markets. Nonetheless, the cost of money to the lender varies more or less, and to maintain spreads between money cost and money lending rates, alternative loan forms might be used:

1) Loan provisions can be designed to trigger maturity of the loan under a wide variety of domestic situations such as divorce, resale under land contract, delinquency, and so forth, in order to create frequent opportunities to renegotiate the interest.
2) Interest rates can be raised at irregular intervals as an assessment on borrowers by such lenders as savings and loans and credit unions.
3) Short-term loans automatically renewable at rates that provide a guaranteed spread can be used as in Canada.
4) More sophisticated variable rate mortgages, tied to internal indexes of institutional costs of funds or external indexes of competitive capital market lurk in the background to lay off the risk of savings pools fluctuations due to changing cost of savings.

Note that various plans to alter rates paid to savers (and stabilize the flow of savings to residential mortgage finance) trade off the inconvenience of frequency of adjustment against severity of the impact on the budgets of the borrower. Again the student can quickly perceive the negotiation to allocate the impact of changing interest rates among the saver or the borrower or the intermediary institution as an issue of risk allocation.

Residential mortgage lenders have significantly different requirements for liquidity, depending on their ability to protect the savings pool from demand withdrawals within a web of periphery benefits from free checking to pensions, to life insurance, to income tax exemptions. Nonetheless, the institution provides liquidity reserves to meet unpredicted drains and attempts to affiliate with larger systems that provide additional liquidity sources. These systems include holding companies, the Home Loan Bank, the Federal Reserve Bank, and other agencies created by government or the securities market to permit liquidation of mortgage portfolios. Because the liquidating value of mortgages varies inversely with interest rates, government has found it necessary from time to time to provide liquidity at par to protect safety

through nonmarket loans, purchases, or indirect subsidies through such agencies as the Home Loan Bank and Government National Mortgage Association (GNMA). All these methods combine a shift of risk by contract, limits placed on liability, hedges, as well as internal accounting preparations for variance. The student quickly perceives that holding interest rates constant on mortgages shifts the interest risk and the liquidity risk to the mortgage lender who then transfers the cost of that variance to savers, a super agency, or a capital pool subsidized by government. Presumably government absorbs the cost since the political dynamics of its policies contributed greatly to the variance in the first place. Thus the politicians protect against obvious consequences of their own policies by pooling the risk of error through oblique taxation of the residents—and the circle of risk transference is complete.

The safety system is ultimately concerned with variance in the value of mortgage-lender assets to a point where net worth is destroyed and payment of all creditor claims, including those of savers, is threatened. Here again reinsurance devices provide another cognate to real estate financing institutions.[14]

1) Loan participations, endorsements, and loan guaranty plans are not unlike facultative treaties in which each party agrees on every individual risk regarding the exact level of participation.
2) The new coinsurance program for FHA eligible lenders is actually an excess-of-loss agreement on a defined class of business as found in reinsurance.
3) GNMA guaranties of collateral modified pass-through trust certificates for timely payment of interest and principal are not unlike income stabilization agreements as found in reinsurance.
4) Ultimately the Federal Deposit Insurance Corporation (FDIC) or Federal Savings and Loan Insurance Corporation (FSLIC) coverage of individual savings accounts provides liquidity for the saver, as a reporting form coverage of assets funded by pooling of a risk charge among all members of the respective systems.

Of course there are a variety of subsystems to protect the safety and integrity of the mortgage lender that are internal to the enterprise including audits, blanket fidelity bonds, loan committees, and all manner of administrative checks and balances.

The risk of devaluation of money during the long term of a mortgage commitment is now being addressed in foreign countries by elaborate indexing arrangements applicable to mortgage balances due as well as interest rates. Inflation in the United States has been less dramatic, and so its costs are concealed in the rise of interest rates, the rise in government subsidies to housing costs, subtle taxation of the saver by means of Regulation Q, progressive income taxation, and transfer payment escalation. Nevertheless, U.S. lenders have been selectively seeking investment devices to soften the erosion of long-term advances to real estate, primarily in the income property area where political sentiment to grant the borrower all the leverage benefits of inflation is not so strong.

