

REAL ESTATE ISSUES

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Editor's Statement

Basic questions of land use policy are addressed by Robert Ford in our opening article "As the City Grows," a wide-angle view of the conflicts between urban growth pressures and the need for increasing agricultural production. A narrower but related perspective is that of Peter Bowes and Lisa Purdy, who discuss Denver's recent adoption of a transferable development rights ordinance similar to those which have been suggested elsewhere — and occasionally tried — as open space and landmark conservation devices.

Samuel Zell, an imaginative and aggressive syndicator and developer, builds on his previous *REI* article and a set of very personal market insights to develop a new math of real estate, one that can yield surprising results. His theme is taken up by Maury Seldin, who discusses the new ratios in "Seldin on Change."

Some of the consequences of the new math—and some of the causes—are explored by M. C. Findlay and R. V. Eastin in discussing the plight of the thrifts, which as we know has deteriorated rapidly and seems likely to continue to do so. Ronald Copley explores some impacts of the Economic Recovery Tax Act of 1981, from which much is hoped by developers, preservationists, community leaders and supply-side economists. Jeffrey Fisher and Jerrold Stern propound a technique for selecting the optimal depreciation method under ERTA, and Mark Lee Levine explores some tax and other problems associated with so-called "new financing" techniques. Policy questions relating to multifamily housing are the subject of James Vernor's article, which also lays down avenues for future research.

James Webb surveys the real estate literature and finds it improving; Earl Talbot examines the case of the nude dancer and finds it interesting as well as provocative. So, I think, is this number of *Real Estate Issues*. Please let us know if you agree.



Editor-in-chief

As the City Grows

Robert W. Ford, Page 1

As urbanization extends into the agricultural community, valuable lands for the production of food and fiber are being taken for nonagricultural uses. The need to protect these agricultural lands and maintain a farmland base are discussed, as well as the major forms of agricultural land protection, including several excerpts from the National Agricultural Lands Study and some positive protection-type ordinances that have resulted from the efforts of citizens.

Denver's Transferable Development Rights Story

Lisa Purdy and Peter D. Bowes, Page 5

Early this year Denver passed an ordinance that allows owners of historically designated property to transfer excess development rights to other properties. The development of the ordinance and the people who backed it are detailed here.

The New Real Estate Math: $1+1=1\frac{1}{2}$

Samuel Zell, Page 9

Slow growth, high interest rates and a deflationary tone to the real estate markets are perceived for the industry within the next ten years. The author focuses on the "crisis in the user's ability to pay," as occupancy and construction costs escalate. Economic survival is shown to depend on major modifications in underlying assumptions and new courses.

A Note on the Plight of the Thrifts

M.C. Findlay and R.V. Eastin, Page 13

The efficient market framework of finance is extended to policy issues confronting the thrift industry. The authors contend that the mortgage rate was never subsidized, rate ceilings had limited effectiveness, the thrifts' portfolio losses are sunk costs, and additional powers are not likely to generate large profits.

Impact of the Economic Recovery Tax Act of 1981 on Real Estate Tax Shelters

Ronald E. Copley, Page 17

The Economic Recovery Tax Act of 1981 provides both incentives and disincentives to investors of real estate tax shelters. Investors are encouraged to increase shelter investments due to faster write-off allowances and lower capital gains rates spelled out by the new law. On the other hand, the Act discourages marginal investors by decreasing overall individual rates that will cut projected tax savings.

Selecting the Optimal Depreciation Method for Real Estate Investors

Jeffrey D. Fisher and Jerrold J. Stern, Page 21

Even though the Economic Recovery Tax Act of 1981 made major changes in the tax depreciation computation, four key variables must be included in the decision making process for choosing the optimal depreciation method for real estate. This article includes these variables in a model which is used to develop decision charts.

New Financing Techniques—

Practical Problems and Tax Implications

Mark Lee Levine, Page 25

Some of the tax implications arising from the use of "new" financing techniques are explored. After listing several of these alternative mortgage instruments, the author points out some of the areas of concern for both the lender and borrower who use them. Finally, using the shared-appreciation mortgage (SAM) as an example, he cites specific tax problems that would be generated when utilizing this particular instrument.

Policy, Problems and Research Issues for Owned Multifamily Housing

James D. Vernor, Page 30

The condominium lifestyle has increasing appeal in the U.S. housing market, but carries many problems with it. This article attempts to identify a number of the present and future problems including those for public policy, for the producers, purchasers and the urban land economist.

The State of the Literature in Real Estate

James R. Webb, Page 36

In recent years, the quantity and quality of the real estate literature have increased dramatically and probably will continue to do so. Present and future improvements are due to new real estate journals and books, graduate programs in real estate, computer colloquiums and real estate research centers. The effect of these contributions is discussed.

Seldin on Change—

New Ratios: What Are They Telling Us?

Maury Seldin, Page 39

In his third article in the series, the author presents various changes that have occurred in the real estate market in regard to the ratio of debt to equity, interest rates, capitalization rates, land values, and the prices of residential, retail and office space. He cites some of the effects of these changes, and comments that our present adjustment process may be unlike anything experienced in the past.

The Case of the Nude Dancer

Earl A. Talbot, Page 43

In *Schad v. Mt. Ephraim*, the Supreme Court ruled that a municipal zoning ordinance prohibiting live entertainment, nude dancing in this case, in effect denied an individual's right to free speech. The case established the outside limits for the use of zoning controls in regulating sexually-related commercial activity, and contradicted earlier decisions concerning the restriction of "adult" entertainment uses imposed by local zoning.

World Rental Levels

Richard Ellis, Inc., Page 45

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

Real Estate Counseling

If you are a non-member reader of *Real Estate Issues* you may have wondered about its sponsor, the American Society of Real Estate Counselors, and about just what it is that Counselors do.

ASREC was founded in 1953 as an affiliate of the National Association of Realtors®. Today the Society recognizes over 550 members in the United States, Canada and Puerto Rico. Membership is by invitation only, and is extended only to those men and women who meet the organization's high standards. Members come from diverse real estate backgrounds and are some of the most skilled and respected individuals in the field. They are entitled to use the professional designation CRE—Counselor of Real Estate.

In addition to the opportunities for professional association offered by a closely-knit network of colleagues, members benefit from the publications, workshops and seminars offered by the Society and from an annual high level conference at which political, social and economic issues are examined. In addition to *Real Estate Issues*, ASREC publishes books and monographs on counseling topics.

In simplest terms, professional real estate counseling is defined as the provision of expert unbiased advice and guidance in real estate matters on a fee basis. Clients may be individuals, companies or institutions who are served under retainer, *per diem* or fixed fee arrangements. Counselors pride themselves on their objectivity and competence, on a broad knowledge of the real estate industry, and on a sensitive approach to what often by its nature must be a highly individual and confidential service.

The importance of professional real estate counseling is especially apparent in a time of accelerating economic, technical and social change. We are proud to be responding to the public's need for guidance and to the constantly growing desire for professionalism in real estate.



President

AS THE CITY GROWS

by Robert W. Ford, CRE

City expansion and continued population growth in this country are removing valuable agricultural lands from our inventory. This diminishing farmland base affects our attitudes toward growth and our ability to provide food and fiber for current and future needs. An understanding of the phenomenon will help us analyze present and probable trends affecting land use on the periphery of our cities.

Need To Protect Agricultural Lands

It is critical that we maintain a viable agricultural economy in order to provide food and fiber. As a country we produce a surplus of food and are able to export it to less capable countries. In recent years, though, our ability to continue this mode in the future has come into question.

The food and fiber produced in the U. S. are used primarily to feed and clothe our fast-growing population, but we also market a growing volume of agricultural products (Figure 1). The harvest from one in every four acres of cropland in America goes to other countries. Exports increased an average 10 percent annually during the decade of the 1970s, reaching 25 percent of the American farmers' cash earnings today compared to 10 percent in the early 1950s. In 1980 the market value of U. S. agricultural exports reached a record \$40 billion. When balanced against an \$18 billion agricultural import, this results in a positive trade balance of about \$22 billion, a figure representing about one-fourth of our foreign oil bill.

This paper was delivered by Mr. Ford at the Eleventh Pan Pacific Congress of Real Estate Appraisers, Valuers and Counselors, held last October in Melbourne, Australia.

Robert W. Ford, CRE, is owner of Robert Ford & Assoc., Inc., a Modesto, California firm specializing in properties that have agricultural, recreational and/or land use problems. Involved in real estate since 1946, he also holds the professional designation MAI, and was president of the American Institute of Real Estate Appraisers in 1975.

Meanwhile, we have been converting agricultural land to nonagricultural uses at the rate of about three million acres per year, of which about one million is from our cropland base. This land has been paved over, built on, flooded or in other ways converted to nonagricultural uses. Planners, economists and agricultural experts who are responsible for providing food and fiber to a growing worldwide population are concerned about the loss of this land to agriculture.

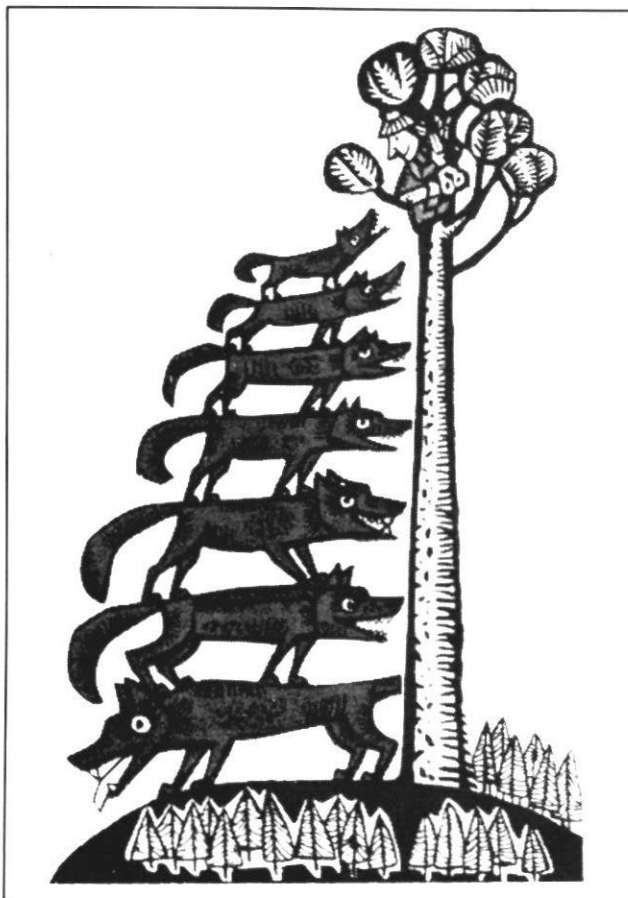
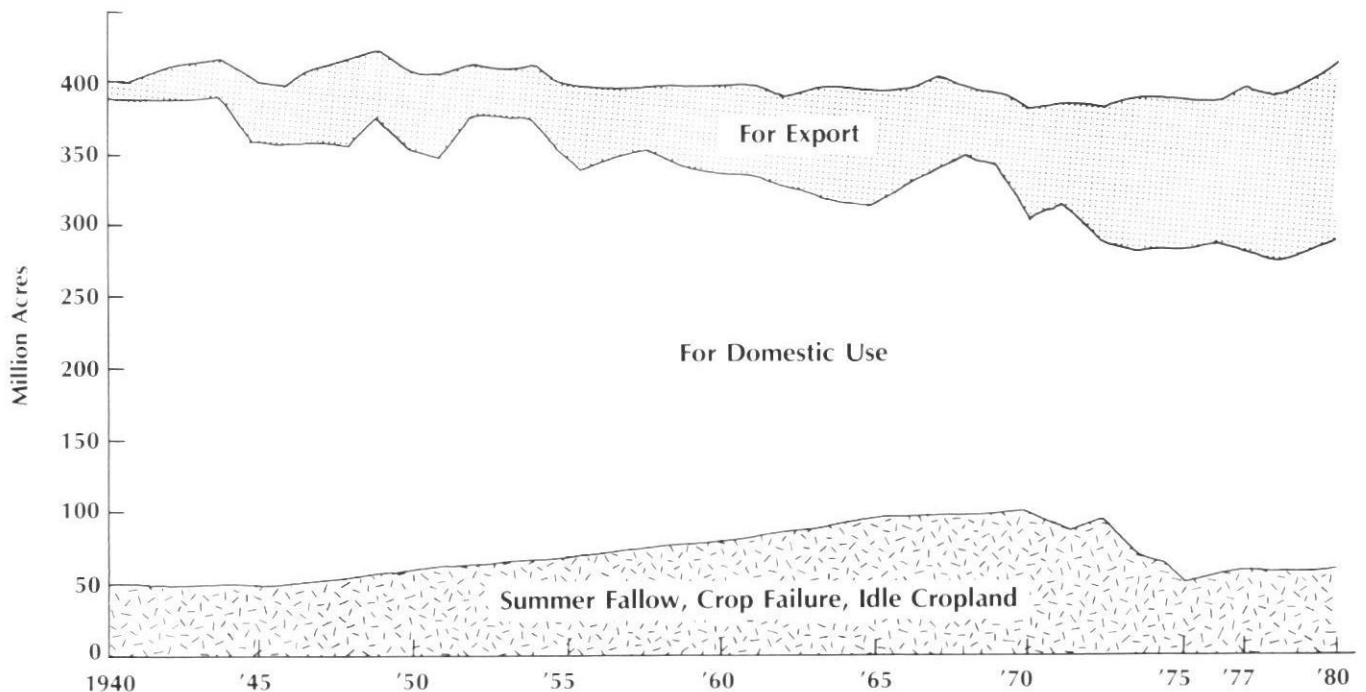


FIGURE 1

Acreage of Crops Harvested, Summer Fallow, Idle and Crop Failure
U.S. 1940-1980



Source: National Agricultural Lands Study, Final Report 1981, Washington, D.C.

Figure 2 shows America's land base in 1977, including all the lands within the country and their allocation by use at that time. The cropland base of 540 million acres included 413 million of existing cropland. Potential cropland — lands with high to medium potential for conversion from other lower-value agricultural uses — makes up the difference.

In past years, production from lands lost to agriculture has been replaced by new lands brought under irrigation and converted to cropland use, and by the ability of American agriculture to develop varieties that have increased crop yields. A combination of these elements has resulted in increased agricultural production despite a diminishing land resource. The National Agricultural Lands Study, a joint effort of the Department of Agriculture and the Environmental Protection Agency, clearly identifies the agricultural land base. Their documentation shows that agricultural lands in the U.S. are a finite resource and eventually will need to be protected. The immediate need is to slow down the conversion process of prime agricultural lands to other uses.

An emerging question is: Do we develop the land as needed to take care of our growing population in expanding cities, or do we preserve the agricultural lands and uses and prevent needless conversion to non-agricultural use? Our early settlers built new cities on

prime locations adjacent to rivers and strategically located on valley floors or other similar places. These sites often were also where the best farmland was located. Thus, today many of our cities are located on prime agricultural lands. If these cities expand, the adjoining prime agricultural lands probably will be converted to nonagricultural use.

The solution to these problems is hidden in the mix of many concerns, including:

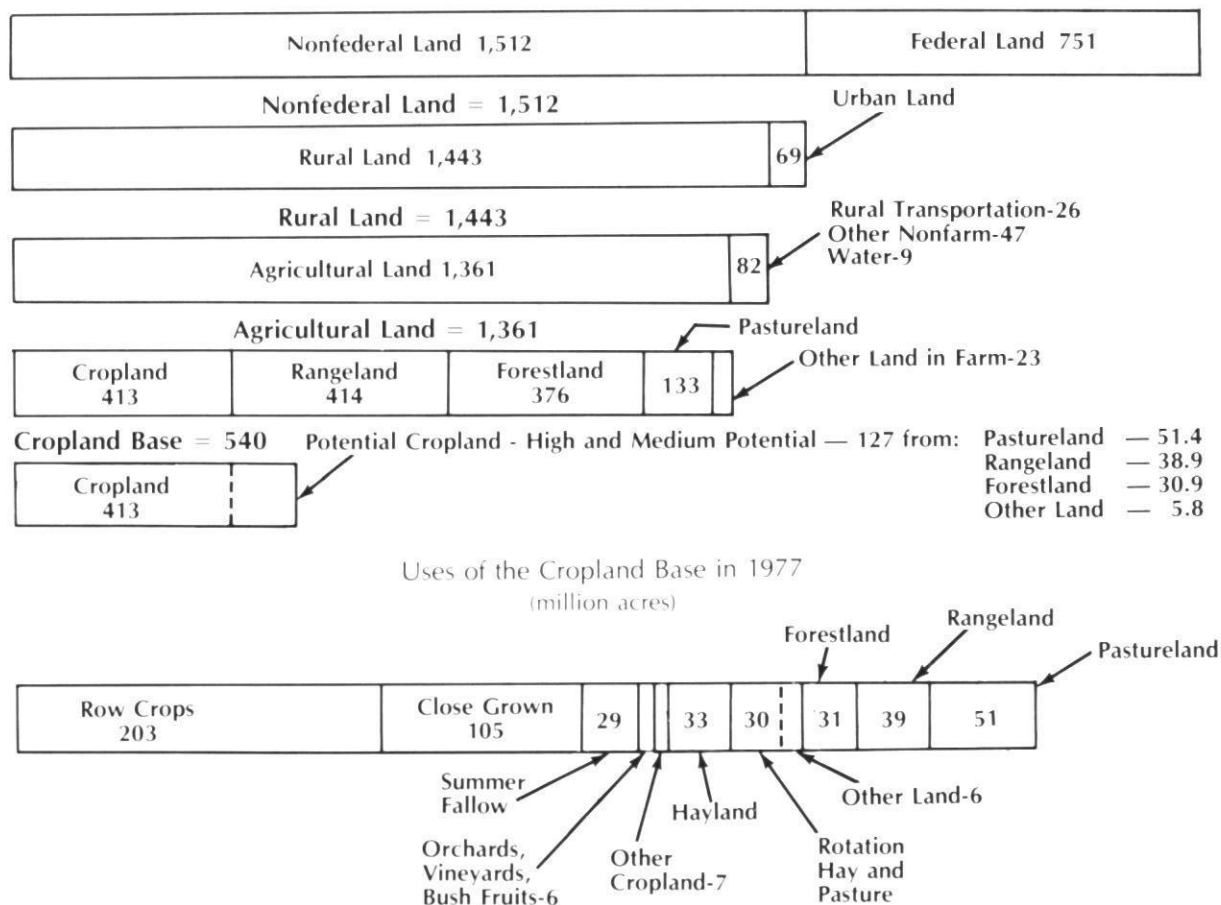
- Land use questions: where to put the country's population, factories, shipping, reservoirs and roads;
- Land tenure issues raised by the desire to maintain family farming and bring more citizens onto the farm, and the questions of corporate farming and foreign ownership of lands; and
- The need to protect the agricultural land base.

In the past, solutions have often been made for political expediency. Fortunately, however, our growing awareness of the size of our agricultural resource and need for it has received the attention of many officials. In some areas, a basis for agricultural land protection has been developed.

FIGURE 2

America's Land Base in 1977
(million acres)

Total U.S. = 2,263



Note: Unless otherwise specified, all data and references to the United States or to the "U.S. agricultural land base" in this report refer to the 50 states. In discussions based on Census of Agriculture and farm production regions, Alaska and Hawaii are excluded from the Western Region and U.S. totals.

Source: National Agricultural Lands Study, Final Report 1981, Washington, D.C.

Protection Programs And Regulations Developed

Canada has agricultural protection programs in the provinces of British Columbia, Saskatchewan and also on Prince Edward Island. In British Columbia, when the new Democratic Party was elected to form a government for the province in 1972, one of the top priorities was to protect farmland from urban encroachment. A freeze that prohibited subdivision of farmland was enacted in 1973, and a Land Commission was created to establish permanent agricultural land reserves and prohibit the nonagricultural use of land. As of 1978, 11.6 million acres are reported to be in reserve status.

In Saskatchewan, the need to encourage agricultural expansion and attract young farming families resulted in a program which helps farmland owners dispose of their

land at a fair price and to help new farmers establish. On Prince Edward Island, the Land Development Corporation was established in 1969 to solve the problem of abandonment of small farm holdings, many of which are on first-rate agricultural soils. The corporation purchases lands that are for sale and improves them by repairing structures, improving drainage and taking other conservation measures, and then resells the property on favorable terms to adjoining or other farmers.

In the U.S., many counties and states have developed agricultural protection regulations. The National Agricultural Land Study identified nine viable ways to protect agricultural land here. If one or more of these measures have not already been implemented in agricultural areas, they probably will be imposed in the near future.

The state and local efforts identified are as follows:

1. *Comprehensive planning* — a process which leads to the adoption of a set of policies regarding land use, transportation, housing, public facilities and economic and social issues.
2. *Agricultural zoning* — a legally binding designation which specifies agricultural land uses, including the type, amount, location and size of development.
3. *Agricultural districting* — generally a nonbinding designation of specific tracts for long-term agricultural uses and usually coupled with benefits and assurances which improve conditions for farming.
4. *Purchase of development rights* — purchase of the right to develop from owners of specific parcels, leaving the owner all other ownership rights. The price of the rights is the diminution in the market value of the land as the result of the removal of development rights. The remaining value is "farm use" value.
5. *Purchase and resale or lease with restrictions* — purchase of land, imposition of restrictions on use and development and resale at market price. The end result is equivalent to purchase of development rights.
6. *Transfer of development rights* — development rights on land in a designated preservation area may be purchased by a developer and transferred to a designated area where the equivalent amount of additional development can be constructed.
7. *Differential assessment* — assessment for property tax purposes based on the farm use rather than market value of the land. Three major types of differential assessments exist: 1) pure preferential assessment with full abatement; 2) deferred taxation with partial or no abatement and restrictive agreement; and 3) restrictive agreements under which a farmland owner contracts to retain his land in farm uses in return for a lower assessment.
8. *Development permit system* — requirement that a special permit (in addition to normal local zoning and building permits) be obtained for development from a designated state or regional agency.
9. *Right to farm* — legislation stating that local ordinances cannot be enacted that restrict normal farming practices which do not endanger public health or safety; providing farmers with some protection against private nuisance lawsuits.

When working with property that is impacted by community general plans, agricultural zoning, agricultural districting or a development permit system, it is imperative that one be well aware of the implications of each of these types of restrictions, so that their impact on the client's property can be properly measured. Usually if the farmland were adjacent to a city, it could be developed based on the timing whims of the owner, but these condi-

tions have changed. Today, irrespective of the property's location adjacent to a community, unless long-range planning shows eventual inclusion of this property into the "urban reserve" it may be many years before the farmland will grow anything other than crops. For many years California agricultural appraisers have joked that the best thing to raise on some of California's farmland was the price. This "crop" was often achieved by converting property into nonagricultural uses, which may not be as easy to accomplish in the future.

Controlled Versus Unlimited Growth

Many communities in the U.S. have either adopted or are considering controlled growth or growth management programs. This process involves identification of the land resources available for urban expansion within the community and the designation of a set number of dwelling units and a specific amount of commercial area that can be added each year. In communities where these programs and some form of agricultural protection regulation exist, the dividing line between urban and agricultural land becomes reasonably clear, at least until the end of this planning period.

Without this "dividing line" around the city, or some other line of demarcation between urban and agricultural uses, an "impermanence syndrome" emerges on close-in agricultural lands. This condition occurs on agricultural properties that are located between the urban and agricultural community. Owners observe a creeping urbanization toward their location. New urbanization brings with it increased residential densities along with more complaints from the homeowners to farmers about dust, pesticides, irrigation waters, noises and other everyday farm conditions. These aggravations, coupled with the realization that the property will one day be converted to nonagricultural uses, encourage a reduction of agricultural capital expenditures and an indifference toward efficient farming; if the use of the land will be changing, there is no real reason to repair the buildings, improve the drainage or irrigation systems or do other major maintenance work on the farm property. A state of interim use develops, and agricultural deterioration sets in.

As each city grows, the citizens and planners of that community have a responsibility to decide whether or not they wish to have unlimited or controlled growth and whether or not they have an interest in preserving agricultural lands. While some of the protective measures stem from national attitudes and the national interest, their actual implementation still occurs at the state or local level.

Real estate professionals, especially appraisers and counselors, should be familiar with the intent of the regulatory laws, recent judicial decisions from tests of these laws, exceptions to the rule of the particular ordinance enacting the law, and the long and short-term implications of these regulations on affected properties. Conditions are changing and it is critical to be both prepared and willing to evaluate the impact of these changes on real property.

DENVER'S TRANSFERABLE DEVELOPMENT RIGHTS STORY

by Lisa Purdy and Peter D. Bowes, CRE

On January 18, 1982, Denver's City Council passed an ordinance that allows owners of historically designated property to transfer excess development rights to other properties within the Business-5 Central Business District (CBD) zone. This was considered a major accomplishment by developers, preservationists, and representatives of business and government, all of whom were involved in the development of the ordinance and the intricate procedures required to assure its acceptability by all interested factions and the marketplace. One year ago no one even thought seriously about transferable development rights (TDRs). Now everyone talks about them.

This newly created ability to transfer development rights from historic structures to development sites provided a companion TDR mechanism to the one that has existed in Denver for nonhistoric structures. The nonhistoric ordinance has been available for some time but transfers were limited to contiguous sites, density could be transferred from any type of building and the transfers lacked many of the controls built into the new ordinance. Until recently the nonhistoric TDR ordinance had not been used very much, but the development of its companion for historical properties was considered appropriate for the scale and relation to the street that historic properties could provide. More importantly, this new procedure was deemed critical to the saving of several historic structures because it would provide an economic return, making preservation of these structures an attractive alternative to demolition.

Lisa Purdy is a preservation specialist for Historic Denver Inc., the largest private local preservation organization in the country, which is involved with preservation economics and issues in downtown Denver.

Peter D. Bowes, CRE is vice president of Bowes and Company, a Denver firm specializing in valuation and counseling of commercial, industrial and other investment real estate. He also holds the MAI designation.

Background

Denver is developing a 14-block mall on 16th Street, the retail section of the Central Business District, which will preclude all vehicular traffic except for public minibuses. It is intended to be an 80-foot wide people place.

One of the requirements for Federal funding of the mall was a Section 106 Compliance Review. This involved a survey of all historic buildings along 16th Street to determine if the mall would have any detrimental effects on these buildings. In May 1979 the State Historic Preservation Office determined that there would be no such effects and at the same time decided that a national historic district to include buildings along 16th Street and four blocks of Champa Street would be appropriate.

This created quite a stir among the property owners and representatives of the CBD community, a problem that had more to do with the owner's perception of the negative effects associated with inclusion in a historic district than with reality, since district inclusion generally provides more benefits than drawbacks. According to some sources, the negative response of property owners was caused by the fact that they were not consulted before the district was nominated. Nonetheless, representatives of Downtown Denver, Inc. and the State Historic Preservation Office agreed to defer consideration of a historic district for one year until the downtown community could evaluate the impact and appropriateness of designation. This was a good indication of the joint public/private efforts that were to be forthcoming.

In December 1980, in response to concerns about the structures to have been included in the defined district, Historic Denver, Inc. funded (with money from the State Historic Preservation Office, The National Trust, and the Boettcher Foundation) a \$40,000 study of 16th Street. Downtown Denver, Inc., was chosen to lead the study, which was to include the integration of contemporary and historical building styles as a technique for historic preservation and urban design. Design guidelines for both old and new buildings were to be the product of this



Boston Building

process and a policy committee was appointed jointly by Historic Denver, Inc., and Downtown Denver, Inc. that included a 16th Street retailer, a historic property owner/developer, a real estate appraiser and counselor, a mortgage banker, an architect, and a planner.

For all the good intentions of this committee it ultimately did not resolve the issues of historic preservation represented by 16th Street. Instead, a larger need appeared—the development of a special zoning district for 16th Street that would encourage sunlight and retail uses at the ground level consistent with the pedestrian implications of the mall. Timing and political expediency directed that historical implications not be part of that specific effort and the resulting ordinance except for rehabilitation schemes for four buildings on the mall. This was a consensus decision by the committee and the sponsoring organizations with the specific understanding that historic preservation/conservation efforts would be a subsequent task.

Historic TDRs

The committee that was put together to consider the historical TDR concept and the possibility of an additional premium for renovated historic structures was carefully picked but unofficial. This committee included representatives from Historic Denver, Inc., Downtown Denver, Inc., the Denver Landmark Commission, and the Colorado Historical Society, as well as other community leaders. There was a lot of give and take in the development of the concepts with much research and discussion of similar ordinances in other cities. A key goal in all discussions was to avoid the extreme positions of either preservationists or developers, as it was clear that neither extreme would be considered acceptable to city government agencies, the public at large, or City Council.



D & F Tower

After nearly three months of deliberations, drafting and redrafting, the ordinance finally took this shape:

- 1) *The TDR amount is calculated by deducting the density of the historic structure from the basic 10:1 allowable density on the site. Premiums for plazas or other bonus items on the historic site will be included.* Once the transfer takes place, the density of any future redevelopment of the historic site will be reduced by the amount of square footage sold, unless additional TDRs can be acquired. Such future redevelopment could take place in case of significant casualty loss that would not warrant reconstruction or economic circumstances that would suggest demolition of the historic structure.
- 2) *The sending site can transfer up to four separate times, with a minimum of 25 percent of the available TDRs.* This was included to minimize the amount of paperwork that would be required by Zoning Administration.
- 3) *The receiving site could not increase its density more than 25 percent of the base floor area ratio allowance.* In the B-5 zone the base floor area ratio is 10:1, so that the maximum increase is 2.5:1. This precludes overly large projects and for full block developments may require acquisitions of TDRs from more than one historic site. In addition, other premium bonuses may be accumulated, but the building may never be taller than the approximately 60 stories allowed by FAA regulations.
- 4) *The transferring site must contain a locally designated landmark structure.* Designation is a function of the Denver Landmark Commission which requires that the building have substantial architectural, geographic, or historic significance.

5) *Before the transfer can take place, the sending property must be renovated.* The Denver Landmark Commission has guidelines for the renovation of landmark buildings, which must be followed and approved by the Commission and the Zoning Department before development rights can be sold. The historic structure also must be occupied prior to any transfers.

In an early draft of this concept the committee planned to require a preservation easement from the owner that would guarantee the perpetual retention of the historically designated property. Ultimately the committee felt that this requirement would not make it through the political process and it was removed. Experts on the subject also feared that this "forced" contribution would jeopardize the potential tax benefits that normally accrue to the donor of a preservation easement.

Present Inventory

The present inventory of locally designated properties and the square footages* (TDRs) available are:

Colorado Federal Building	26,632 sq.ft.
D & F Tower	10,900 sq.ft.
Equitable Building	70,000 sq.ft.
Firestation #1	50,500 sq.ft. (1)(3)
Masonic Temple	29,199 sq.ft. (2)(3)
Navarre	75,300 sq.ft.
Odd Fellows Building	58,700 sq.ft. (3)
Trinity Church	Already sold TDRs through old ordinance to a contiguous property.
Tramway/Cable Building	193,100 sq.ft.
U.S. Post Office	848,000 sq.ft. (1)(3)

Potential properties for local designation and the square footages* (TDRs) available are:

Curry-Chucovich House	52,700 sq.ft. being sold
Denver Dry Goods	180,000 sq.ft.
Kittredge Building	26,909 sq.ft.
Boston Building	33,183 sq.ft.
Brown Palace Hotel	36,000 sq.ft.
Paramount Theatre	181,000 sq.ft.
U.S. Customs House	810,000 sq.ft. (1)(3)

This is a significant inventory of space, but the ability to transfer development rights will actually minimize density in our B-5 area and not expand it. These historic sites, if they were to be available for redevelopment in more efficient and therefore more highly concentrated uses, possibly in conjunction with contiguous sites, could get densities of up to 18:1, while the existing historic densi-

*Square footages approximate—from an unofficial source.

(1) It is not certain whether a government owned building can sell TDRs.

(2) Designated after ordinance passed.

(3) Nonprofit and/or nontaxpaying entities



ties are usually calculated for transfer purposes at about 10:1 to 12:1. Considering the overall size of our CBD, the difference on these few properties is not overwhelming, but the key point is that this effort will *not* increase density as many detractors thought.

The other concept the committee discussed was the possibility of an additional 4:1 bonus premium for renovated buildings along 16th Street; for each square foot of building renovated, the owner would be able to sell and transfer an additional four square feet to another site, in addition to the allowable TDRs sold under the proposed historic TDR ordinance.

In the end, this idea was dropped for two major reasons: first, it was felt that with the availability of TDRs and possible 25 percent tax credits for Nationally Registered Properties, there was no overwhelming economic necessity to include this additional premium; and second, we felt that getting the TDR ordinance passed by itself was a big enough task without adding another proposal for the council and city government to consider. This might be pushing our support for preservation just one step too far!

Conclusion

The committee and the organizations involved in the drafting of this proposed ordinance sold it hard and well to the involved city agencies, the public, and to the individual members of Denver's City Council. When it was finally considered by the City Council, it passed unanimously.

However, there was one negative circumstance surrounding this effort. The media were not informed or sold on the concept ahead of time and felt that substantial windfall profits were to be generated for individual historic property owners. This feeling was heightened by the appearance of a front page news article describing a transfer that took place under the old *nonhistoric* transfer ordinance. Much criticism was raised about this transfer by the city's tax assessor in that it involved a transfer of rights from a taxpaying entity to a nonprofit entity with potential tax losses for the city. The article confused the old ordinance with the recently passed historic transfer ordinance, causing many people to question the tax implications of this new ordinance. It also raised issues of increased congestion and air pollution. A week of hard effort was needed to inform representatives of the media that an overall tax gain to the city was likely as a result of these historic transfers. After appropriate details and counterarguments were relayed, the opposition died down and disappeared.

We are convinced that the city will experience an overall tax gain due to this process for three reasons:

- 1) It is most likely that the buyers of development rights will be in prime downtown locations that are assessed at higher values than where the rights originated.
- 2) The rights being transferred were heretofore from unused and therefore *untaxed* space.

- 3) Some of the transfers would go from nonprofit organizations to taxpaying entities, adding to the tax rolls.

This historic TDR ordinance provides one additional tool for the developer to consider in trying to get the best from a development site or to cope with the economic problems of preserving a historic property. While it will not solve the problems of our CBD; it will do more than its detractors thought—though less than its advocates thought—to alleviate those problems.

Two additional efforts are underway:

- Local historic districts may be added to individually designated sites as being eligible for transferring of development rights within the B-5 zone. Timing and political expediency in getting the basic ordinance passed suggested that the initial effort be limited to specific structures on specific sites without consideration of districts.
- A separate policy committee is working on a zoning district contiguous to B-5 to get these same concepts implemented. They presently are not available in any form, and the historic and nonhistoric TDR concept would be a valuable tool there as well.

Copies of the ordinance as finally passed can be obtained by writing to Lisa Purdy, Historic Denver, Inc., 770 Pennsylvania, Denver, CO 80203, including a self addressed, stamped envelope.

THE NEW REAL ESTATE MATH: $1 + 1 = 1\frac{1}{2}$

by Samuel Zell

The prospects for the U.S. real estate market in the 1980s will be greatly affected by major changes in the use and application of real estate assets. An impending crisis in the ability to pay will result in a fundamental alteration in the overall economics of real estate ownership.

Over the past 25 years, the underlying considerations in real estate ownership and occupancy have been colored by expectations of continued inflation. In contrast, the '80s are perceived as a time of slow growth, high interest rates and deflation in the real estate markets, which will have profound consequences throughout the economy. Success and economic survival in the real estate business will require us to make major modifications in underlying assumptions and to charter new courses reflecting these rapidly changing circumstances.

Occupancy Costs To Increase

The demise of long-term, fixed-rate debt as an integral part of the industry is just beginning to affect the real estate economy. Conventional wisdom foretold the disappearance of this form of financing, but failure to analyze the dramatic impact that this would have on occupancy costs will prove to be an expensive error. Costs of occupancy will rise significantly because of the volatility of underlying interest rates, the higher risks of variable rates, and the more rapid amortization of debt. These rising occupancy costs, in absolute terms and as a percentage of all expenses, will force lessees to reexamine patterns of usage and adjust accordingly.

Real estate feasibility has historically been determined by evaluation of prevailing rates, absorption, costs of pro-

duction and the cost of dollars. This method of analysis, however, fails to evaluate the impact on the user's ability to pay. Market depth consideration at varying occupancy cost levels has been omitted at the level of entrepreneurship, which can result in overbuilding despite statistical support for increased demand.

An example of this occurred in 1972 and 1973 when apartment construction averaged over 1,000,000 units per year. The majority of this construction was directed at the upper end or luxury segment of the market. Development decisions were related to the costs of production and financing, not to the depth of the population able to afford the product. The massive amount of new luxury housing decimated occupancy rates nationwide and led to the demise of the apartment development community. Its ripple effect contributed to massive losses by REITs, their lenders and stockholders. If inflation had not accelerated significantly, to revise renter income levels, those units would still be vacant today. The current scenario in luxury office development is a repetition of this disaster. Developers assume in their feasibility that users continually upgrade facilities as they become available. They focus on the viability of the development, not its affordability.

Mass discount retailers such as K-Mart implemented market strategy that was based on the availability of cheap financing. Low occupancy costs as a percentage of sales encouraged use of multiple stores as the vehicle for market penetration. Just six years ago net leased retail at a gross rental of two dollars per square foot per year was commonplace. In 1982, a similar space required a minimum of six dollars net per square foot per year, which altered the costs of occupancy by four and five times the inflation rate during that period. The consequences are now visible.

Occupancy costs in the '80s are likely to be as disruptive for business planning and development as OPEC and oil price costs of the '70s. Energy costs rose dramatically as demand began to outstrip the supply. As the price of

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energy rose, elasticity of demand led to conservation and reduction of consumption. Real estate is no different but the focus is not on the availability of brick and mortar, but the availability and cost of capital. As capital goes from surplus to shortage, it is having an exponential impact on the costs of occupancy. Major business strategy will require drastic adjustments and major users of space need to alter long-term strategic goals and methods.

Tenants To Reconsider Space Needs

The impact of occupancy costs also affects the individual. As the cost of shelter requires a greater percentage of the disposable income, he/she is reevaluating previous ideas on the amount and quality of space required. Tenants will look at rent costs as a percentage of their disposable income and decide whether or not they are willing to give up leisure activities, transportation and/or a vacation for larger or more elaborate living quarters.

Between 1977 and 1982, the number of nonsubsidized rental units built totalled under 1,000,000 units, compared to an average of 800,000 units per year in the first half of the '70s. Despite an 80 percent drop in production, the overall occupancy factor increased by only about 2 percent. Concurrent with the reduction in supply, the average rental increased between 60 and 80 percent.

Based on the production of the last five years, the overall rental occupancy factor should be close to 100 percent. Instead, occupancy is 95 percent and units are readily available in most markets. The population's adjustment to these circumstances is seen in the type of units that are now vacant (one bedroom and efficiency units) versus those that were vacant in 1977 (two and three bedroom units). Even in the weaker markets of 1973 and 1974, the occupancy proportion of one bedroom and efficiency units was always significantly greater than the larger units. The current vacancy shows that tenants are more willing to double up and accept less space and less privacy rather than forego or lessen their living standards. In the rental housing market, the consumer is making radical adjustments. Doubling up and even tripling up is endemic to compensate for the higher occupancy costs.

Household formations—the generating engine for occupancy of rental housing—have been propelled not only by population growth but also by the '70s phenomenon referred to as the "unbundling" process, that is, children leaving home at an earlier age, retired people maintaining single-purpose households and, of course, the rampant growth in the divorce rate that has led to a multiplication of households. Over the last five years, a new process of "rebundling" has appeared: multiple occupancy of rental units by two, three and four unrelated people; a greater number of young people who enter the job market but continue to live at home; and a return to the tradition of single retired parents who live with children rather than maintain a distinct dwelling unit. These factors are already having a significant impact on the housing market. The current availability or oversupply of one-bedroom apartments as compared to those with two and three bedrooms reflects this change.

In the next five years as the cost of rental housing continues to rise, this process will probably accelerate and more units will be released in the market. Units previously occupied by unbundled users will maintain a continuing supply of vacant units. From 1970 to 1978, the unbundled population in the housing market grew at a 5 to 5.5 percent rate. Since 1978, this rate has dropped to 3 percent. This adjustment by the population to a more intense use of dwelling units versus living alone has not been enough to overcome increasing costs. Consequently, new developments during this period have attempted to achieve affordability by a significant reduction in the size of these units. Within the next 10 years, the unit sizes probably will be further reduced to reflect the costs of occupancy, which serves to demonstrate that when the price of the space rises exponentially, the population will make whatever adjustments necessary to maintain its living standards.

Impact On Single-Family Market

The single-family market is similarly affected. In an inflationary atmosphere, decisions to buy single-family homes were influenced by the feeling that the single-family home not only provided shelter but was also a good investment. For these reasons, buyers were willing to overextend themselves.