Conclusions

Just as a course in real estate law might dwell on the nuances of "Title, title, where lies the title?" the teaching of the dynamics of residential mortgage

lending has the constant refrain "Variance, variance, where lies the burden of variance?" The mechanisms through which the variance in cash flows and values is allocated among individual borrowers, individual lenders, and pools of lenders, borrowers, or the public at large are the heart of the subject matter. Development of the continuing negotiation refinements of this issue seems far more instructive than requiring memorization of long lists of mortgage clauses, lending rules, or institutional attributes. To date, however, the strategy of real estate investment to lay off excessive risks on others is best articulated in the humor of trade publications.[15]

IV. INCOME PROPERTY LENDING AS FURTHER DEMONSTRATION OF RISK MANAGEMENT TACTICS

Introduction

Nonresidential income property loans lack the standardized, fungible character of residential mortgages, an attribute that makes possible the super institutional pools with which to homogenize residential loan risks. Thus lenders are far more dependent on customizing the loan agreement to allocate the risk between borrower and lender. However, income properties provide more opportunity to create monopoly values for property through the synergy of money and talent than is true for the individual homeowner who must compete in a far more homogeneous market. Thus, there is more opportunity to employ the risk/pay-off matrix which is the essence of free enterprise, that is, those who take the risks take the profits.

It should be noted that virtually every outlay for an income property investment is revenue and therefore a profit center to some other enterprise system. Those profit centers are for material, services, or expertise, the types and amounts of each differing over the time cycle of an income property. Thus, the timing of benefits and outlays is greatly out of synchronization as compared with the purchase and enjoyment of a single-family home. If anything, during a period of inflation the benefits of home ownership might increase downstream, while the costs of mortgage payments and other housing related expenses might decline as a percentage of disposable income. Just the opposite can be true of an income property investment unless it is carefully structured by both the borrower and the lender to accomplish a more even distribution of benefits and outlays over time. Thus, all of the concerns of variance in the residential loan must be dimensioned by the additional attributes of flexibility for variance in the timing of the income property collateral.

Definition of Timing

Application of the pleasure, pain, and bail-out considerations of any mortgage loan in order to structure dynamic and static risk management arrangements depends on when the borrower plans to take the most cash from the income property. Cash profits are in part a function of the profit centers retained by the borrower as compared to those subcontracted away to avoid the unknown costs inherent in doing some function without adequate experience. The borrower may enjoy profits from loan values on land, from construction contracts, from services for design, marketing, or management which make it

unnecessary for him to risk any of his net worth beyond the date of closing on the permanent loan. These cash profit centers make the hard dollar maximum exposure of the borrower to loss equal to zero, greatly reducing threat of loss as a motivation to repayment. Of course these profit centers might be nonexistent due to ineptness, changes in conditions not anticipated by contract, or failure to achieve marketing goals.

Thus income lenders sometimes seek to avoid these risks with loans that can be closed only when critical conditions have been met, such as completion of construction, payment of all obligations, achievement of occupancy levels sufficient to carry mortgage payments, or deadline dates. The borrower attempts to shift the risk of not meeting these conditions to subcontractors, to payment and completion bond companies, to tenants willing to prelease, and to standby lenders. All of these arrangements come at a cost in terms of higher contract prices, premiums, rent concessions, and commitment fees.

The Reliance on Take-outs

To unravel risk management of the income property loan, one must reverse the chronological time line of development events. The ultimate source of satisfaction to the borrower and security for the lender is a tenant willing to pay rent adequate to meet operating costs, real estate taxes, interest and principal payments, and cash dividends to the equity investor and still allow a cushion for unexpected variance in rents collected and expenses incurred. All cash requirements should not exceed a desired ratio to gross income, called breakeven point or default ratio. On the basis of the business forecast and cash flow projections, it should be possible to secure a permanent loan commitment, subject, of course, to a variety of conditions as to completion, occupancy levels, and other qualifications. This qualified permanent loan commitment provides hope of liquidation for the progressive commitment of funds by the construction lender. The latter seeks a variety of assurances that this hope can be realized, including escrowed equity, letters of credit, performance and payment bond, and other evidences of borrower ability to qualify for closing the permanent loan commitment. The student will quickly perceive how the permanent lender identifies the assumptions on which a solid loan depends and shifts the risk of nonconformance to the construction lender up to the point where no construction lender would regard the commitment as a probable cash-out of the construction loan. Too many conditions due to too many unsubstantiated assumptions by the borrower kills the deal. The wise construction lender then needs to shift his risk of loss to the borrower or others. Presumably the maximum potential loss for the construction lender is the difference between cost to complete and market as compared to funds not yet disbursed from the construction loan or available from various security instruments mentioned earlier.