This scenario has changed radically in the '80s. The Bureau of the Census listed the average "young family" income in 1970 at \$9,602; the average housing unit was selling for \$31,300, which required a debt service of \$2,207. The average payment as a percentage of income was 23 percent. By 1981, the average "young family" income was \$21,150; the average housing unit was selling for \$76,500 with debt service at \$8,256. These payments required 39 percent of the income generated. The extraction of approximately 16 percent of total income for housing costs has materially impacted cash available for other consumer expenditures. The current housing depression, therefore, is not only attributed to a recessionary economy, but to a realization that the breaking point in terms of ability to pay has finally been reached.

Surplus Of Space Predicted

The results of this crisis will immediately put to rest the myth that there is a national shortage of housing, office and retail space. In fact, an oversupply in all types of real estate more accurately reflects present circumstances. American real estate users have been consuming more space than they need.

In the office space market, the average number of square feet per employee in the U.S. is approximately 225 square feet. Worldwide, the average number of square feet per employee is closer to 100. As occupancy costs rise, the employer will be forced to reduce the amount of space per employee in order to curb the unfavorable ratio between the productivity of the employee and occupancy costs. Office design will shift radically from an attempt to achieve the most suitable environment for high productivity to the reality that such an objective must produce a

sane cost-benefit relationship. The U.S. office market has four and five times the proportion of private offices that obtains in the rest of the world where workspace is limited to function and meetings are held in communal conference rooms. Costs will force U.S. employers to adopt similar configurations.

As a result, not only will there be limited growth and demand for new office space in the '80s, but as this focus on office space changes and the number of square feet per employee is reduced, major space now occupied will become surplus. Furthermore, faced with these rising costs, employers will attempt to economize by the use of back-office, satellite operations. In the era of the electronic office, it is now feasible for a company to base part of its employees in a suburban or lower-cost, older facility and connect them electronically with the high-cost, high-prestige executive office.

An example of user economics is seen in law firms today. In 1972, a first-year lawyer who was employed by a major New York law firm earned \$25,000 per year; cost of occupancy for this lawyer was \$2,700 per year, at \$12 per square foot. By 1982, the first-year lawyer was being paid \$43,000 per year, but the cost of occupancy was \$9,000, at \$40 per square foot. Cost of occupancy represented approximately 11 percent of the base salary of the 1972 employee. In 10 years, the cost of occupancy increased over 350 percent, while salary rose only 80 percent. This comparison demonstrates the tremendous squeeze that increased occupancy costs have put on profitability. The user is forced to employ whatever means are necessary—less prestige, less square feet per employee, satellite operations, etc.—to bring down the overall occupancy costs.

Similar patterns exist in the retail sector. As the cost of energy, salaries and inventory financing escalate, retailers have been forced to adjust their *modus operandi* to maintain profits, altering strategic goals and downsizing occupancy requirements. A 1967 to 1970 vintage enclosed mall of 700,000 square feet would typically include 160,000 square feet of mall shops, representing 30 different retailers and averaging approximately 4,000 square feet per store. In 1982, a regional mall with 160,000 square feet of mall shops would be occupied by 50 retailers who occupied an average of only 2,500 square feet per store. The 1967 mall grossed approximately two dollars per square foot; the 1982 mall netted approximately \$16 per square foot. As the cost of occupancy escalated rapidly over this period, the retailers adjusted by downsizing the amount of space required and increasing sales per square foot. This strategy made it possible to generate similar profits in 25 percent of the space.

The corollary benefits accruing to the retailer were less employees, less pilferage, and significantly less inventory accumulation. The smaller stores also reduced capital required for initial fixturing. In addition, retail chains recognized that their days of being on every street corner are over. Instead, they demand greater advertising and

promotional efforts to attract a higher volume to fewer locations.

In the single-family "For Sale" housing business, major developers are beginning to construct "U" shaped single-family houses that potentially could be used by two separate, unrelated families who share a common kitchen, living room and dining room. While not uncommon in the rest of the world, this type of multiple occupancy is quite foreign in the U.S. and will require major social adjustments if it becomes widespread. It seems clear, though, that the population is willing to make major adjustments in shelter lifestyle in return for maintenance of its current standard of living. Adaptability suggests that shelter is not as high a priority as overall standard of living. Being "house poor" is rapidly going out of fashion in a disinflationary atmosphere.

The average number of square feet in new single-family homes has been declining dramatically over the past five years. Additional adjustments will be necessary in order to maintain any form of single-family housing construction in the U.S. Builders will be required to evaluate fundamental changes including carports instead of garages, slab construction instead of basements, zero lot line and townhouses rather than single-family detached, smaller and less numerous appliances, the elimination of subdivision amenities such as tennis courts, swimming pools and other leisure centers.

Focus To Shift To Protection Of Occupancy

The real estate survivor of the '80s will need to totally readjust his/her thought patterns. Paramount in planning and development will be the soon-to-be availability of real estate that is currently occupied. Affordability and depth of the user's ability to pay will replace the grandiose and often wasteful projects developed in the '60s and '70s. The real estate investor will focus more on current yield as an investment objective, and less on future increased revenues. The internal rate of return methodology, so prevalent in the real estate community today, will lose its appeal. The achievement and maintenance of occupancy will be the foremost concern.

Leasing strategies will change radically as concern for the protection of occupancy supersedes the desire for future rental increases. In the '60s and early '70s, office leases were negotiated for long terms in order to protect the owner from any fluctuations in occupancy. By the late '70s, a period of high inflation, leases were shortened, as landlords became more interested in gains in the short term without concern for future occupancy demand at expiration.

The attractiveness of office buildings, predicated on the amount of new term tenant lease expirations, will diminish, reversing the pattern of the last five years. Buildings that are well tenanted with long-term leases will become more attractive as concern for demand overcomes concern for future ability to increase income. This altered focus is likely to result in a system similar to the European system, in which a tenant executes a long-term

lease with rental reviews every three to five years. The system maintains occupancy without the destruction of purchasing power. Long-term leases will further accelerate the movement from gross to net, thereby putting the burden of adjustments and taxes and operating costs directly on the tenant, reducing the landlord to the role of a collection agent.

Further concentration of retail in growing regional centers will reduce the viability of the neighborhood center. Retailers will reject multiple locations, even when neighborhood locations provide lower costs of occupancy, in order to avoid other costs of operation. Thus, major regional shopping centers will grow in value and in volume as they slowly take over the market from smaller centers; successful retailers will achieve greater volume and a higher margin per sale from fewer locations.

Emphasis On Regentrification Opportunities

Most major elements of real estate will develop two-tier markets. In the past, new construction occupancy has been achieved by renting space to tenants in less modern facilities, which is an effective system when the spread in cost between new and old is no greater than 20 percent. Today, however, the spread between old and new buildings is as much as 200 percent. Office developers are thus no longer able to offer moderate concessions in order to move tenants from the old to the new buildings. Tenants who can afford to occupy old buildings will no longer be candidates for the new buildings. This situation will create ample opportunities for the acquisition of old, well-maintained buildings, which should outperform the new, more expensive ones over the next ten years.

In residential and industrial real estate, also, tenants will become more conscious of occupancy costs and accept older, somewhat less prestigious buildings. In similar fashion, more and more users will put their prestige or executive offices in a new building and their back-office operations in an older building connected electronically with headquarters.

Escalating occupancy costs will reduce corporate and personal mobility. A slowdown in the growth rate of the Sunbelt cities is expected. Rising costs of relocation will help preserve the service-based economies of the Midwest and Northeast, which were previously suffering from an erosion of population and industry. The significant amount of new space created in the Sunbelt, in anticipation of the continued demographic changes of the late '60s and early '70s, will serve to weaken these markets; return on investment in these fashionable parts of the country will be lower in the next 10 years.

A new series of criteria for analyzing location will be developed by real estate investors. Rising costs of occupancy increase the desirability of major multi-use concepts or areas where high density and multiple uses will cause the concentration of these facilities. In-place infrastructure will command a premium over infrastructure yet to be built.

Increased occupancy costs will also encourage conversion of uses. Embryonic efforts are underway to acquire and convert industrial tilt-up buildings in good locations to office space. Tilt-up industrial buildings, often constructed for between \$10 to \$20 per square foot, can be converted to rough office space for an additional expenditure of approximately \$10 per square foot. For a total investment of \$25 to \$40 per square foot, converted office space can provide a back-office operation or incubator office space at rental rates of about \$10 per square foot, approximately one-third the cost of new, first-class office space.

Similar opportunities in major cities exist in converting industrial buildings close to the central business district to residential units. New York City is leading the country in this type of conversion. Industrial space can often be converted to residential at 50 percent of the cost of new residential space. At the same time, the costs of demolition are avoided and space is provided in a semi-prime location.

Regentrification efforts are just beginning and will be a focal point of real estate development in the '80s. As the cost of new construction continues to outpace the ability to pay, more efforts will be directed toward preserving and reutilizing existing structures in major metropolitan areas, especially those cities in the Midwest and Northeast where a supply of this kind of space exists due to the exodus of the population and employers to the Sunbelt areas.

All of these factors are extremely bearish on investment in raw land—a traditional form of investment for speculators and real estate investors. The appreciation anticipated from the ownership of land, particularly on the outskirts of major metropolitan areas, has been highly touted as an inducement to investment. This appreciation, though, is predicated on anticipated growth in new buildings and, thus, its absorption. The factors affecting the real estate market in the '80s will decrease the absorption rate of land throughout the U.S. The regentrification of existing buildings combined with the crisis in the ability to pay, and the realization by municipalities that the costs of building new infrastructure do not provide an adequate rate of return, will lead to higher allowable densities. A reduction in the absorption of land and a decade of high interest rates will impact the perceived value of land, reducing its attractiveness in terms of total rate of return. Land absorption will also be affected by the high costs of new construction and the allocation of available capital for investment opportunities other than new real estate.

The assumptions that underline these changing conditions are having a major impact on real estate as a prudent investment. The next 10 years will reflect a sharp transition in the industry as affordability comes to dominate real estate decisions, resulting in a decade of much slower development as the cost of construction becomes prohibitive relative to the user's ability to pay. Real estate investment in the '80s will move away from cost creation and focus on whether or not market depth is sufficient to support the number of users at the required costs.

A NOTE ON THE PLIGHT OF THE THRIFTS

by M.C. Findlay and R.V. Eastin

"We have waited for interest rates to fall, but we can wait no longer."

Roy Green, chairman
U.S. League of Savings Associations
(see Bibliography 20 at end of article)

Thus far in the 1980s, the plight of the thrifts has not been a happy one. By the summer of 1981, Bernstein-Macaulay was estimating that the S & L industry mortgage portfolio had a book value of \$500 billion but a market value of only \$400 billion. This \$100 billion loss was covered by only \$30 billion in equity and reserves. The only change in this scenario by the spring of 1982 was that accounting losses had reduced the latter dollar figure to the mid-20s.

The threat of substantial insolvency problems in the industry has helped to relax restrictions on interstate and even interindustry mergers. In addition, borrowing and capital requirements have been loosened, loss write-off periods have been lengthened, and a tax-exempt ("All-Savers") certificate has been authorized. By any standards, a fairly massive Federal rescue effort is underway for this industry (2, 4, 15, 16), and a larger one has been requested (20).

The thrift industry stoutly resists the application of the term "bail out" to this effort and contends that its historic task has been to encourage housing by assembling low-cost deposits to lend as mortgages. The combination of a high interest rate environment and consumer pressure caused deposit ceilings to be lifted, and the industry's cost-of-funds rose more rapidly than new, rate-sensitive mortgages could be added to the portfolios. The industry claims to be in a temporary condition until its mortgage

yields get back into line with its liability costs. Government assistance is seen as the most efficient way to bridge the gap. Observers claim, however, that with the need to reindustrialize America, housing should no longer receive special consideration.

With Federal funds at stake, the quality of economic analysis in this debate can be expected to be poor. Furthermore, the literature of the institution is still largely mired in a partial equilibrium, semi-efficient market framework. This paper reinterprets the plight of the thrifts in an efficient market framework and draws some policy conclusions.

View On An Efficient Market

The one-price law of markets prevails in an efficient market, and there are no *ex ante* windfalls. If it is assumed that thrifts both buy and sell loanable funds in such markets, several conclusions emerge:

1. *The mortgage rate is and was unsubsidized.* The tax laws may well encourage owner-occupied housing by allowing mortgage interest and property taxes to be deducted and not requiring the imputation of rental income. Furthermore, thrifts may possess some informational processing economies in homelending. However, the presence of banks, insurance companies, and other lenders with a broad range of portfolio choice in the mortgage market would raise serious doubt that mortgage yields diverged significantly from those of the capital market as a whole (for example, see 25, chapter 9). In this context, the portfolio losses have little to do with "subsidizing" mortgages, but reflect the result of borrowing short and lending long during a period of substantial unanticipated inflation (1).

2. *Bygones are bygones on the existing mortgage portfolios.* While it may be possible to depict market expectations about short-term rate movements from the term structure, long-term rates at a given point in time are essentially a fair game. The downsloping yield curve seen

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so far in the early 1980s may promise some cash flow relief to the thrifts on the near-term cost of their liabilities if short rates decline, but it promises no expectation of a reduction in their loss on the existing long-term, fixed-rate mortgage portfolio. In other words, the \$100 billion loss mentioned earlier can be viewed as an unbiased estimate of a wealth loss.

3. *Except for spare capacity or joint production, new lines of business indicate only normal profits at the margin.* Some participants in the thrift industry seem to feel that losses on the mortgage portfolio can be made back through the employment of broadened lending powers (for example, trust business, consumer loans). Yet each of these markets would appear competitive, such that a new entrant could expect only normal profits. As discussed here, greater profits can only be expected on such business if there is some jointness in production with the thrifts' existing business.

4. *Rate ceilings do not lower the cost of funds to thrifts at the margin and never have.* When a homogeneous productive input (loanable funds) is obtained from several sources simultaneously, it must follow that the price of the last unit purchased from each source is the same in equilibrium. Rate ceilings have the economic effect of creating a partial monopsony cartel (23) in which the explicit dimension of cost (that is, rate paid) is fixed, but the implicit dimensions (for example, branches, operating hours) are not. What happens is that members of the cartel compete along the uncontrolled dimensions until they dissipate all of the rents at the margin (13, 21, 22, 26). With price determined at the margin, this result ties back into the assertion of an unsubsidized mortgage.

5. *Rate ceilings only lower the cost of funds on the average under restrictive assumptions.* In the first place, it would be necessary to encounter economies of scale (that is, decreasing average costs) over at least some range of operations. It seems unlikely that significant economies exist in the paying of interest (explicit return) per se, but the implicit return (for example, branches, advertising)

has been found to involve economies of scale (3, 5, 6, 7, 8, 10, 11, 12). The existence of economies of scale is necessary, but not sufficient, to guarantee inframarginal returns. In this view, if there is an optimal scale, competitors enter at this scale until normal profits only are earned at optimal scale and less-than-normal profits are earned at any other scale. In practice, however, the restrictions placed on raising capital for new thrifts (for example, the prohibition of the payment of underwriting fees and the ownership distribution requirements), combined with the restrictions on expansion by existing associations, could have operated effectively to preclude any potential competitor from entering and quickly attaining optimal scale.

Theoretical Implications

From this rather unconventional view of the thrift industry, several disagreements with the existing literature may be noted:

1. *Thrifts cannot have been guilty of "mispricing" mortgages if they were price-takers.* Charges that thrifts miscalculated the course of long-rates or attempted to maintain a constant markup over their deposit costs in pricing mortgages [that is, Kaufman's definition of the "solvency problem" (19)] are meaningless in this context. Speaking *ex post*, one can only say that the thrifts suffered the misfortune of being in the wrong business at the wrong time. The most serious charge of *ex ante* error would be levied against those thrifts which, thinking they could outguess the market on the future course of long rates, further unbalanced the maturity structure of their portfolios to speculate (generally to their *ex post* regret).

2. *If there are and were inframarginal rents from rate ceilings, they probably have gone to offset windfall portfolio losses rather than to subsidize mortgages or as excess thrift profit.* One should consider a scenario of the last decade of thrift experience *without* inframarginal effects. The latter implies, operationally, that thrifts would not only be paying a fair market rate for funds obtained at the margin, but also on the average (for example, that there were no little old ladies with dormant million dollar pass-book accounts). The substantial rise in both long and short rates over the 1970s would have caused a massive rise in the cost of all funds obtained, as well as substantial opportunity losses on the mortgage portfolios. Finally, thrifts are rather thinly capitalized. Intuitively, one would expect a great many thrifts to be in trouble long before now under this scenario.

Only because of the unique nature of the thrift industry could such a situation exist even in theory (14). Deposit insurance makes the smaller saver indifferent to the financial condition of the association. The lending and merger policies of the FHLBB also desensitize the larger depositor, although the less secure institutions experience increasing difficulties obtaining this money during periods of stringency. Due to limited liability, shares of stock thrifts in even the worst shape would continue to command a price, as an out-of-the-money call option on an underlying asset of high variance.

The overall stability of this model leaves much to be desired. A situation where a windfall asset loss that had already occurred was being made up by a rent on regulated accounts, which could only be earned over time, is being postulated here. The latter must have proceeded for a given period of time before the former would have been fully compensated. The two are connected only in the sense that the older associations will tend to be larger and enjoy the greatest economies, while also having the largest proportion of low-rate mortgages.

Finally, as rate ceilings were legally removed or became *de facto* irrelevant, greater emphasis was placed on explicit return where few scale economies exist. Newer thrifts are found to be employing high explicit cost funds to act as mortgage brokers or even to invest in money market instruments (24). The older and larger associations under these circumstances retained the losses on their asset portfolios but lost the benefits of the ceilings to make them up.

3. *Court and legislative decisions have exacerbated the mortgage losses of the thrifts.* The Wellenkamp decision in California essentially voided the alienation and due-on-sale clauses of mortgages in that state; similar decisions in Federal court are currently being appealed. As a result, existing low-rate mortgages have become assumable. From the borrower's standpoint, these decisions have served to extend the maturity of an in-the-money call option from, perhaps, an average of 5-6 years up to as much as 30 years. With value preservation in efficient markets, the borrower's gain is a measure of the thrifts' loss.

Policy Implications

This model provides the following implications for public policy:

1. *The allowance of more flexible mortgages would seem desirable, but for somewhat different reasons than are often given (17, 18, 24).* In the first place, what has traditionally been called interest rate risk in the analysis of fixed-rate securities has become almost exclusively "unanticipated inflation" risk in recent years. The former was often discussed loosely in terms of interest rates fluctuating and the household sector having a fixed income and poor ability to forecast rates. The borrower would prefer a fixed-rate mortgage, and the thrift institution was viewed as providing a valuable maturity intermediation service.

Of course, financial markets and thrifts have also been poor forecasters over the post-war era. To the extent that rate changes are driven by unanticipated inflation, a borrower whose income and house price responded to inflation would find his/her net wealth subject to less variance if those debts also responded to inflation. In this context, the maturity intermediation of fixed-rate borrowing actually results in the creation of speculative risks (that is, uncovered options) and is of dubious social value (9).

The new mortgages contain most of the borrower advantages that have been won in the courts and also those viewed as likely in the future. This is a very rational response by the industry. It is similar to an auto company which, after constantly being forced to recall its cars to install consumer options for free, concludes that its only course of action is to sell all of its cars "fully loaded." In a competitive market, of course, all of these "consumer protection" features ultimately will be priced.

The shift of both inflation and legal risks to the borrower by the new instruments can be justified on another basis as well. To the extent that borrowers, as a group, may have more control over the political process than thrifts, then the former may see increases in inflation or erosion of the rights of contract as advantageous. They may reward those in the political system who confer such benefits on them and consequently create the potential for moral hazard for the thrifts. The new instruments tend to reduce this potential.

2. *A broadbased market rate, instead of a posted-price or cost-of-funds index, would seem the preferred basis for mortgage debiting rates.* In a purely efficient market, it would not matter which debiting interval or debiting index were chosen; competition over time would force the resulting instrument to be "correctly" priced. In the real world, there are advantages to using a broadbased, market-determined rate of equivalent maturity for the debiting index, such as a government security yield or average. First, if rates are changed every six months for example, then a rate on six-month instruments would have logical appeal as an index. Second, to prevent the appearance of manipulation a broadbased market rate would appear to be desirable. Finally, the cost-of-funds indexes, often employed in variable-rate contracts, are technically flawed. As the mix of funds raised by thrifts moves in the direction of higher explicit/lower implicit cost sources, the cost-of-funds index, which measures only the former, will rise no matter what has happened to interest rates. Likewise, as thrifts are able to obtain funds at the tax-exempt rate, the measured cost may fall, again without reference to a change in interest rates. This index appears to be a bizarre basis for writing debt contracts.