Traditionally the lenders have assumed that the satisfaction of the borrower will be found in completion of the project in order to receive cash dividends, and that the motivational pain will occur through the loss of equity provided by the borrower in the form of land, escrows, and front money cash. In recent years, however, these assumptions were insidiously undermined by the fact

that competition for loans had led to recognition by the lenders of soft dollar equities from land appreciation, contractor profits and fees, contribution of cash by limited partners or other silent investors. In addition there were serious errors regarding building cost due to over-estimation or under-supervision. As a result many borrowers found their profit centers in the construction process itself and relied little on the need for a take-out at the end of the line by cash paying customers. Application of pain to instill performance was dulled by the skill with which the developer used devices for limiting his liability or defending his position.[16] In any event the permanent loans seldom required personal liability on the theory that the balance of the loan far exceeded the ability of the borrower to pay so that the lender must and could look only to the property for his bail-out. While the lenders would spend a considerable portion of total funds lent on property insurance, on completion escrows, or on bonds, seldom would the lender require that even 1% of project cost be spent on consumer research to provide reasonable certainty as to the quantity and character of effective demand on which the liquidity and safety of the loan depended. As a result the fundamental assumption that there was a need for the project was never tested, and ultimately the lender and/or equity position had to absorb the cost of an imperfect straddle, that is, a put to the lender without balancing take-outs in the marketplace.

Timing and Adequacy of Interest Returns For the Income Property Loan

A look at the phenomenon of participating loans provides one additional illustration of the risk management process at work in the mortgage loan negotiation.[17] At first lenders were concerned that high ratio loans on shopping centers with little or no recourse other than the property meant lenders were taking equity risks (accepting a put on a weak center) for only interest returns on money. Thus they offered the borrower alternatives of progressively higher interest rates and progressively lower participation in future net worth for the lender, accomplished through stock warrants in development corporations. Developers were willing to trade away a share of the indefinite future for the immediate benefits of building a center with the higher loan possible with lower interest rates without exceeding a specific default point. With inflationary increases in retail sales, lenders regretted retaining a futures market in net worth in lieu of a share of current shopping center percentage rents in excess of debt service.

Then came the issue of which revenue line represented the risk position appropriate to something termed "an equity participation." Depending on the bargaining position of lender and borrower, an infinite variety of agreements have been struck as to how defined gross potential rents, effective gross rents, net income, cash throwoff, after-tax cash flow, or spendable after-tax cash are to be the basis for participation. Obviously at each step along the profit and loss statement, the balance becomes more volatile, that is, more subject to variance. At the same time each allowable deduction for operations provides a potential for discretionary, preferential diversion of equity dollars to the borrowing institution or its subsidiary. Conversely, cash returns in which the lender might participate could exceed anything justified by the passive con-

tribution of funds, by the maximum potential loss to the lender at some specific time, or by the maximum interest rate permissible under applicable usury laws. Thus the loan agreements became a maze of controls on participation that would either avoid stripping the borrower of management incentive or solvency, or stripping the lender of a profitable loan, public good will, or his position as a secured creditor, should he violate usury constraints.

What is significant here is the evolutionary recognition that all foreseeable contingencies leading to variance in cash shares had to be anticipated by contract. At the same time that the relationship of landlord to lender became articulated in terms of variance, the landlord reshaped his arrangements with his tenants. Pass-through of increasing operating expenses by means of escalator clauses expanded from simple proration of real estate taxes to sophisticated lease-construction packages. Architectural design coordinated with lease terms either isolated mechanicals and maintenance to the space occupied by a single tenant or prorated all expenses through compulsory tenant associations that assessed members but were managed by the landlord. Projects without direct ties to retail sales found various applications of the consumer price index to escalate collections, sometimes independently of a change in operating costs. Once the student recognizes the strategic interplay between allocation of variance between landlord and lender and landlord and tenant, he is prepared to approach the appraisal process, investment analysis, and contract negotiation with more willingness to test alternative positions with careful cash flow projections.

V. REAL ESTATE FINANCE INSTITUTIONS AS RISK MANAGEMENT DEVICES

Introduction

The essay has already alluded to some of the specialty institutions designed to provide liquidity and risk transfer for residential mortgage loans. Risk management strategies provide insight to all types of real estate institutions that have appeared over the years, highlighting weaknesses or advantages of each in ways that might not be found in most current real estate literature.

Some Institutional Risk Control Examples

The popular limited partnership form most often stresses its advantages as an income tax conduit or as a pooling of small investors in a larger property. However, those limited partners by law may have no part in management, and their shares of cash profits are subordinated to a variety of claims including management profit centers for the general partner and contingent shares to creditor positions. Thus the limited partners are in a position analogous to a second mortgage revenue bond holder with only the tax loss ploy as a sweetener. However, the feature of contingent return for the use of capital would justify financing real estate entirely with limited partnership funds to hold the debt service requirements within cash available for distribution. The default point of an income project financed exclusively with limited partnership units becomes equal to its expenses as a ratio of gross revenue so that holding power during the rental absorption period becomes impressively

secure. Only recently has the contingent interest feature been used to improve investment quality.[18]

Real estate equity trusts are parallel to the maritime joint ventures of previous generations and the trading companies which were the developers of colonialism. However, the identification as an equity risk capital pool is shown to be deceptive when the implications of Internal Revenue Service requirements for passive investment are studied. As suggested earlier, equity is the degree to which cash profit centers can be diverted to a specific position, and that power to divert is limited for the equity trust. Ironically some of the participating loans negotiated by insurance companies during the money crunch have more character as equity than shares in an equity trust where profit centers are limited. The general profit centers for the investor income properties are found in operating revenues, refinancing surplus, capital gains on sales, or tax savings attributable to the real estate to other income. The trust share investor who has limited access to the last three cannot be compared to property investors who enjoy all four without regulatory limitations. These other investors, as well as the equity trust management advisor, might also exploit the real estate investment as a customer for services of all types, thus diverting further cash flows to support justified investment values. Where then is the advantage of true equity investment for the small investor in the equity trust?

The elaborate joint venture arrangements between financial institutions and real estate developers[19], mergers of building companies and corporate conglomerates[20], and the defects appearing in state housing finance agencies[21], all appear in the literature as studies in inadequate preparation for potential variance of underlying assumptions. The legal literature is saturated with comment on this common theme of who bears the consequences of change in long standing assumptions about the use, sale, or rental of land.[22] Institutional financing solutions are sought to the windfalls and wipeouts created by reimposing public control on land, land investments, and even housing rents of low income groups.[23] Risk measurement and management for real estate finance has also become a favored topic for academic research as the new generation of academics applies the most sophisticated techniques of finance to analysis of real estate portfolios or individual properties.[24]

Certainly all of this literature and activity must begin to influence the regulation of real estate finance institutions. If regulators were to match cash flow assumptions to the ability to repay income loans, loan-to-value ratios would be quickly recognized as irrelevant. Worse, traditional loan-to-value ratios are counterproductive as they do not reveal how changes in interest rates and term relate to the default point of the project. Moreover, default ratios and debt cover ratios or deficiencies therein immediately suggest what additional endorsement, escrow, holdback, marketing plan, or escalation clauses are required to reasonably anticipate cash needs for repayment of loans on schedule. Abandonment of the traditional loan-to-value ratio in favor of cash flow planning by the lender could be the motivation necessary to update the moribund appraisal process with contemporary business forecasting methods. There is reason to believe that the court and public administrative institutions are a significant deterrent to application of the best real

estate principles which build on the concept of real estate investment as business planning under conditions of uncertainty.[25] Financial risk management deals with control of those uncertainties.

VI. CONCLUSIONS

One of the basic objectives of business education is to teach students why and how to be explicit when defining assumptions for a business plan or forecast. By tracing the burden of possible variance in each assumption or surprise contingency, the student learns that most risks can be measured, that business bets can be shifted to others or systematically accepted as skill and transaction patterns permit. Rational balancing of potential losses and potential gain is the essence of entrepreneurship. To appreciate real estate finance the student must be taught to perceive the risk/payoff matrix in far different dimensions than simply the gross balance of the loan relative to the dollar amount of interest income.

When real estate finance is taught to include the financing of public infrastructure systems, of the development-production sector, and of the long-term user, there is then an opportunity to synthesize the subject matter into a total system. Each of these groups consists of cash cycle enterprises with different cash requirements and capacities for raising capital. The instruments of real estate finance ultimately allocate the shock and cost of variance in the assumptions under which each group and enterprise made its decisions among the three parties to land use decisions. Thus real estate finance is pivotal to the study of other aspects of land use and real estate ranging from the impacts of alternative public policies to construction design and contracting.

Student perception of the web finance-related contracts among public, user, and production segments then leads to the hypothesis that maintenance of cash solvency, and not value maximization, is the critical decision point for economic decisions about land and related improvements. That hypothesis, of course, subjects most of the traditional land economics theory to a skeptical review and might explain the recent importance of land economics value theory in directing or innovating land use policy.[26]

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The Problem of Inflation in Lease Negotiations

by Max J. Derbes, Jr., C.R.E.