3. *The actual form and extent of Federal assistance to the thrift industry clearly involves value judgments and reflects a political question.* Nevertheless, it is possible to give a rough classification of the alternatives. A reduction in the inflation rate would clearly benefit thrifts without any cry of "bail out." The exploitation of existing economies of scale might benefit them at the expense of no identifiable victim. Those who have been enriched unexpectedly might be made to contribute, as well as those who historically have played the latter role. Finally, either because it contributed to the problem or because the breakdown of the thrift industry would have substantial macroeconomic effects, at least in the short run, the government itself might play a role.

Extensive merger and expansion of powers would appear to be the cheapest source of thrift relief. It is generally

believed that unexploited economies of scale with respect to financial institutions exists. At the least, the thrifts would appear to possess an excessive capacity to pursue their historically limited function in a deregulated environment. The prospect of merging with banks, going across state lines, turning deposit production branches into loan production operations as well, and the like, holds some prospect for profit relief. In any event, the removal of any artificial regulatory barriers to optimal scale would appear to be one of the cheapest solutions to the plight of the thrifts.

The current efforts at a Federal preemption of state jurisdiction over mortgage terms (for example, to override Wellenkamp) would appear to have some justification. Questions of wealth distribution are difficult to assess in a neoclassical economic framework. To the extent that these decisions conferred windfalls on existing borrowers, and especially to the extent that some or all of this must ultimately be paid by the Treasury, a case for overriding the decision can be made.

Beyond this point, the options become ambiguous. If one were to make the heroic assumption that all of the money remaining in passbook and other low-rate accounts were there for purposes of convenience yield (that is, no naive savers), which would give rise to inframarginal thrift profit, then a case could be made against raising the ceilings and the cost of these accounts. An example of the market's propensity to clear, however, is given by the surprising amount of passbook money which has gone into the tax-exempt certificates because the rate is higher even for low-bracket investors. Failing this, the final resort is to direct government assistance, which is beyond the scope of this model.

BIBLIOGRAPHY

1. Asay, M. R., *A Theory of Rational Mortgage Pricing: An Application of Contingent Claims Analysis*, unpublished PhD dissertation, University of Southern California, 1977.
2. "Bank Board Moves to Set S & Ls Sell Off Low-Yield Mortgages as Tax Shelters," *Wall Street Journal* (March 30, 1981), 12.
3. Bell, F. W., and Murphy, N. B., "Economies of Scale and the Division of Labor in Commercial Banking," *The Southern Economic Journal* (October 1968).
4. "Below-Market Loans for Ailing S & Ls Draw Support from Bank Board Chief," *Wall Street Journal* (March 13, 1981), 30.
5. Benston, George J., "Economies of Scale and Marginal Costs in Banking Operations," *The National Banking Review* (June 1965).
6. "Cost of Operations and Economies of Scale in Savings and Loan Associations," *A Study of the Savings and Loan Industry*, Federal Home Loan Bank Board, U.S. Government Printing Office, Washington, D.C., 1970.
7. "Economies of Scale of Financial Institutions," *Journal of Money, Credit and Banking* (May 1972), 312-341.
8. Brigham, Eugene F., and Pettit, R. Richardson, "Effects of Structure on Performance in the Savings and Loan Industry," *A Study of the Savings and Loan Industry* (1969), 971-1209.
9. Findlay, M. C., and Capozza, D., "The Variable Rate Mortgage and Risk in the Mortgage Market: An Option Theory Perspective," *Journal of Money, Credit, and Banking* (May 1977), 356-364.
10. Friend, Irwin, "Summary and Recommendations," *A Study of the Savings and Loan Industry*. Prepared for the Federal Home Loan Bank Board, Washington, D.C. (September 1969), 1-65.
11. Goldfield, Stephen M., "Savings and Loan Associations and the Market for Savings: Aspects of Allocational Efficiency," *A Study of the Savings and Loan Industry* (1969), 569-658.
12. Greenbaum, S. I., "Competition and Efficiency in the Banking System—Empirical Research and Its Policy Implications," *Journal of Finance* (June 1970).
13. Havrilesky, Thomas, and Schweitzer, Robert, "Non-Price Competition Among Banking Firms," *Journal of Bank Research* (Summer 1975), 113-121.
14. Hill, G. C., "Agency Discloses 266 S&Ls Had Net Loss in 2nd Half," *Wall Street Journal* (April 3, 1980), 2.
15. Hill, G. C., "Threat to Thrifts," *Wall Street Journal* (February 20, 1981), 1, 10.
16. Jackson, Brooks, "Regulators Seek to Ease Anxieties Over Dismal State of S & L Industry," *Wall Street Journal* (March 20, 1981), 27.
17. Janssen, Richard, "Troubled Thrifts," *Wall Street Journal* (October 17, 1979), 1, 17.
18. Janssen, R., and Foldessy, E., "After a Near-Disaster, Savings Banks Vow to Take a Tougher Stand in Making Loans," *Wall Street Journal* (May 20, 1980), 48.
19. Kaufman, George, "The Thrift Institution Problem Reconsidered," *Journal of Bank Research* (Spring 1972), 26-33.
20. Rosenblatt, Robert A., "S & Ls Seek \$10 Billion Aid Plan," *Los Angeles Times* (March 4, 1982).
21. Spellman, Lewis J., "Deposit Ceilings and the Efficiency of Financial Intermediation," *Journal of Finance* (March 1980), 129-136.
22. Spellman, Lewis J., "Non-Rate Competition for Savings Deposits," *Journal of Bank Research* (Autumn 1977), 171-178.
23. Stigler, George, "Price and Non-Price Competition," *Journal of Political Economy* (January 1968), 149-154.
24. "Trouble at the Thrifts," *Business Week* (November 19, 1979).
25. Van Horne, James C., *Financial Market Rates and Flows*, Prentice-Hall, 1978.
26. White, Lawrence, "Price Regulation and Quality Rivalry in a Profit-Maximizing Model: The Case of Banking Branching," *Journal of Money, Credit and Banking* (February 1976), 97-106.

IMPACT OF THE ECONOMIC RECOVERY TAX ACT OF 1981 ON REAL ESTATE TAX SHELTERS

by Ronald E. Copley

Passage of the Economic Recovery Tax Act of 1981 will directly affect investments in real estate tax shelters in contrasting ways [Hall, Meagher, 1981]. On the one hand, the Act should enhance investment because of substantially faster write-offs. Fixed recovery allowances are based on a 175 percent declining balance method over a 15 year period. The Act also reduces the maximum capital gains rate from 28 to 20 percent. Thus, taxes paid at time of sale will be considerably lower for high-bracket taxpayers.

On the other hand, the Act should diminish investment because of a reduction in tax rates. Individual tax rates will drop approximately 23 percent over the period from 1981 to '84 and the maximum tax rate decreases from 70 to 50 percent effective January 1, 1981. Thus, some marginal investors may no longer have an incentive to shelter income.

This paper examines these contrasting effects of the 1981 Act. Simulation analysis is employed in order to compare internal rates of return (IRRs) based on various assumptions of the old and new laws. The results show that the Act should increase investment for every tax bracket observed. Furthermore, the analysis indicates that the incentive to invest is more evenly distributed across all tax brackets and away from favoring only high income taxpayers.

The Model And Results

The model used to calculate after-tax flows necessary for determining the IRR of an investment is presented in Kau

and Sirmans [1980] and discussed in Wendt and Cerf [1979]. Assumptions of the analysis are contained in Table 1. IRRs are calculated assuming marginal tax rates for married individuals filing joint returns according to the schedule presented in Table 2.

The analysis for the old law assumes constant 1980 rates throughout the life of the investment. According to the new law, these rates were reduced by 1.25 percent for 1981, 10 percent for 1982, 19 percent for 1983, and 23 percent for 1984. Tax rates after 1984 are assumed constant at the 1984 rate throughout the remaining life of the investment.

For both the old and new laws, IRRs for the four different tax brackets are presented in Table 2. Three different capitalization and interest rates, and two different holding periods are presented in Tables 3 through 8. Data in all six tables indicate that the new law should greatly enhance investment for taxpayers in all four brackets and at every rate of interest. For example, in Table 3 where a five year holding period and a 16 percent capitalization rate are assumed, IRRs based on the new law exceed those based on the old law by significant amounts. In all the tables, the differential appears to be higher at lower interest rates and the longer holding period. Overall, the new tax law should enable higher rates of return under every set of assumptions.

Another interesting observation is derived from the data: Whereas the old law tended to encourage investment for higher income taxpayers, the new law tends to spread out that incentive to taxpayers in all brackets, as portrayed by Figures 1 and 2 that have been constructed from data contained in Tables 3 through 8. In both figures, dashed lines represent the old law and solid lines represent the new. Figure 1(a), which assumes a period of 10 years and a capitalization rate of 16 percent, shows that significantly higher rates of return are possible for higher brackets than for lower brackets under the old law. The steepness of the dashed lines should be noted.

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The author acknowledges the Center for Instructional Services at Memphis State University for providing microcomputer resources to conduct this analysis.

For the new law, however, this preferential treatment afforded to higher income taxpayers is smoothed out across all lower brackets. The solid lines are not as steep as the dashed lines. This observation is generally present in Figures 1(b) and 1(c) as well as throughout Figure 2. In fact, it appears to be more prevalent for the longer 10 year holding period and higher capitalization rates.

Summary And Conclusions

Results of this analysis have important implications for both shelter investors and promoters. Evidence presented clearly shows that the Economic Recovery Tax Act of 1981 should make tax shelters more attractive to investors, owing to faster write-off allowances and lower capital gains rates at time of sale. This incentive to invest more than compensates for any disincentive to invest caused by lower tax rates on ordinary income which means lower tax savings over the life of the investment.

In addition, the data indicate that the new law should more evenly distribute the incentive to invest over all tax brackets, instead of mainly the high tax brackets favored by the old law. This result should prove beneficial to the marketing efforts of shelter promoters.

BIBLIOGRAPHY

1. "Explanation of Economic Recovery Tax Act of 1981" (Chicago: Commerce Clearing House, Inc., 1981).
2. Hall, Craig, "Tax Bill a Boon to Property Investors," *Barron's* (August 10, 1981), 12-14.
3. Kau, James B. and Sirmans, C. F., *Tax Planning for Real Estate Investors* (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1980).
4. Meagher, James P., "Rehabs and Taxes ... 'Point Leverage'," *Barron's* (November 30, 1981), 12-14.
5. Wendt, Paul F. and Cerf, Alan R., *Real Estate Investment Analysis and Taxation* (New York: McGraw-Hill Book Company, 1979).

TABLE 1
Assumptions of the Analysis

1. No amortized financing costs or mortgage prepayment penalties.
2. Mortgage payments made annually on a 25 year mortgage.
3. For the old law, depreciation is calculated using 200 percent declining balance over a 30 year useful life. Of the total value, 80 percent is depreciable.
4. For the new law, depreciation is calculated using 175 percent declining balance over a 15 year useful life. Of the total value, 80 percent is depreciable.
5. The loan-to-value ratio equals .7.
6. Selling price of the property at time of purchase and time of sale equals \$225,000. Net operating income is constant and calculated as a fixed percentage (capitalization rate) of total value.
7. Equity equals .3(1-.7) of total value.
8. No preference items, no alternative minimum tax, and no investment tax credit.
9. Taxes due-on-sale were calculated by dividing the total gain-on-sale (selling expenses equal 5 percent of sales price) into excess depreciation recapture and capital gains with both being taxed at the individual's marginal tax rate in year of sale.

TABLE 2
Tax Rate Schedule for Married Individuals
Filing Joint Returns

Tax Bracket	Taxable Income	Marginal Tax Brackets (%)						(and beyond)
		1980	1981	1982	1983	1984	1985	
A	29,900-35,200	37	36	33	30	28	28	
B	45,800-60,000	49	48	44	40	38	38	
C	85,600-109,400	59	58	50	48	45	45	
D	215,400-	70	69	50	50	50	50	

Source: "Explanation of Economic Recovery Tax Act of 1981" (Chicago: Commerce Clearing House, Inc., 1981), 4.

TABLE 3

IRRs for Old Law vs. New Law
Holding period = 5 years; Capitalization rate = .16

Tax Bracket	IRR	
	Old Law	New Law
Panel A (interest rate = .10)		
A (lowest)	.1970	.2390
B	.1710	.2250
C	.1480	.2150
D (highest)	.1210	.1790
Panel B (interest rate = .13)		
A (lowest)	.1500	.1900
B	.1340	.1840
C	.1180	.1790
D (highest)	.0990	.1560
Panel C (interest rate = .16)		
A (lowest)	.1050	.1385
B	.0950	.1390
C	.0860	.1400
D (highest)	.0750	.1300

TABLE 4

IRRs for Old Law vs. New Law
Holding period = 5 years; Capitalization rate = .13

Tax Bracket	IRR	
	Old Law	New Law
Panel A (interest rate = .10)		
A (lowest)	.0870	.1420
B	.1020	.1594
C	.1150	.1620
D (highest)	.1300	.1650
Panel B (interest rate = .13)		
A (lowest)	.0640	.1170
B	.0710	.1210
C	.0768	.1180
D (highest)	.0843	.1150
Panel C (interest rate = .16)		
A (lowest)	.0390	.0910
B	.0380	.0800
C	.0364	.0720
D (highest)	.0350	.0610

TABLE 5

IRRs for Old Law vs. New Law
Holding period = 5 years; Capitalization rate = .10

Tax Bracket	IRR	
	Old Law	New Law
Panel A (interest rate = .10)		
A (lowest)	.0523	.1040
B	.0558	.1021
C	.0588	.0970
D (highest)	.0624	.0910
Panel B (interest rate = .13)		
A (lowest)	.0283	.0780
B	.0233	.0620
C	.0191	.0510
D (highest)	.0148	.0375
Panel C (interest rate = .16)		
A (lowest)	.0029	.0510
B	-.0110	.0185
C	-.0225	.0019
D (highest)	-.0360	-.0190

TABLE 6

IRRs for Old Law vs. New Law
Holding period = 10 years; Capitalization rate = .16

Tax Bracket	IRR	
	Old Law	New Law
Panel A (interest rate = .10)		
A (lowest)	.1440	.2310
B	.1690	.2360
C	.1900	.2440
D (highest)	.2140	.2540
Panel B (interest rate = .13)		
A (lowest)	.1240	.2000
B	.1415	.2020
C	.1565	.2050
D (highest)	.1730	.2090
Panel C (interest rate = .16)		
A (lowest)	.1010	.1658
B	.1110	.1640
C	.1190	.1620
D (highest)	.1280	.1595

TABLE 7

IRRs for Old Law vs. New Law
Holding period = 10 years; Capitalization rate = .13

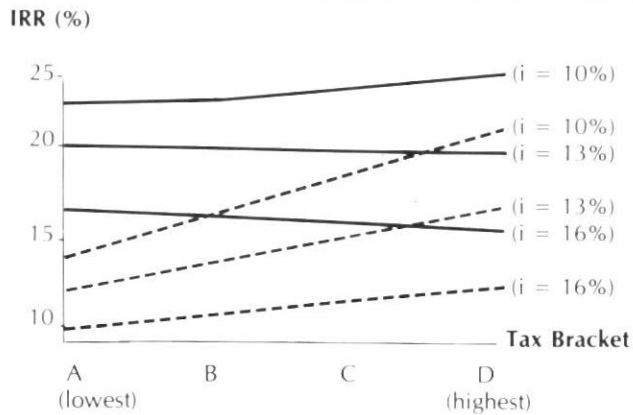
Tax Bracket	IRR	
	Old Law	New Law
Panel A (interest rate = .10)		
A (lowest)	.1090	.1780
B	.1230	.1790
C	.1350	.1800
D (highest)	.1485	.1820
Panel B (interest rate = .13)		
A (lowest)	.0875	.1450
B	.0940	.1425
C	.0995	.1386
D (highest)	.1055	.1340
Panel C (interest rate = .16)		
A (lowest)	.0627	.1070
B	.0607	.1010
C	.0590	.0920
D (highest)	.0525	.0805

TABLE 8

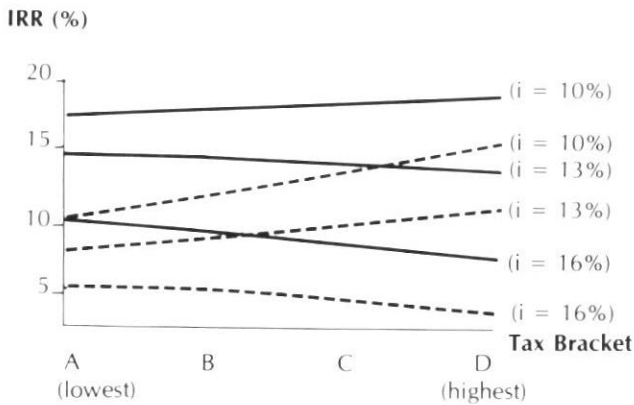
IRRs for Old Law vs. New Law
Holding period = 10 years; Capitalization rate = .10

Tax Bracket	IRR	
	Old Law	New Law
Panel A (interest rate = .10)		
A (lowest)	.0734	.1235
B	.0764	.1200
C	.0795	.1144
D (highest)	.0825	.1076
Panel B (interest rate = .13)		
A (lowest)	.0500	.0870
B	.0450	.0800
C	.0405	.0695
D (highest)	.0363	.0560
Panel C (interest rate = .16)		
A (lowest)	.0227	.0445
B	.0009	.0335
C	-.0027	.0180
D (highest)	-.0150	-.0015

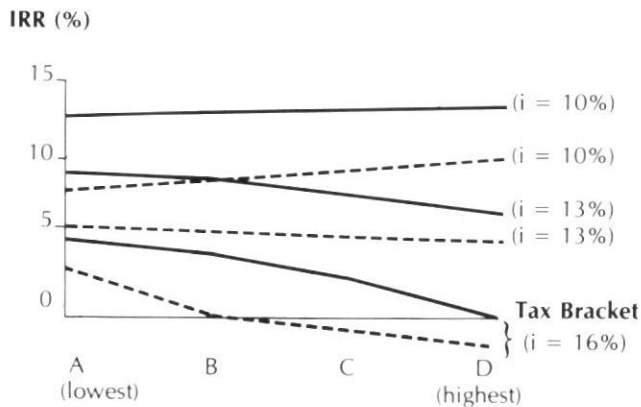
FIGURE 1*
Holding period = 10 years



(a) capitalization rate = 16%



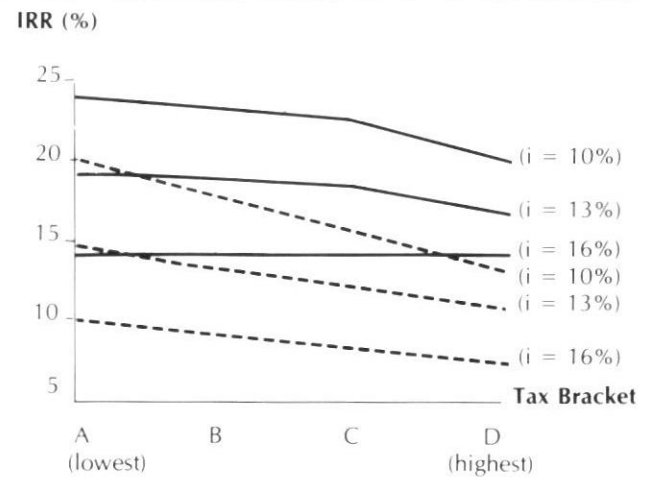
(b) capitalization rate = 13%



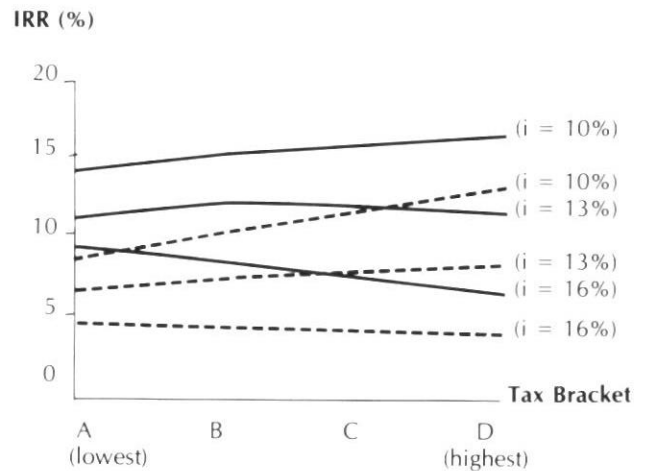
(c) capitalization rate = 10%

New Law —————
Old Law - - - - -

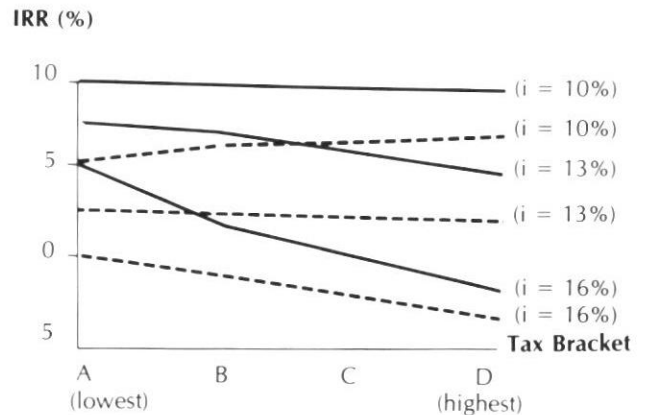
FIGURE 2*
Holding period = 5 years



(a) capitalization rate = 16%



(b) capitalization rate = 13%



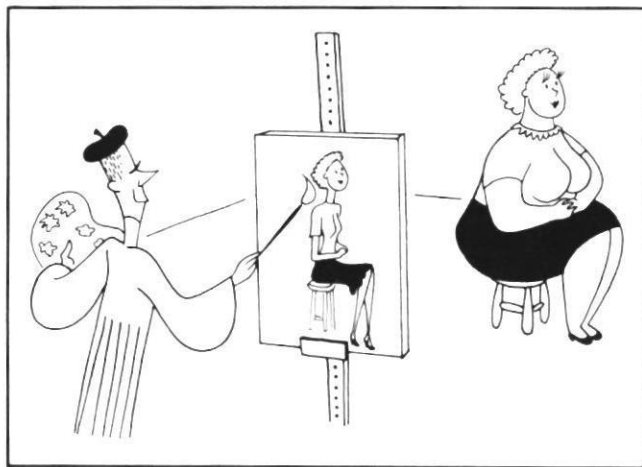
(c) capitalization rate = 10%

*Lines in these figures are approximately linear

SELECTING THE OPTIMAL DEPRECIATION METHOD FOR REAL ESTATE INVESTORS

by Jeffrey D. Fisher and Jerrold J. Stern

The Economic Recovery Tax Act of 1981 (ERTA)¹ is causing a major overhaul of many tax-planning techniques which were in use prior to that legislation. One of the prime areas in need of new decision rules is the determination of the optimal depreciation method for real estate investments. While the new Accelerated Cost Recovery System (ACRS)² virtually eliminates potential disputes between taxpayers and the Internal Revenue Service regarding depreciable lives and the use of component depreciation, the choice between accelerated and straight line depreciation for real estate must be viewed in a new light.



In selecting the optimal depreciation method for real estate, four key variables must be included in the decision

process: 1) the investor's estimated holding period; 2) the investor's marginal tax rate; 3) the applicability of the regular minimum tax; and 4) the discount rate. This article includes these variables in a model which is used to develop decision charts that contain comprehensive depreciation method decision rules for investors in recognition of ERTA. Investments in both new and existing conventional residential rental property, as well as commercial real estate, are included in the charts. Before discussing the model and the charts, though, a summary of the applicability of ACRS to real estate is provided.

Depreciation Under ACRS

Real estate investments acquired after 1980 which are depreciated on the basis of years rather than the units of production method³ are considered "recovery property." For such property, depreciation deductions must be computed in accordance with ACRS. Section 168(c)(2)(D) includes virtually all real estate investment property (Section 1250 property) in the "15 year real property" class. As 15 year property, real estate investments can now be depreciated using a 15 year "life" (recovery period), regardless of whether the property is new or used and irrespective of whether it is residential, rental or commercial.⁴ At the option of the investor, a 35 or 45 year recovery period may be used in place of the 15 year period.

With regard to depreciation methods, Section 168(b) allows real estate owners to use either Treasury Department tables⁵ which approximate 175 percent declining balance (with a switch to straight line), or straight line, if the 15 year recovery period is chosen. Straight line must be employed by investors using 35 and 45 year recovery periods. No matter which recovery period "life" is selected, it is considered a composite life. Section 168(f)(1) precludes the use of component depreciation for Section 1250 property.

As under prior law, excess depreciation from real estate is a tax preference item for the regular minimum tax.⁶

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Section 57(a)(12) provides that the excess depreciation tax preference for 15 year real property is the excess of the actual deduction over the deduction computed by the straight line method using a 15 year recovery period. Thus, only investors employing the 175 percent declining balance method incur the excess depreciation preference.

Aside from the regular minimum tax, depreciation recapture may reduce or eliminate the benefits of accelerated depreciation. For residential rental property, Section 1250 recapture applies just as it has in the past. The difference between actual accumulated depreciation at the time of disposition and accumulated depreciation based on the straight line method (referred to as "additional depreciation" or "net excess depreciation") is recaptured to the extent of gain. Depreciation recapture for commercial property, however, is much more severe under the new rules. Section 1245(a)(5) requires 15 year commercial property to be treated as Section 1245 property for recapture purposes if accelerated depreciation were chosen. Thus, *all* depreciation is subject to recapture at disposition to the extent of gain. For both residential and commercial property, there is no recapture if the straight line method is employed.

Conceptual Cost-Benefit Analysis Of Accelerated Depreciation

With the new provisions for depreciating real estate, the optimal choice between accelerated and straight line is certainly not obvious. Prior to formulating decision rules, however, Figure 1 is used to help conceptualize the tradeoffs between the two depreciation methods. Following a discussion of the figure, a model is developed and used to generate decision charts for depreciation method choice.

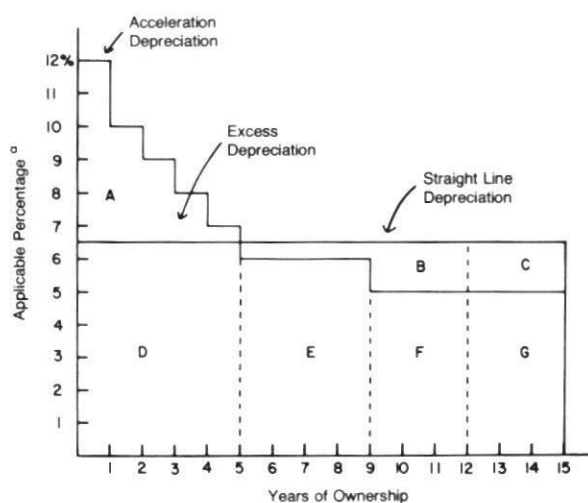
Figure 1 indicates the basic relationship between accelerated and straight line depreciation deductions over a 15 year period. For the sake of simplicity, the figure does not attempt to quantify the actual dollar amounts of annual depreciation deductions.

It should be noted that accelerated depreciation exceeds straight line through Year 5, thereby sheltering more income than straight line. The additional sheltered income thus avoids being taxed in the year in which it is earned. For investors subject to the regular minimum tax, the excess of accelerated depreciation over straight line (Area A in Figure 1) results in increased regular minimum tax liability.

After Year 5, accelerated depreciation is less than straight line. Thus, less income is sheltered (relative to straight line depreciation) after Year 5. The leveling off of accelerated depreciation after Year 9 represents the switch to straight line depreciation for the remaining depreciable life. After the straight line changeover, the remaining depreciation deductions are still less than what straight line would have provided.

For residential real estate investors using accelerated depreciation who dispose of their investments at a gain prior

FIGURE 1
ACCELERATED VS. STRAIGHT LINE DEPRECIATION UNDER ACRS



^a The annual depreciation deduction is computed by multiplying the applicable percentage by the unadjusted basis of the recovery property. (Section 168(b)(1)(B)(2))

to the end of Year 15, part or all of the gain is recaptured as ordinary income. The recapture potential can be thought of as "net excess depreciation," that is, the total of all excess depreciation through Year 5 minus the depreciation foregone after Year 5 from not having chosen straight line in the beginning. In terms of Figure 1, the recapture potential at the end of a 12 year holding period is Area A minus Area B. Not by mere coincidence, Area C in the figure is equal to the difference between Areas A and B. This should be expected since Area A must equal the sum of Areas B plus C. In other words, the total amount of depreciation taken over the recovery period is the same, regardless of the method chosen.

For commercial real estate investors who use accelerated depreciation, *all* depreciation taken represents recapture potential. Thus, for a sale at the end of Year 12, the recapture potential is equal to the sum of Areas A, B, D, E and F.

The chief difference between the depreciation of conventional residential and commercial real estate is the size of the recapture potential. However, regardless of the amount of recapture, the tax increase caused by it does not occur until the year of disposition (that is, Year 12), thereby decreasing its impact in terms of present value.

In contrast with the issue of recapture, the regular minimum tax potential is the same for both conventional residential and commercial investors. Moreover, when present, the regular minimum tax liability occurs on an annual basis and is largest in the earliest years, thereby increasing its impact in terms of present value.

Cost-Benefit Of Present Value Model

Given the basic cost-benefit issues discussed above, a more formal representation of the tradeoffs between accelerated depreciation and straight line is now presented. The equation represents the present value of the incremental tax benefit of accelerated depreciation over straight line. An investor at a given marginal tax rate would choose accelerated depreciation if the present value expressed by the equation is positive for a given discount rate, anticipated holding period, and set of depreciation deductions. Otherwise, straight line depreciation would be chosen.

Assuming a sale at the end of the holding period at a price at least as large as the purchase price, the present value of the incremental benefit of accelerated over straight line depreciation can be expressed as follows:

$$PV = \sum_{i=1}^n \frac{(DA_i - DS_i)t_o}{(1+k)^i} - \frac{\sum_{i=1}^n (DA_i - DS_i)t_o}{(1+k)^n} - \frac{\sum_{i=1}^n DS_i}{(1+k)^n} (t_o - t_g) - \sum_{i=1}^{t'} \frac{(DA_i - DS_i)}{(1+k)^i} \quad (.15)$$

Where:

- DA_i = accelerated depreciation in year i
- DS_i = straight line depreciation in year i
- t_o = marginal ordinary income tax rate
- t_g = marginal capital gains tax rate (40% of t_o)⁷
- k = after-tax discount rate
- n = holding period (n corresponds with Year 12 in Figure 1)
- t' = year after which annual excess depreciation would be less than zero (t' corresponds with Year 5 in Figure 1)

The first term on the right-hand side of the equation includes the present value of the tax benefit from the annual incremental depreciation deductions through Year t' (that is, Year 5 in Figure 1) from using accelerated depreciation. However, since straight line is greater than accelerated *after* Year t' , the first term also includes the present value of the incremental straight line deduction tax benefits foregone after Year t' .

The second term reflects the present value of the tax on the Section 1250 recapture of net excess depreciation (additional depreciation) at disposition. The third term represents the present value of the tax on the balance of the depreciation (the straight line depreciation) which applies only for commercial real estate investors using accelerated depreciation. By utilizing $(t_o - t_g)$, the third term reflects the incremental tax effect of the straight line portion of the depreciation being taxed at ordinary in-

come tax rates rather than as a capital gain. The final term captures the present value of the cost of the regular minimum tax and applies only for investors who are subject to this tax.⁸

Depreciation Method Decision Charts

Using the equation, a computer simulation program was developed to generate a series of "indifference curves"⁹ which are included in the decision charts in Figures 2-4. Each chart comprises a continuous range of discount rates and holding periods. By comparing various discount rates with potential holding periods, an investor can readily ascertain which depreciation method is best given that investor's marginal tax rate.

FIGURE 2
DEPRECIATION METHOD DECISION CHART FOR
COMMERCIAL PROPERTY — WITHOUT REGULAR MINIMUM TAX

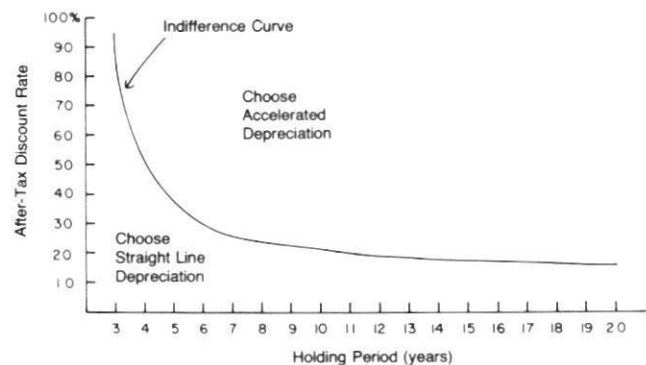
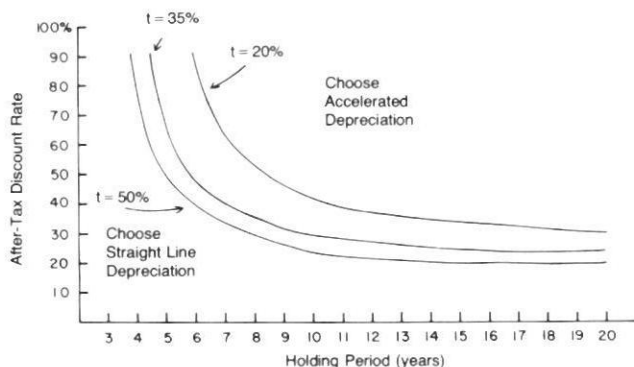


Figure 2 is the decision chart for commercial property assuming the investor is not subject to the regular minimum tax. For illustrative purposes, assume an investor is anticipating a 10 year holding period. If this investor's after-tax discount rate were 20 percent, he or she would be indifferent between choosing accelerated over straight line depreciation. In other words, the present value of the incremental benefits of accelerated depreciation over straight line would be zero. If the anticipated holding period and/or the discount rate were increased, the accelerated method would be the optimal choice. Conversely, if the holding period and/or discount rate were reduced, the straight line method would provide a larger incremental tax benefit.

The single indifference curve in the Figure 2 decision chart applies for all marginal ordinary income tax rates for commercial property investors not subject to the regular minimum tax. The lack of importance of the marginal tax rate for these investors is explained by noting that each of the terms in the equation includes the marginal regular income tax rate (t_o), except for the regular minimum tax term (the last term). When the present value equals zero and both sides of the equation are divided by t_o (ignoring the last term), t_o simply drops out of the equation for those taxpayers not affected by the regular minimum tax.¹⁰

FIGURE 3
DEPRECIATION METHOD DECISION CHART FOR
COMMERCIAL PROPERTY — WITH REGULAR MINIMUM TAX
(t is the marginal tax bracket for the indifference curve)



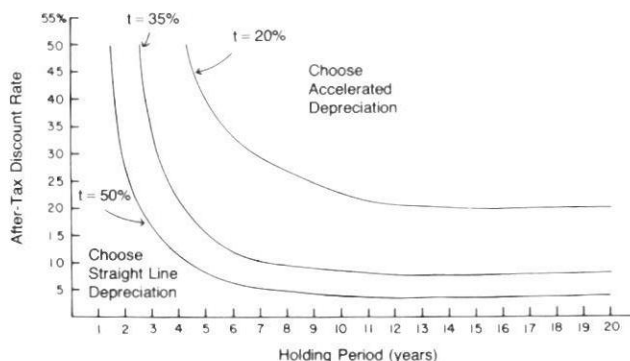
Figures 3 and 4 function in the same manner as Figure 2. The area to the right of any given indifference curve represents combinations of discount rates and holding periods for which accelerated depreciation should be used; the area to the left represents combinations of discount rates and holding periods for which straight line depreciation should be used. This result occurs because of the relationship between the present values of the incremental benefits and costs of accelerated depreciation. At either higher discount rates or longer holding periods, the present value of the incremental benefit of deferring income through accelerated depreciation increases relative to the costs of Section 1245 recapture and, if applicable, the regular minimum tax.

Figure 3 shows the indifference curves for commercial property assuming the regular minimum tax applies for all investors. The shifting of the curves to the right (compared with Figure 2), as a result of the regular minimum tax, should be noted. Thus, it takes longer holding periods for a given discount rate (or higher discount rates for a given holding period) to justify using accelerated depreciation. The investor's tax rate also now affects the indifference curves because the regular minimum tax is assumed to be 15 percent regardless of the ordinary income tax rate.

There is no decision chart for conventional residential rental housing investors who are not subject to the regular minimum tax. Under the assumptions made in this marginal tax rate analysis, residential investors will *always* gain by using accelerated depreciation. For such investors, the only "cost" is the recapture of net excess depreciation upon sale. In all cases, using marginal tax rates, the present value of that cost is less than the present value of the tax savings from using accelerated depreciation.

Figure 4 includes the decision chart for conventional residential rental property, assuming investors are affected by the regular minimum tax. Since accelerated depreciation for residential property results in Section 1250 recapture (for net excess depreciation) rather than Section 1245 recapture (for all depreciation), the accelerated method becomes desirable at much lower discount rates and shorter holding periods as compared with

FIGURE 4
DEPRECIATION METHOD DECISION CHART FOR
CONVENTIONAL RESIDENTIAL RENTAL PROPERTY —
WITH REGULAR MINIMUM TAX
(t is the marginal tax bracket for the indifference curve)



commercial property. For example, for an investor in the 50 percent tax bracket, at a 10 percent discount rate, accelerated depreciation would be chosen for anticipated holding periods of about five years or longer. It is interesting that in this case there is no additional benefit for holding periods beyond 15 years, since net excess depreciation is zero and there is no recapture. Thus, after the 15 year point the indifference curves are flat.

Choosing the optimal depreciation method under the new Accelerated Cost Recovery System can be a complicated task. The need for decision charts arises from the interplay between the present values of the tax savings from annual depreciation deductions, depreciation recapture and the regular minimum tax. However, with the model and decision charts developed here, the tradeoffs are identified and the choice of depreciation method is more straightforward.

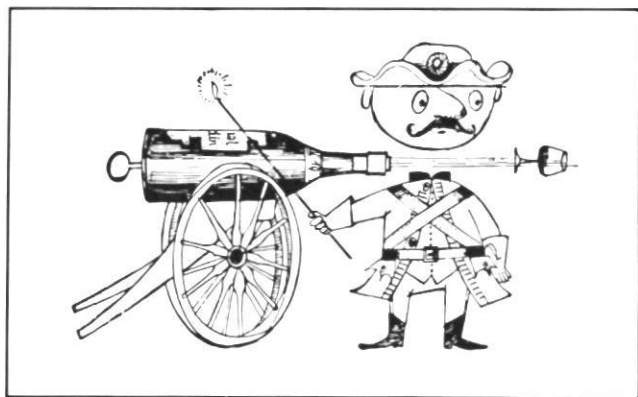
NOTES

1. P. L. 97-34, 8/13/81.
2. Section 168.
3. Sections 168(a) and (e).
4. Section 168(c)(2)(D).
5. Treasury Department News Release, September 10, 1981.
6. Section 57(a)(2).
7. The term $(t_0 - t_g)$ can also be expressed as $(.6t_0)$ because t_g is 40 percent of t_0 for taxpayers other than corporations. [Section 1202(a)]
8. In some instances, the last portion of the fourth term should be $(.15)(1 + \frac{t_0}{2})$ rather than $(.15)$ in order to capture the effect of both the flat 15 percent regular minimum tax rate and the change in the investor's regular income tax liability due to the incremental depreciation. If the incremental depreciation causes the regular income tax liability to decrease, one-half of that decrease can reduce the exclusion in the regular minimum tax computation (assuming the regular income tax liability is in excess of \$20,000), thereby causing a like amount of tax preferences to be subject to the 15 percent tax. The $(\frac{t_0}{2})$ adjustment factor is not necessary for marginal tax rates lower than 45 percent. Moreover, simulations performed using the adjustment factor for the 50 percent tax bracket investor caused virtually no change in the indifference curve for that investor.
9. A source listing of the computer program used for this analysis will be made available by notifying the authors.
10. To actually perform this computation, $(t_0 - t_g)$ in the third term of the equation would have to be replaced by $(.6t_0)$. See *supra* note 8.

NEW FINANCING TECHNIQUES—PRACTICAL PROBLEMS AND TAX IMPLICATIONS

by Mark Lee Levine

The use of "new" financing techniques in the acquisition of single-family homes, commercial office buildings and other structures has raised tax implications, some of which will be examined here. Many of these techniques are not necessarily "new" but have been modified to adjust for current needs.



Market interest rates prohibit many buyers, especially in the residential market, to undertake financing by the traditional methods. Sellers are being asked to finance the sale of their own property by carrying back a purchase money mortgage or other instrument to secure a portion of the purchase price that is owed to the owner. Many lenders are asked to modify high interest rates in exchange for other forms of compensation such as deferred interest, accruing interest charges in the early years while adjusting payments upward each year to reach the market rate of interest, or other adjustments in which the lender takes a "piece of the action" in the form of ownership, participation loans or other sweeteners.