One of the most perplexing problems in lease negotiations is agreement on the provisions relating to inflation protection for the lessor. Because of the recent acceleration in the rate of loss of the dollar's purchasing power, this problem has been aggravated. To what extent will recent inflationary trends cause radical changes in the economics of leasing?

The basic purpose of any lease is assurance of occupancy for a given period to the tenant while at the same time assuring the lessor a steady income for the same period. This gives stability of occupancy and real estate costs to the tenant and makes outlays for moving costs, tenant improvements, business planning, and so forth, more predictable. The lessor's benefits include a reduction in management burdens, a predictable income, and better security for obtaining a long-term loan. On new projects, the lease often is the difference between a feasible and a non-feasible venture; that is, there would be no facility without the financing made possible by the lease.

Prior to the current rates of inflation, lessors were willing to settle for modest rent increases periodically (say each five years at the expiration of the primary term for each option period). In bygone years, some owners were even willing to accept options at reduced rates after the original term during which the mortgage was paid off.

Experience has shown, however, that the fixed rent step-up periodically during the base term or for the option periods more often than not did not cover the loss in the purchasing power of the dollar which the lessor suffered. Regardless of how significant the increases in rent appeared at the time of the original negotiations, much of this benefit was wiped out by inflation. Therefore, in recent years, numerous systems have been devised to overcome this lessor disadvantage. Each of these has advantages and objections from the standpoint of lessor and lessee. No system has been devised which is a universal solution applicable to all cases.

One obvious economic fact of life makes the universal solution an impossibility: that is, the *difference* between the future rental value of any parcel of real estate and the future relative purchasing power of the dollar. If this were not

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so, then wouldn't it be possible to tie all future rents to the overall purchasing price of the dollar?

While rent levels generally tend to follow other inflation phenomena, they generally move within the range of their own special economics. Recent items in the news continually underline the variations in the movement of prices among various commodities and services. Of particular note in the recent inflationary period has been the lag of rent levels behind other economic indicators. Furthermore, the fair economic rent of any one parcel of real estate moves to a degree independently of real estate rent trends in general because of very localized conditions, particularly neighborhood influences.

In theory at least, the rents due to the owner in the future should not exceed the property's individual rent capabilities during the lease term. This may work two ways. If the property is in a rapidly growing area, then the fair rent ten years after the beginning of the lease may increase by many times the overall inflationary indicator generally or even the real estate rent indicators. However, if the area is declining, then the fair rent ten years hence may be the same or less than that charged at the offset.

There is another subtle effect on a particular property; that is, to what extent did the lessee's good influence on the property and its neighborhood enhance the rent potential 10 or 20 years after the original date? Should the lessee be charged for his contribution to this theoretically fair rent as the lease term progresses?

Furthermore, the negotiation strength of the parties at the outset will depend upon the estimated future benefits of the property at the time of the negotiations, the recent history of the property's productivity, and the subjective financial strength of the parties. These will tend to influence not only future protections against the shrinking purchasing power of the dollar, but even the primary term rent considerations.

If a particular property enjoys a bright outlook with limited or non-existent competition, then the lessor can push for maximum inflationary protections. If the track record recently is very good or, for proposed properties, the track history of similar properties shows success, then the lessor is in a favorable bargaining position. Lastly, if the lessor does not need long-term minimum rents to assure favorable financing, his position is improved.

Because of these many variables, there is no one lease agreement which can be applied to all situations. All possible means of protection should be considered in light of the financial condition of the parties and the property's potential.

LIMITATION OF LEASE TERM

When the lessor does not need a long-term lease in order to obtain long-term financing, he has the surest protection that fixed rents will not reduce the future purchasing power of the rental income. Often, the financial strength of the owner-lessor will be such that he can obtain long-term financing based primarily upon his financial strength rather than the strength of the tenant. Or, the owner may own the property outright with no mortgage.

The type of property and the cost and trouble to the lessee of moving will influence just how short such a lease term can be. For the residential apartment, for instance, the cost of moving is at a minimum and competitive units can be easily found; therefore, the lease term is normally one or two years. The small retailer will have fixture and decorating expenses and probably will insist on from two to five years minimum. Relocation costs will force the small industrialist to require a three to five-year minimum with options, if possible. Users of larger facilities, both retail and industrial, will usually not settle for less than 10 to 20 years, including primary term and options.

The short-term lease is not advisable for any type of specialty building because of the risk to the lessor. Specialty restaurants, service stations, auto dealerships, and so forth, represent such a risk unless they are older, successful, and have a bright future.