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Nature Of New Financing Techniques

Recent articles have emphasized the many types of alternative mortgage instruments (AMI).¹ A few types of mortgages and deeds of trust in the market are:

- *Graduated Payment Mortgage (GPM)*—payments are lower in the beginning and increase at a later time to allow for the lower initial rate.
- *Pledge Account Loan (PAL)*—uses pledged savings to a more favorable mortgage rate.
- *Renegotiable Rate Mortgage (RRM)*—the lender and borrower are not locked into a longer term of Fixed Rate Mortgage (FRM), but the rates are renegotiated at given intervals.
- *Variable Rate Mortgage (VRM)*—interest rates vary according to an agreement of the parties involved.
- *Shared Appreciation Mortgage (SAM)*—the lender shares or participates with the borrower in the appreciation in the property.
- *Price Level Adjusted Mortgage (PLAM)*—a mortgage or note factor that is adjusted based on a price level consideration.
- *Reverse Annuity Mortgage (RAM)*—allows payments by the lender to the borrower, who may receive a monthly payment which increases the amount outstanding on the indebtedness. At the end of a given period, the loan is either paid back by the sale of the property or refinanced.
- *Fixed Debt with a Life Annuity-type Loan (FDLA)*—allows for interest-only payments and then an annuity is purchased.
- *Graduated Payment Adjustable Mortgage (GPAM)*—incorporates the factor of graduated payments but also adjusts the interest rate.²

Many other types of "creative" loans exist and have been discussed in other articles.³

Use Of New Financing Techniques

Some of the areas that both the lender and borrower must be concerned with in using these financing techniques include:

- *Securities*—The use of the SAM and perhaps other “creative” techniques can create a security⁴ as defined under the 1933 Securities Act.⁵ An investment contract under the Act can simply involve a situation in which money is invested with the expectation of profit and through the efforts of another, as when one buys stock in a company and looks to the board of directors and the officers to determine whether or not the company will generate a profit. Another example is a situation where a real estate broker helps a client invest in a home by acting as a lender and/or controlling the rental of the property, and with the investor places equity funds into the investment in the initial stage.⁶
- *Types of Instruments*—The choice of the instrument and a detailed examination of its language are obviously crucial, since any instrument may have flaws and newer instruments have not been tested by the Courts in many instances.
- *Valuation*—How to value a given property⁷ can become an issue in connection with the SAM and similar devices. If the lender participates in the appreciation, the question is how to measure the appreciation—not always an easy decision.
- *Conflicts of Interest*—These exist in a number of situations, especially where there is an equity kicker or participation by the lender. Questions include: Are there controls as to when the property is sold? When new financing takes place? When and how determinations are made as to improvements or modifications on the property?
- *Usury*—Interest rates in many jurisdictions may be in excess of those allowed by law. In the residential field it is common for states to have a limitation on the maximum interest rate that can be charged.
- *Federal and State Truth in Lending Issues*—Under Federal⁸ and state law, disclosures required under truth in lending must be considered.
- *Liens*—Questions include: Does the lender have an actual line on the property, or is he/she an equity participant? Is he/she a partner? Most instruments drawn by the lenders will provide that the lender is in a creditor, not owner, capacity. This posture is consistent with the Federal Home Loan Bank Board concept, but may not resist challenge in every case. Also, does the lender in a SAM or other instrument with an adjusting factor create a new lien for the adjustment factor? For example, if the property goes up in value and the lender in question has a first lien, does the lender also have a first lien on the increased value? Does the lien only affect the borrower's or homeowner's interest, or also the lender's interest? Does the lender have a priority lien over only the amount initially loaned and not the appreciation, that is, the entire amount? (Other issues in this area should also be considered.⁹)
- *Due-on-Sale Clauses*—In some jurisdictions, the due-on-sale clause is not enforceable against the party who is occupying a home on a residential-use basis, as opposed to the party who is an investor.¹⁰
- *Entity-Structure Ownership*—The nature of the ownership may have tax implications. The SAM and other participating loan arrangements, as well as some of the other types of alternative mortgage instruments, may have ownership interests in multiple parties, as in the case of tenants in common, joint ventures and partnerships. It is also possible to structure a situation in which the lender not only makes the loan, but also is granted an option to purchase an undivided one-half interest (or other interest) in the property. This option might give another alternative means for the lender to participate in the appreciation of the property. As such, it may not be a SAM or similar instrument in form, but an equity kicker. It is emphasized here that the form of entity or structure does affect tax issues.¹¹
- *Yield Calculations*—Along with questions of the structure, usury rates and other issues raised above is the question of the exact yield of any given instrument and how one makes the calculation. This determination is important under the Real Estate Settlement Procedures Act, truth in lending and usury laws, and is discussed in detail.¹²
- *Default Provisions*—In situations involving adjustable mortgage instruments (GPM, GPAM, RRM), the borrower may not be unable to make payments and the investor-lender may need to foreclose because of default, which raises issues as to how one exercises rights on default by a “co-owner.” Other questions on foreclosure and issues regarding the Bankruptcy Reform Act of 1978 and state limitations exist.¹³
- *Death, Bankruptcy, Dissolution, etc.*—Issues may exist on how to handle death or other forms of incapacity in this type of transaction. For example, in a SAM does one assume that the beneficiaries will pick up the position of the decedent-borrower?
- *Marketability of Loans*—Lenders are concerned with the marketability of the loans they make under alternative mortgage instruments.¹⁴ Because of this uncertainty the secondary mortgage market is hesitant in many instances to accept them.
- *Lack of Data*—A mere lack of data to handle the interpretation of these creative instruments or alternative mortgage instruments is another problem.

Financing Techniques And Tax Issues

A great deal of liability is generated when utilizing these instruments; lawyers will litigate the effects for years to

come. As mentioned earlier, whether a lender is only a lender or whether he/she is participating in a form of joint venture or partnership is a case in point. Attorneys who draft the instrument for the lender will probably provide language to eliminate joint venture interpretations of the transaction so that the lender is not caught with liability if the venture fails. Whether or not these statements will eliminate liability remains to be seen.

Failure to contemplate the implications of a given action, such as a due-on-sale clause, usury questions, default provisions, issues on divorce, etc. can generate additional claims against those parties who are involved in utilizing alternative mortgage instruments. It is unfortunate that the great zeal of lenders, borrowers, real estate licensees and others to generate sales and loans has caused people to rush in and use instruments that have not been properly examined. Many issues will not be seen, let alone resolved, until hindsight produces greater wisdom.¹⁵

As an example, the SAM is used to show some of the tax problems that would be generated when utilizing this instrument.

1) Code §280A: Business Use of Home, Rentals, etc.—limits deductions where a home or vacation home is used for business as well as personal use. If a parent, as an example, is involved in a SAM or other equity participation arrangement with his/her children as the occupants of the property, the expenses incurred relative to the house would be denied to the extent that they exceed income, except for expenses that are deductible even without regard to income such as property taxes, interest expense on the house, and casualty losses.

The real question is whether or not Code §280A applies. This rule states under Code §280A(a): "Except as otherwise provided in this Section, in the case of a taxpayer who is an individual . . . , no deduction otherwise allowable under this Chapter shall be allowed with respect to the use of a dwelling which is used by the taxpayer during the taxable year as a residence." Since the Section goes on to define use as including certain related parties, the Code would seem to apply to the parent-child relationship as described. Thus, use by the children could be deemed to be use by the parents and vice versa. As such, however, it could limit the deductibility for the parents of what might have been deductible rental expenses for them, if they owned one-half of the house, one-half of maintenance expenses, insurance expenses, etc. If it is within Code §280A, such items may not be deducted if those expenses exceed the income after adjustment for the rental items that would otherwise be deductible such as interest, taxes and casualty losses.

Although the rules under this Section have recently been eased as a result of new legislation, the position must still be considered. The change comes about as a result of Code §280A(d)(3), which provides: "A taxpayer shall not be treated as using a dwelling unit for personal purposes by reason of rental arrangement for any period if for such period such dwelling unit is rented, at a fair rental, to any person for use as such person's principal residence." In

other words, one will not be treated as *using* the residence on a personal basis if the property is rented at a fair rental rate. What is "fair" remains to be interpreted.

There is a specific reference under the Code Section to rentals involving shared equity financing. Code §280A(d)(3)(B)(i) provides that the above rule will apply "to a rental to a person who has an interest in the dwelling unit only if such rental is pursuant to a shared equity financing agreement." The shared equity financing agreement is defined in the Code to include two or more persons who acquire a qualified ownership interest in a dwelling unit, where the person or persons holding one or more of those interests is entitled to occupy the dwelling unit for use as a principal residence and is required to pay rent to one or more other persons holding the qualified ownership interest in the unit.

Other restrictions exist which enable one to qualify for the exception in order to avoid the application of Code §280A. New legislation has eliminated some of the prejudice created by cases involving rentals to family members and shared equity financing arrangements. However, not all shared equity financing arrangements will fall within the restrictions of the Code Section. If they do not, participation in an equity arrangement may result in the application of Code §280A. If this Section is applicable, deductions will be limited to the interest, taxes and casualty losses on the property, or if the gross income exceeds these amounts, then other legitimate business expenses could be deducted up to the maximum of the income generated from the property.¹⁶

2) Code §163(d)(4)—limits the deductibility of investment interest. The SAM by definition would provide that the lender lend money at a lower rate and receive a substantial payment in future years when the house is sold or otherwise refinanced. Is the lump sum payment which might be paid to a lender five years down the road after making the initial loan, interest to the lender? Is it deductible to the borrower-owner? This Code Section limits the deductibility of interest to net investment income, plus \$10,000 and other adjustments.¹⁷

3) Capital Gain or Ordinary Income—It is questioned whether or not the payment on a SAM which is received sometime in the future is interest or capital gain to the lender. The lender might argue that he/she participated in an investment and enjoyed a capital gain. This may be more important for individuals who make loans in a shared participation manner. Part of the problem might be avoided by use of the option technique.

4) Code §483—can come into play in a sale where the interest rate charged by the seller-lender on an owner carry-back or purchase money mortgage is insufficient based on an interpretation under Code §483 and Regulations thereunder. The insufficient interest is generated under the theory that the sales price actually has precomputed or unstated interest, and is deemed to exist where the interest rate charged is less than 9 percent simple interest. A failure to charge at least 9 percent will result in interest being deemed to exist in the sales price at the rate

of 10 percent compounded semi-annually. (Certain exceptions exist such as sales of land between related parties where the interest rate imputed is 7 percent subject to other limitations.)

It is questioned whether or not this Section can be applied to a lender and a borrower who are involved in a SAM. Technically, since the only case under the rule that would be covered is a sale or exchange and this is a loan, the rules would not apply. If it is argued, however, that the transaction actually involves a sale of an interest by the borrower to the lender of a right to participate in profits, again in consideration of a loan with an interest rate lower than that permitted, Code §483 may apply but it is unlikely.

Are there tax implications from generating interest-free loans or other loans of a favorable interest rate? The answer could be yes, although there are many court decisions at this time which have indicated that interest-free loans, such as loans from parents to their children, would not generate gift tax. This same issue has been raised as to whether income tax would be generated by an interest-free loan. The general position held is that interest-free loans do not generate income or gift tax.¹⁸

5) Accrued Interest—As mentioned earlier, this factor may create problems for both the lender and the borrower.

6) Sale of SAM—Is it possible for the equity participant-lender to sell his interest before the interest has been paid? If this happened, would the lender generate capital gain as opposed to ordinary income?

7) Accounting Method—may differ between the borrower and lender. If the lender is on a cash basis and there is no constructive receipt, the lender would not take into income any monies until received. On the other hand, if the lender is on an accrual basis, the accrued interest or other benefit would be taken as income. In some loans on which the interest is accrued and added to the outstanding balance, this would be taxable to the lender. If the "interest" is earned through a SAM, and since that interest or amount of appreciation cannot be determined, then perhaps nothing should be taxed currently.

In the reciprocal situation, the borrower *would* take a deduction currently, when on an accrual basis for accrued interest, but *would not* take a deduction currently when on a cash basis and not paying the interest currently.

8) Allocation of Income and Deductions among Taxpayers—Code §482 provides for an allocation of gross income, deductions, credits or allowances among organizations, trades or businesses, if the Secretary of the Treasury determines that the distribution made by the parties or other apportionment or allocation is made on an unreasonable basis and might produce an evasion of taxes, or is necessary to clearly reflect the income of those involved. This Section is important because it may allow the government to attempt to adjust the deductions and other items that the parties claim in regard to many ar-

rangements, even some equity participation loans or other alternative mortgage instruments.

9) Alternative Minimum Tax—Code §55 of the Internal Revenue Code of 1954, as amended, imposes an alternative tax on a taxpayer where the alternative produces a greater tax by this calculation as opposed to the regular tax with other tax preferences. The alternative minimum tax is made up of the gross income for the taxpayer in the given year, reduced by the sum of deductions allowed for that year, with certain other adjustments, and also increased by an amount equal to the sum of tax preference items dealing with excess itemized deductions and the capital gain deduction. Since interest is an excess itemized deduction, that is, a deduction from adjusted gross income to reach taxable income, it can cause a tax preference where there is a substantial amount of itemized deductions.

With an alternative mortgage instrument in the form of a SAM, in the year of disposition there may be a substantial amount of interest payments made to the seller of the home by the borrower, who would claim a substantial deduction for this interest which in effect goes to the lender-other party on the SAM. Since this substantial interest deduction can produce a tax preference, it could result in additional tax due by the taxpayer in the year of disposition.

10) Non-Profit Activities—It is possible for, as an example, a parent to be involved in a SAM or other equity program with his/her children or other relatives. If the activity produces a loss for the investor-parent, it could constitute an activity not engaged in for profit within the meaning of Code §183: "In the case of an activity engaged in by an individual or an electing small business corporation, . . . if such activity is not engaged in for profit, no deduction attributable to such activity shall be allowed under this Chapter except as provided in this Section." In other words, the intent of this Section is to eliminate the old hobby loss positions and to make sure that the activity is entered for profit.

Some deductions are allowed whether or not the activity is for profit. This is provided under Code §183(b) and includes such items as interest, taxes and casualty losses.

Many tax issues exist with creative or new financing. The points raised here are only examples of the problems that might be raised in this area. Since many unresolved tax issues surround the use of creative financing or alternative mortgage instruments, all parties should recognize this and proceed with caution when using these tools to generate a more active market.

NOTES

1. Stanley Iezman, "The Shared Appreciation Mortgage and the Shared Equity Program, A Comprehensive Examination of Equity Participation," *Real Property Probate and Trust Journal* (Fall 1981). See also Stanley Iezman, "Alternative Mortgage Instruments: Their Effect on Residential Financing," *Real Estate Law Journal* 3 (1981).

2. Ray Sweat, "AMLS, GPAMLS, and ARMS," *Title News* (December 1981).

3. Joseph McKenzie, "A Comprehensive Look At Shared-Appreciation Mortgages," *Federal Home Loan Bank Board Journal* (November 1980).

4. For more in the area of securities, see Mark Lee Levine, *Real Estate Securities and Syndications, An Introduction* (Denver: Professional Publications and Education, Inc., 1981).

5. See *SEC v. W.S. Howey Company*, 328 U.S. 293 (1946). See the Securities Act of 1933, Section 2 (1), as amended.

6. Mark Lee Levine, "When Does Real Estate Become A Security?" *The Real Estate Market Advisor* (January 1982).

7. See *supra*, Note 1. See also Michael Chandler, "Equity Participation—Creativity Unlimited," *Real Estate Today* (June 1981); and Mark Lee Levine, "Tax Implications of Shared Appreciation Mortgages," 59 *Taxes* 487 (July 1981); FHLBB Res. #80-610, September 30, 1980, as amended, 45 *Federal Register* 66801 (1980).

8. Federal Truth in Lending Act, 15 *USC* §1601, *et seq.*, along with Federal Regulation Z.

9. See *supra*, Note 1. See also Federal Tax Lien Act of 1966, IRC §6321-§6326.

10. See the Real Estate Settlement Procedures Act which discusses some of these implications under 12 *USC* §2601, *et seq.*; the Federal Truth in Lending Act, cited *supra*, Note 8; Dunn and Nowinski, "Due On Transfer Clauses, An Update," *Real Property Probate and Trust Journal* 291 (1981). See also Iezman cited *supra*, Note 1, 522.

11. See McKenzie *supra*, Note 3. See also Levine *supra*, Note 6.

12. Michael Chandler, cited *supra*, Note 7.

13. Iezman, cited *supra*, Note 1.

14. *Ibid.*

15. Mark Lee Levine, *Realtors' Liability* (J. Wiley & Co., 1979); "Real Estate Malpractice: Areas of Liability," *Trial* #1, (January 1982), 33.

16. See Mark Lee Levine *supra*, Note 5.

17. See Mark Lee Levine, *Real Estate Transactions, Tax Planning and Consequences*, Third Edition, West Publishing Co. (1981); see also Mark Lee Levine, *Real Estate Tax Shelter Desk Book*, Third Edition, Institute for Business Planning (1982). Also, under Code §163(d)(1), there is a limitation on the amount of interest that one might deduct, where it is investment interest. The Code provides that where the taxpayer, excluding a corporation, has investment interest, which means the excess of investment or passive income over investment expenses, the taxpayer is limited to the amount of this type of investment interest that can be deducted. The deduction is limited to \$10,000 plus the amount of net investment income that the taxpayer has and certain excess deductions.

The next question is whether or not the shared-appreciation mortgage setting or other alternative mortgage instrument, which results in a substantial amount of interest deductions claimed by the borrower in the given year, produces this limitation. If one assumes that the payment made in the year of disposition by the borrower to the lender is an interest deduction, it may fit within the rule. If it does, and if there is not sufficient investment income by the borrower from other property, the deduction may be limited for the current year.

18. See *Lester Crown*, 67 TC 1060 (1977), *aff'd* 585 F. 2nd 234 (7th Cir. 1978); for a collection of these cases and a discussion of this issue, see Levine, *Real Estate Transactions, Tax Planning*, cited *supra*, Note 17.

POLICY, PROBLEMS AND RESEARCH ISSUES FOR OWNED MULTIFAMILY HOUSING

by James D. Vernor

Demographic and economic changes will make the condominium a more prevalent—although not problem-free—lifestyle for many households in the future. This paper attempts to identify various of these problems and issues and to assemble ideas for research opportunities in this important area of housing. While the label “condominium” is used for convenience, it should be understood that the interest is more broadly focused on all forms of owned multifamily housing—including cooperatives, fee-simple townhouses, zero-lot line houses, *de minimis* planned unit developments and other variants.

A growing demand for owned multifamily housing can be expected from the continuation of current trends. Increasing land and building costs, and historically high interest carrying charges combine to push traditional single-family detached housing beyond the budget capacity of many households. For some of them, the condominium house represents an inferior good—one to be traded down to a period of reduced real purchasing power. For many others, however, the condominium represents a more suitable set of trade-offs: Exterior building and grounds maintenance responsibilities are delegated to others and the economics of scale-purchasing allow amenity packages such as swimming pools and tennis courts. A trend toward smaller households, including singles, combined with an inflation-induced preference for ownership makes condominium-style housing preferable and attractive.

Given the body of experience with condominium-style housing to date and recognizing the increased

significance of this lifestyle in the future, it would seem desirable to identify and begin a study of the associated problems from the perspective of the various participants in the housing process: the public sector in the form of local and state governments; the producer as converter or builder; the collective consumer, identified as the condominium community association; the individual consumer; and the urban land economist as he focuses on longer-term considerations of land use patterns and processes.

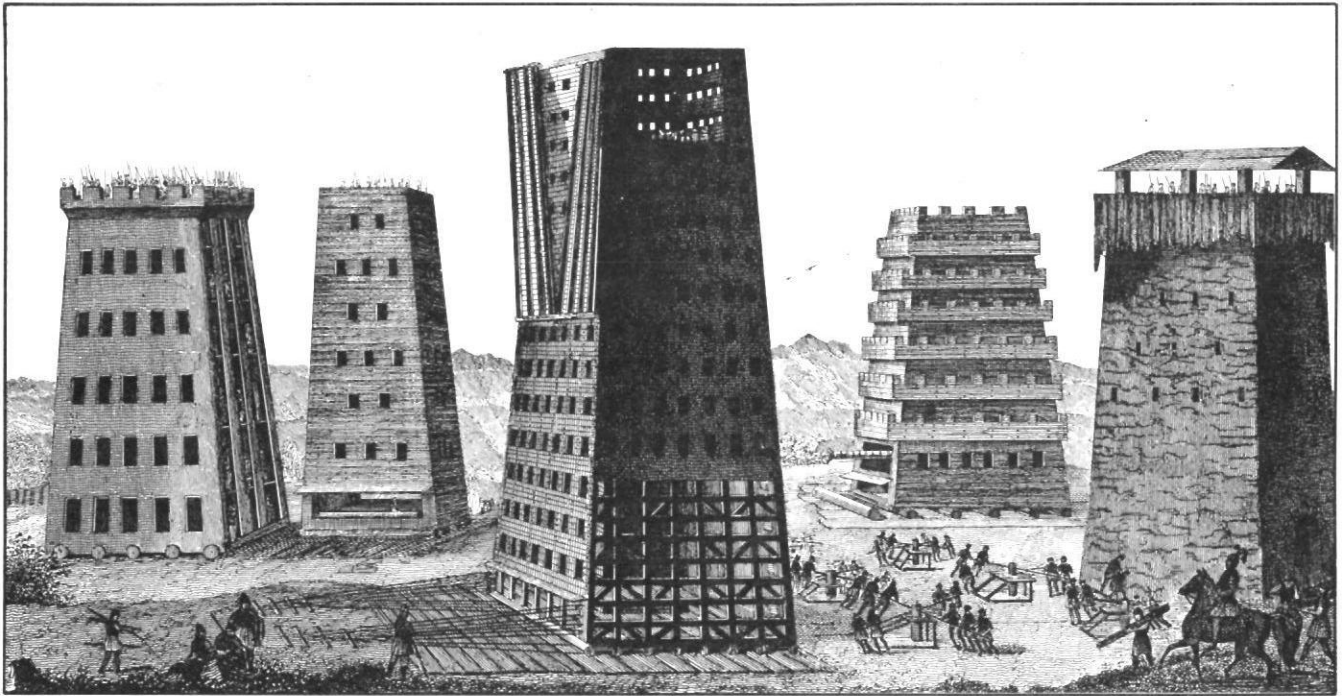
Problems For Public Policy

During the past decade the benefits of apartment ownership became evident to many renters. The deductibility of interest expense for taxable income purposes combined with the appreciation potential for a levered ownership interest attracted and convinced many buyers for individual rental apartments. Simultaneously and perhaps consequently, gross rent levels failed to grow at the same rate as operating and ownership expenses. As the operation of rental apartments became less profitable, the conversion of those rental units to ownership status for individual occupants became more profitable and commonplace, especially in larger cities. The conversion of rental units into for-sale units raised concerns for those tenants who can't afford to purchase their units and are thus displaced. Housing policy interest grew concerned over the personal disruption and the loss of rental housing stock, and forecasted inadequate rental housing stock. This concern manifested itself in ordinances, laws and statutes at the local and state levels. Various kinds of protections were sought for renters, for buyers, for rental housing and for the low income housing stock.

An interesting policy issue in this area is how to establish a balance between a) the rights of tenants and the interest of the low income rental housing stock and b) the rights of condominium unit purchasers. One possible interpretation of the initiatives to date is that renters have higher rights than buyers. To what extent is it desirable to subordinate the rights of the apartment owner to convert? If

This article originally was presented to Dr. Richard B. Andrews to commemorate his retirement from the University of Wisconsin.

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there is a looming shortage of rental housing, as some suggested, what is the disincentive effect on the apartment house builder if public policy closes off one possible escape route from an unprofitable rental situation? Should policymakers recognize that conversion prohibitions might operate like rent control ordinances to alienate capital investors and aggravate a rental housing shortage? Is a conversion limitation another subtle form of rent control in that it might reduce the probability of a satisfactory return on invested capital?

What is the impact of conversion on the level of municipal services demanded and the public budget? Are owners of individual apartment units likely to take a keener interest in the quantity and quality of public infrastructure? If a building is converted, is this a realization of higher property value in ownership? Will conversion generally lead to higher property value, tax assessments and tax revenues? Will the changes in service level demands, as balanced against tax revenue changes, produce tax profits or tax deficits from the condominium conversion process?

The public sector might be interested in the impact of apartment conversion on other neighborhoods where apartments are not being converted. It has been asserted that condominium conversion occurs at the higher end of the price range for apartments and that lower and middle quality apartments are not suitable for conversion. Does this mean that a tenant who is displaced from a high quality apartment and chooses to continue renting will then be relocated to a neighborhood or structure of lesser quality apartments? Might this tenant then contribute to an upgrading of his new neighborhood? What sort of a housing filtering process in chain reaction might be ex-

pected from this phenomenon, and what is the overall impact on urban services, budget, and quality of life?

Those in positions of policy responsibility might want to evaluate the adequacy of data for supporting their decisions. In debate about proposed ordinances in Chicago, there was a lack of available information on quantity, quality, and location of condominium conversions. Not only had neighborhood interests who were opposing condominium conversions seriously overestimated their extent, but so had real estate industry proponents; and when they finally were accurately counted, it was determined that the largest share of condominiums (converted from apartments) was in a small number of high-rent level structures and that the impact on the low rental stock has been seriously overestimated. Government officials might need to commence development of systems to gather sufficient data to evaluate the impact of condominium conversion on some protected housing submarkets.

Problems From The Producer's Perspective

The producers of condominium housing include builders of new condominiums, converters of apartments, and mortgage lenders who advance interim financing during the construction or conversion period, as well as permanent loans to purchasers. Private and governmental mortgage insurers and secondary mortgage market investors also could be considered.

An initial problem of the condominium builder is the general community resistance accorded all multifamily housing developers: concerns over increased automobile traffic, neighborhood school crowding, other public service overloading, and a general neighborhood fear of

adverse property value impacts. The condominium developer's relationship with the community will be improved if evidence is shown that apartment unit ownership has favorable sociological and economic effects on the community.

The condominium converter seeks ways to defuse opposition to conversion. One interesting possibility for preserving a portion of the rental stock is to sell only 80 percent of the apartments in a structure. The other 20 percent will be saved for rent to tenants and could be owned as community property by all of the owners who have purchased the 80 percent. In one actual situation of this type, it was expected that the rental income to the community association would replace the necessity for monthly maintenance fees. This has some interesting subtle effects. It might well be expected that the developer would seek to achieve his yield and profit objective by including a prorated share of the value of each rental unit in the sales price of each apartment sold. This means the condominium buyer has paid a higher price, reflecting his share of the units rented out, and has probably financed the majority of this purchase price with a higher mortgage. A higher interest payment on that mortgage may be qualified as a deduction for federal income tax purposes. So the buyer of a unit in this project has traded away a monthly maintenance fee to the homeowners association, which is not an allowable federal income tax deduction, for a higher interest expense on the rented units. There will, additionally, be the possibility of a share of a capital gain on the successful resale of these investment units. There will be problems for the tax accountant in establishing prorated shares of basis, and the local property tax assessors may initially have some difficulty in properly assigning these taxable values.

It is to be hoped that the condominium building and converting industry records the lesson learned during its brief history to date. In the early 1970s condominium developers failed to recognize and design a product to meet the needs of their market. Builders with previous experience in offering units for rent shifted into the for-sale market without any modification to their product. Condominium units were constructed and offered for sale in some markets that failed to provide the better quality features and workmanship that were demanded by a more sophisticated purchaser. Some early condominium builders failed to understand the central strategy of the condominium concept as making dense use of expensive land in good locations. Projects were located on marginal and undistinguished sites without significant linkages.

The resulting misfit of product to demand resulted in numerous metropolitan markets with oversupplies of condominiums. The public came to regard the concept as somehow faulty instead of recognizing the errors in its execution. As more is learned about who purchases condominiums, why and how they do it, builders must be ever alert to ascertaining the changing needs of the markets and designing a product to meet them. Since condominium community facilities are so intensely shared, the long-term costs of a poorly designed condominium

can exceed the diseconomies and social problems of an unsuccessful single family home development. Greater sophistication in the marketplace today enables the developer to eliminate the swimming pool from a community designed for empty-nester residents who have no desire to attract children; many contemporary buyers realize that the primary function of an ornate clubhouse is to serve as a display and marketing facility for the developer.

A desire for property ownership and the need to economize on construction costs are currently leading to many technological innovations. The condominium concept is frequently being applied to retail and office and medical complexes. A project in Roswell, Georgia offers attached condominium residences and businesses. Some large, old single-family houses are being recycled into small multi-unit ownership. Creative rehabilitation is causing the conversion of old industrial loft buildings to residential condominiums.

Primary lenders, mortgage insurers, and the secondary market are also part of the production process. From their perspective, the prospect of financing individual units in a community carries a whole new dimension of default risk. There is the chance that the closely shared lifestyle will become disagreeable, that the limited pool of community political leadership will prove inadequate, or that the condominium community budget will be mismanaged to the detriment of any capacity to make capital replacements.

Few lenders have been willing to lend in this atmosphere of uncertainty. In general there seems to be a need to educate the financial community so that it is more willing to underwrite these risks. At this time it might be useful to simply begin to develop the questions that the lenders should be asking: What constitutes an adequate level of capital replacement reserves in a condominium community association? How does one simply examine the declaration and bylaws to evaluate the adequacy of the community association authority and governing procedures? How does an outsider quickly evaluate the rules and regulations for their adequacy, fairness, and whether or not they are being enforced? How can the mortgage lender evaluate the human quality—present and future—in the way a commercial banker evaluates the management of a corporate borrower?

A special cog in the financing mechanism is the real estate appraiser. Several special problems attend the application of traditional appraisal methodology in a condominium community. For example, the three hallowed approaches to forecasting market value include the replacement or reproduction cost approach; but this fails to work in a condominium community because of the unavailability of benchmark sales of comparable individual sites. Appraisers are frequently confused in their attempt to define a set from which to draw comparable sales and then to infer probable selling prices. Lacking confidence in their procedures and market familiarity, they might prefer to extrapolate recent sales activity strictly within the condominium community instead of attempting to

make comparisons with other condominium communities nearby that might appeal as alternatives to the most probable buyer.

Another problem is the lack of available information on the sales that do occur within a condominium community. When specialized mortgage lenders like savings and loan associations appraise properties in conjunction with extending mortgage loans, they customarily submit this information to an information pool. There, it is available to be shared by other savings and loans and staff appraisers in the same market. If these savings and loans choose not to make loans on condominiums, there will be fewer comparisons available in the pool; transactions will have to be financed to a greater extent by sellers, but it is unlikely that any record of the transaction terms will be available for subsequent appraisal. Condominium associations can react to a limited extent by requiring notice of sales and related data for the purpose of maintaining their own information pool, but there is no way they can be assured of getting this information to the decision makers in the mortgage lending institutions. Perhaps this suggests an area of possible service for state membership groups of condominium associations—such as the several local and state chapters of the Community Association Institute. These organizations might be in the best position to teach individual condominium associations the importance of gathering market information and establishing formats for such a data survey, and further assuring the delivery of that market information to all the appropriate mortgage lenders and appraisers in the area.

Individual And Collective Consumer Perspectives

The condominium community streets, green planted areas, swimming pools, clubhouses, and building exteriors are concurrently owned in undivided fractional interest as tenants in common by all of the individual unit owners. While other ownership arrangements might be used by cooperatives, zero-lot line houses and fee-simple townhouses, there is usually a custodial and management responsibility assigned to the board of directors of a community owners association. These groups are mandatory membership organizations and are a civil democracy in microcosm. The members of the board of directors and the elected corporate officers serve without pay and are frequently called upon to discharge responsibilities for which they have little training, experience, or inclination.

Although conceptually the same as the elected board of aldermen for an incorporated municipality, the condominium association must rely for its leadership on a much smaller group of citizens. Therefore it runs a higher risk of exhausting the supply of leadership potential. Although numerous professional firms offer specialized services in law, accounting, and property management, there is little exposure of the decision-making process to public scrutiny and a greater potential for malperformance by officers and directors. Many condominium unit owners draw on their experience as apartment tenants and treat their volunteer community leadership more like hired professional property managers. Earnest and well-

intentioned officers of the association have little training and taste for abrasive interpersonal relationships and suffer "burn-out" early. With a rapid turnover in its leadership, the community has a short institutional memory, may reinvent solutions to problems, and executes policy in an inconsistent manner, contributing to the general disaffection of some community residents and to a suboptimal financial administration. Community associations must learn to tolerate and ameliorate these people problems.

Condominium community associations have special problems in their long-term financial self-preservation. While the municipal corporation can borrow against future growth, the condominium has usually attained its full size. The sale of public bonds is unfeasible. Unsecured and unguaranteed bank borrowings are impractical, and most state enabling statutes do not permit the collateralizing of community property. Hence the community association must accumulate a sinking fund for the occasional large capital replacement, or levy special assessments when the replacement becomes a necessity.

In most communities it is likely that an extraordinary effort will be required to determine the necessary periodic set-aside for the future replacement of roofs, pavings, etc. At that, a vocal portion of the condominium association membership will prefer to avoid an accumulation program in favor of passing future costs to future residents. The danger in this is that the necessary special assessments in the future might be beyond the means of numerous owners at that time. If they refuse or are unable to pay, the association board then faces a potentially difficult collection process. The heavy special assessment could force a surplus of properties offered for sale, thus depressing property values.

Because the whole condominium concept is so new, there has been little experience with communities needing to repave streets and undertake other major capital replacements during a period of reserve insufficiency. But adequate evidence indicates that this is a factor that looms large in the perspective of lenders. There is some opinion that lenders prefer financing new condominiums to resales in existing communities because the individual loans have a greater chance to season before any reserve insufficiency develops. Developers of new communities and converters of older buildings frequently are sweetening their product-offering by delivering large dollar reserve accounts at the time of grand opening. In the event a community association is unable to finance its capital replacement needs in any manner, there would be an acceleration of the economic life and an obvious and damaging deterioration of the public facilities.

Another problem relating to the financing of condominium communities involves the equity of property taxing systems. Condominium associations have already made progress in convincing tax assessors not to assess common area improvements; assessors seem to agree that prorated shares of the value of clubhouse and other amenity improvements are reflected on a prorated basis in the individual unit market values and assessments.

Condominium interests are a remaining problem, however, in that the condominium unit owners are taxed at the same mil rate as other residential owners but might receive a lower level of services. They argue in particular that they must maintain their own streets, street lights, sewer pipes, park areas, and security services. For their part, the municipalities argue that these are elective services chosen for the benefit of private property. Perhaps this debate will continue without resolution. As condominium purchasers become more sophisticated, they might demand that initial street and sewer system construction be done to the standard and under the inspection of the local governing authority to facilitate their dedication.

While many of the services hired by condominium associations do in fact parallel similar services provided publicly (street lighting and maintenance, security, park area upkeep, recreational services and facilities), the maintenance fee collected by the homeowners association is not recognized as a property tax. So the same services on a private basis cost more on an "after-income tax" basis than if they were provided by a municipality. The condominium association may be able to convert its monthly maintenance fee into a property tax that is deductible for income tax purposes by municipal incorporation of the entire condominium community. This would convert most, but not all, of the costs of these on-site services to property tax supported. Other services not normally within the province of the community association might be purchased from existing government sources such as fire and school services. But in many other ways the community association is already functioning much like an elected municipal government. This would probably be more feasible for larger communities where the increased costs of administration could be spread over a bigger base.

Other advantages to municipal incorporation might exist. Municipalities probably have a superior borrowing power with financial institutions. Certainly the exemption of municipal interest from federal income taxation would enable the municipality to borrow at a lower cost than that available to a condominium association. There are few instances in the record of municipal incorporation for condominiums. One well-known case in Pennsylvania occurred as a defensive measure to prevent annexation to a nearby municipality and a resulting duplication of sewer facilities.

Condominium communities may discover and invent other advantages to the unification of a large number of individual ownership interests in a residential community. A generation ago regional shopping centers discovered that by uniting and organizing diverse retailing interests in a single shopping center, they could standardize shopping hours and undertake concerted actions for improving and publicizing the center as well as present a unified architectural style. Condominium communities would be taking advantage of their unity, for example, in converting into a small city or village. A condominium community in Minneapolis that occupied an entire city

block was able to make use of a tax increment financing plan and secure below-market interest rate financing for purchasers. (A tax increment financing scheme facilitates construction or improvements financed with borrowed money where that borrowed money would be repaid out of the additional tax revenues resulting from the improvements).

Another possibility might be for a group of condominium communities to found a credit union. The credit union might appeal for savings accounts to the loyalties of condominium residents and, in turn, concentrate its investments in loans for community improvements, temporary assistance to distressed unit owners for regular and special assessments, and perhaps even for mortgage loans to purchasers.

Perhaps one of the most pressing problems currently facing condominium communities is the misunderstanding on the part of many buyers of the sharing and tolerance involved in these communities. Most community leaders can report examples of occupants who thoughtlessly engage in activities that disturb their neighbors. At the same time many neighbors are insufficiently tolerant of the normal transgressions of those living nearby. While these same problems occur in any living environment, they are frequently aggravated by the greater density of multifamily properties. Just as housing policymakers identified a need to counsel subsidized homebuyers on their new responsibilities, a need might be recognized to counsel prospective condominium occupants on the trade-offs in a shared multifamily housing lifestyle. It seems unlikely that this type of information would be conveyed by any of the present parties to the transaction—lender, broker, or seller.

Future Concerns And Conclusions

As the condominium type of community achieves maturity and perhaps a stage of decline in a life cycle, it may be noticed that it behaves differently from a neighborhood of single-family detached homes under diverse ownership or a high-density multifamily housing project under the single ownership of an investor. What can be expected to happen when the units achieve the end of their physical and economic life expectancies? Since they were all built at the same time, is it reasonable to expect them all to become deteriorated at the same time? How do individual owners rehabilitate and renew their units, if the majority of the community has neither the will nor the means for a private renewal? In what way might units in a condominium community experience the filtering process that hands down housing units to lower socioeconomic occupants? Is such a land use succession likely to occur without serious difficulty, or will the older residents vigorously resist change because of the greater intimacy of their shared lifestyle?

Exactly how might filtering in the condominium neighborhood be complicated by factors not found in single-family detached neighborhoods: common ownership of land and facilities; the association for governance; and the internalizing of the abuse of common and unrelated

property? Will there be an advantage in the control of externalities such as the physical condition of surrounding units and services? What long-term advantages might be associated with the homogeneous nature of condominium neighborhoods? What special qualities might uniquely suit condominium communities as urban in-fill development? Might there be a legitimate long-term need for the association to use inducements to affect tenure choice within its community?

While the many advantages to condominium living—the economies of development scale, the sharing of amenities, the transfer of the maintenance responsibilities and the economies of smaller scale living—are likely to contribute to the increasing popularity of this living style in the future, problems already exist and more are likely to be uncovered. This paper has endeavored to identify some of the opportunities and problem areas that would lend themselves to further study and discussion.

THE STATE OF THE LITERATURE IN REAL ESTATE

by James R. Webb

In the *California Management Review* a few years ago, Michael J. Hanrahan lamented the dire state of the literature in real estate.¹ Since then there have been many significant improvements. Real estate literature has grown rapidly in quantity and quality due to influences including the increased interest in real estate investment by major life insurance companies and pension funds,² the more stringent educational requirements of professional organizations³ and expanded interest by college students.

This article discusses the changes in the real estate literature since the early 1970s as well as some future directions for research.

Real Estate Journals

It is unfortunate that in his article on the literature in real estate, Hanrahan did not discuss the "real" literature in any area of expertise: the journal. The lag from journal to book form may often be as long as five years. After an author writes an article, it may take a year for it to be accepted, a year before it is printed in a journal, another year or more before it is included in a book and a year for the book to be published. Care must also be taken not to confuse popular press ramblings for "literature."

Since 1971 at least six real estate journals have come into being. They are *Real Estate Review* (1971), *American Real Estate and Urban Economics Association Journal* (1973), *Real Estate Law Journal* (1973), *Journal of Real Estate Taxation* (1974), *Housing and Society* (1974) and *Real Estate Issues* (1976). Two more real estate journals will commence publication this year: the *Journal of Real Estate Investment* by Questor Associates of San Francisco



and *Housing Finance Review* by the Federal Home Loan Bank Board Office of Policy and Economic Research, Washington, D.C. In addition, two real estate journals that are still in a feasibility study stage could begin publication by 1983.

So far only those journals dealing exclusively with real estate have been discussed. There are also numerous finance and investment journals that publish articles on real estate. The major journals in this area to have appeared since 1971 are *Financial Management* (1972), *Journal of Business Research* (1973), *Journal of Financial Economics* (1973), *The Journal of Portfolio Management* (1974) and *The Journal of Financial Research* (1978).

In all, Nielsen and Wilson⁴ list and rank according to various criteria 17 real estate journals.⁵

The quality of real estate literature has also increased significantly. *The American Real Estate and Urban Economics Journal* is the journal of the American Real Estate and Urban Economics Association, which includes over one thousand professionals from business, government and universities and colleges. Each year the association

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has a midyear and an annual convention at which research papers are presented. The annual convention is held in conjunction with the American Economic Association and the American Finance Association. *Housing Finance* and *Housing and Society* are also high quality, refereed journals.