The objection to the short-term lease from the lessee's standpoint is that he is at the mercy of the owner at the end of the short term. The lessee will usually push for some options to guarantee his continued occupancy. Many of the means of constructing these options to provide inflation protection for the lessor are listed below.

One seemingly harmless method is the right of first refusal with no rent stipulated. From the viewpoint of the lessor, the difficulty with the right of first refusal is that other prospective tenants who become aware of such a clause will not even consider the location seriously unless it is truly prime. This is particularly true in the case of properties requiring complex analysis before leasing. Much time and expense go into the prospective new tenant's considerations and these are for naught if the original tenant meets his offer. On the other hand, the right of first refusal makes the original lessee and the owner more amenable to reasonable negotiations toward the end of the short-term lease.

Long-term leases afford protection to the lessor-owner only if the tenant is a strong credit risk; otherwise, it is a one way street in favor of the lessee. Nonetheless, it may assist in financing over a long term.

The objection to the short-term lease from the standpoint of the owner is that this does not guarantee rental income at the expiration of the lease. Many owners have been lulled into short-term leases with the proposition that the facility would still be desirable to the tenant at the expiration of the three to five or ten-year term only to find that their lessee outgrew the facility or for other reasons moved out. Add to the owner's exposure (besides the potential risk of a vacant building) the added burden of management and the exposure of fixed expenses with no income. Thus, the short-term lease as a means of inflation protection for the lessor is not the answer for all owner-lessors.

INCREASED EXPENSE PROTECTIONS

Where the lessor is responsible for some or all of the expenses of the real estate during the term of the lease or options, numerous means of protection are available. The most obvious is to require that all expenses above a base period or a stated amount be paid by the lessee. However, such a provision puts the

lessee at the mercy of the owner, creates a problem with regard to agreement on the criteria of the base period and, in cases of multiple occupancy, involves an allocation problem.

A not-too-subtle result of passing on the average expenses to the tenant is the ill-will caused and the bad reputation which such a situation can give to the owner-lessor or manager. The end result is that the tenants go hunting for other space at the end of their primary term.

The most obvious way to avoid strained relations is to have the lessee pay his own expenses directly. In the single occupancy building, the "net, net, net" lease is the ultimate answer with the lessee obligated to carry a sufficient amount of insurance, maintain the property, pay the taxes, and so forth. With such an arrangement, the owner should allow the lessee the right of appeal to the taxing authority.

In many cases, particularly buildings with multiple occupancy, it is not possible for the tenants to pay all the expenses directly. Nonetheless, in these cases the structure should be so designed that the tenant pays whatever is logical, such as separate utility meters, separate air conditioning and heating when possible, and even separate interior maintenance.

In cases requiring prorated increased costs, the lease should clearly provide means for figuring the proration and the lessee should be given an opportunity to participate in major decisions with regard to tax appeals, types of cleaning services, and other major costs which the tenant must bear pro rata. Even though the costs to the tenant might be the same in the final outcome, there is at least a minimum of hard feelings. This has become an important aspect of lessor-lessee relationships with the tremendous utility and tax increases of recent years.

In order to assure good ownership management, some lease arrangements provide that the lessee shall bear less than the total amount of the increased cost. For instance, if the *ad valorem* taxes do increase, then the owner must bear 10%, 20%, or 25% of this increase with the rest paid by the tenant. Some tenants are willing to pay a higher base rent in order to get such a clause to assure that the owner will be motivated to hold taxes to a minimum.

FIXED STEP-UPS IN RENTS

The original means of protection against increased expenses for the lessor (to some extent, a compensation for inflation) was the fixed step-up in rents. Both were more closely predictable prior to this decade because the rate of inflation and expense escalations were considerably less than they are now.

As a matter of custom, such step-ups were generally not on a per annum basis, but rather every five or ten years. The basic idea was that the lessor covered added expenses and inflation for a few years and was thereby motivated to hold them within reason. The lessee was given the advantage of a locked-in rental for this time period (say five years at a time) so that he could budget. This was also used as a sign-up motivation for the lessee. He was more amenable to a step-up five years in the future than to one the next year.

Interestingly, seldom was consideration given to the fact that on a major percentage of his costs (the mortgage payments), the lessor was locked in for the entire period of the mortgage. For instance, let us assume a 75% mortgage, 20 years at 9% interest on a $120,000 building rented for $12,720 per year net. The following results:

Mortgage $90,000 for 20 years at 9%	$ 9,720
Equity $30,000 at 10%	3,000
Total Rent $120,000 x 10.6%	$12,720

Assuming that the inflationary rate is estimated at 10% per annum compounded with rent step-ups each five years, then the rent would need to be adjusted as follows to protect the lessor's return to equity:

Year	Mortgage Constant	Equity	Total Rent Per Annum	Total Rent Percentage Increase over Prior Term	Percentage Increase over Base Period
1 to 5	$9,720	$ 3,000	$12,720	00.0%	00.0%
6 to 10	9,720	4,832	14,552	14.4%	14.4%
11 to 15	9,720	7,781	17,501	20.3%	37.6%
16 to 20	9,720	12,532	22,252	27.1%	74.9%

This schedule of rent step-ups indicates an increase in absolute dollars as return to equity providing for a 10% per annum compounded increase. If the entire rent was adjusted 10% per annum simple or compounded each five-year period, the following would result:

Year	Per Annum Rent Increased 10% per annum simple	% Increase Over Base Rent	% Equity Return	Per Annum Rent Increased 10% per annum compounded	% Increase	% Equity Return
1 to 5	$12,720		10%	$12,720		10%
6 to 10	$19,080	150%	31%	$20,487	161%	36%
11 to 15	$28,620	225%	63%	$32,992	259%	76%
16 to 20	$42,930	337.5%	111%	$53,134	418%	177%

Typically, lessees will not obligate themselves to a known increase in rent equivalent to the amounts above. Yet, on an unmortgaged property the rents would have to be so adjusted to return to the owner-lessor the same purchasing power.

The step-up adjustment in rents is very difficult to calculate for a long-term lease based upon a projection of current trends so long as inflation remains at a high level. One solution is to structure the increase somewhere between equity return increases and the total rent increases. If the property is highly desirable, the rent increase can be higher; if the property is average or marginal, the rent increase should be closer to that represented by protection of the purchasing power of the return on equity investment.

The step-up inflationary protections are arranged at the beginning of the lease based upon predicted trends at that time. What happens if there is deflation? What happens if the productive ability of a particular property falls during the term of the lease? Whenever the real estate broker runs into a lease situation which obviously involves a lease consideration in excess of the fair rental, this can usually be traced back to overoptimism at the time of the original signing.

Cost of Living Increases

The method of adjusting rents periodically or at option periods to the Cost of Living Index[1] was thought to be the answer to lessor protection against inflation. Observe below what the rent increases would be if adjusted to 1) All Items, and 2) Rent (using the same rent for the building illustrated above if rented in 1967):

Year	Index All Items	Rent	Percentage Increase Over Prior Year	Index Rent	Rent	Percentage Increase Over Prior Year
1967		$12,720	0		$12,720	
1968	104.2	$13,250	4.2	102.4	$13,020	2.4
1969	109.8	$13,970	5.4	105.7	$13,450	3.3
1970	116.3	$14,800	5.9	110.1	$14,000	4.1
1971	121.3	$15,430	4.2	115.2	$14,650	4.6
1972	125.3	$15,940	3.3	119.2	$15,160	3.5
1973	133.1	$16,930	6.2	124.3	$15,800	4.2
1974	147.7	$18,790	11.0	130.2	$16,560	4.8
1975[1]	162.3	$20,650	9.9	137.3	$17,460	5.4

[1]July 1975

Many unsuspecting lessees found that prior agreement to the Cost of Living adjustment every five years or so resulted in a fixed rent way above the economic rent applicable to the building. In addition to the many localized conditions applicable to the building and its neighborhood, the cause of the disparity results from the fact that the rent index includes many newer structures built at much more inflated cost than the owner's historic cost. The fixed long-term physical nature of real estate is the primary reason that its index lags behind that of all items. Add to this the slow movement of real estate prices and rents in general.

The aforementioned index figures show that for this seven and one-half year period all items increased at an annual rate of 8.3% while rents increased only 5% per annum. Most significant is that the half of this increase took place in a little over one-third of the total time period, that is, in the last 2.7 years for all items. The same half increase in the rent index took about half the period (i.e., a more even flow for the rent increases).

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1. U.S. Department of Commerce, Bureau of Economic Analysis, "Consumer Prices of All Items of the Joint Economic Committee, Council of Economic Advisers," *Economic Indicators* (Washington, D.C.: U.S. Government Printing Office).

Because of the disparity between the "All Items" index and the "Rent" index, many tenants are finding mandatory rent increases not reasonable. Some intelligent landlords looking to the future have modified the clause after recognizing this inequity. The rent increase indicated for the 7.5 year period is 62.34% for All Items whereas the Rent increase is but 37.26%, so that the inflationary factor for All Items is 67% higher than that for Rent. Obviously, to base a Rent increase on All Items increase is not equitable, particularly if part of the owner's ownership costs is a fixed mortgage payment constant.

Modified Cost of Living Increases

Coincidentally, two counselors came up with the same solution to the use of the rent index as a means of inflationary protection. Both Don Treadwell of Southgate, Michigan and the author of this article settled this lease provision independently at about the same time on different properties by getting both parties to agree to 75% of the difference in the rent index. Both were rent adjustments which would take place every five years. Using the above illustration, the rent adjustment would be as follows:

1967 Base Rent	$12,720	100%
1972 Rent Index	119.2	
Full Increase	$15,162	119.2%
Less 25% x $2,442	610	
Rent Applicable	$14,552	114.4%

The above represents a rent increase of 2.88% per annum average. Of course if the inflationary trends continue to increase, then the average per annum would be a higher percentage.

If the index for all items were used for this period, the total difference would be 25.3% x 75% or a total increase of 18.98% and a per annum average of 3.80%.

The theory behind using either index but adjusting only to the extent of 75% of the total index difference is that the owner should not get compensated for the total difference in the devaluation of the dollar because his cost of owning the real estate dates back to a prior period. The lessor also has "bought insurance" by obtaining mortgage financing at a fixed interest rate (and fixed mortgage constant) covering a large percentage of his investment. The original base rent was, in part, based on the locked-in mortgage costs, so that adjustment of the rent by 100% of the index may not be considered fair.

Appraiser-Counselor Method

Generally speaking, the system of having the rent set by expert appraisers is used for option periods rather than for the base term, or at least not for the base term which is covered by the mortgage. Most clauses which provide for hiring of appraisers indicate that they shall be so selected only after bona fide attempts at negotiations between lessor and lessee. If the parties can agree, then there is no need for outside opinions.

The principal objection to the hiring of expert appraisers is the cost involved. Secondarily, there is the problem of settling the criteria of the valuation. Lastly, appraiser selection is frequently a problem.

Wherein this system is used, the lessor appoints an appraiser who must be recognized as a professional. Frequently such agreements provide that he or she must be an MAI (member, American Institute of Real Estate Appraisers of the National Association of Realtors®) or SREA (Senior Real Estate Analyst, Society of Real Estate Appraisers) or the equivalent; the lessee insists on similar credentials. These individuals may work independently or together. If their conclusions are within a defined range, then the conclusions may be averaged. If further apart, then the two appraisers ordinarily must agree on a third professional appraiser who will have the final word. The total of the three may be averaged or given a weighted average; or the stance of any two of the three may prevail.

One great mistake of the past was to indicate that the appraisers were to set the market value of the property, or that of the land considered as vacant, and have the lease provide for a set percentage established as rent. Often, the percentage was unrealistically low.

Since the value of the property or the land considered as vacant may be suitable to a higher use than that of the lessee, this often worked into a square-circle type of conclusion. The economic rental of the property in its present utilization could be considerably less than that of the land if the improvements were demolished and it was put to its highest and best use.

A lessee objection to the appraiser system has always been that the lessee created the value by his utilization of the property. This is particularly true in many rural situations where competitive sites are readily available for the same service station, shopping center, or drive-in restaurant.

In those situations wherein an appraiser-counselor is selected to establish the rent and terms of the option period, taking into account all aspects of the problem, the end results are often more satisfactory than when he is requested to use as sole criterion the economic rent of the property if vacant and available for rent. This type of real estate expert must trace the history of the relationships between the parties, the productive capacity of the property, the fairness of the various lease clauses, and so forth. He then endeavors to get agreement on changes which are more applicable to the current situation than those originally written into the lease in addition to settlement of the issue of rent. He does not endeavor to restructure the lease arrangement completely, only those aspects which are clearly inequitable.

This type of real estate expert needs not only technical skill, but wisdom. He needs impartiality, and his end result should be logical.

Leases are intended to benefit both parties. Often, changed conditions cause old leases to benefit one or the other party for a portion of the lease term. Inflation could shake the very foundation of the lease principle unless reasonable people structure the written contract to provide protections from unrea-

sonable inequities. When the time comes to settle rent changes, the parties must act reasonably. They can be aided by a CRE (Counselor of Real Estate, American Society of Real Estate Counselors) who recognizes the basic economics of inflation protections as they relate to the present and future productivity of the particular property, and the respective contributions of the lessee and the lessor to that productivity. Such help is advisable when the original lease is constructed, as well as during examination of a lease that provides for adjustments.