The journals of the practitioner societies have also increased in quality. The two oldest journals of this type, *The Appraisal Journal* (1932) and *The Real Estate Appraiser and Analyst* (1935) have averaged 50 percent authorship from academics or PhDs in the industry since 1976. Other practitioner journals have increased their authorship by this group, too.

Current And Future Books

The flow of real estate books from various publishers has increased almost as much as the journals. As often is the case in academic and popular areas, many authors simply emulate their predecessors. Some real estate books, however, have shown progress since 1976. One of these is *Basic Real Estate Finance and Investments* by Epley and Millar (Wiley, 1980) who have integrated some mainstream finance concepts with those in real estate. The most significant books are yet to come off the press.

This year a series of books entitled *Research in Real Estate* and published by JAI Press will begin to be published. Each volume will have a central theme and contain 10 to 12 "longer than journal length" papers of significant research and each by a different author. In addition to this series, *Real Estate Principles*, a book by Kau and Sirmans of the University of Georgia, is to be published in late 1982 or 1983. Integrating urban and regional economics with mainstream finance and real estate, this book in a few years may serve as the measure of all other introductory real estate books.

Although new "principles," brokerage, and finance and appraisal books are coming out at the rate of about one a month, few have integrated the research of the last five or six years. The future should bring about a change in this approach. As the market becomes crowded, quality will be the distinguishing factor. Two real estate investment books to be published this year and which will integrate the finance and economics literature with real estate are *Real Estate Investment Decision Making* by Austin Jaffe and C. F. Sirmans (Prentice-Hall) and *Real Estate Investment: Strategy, Analysis, Decisions* by Stephen Phyrri and James Cooper (Warren, Gorham & Lamont).

Educational Programs In Real Estate

As Hanrahan reported in 1976, there are no graduate schools of realty. But there are graduate programs in real estate and PhDs and DBAs who specialized in the subject in college. The small number of schools with such programs include (in alphabetical order): Georgia State University, Kent State University, Ohio State University, University of California (Berkeley, Los Angeles), University of Florida (Gainesville), University of Georgia (Athens), University of Illinois (Urbana-Champaign), University of

Southern California, University of Texas (Austin) and the University of Wisconsin (Madison).⁶

About 40 colleges and universities are currently attempting to hire people who have a terminal degree (PhD or DBA) and specialized in real estate. As the number of research-oriented people in real estate increases, the quantity and quality of real estate research and literature should continue to mushroom.⁷

Of course, it may take many years to bring real estate into the mainstream of finance and economics. Many schools regard real estate studies with the enmity reserved for accounting 30 or 40 years ago. Nevertheless, real estate is gaining academic respectability rapidly.

Models And Research Centers

One of Hanrahan's major complaints in 1976 was the lack of operational quantitative models for real estate investment analysis and appraisal. Computerization and operationalization of such models have exploded in recent years. Beginning in October 1976, Georgia State University (Atlanta) has held a Colloquium on Computer Applications in Real Estate each year. The different applications discussed are: 1) financial analytical models; 2) site selection models; 3) appraisal and assessment regression models; 4) land development models; 5) data base models; 6) cartographic models; 7) simulation models; and 8) minicomputer programs. Hundreds of academicians and representatives from private consulting and business firms throughout the country participate in the presentations and discussions. The registration fee is nominal and attendance is necessary since no proceedings or collection of papers is published.

A recent happening in research that affects real estate literature is the establishment of real estate research centers. These centers are found at the state level and are usually funded by a portion of the real estate licensee's fee. States currently having these centers are Ohio (Ohio State University), South Carolina (University of South Carolina), Illinois (University of Illinois-Urbana), Texas (Texas A&M) and Kentucky.

These centers have funds which are allocated to real estate research, usually on a competitive basis and generally restricted to persons within the state. Since the funds are generated by practitioners, they are also supposed to benefit the "real estate industry." Often, the definition of this industry is narrow and the research done is little more than busywork, but some relevant and publishable research does survive the process.

If a request is made, the real estate research centers do supply lists of completed research papers that are usually available for a small fee to cover mailing expenses. Studies are generally unavailable elsewhere, unless published by the author in a journal or book.

Summary

Since Hanrahan's 1976 diatribe lamenting the poor state of the real estate literature, much has taken place. The

quantity and quality of real estate literature in journals have exploded and more will come. Some journal material has trickled down to books, but the more relevant books using the current research are just beginning to be published.

Graduate education programs in real estate are few but do exist. As the schools with programs graduate more PhDs and DBAs specializing in real estate, the research base in this area increases. In addition, the design and operationalization of quantitative real estate and appraisal models have mushroomed through the assistance of the annual Colloquium on Computer Applications in Real Estate. Real estate research centers in five states are also beginning to affect the real estate literature by funding of research proposals. In summary, the future state of the real estate literature appears brighter and more encouraging than ever.

NOTES

1. Michael James Hanrahan, "Dr. Pond and the State of the Literature in Real Estate," *California Management Review* (Spring 1976), 103-109.
2. Barbara A. Patocka, "Pension Funds Blaze the Real Estate Trail," *Institutional Investor* (June 1974), 77-98.
3. Lynn N. Woodward and Marcella Roberts, "Professional Designation or Merit Badge — A Modest Proposal," *Real Estate Issues* (Winter 1980), 43-46.
4. Donald A. Nielsen and R. Wayne Wilson, "A Delphi Rating of Real Estate Journals," *The Real Estate Appraiser and Analyst* (May/June 1980), 43-48.
5. *Land Economics* is listed as one of the 17, but it has never quite lived up to its new name which was changed in 1948 from *The Journal of Land and Public Utility Economics*. In response to an article I submitted entitled "Real Estate Research: Past, Present and Future," the editor replied that "We do not believe that the issue of real estate research funding is central to the majority of our readers." The table of contents in any issue will also demonstrate the incongruence.
6. If I have omitted anyone, I apologize in advance.
7. The same condition is true of people with terminal degrees in insurance where even fewer schools than in real estate offer terminal degree programs.

Seldin On Change

NEW RATIOS: WHAT ARE THEY TELLING US?

by Maury Seldin, CRE

Consider a few facts on land values:

- For the typical single-family house, the ratio of land value to the value of land and building doubled in the last quarter century. It had been cut in half in the previous quarter century, and is now about the same as it was in the late 1920s,¹ as shown in Figure 1.
- Residential land prices as measured by the Homer Hoyt Institute Land Price Index turned down in late 1981 after a decade of sharp increases.² The price increases were greater than inflation rates but less than housing price increases.³
- Governmental regulations and excessive zoning requirements are, aside from inflation, the two main reasons for the high cost of land.⁴

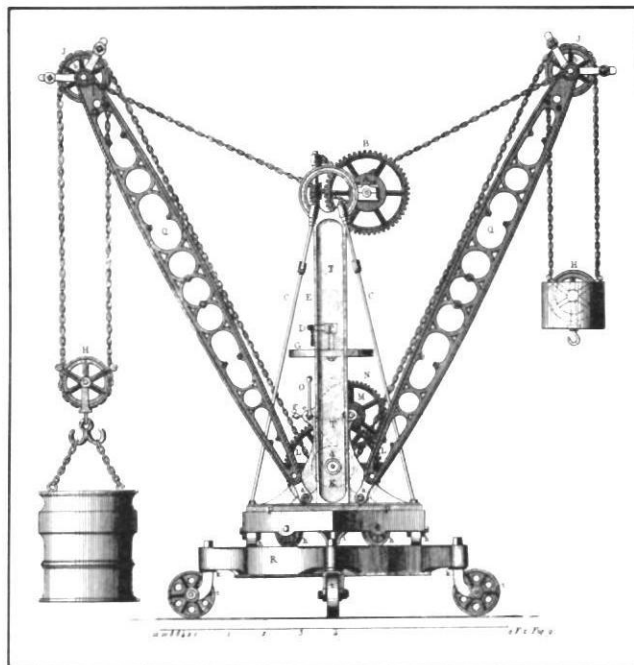
Now take a look at the changes in inflation rates (using GNP deflator):

- In the 1950s the inflation rate averaged about 2½ percent per year. It dropped to about 1½ percent in the early '60s and then started a sharp upward movement.

This article is the third in a series which focuses on the problem of change in the real estate industry.



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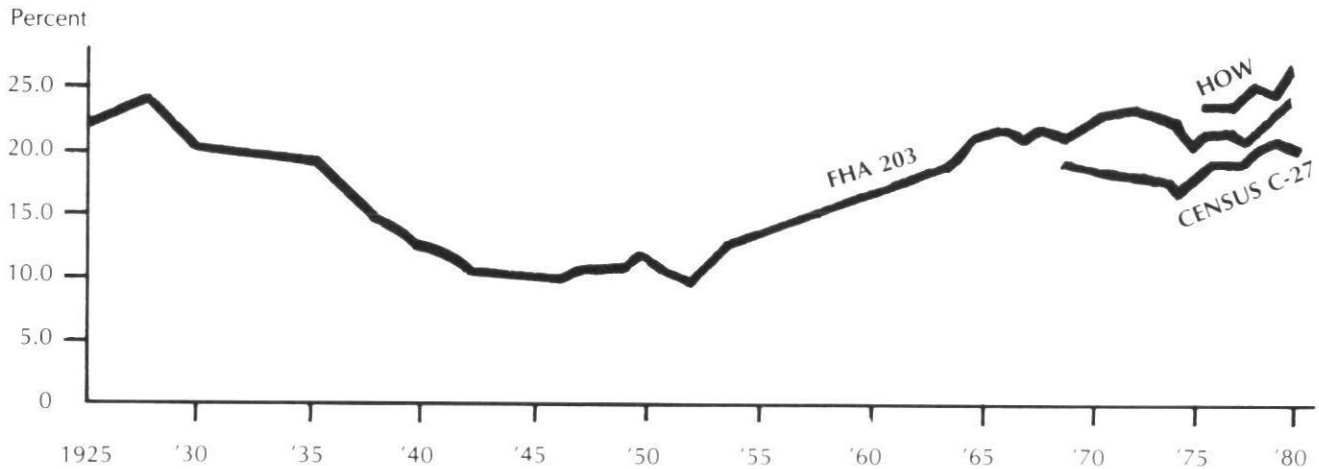
- In the late '60s it was 3½ percent; in the early '70s, 5 percent; and in the late '70s, 7½ percent.
- More recently it has been running about 9 percent, as reflected in Figure 2.

Interest rates and capitalization rates are listed in Figure 3. For most of the '70s, prime property mortgage interest rates ranged around 9 percent. Capitalization rates were about ½ percent higher than interest rates for this same time period. The gap disappeared in 1979. Since then, interest rates have been higher than capitalization rates.

Prices show that the average cost per square foot of office space in 1981 was \$73 (based on sample data from SREA

FIGURE 1

Ratio of Land to Home Prices of Single Family Detached Homes
1925-1980



Source: Homer Hoyt Institute, "The Relationship of Land Costs to House Prices, 1925-1980," *Land Review* (September 1981), 6-7.

Market Data Center as reported in *Land Review*, January 1982). The ratio of net income to price was 7.6 percent in California and 10.15 percent in all other states.⁵ The average cost per square foot of shopping space (also based on SREA data as analyzed by *Land Review*, was \$57 in California and \$49 elsewhere. The ratio of net income to price was 8.2 percent in California and 7.4 percent elsewhere.

At these prices, a number of things seem to be happening:

- Office condos are in bloom in some areas.
- Price-per-square-foot pressures are causing tenants to seek economies in amount of space and location, with some shift to lower-priced suburban areas for back-room activities.
- The pace of building construction looks out of line with long-run requirements, although some structural changes are occurring in local markets.
- Condo development of shopping centers is showing early signs of a trend.
- Prices have hurt many retail operations, resulting in greater economies and turnover in space.
- Competition has hit some shopping centers hard.

In regards to financing, long-term fixed rate mortgages are basically out; 100 percent financing with equity participation is in, as well as pension funds and foreign money with heavy or all-cash investments.

Changes Seen As Cyclical And Structural

The ratio of debt to equity has changed, interest rates have changed and capitalization rates have changed. The price per square foot has changed for residential, retail, office and especially for land. It is not just change over time, but changes in structural relationships. The old rules-of-thumb don't help much.

Much of the discussion these days is of boom or bust: the Great Depression Syndrome. Are we going to get it again — or worse, are we already there?

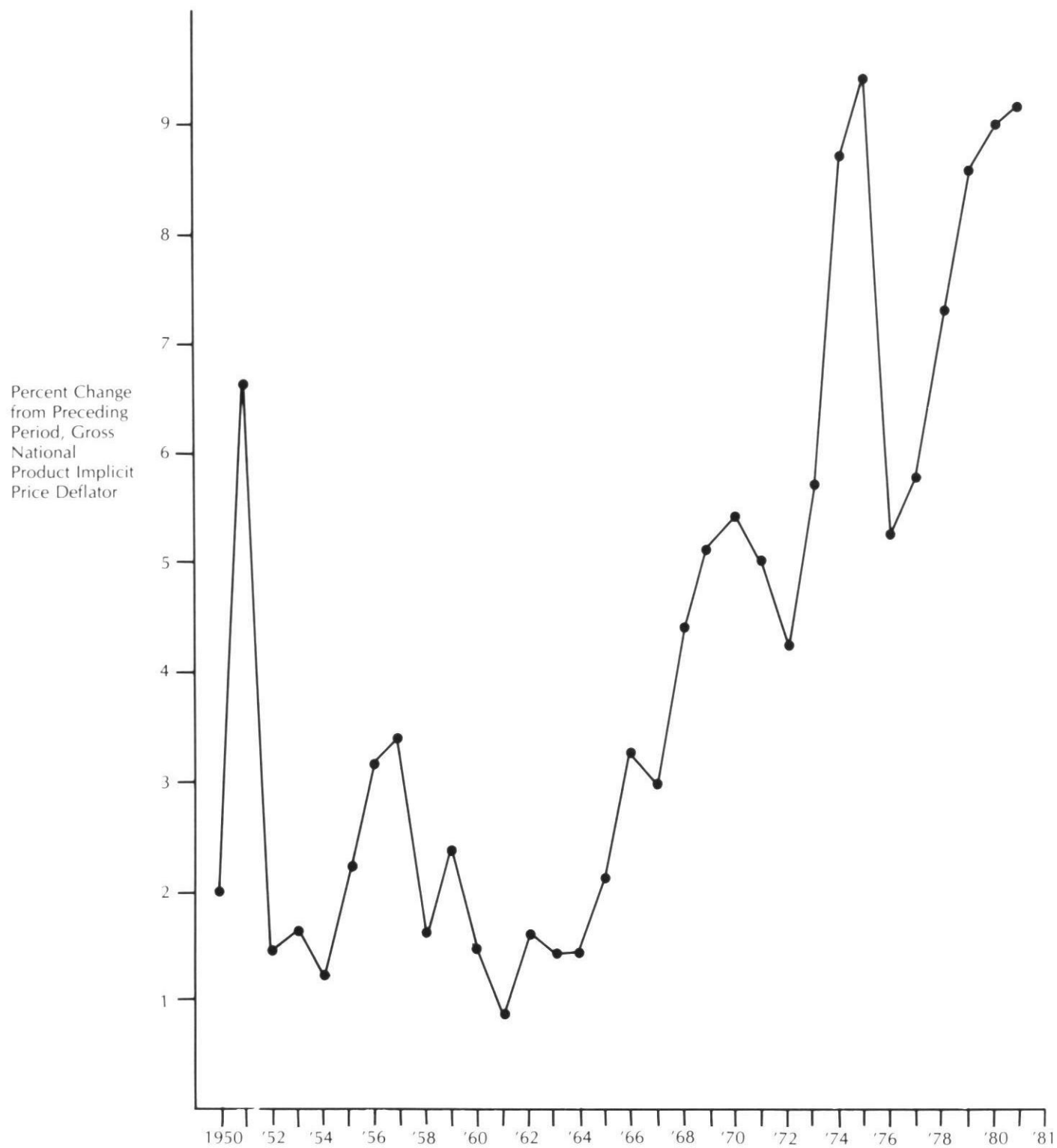
A look at any of the markets will show cyclical activity. In general, amplitudes have increased, and we are getting wider swings in the cycles and maybe different time spans for the cycles.

Then there are the structural changes. Long-run structural changes are occurring in the economy. This does not mean that we necessarily have a Great Depression on our hands, but that rather the relationships are different. The national economy is producing different products. Our international position has changed economically. We may be going through an adjustment process different from anything we have previously experienced.

We are manufacturing different products and services at different locations and changing our real estate requirements. We are financing the real estate differently. Real estate investment has become riskier. What concerns me is that the decision makers may see only the short trends and extrapolate them. There is no more certain recipe for disaster.

FIGURE 2

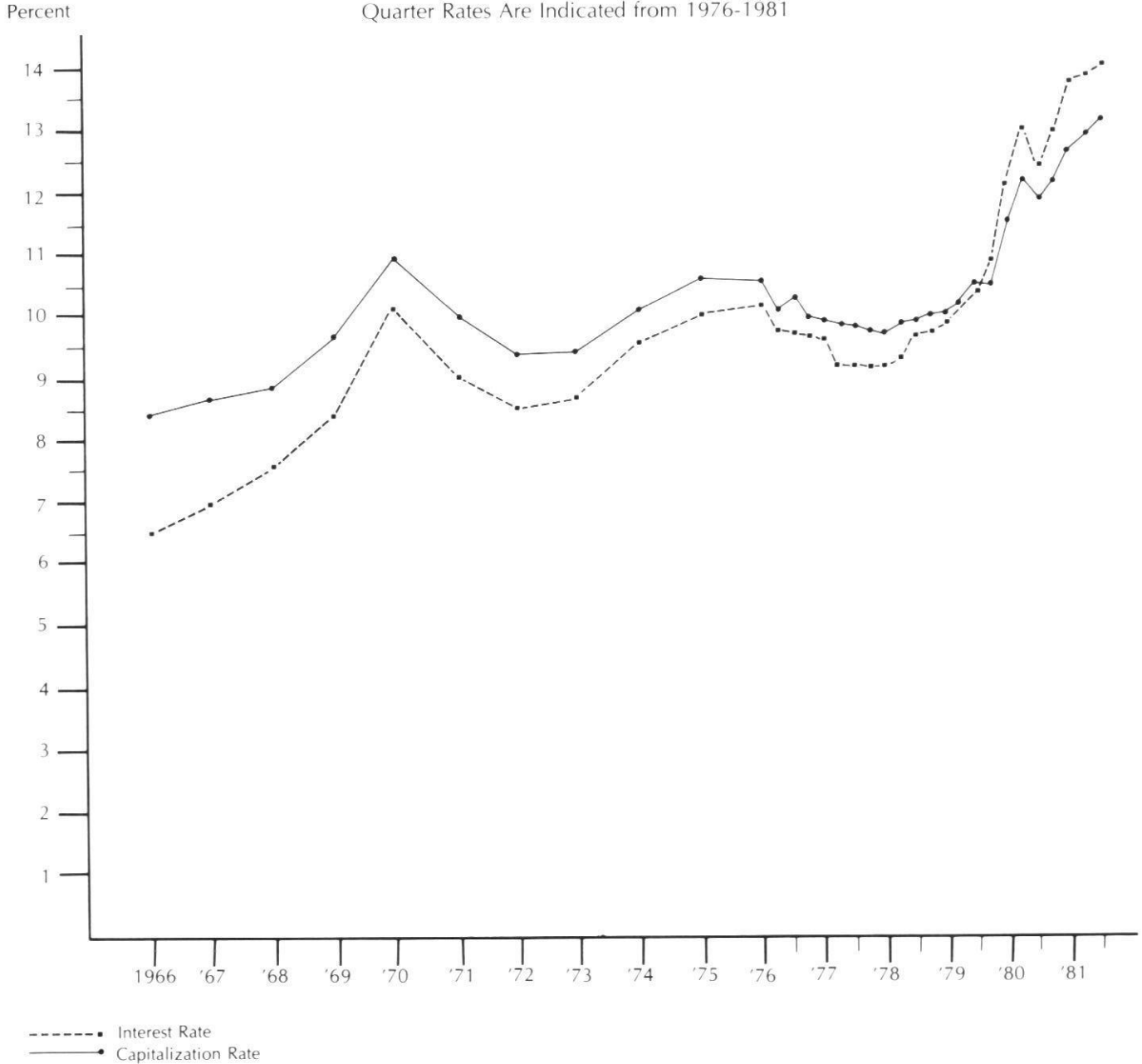
Inflation as Measured by Gross National Product Deflator, 1950-1981



Source: Department of Commerce, Bureau of Economic Analysis, as shown in *Economic Report of the President* (February 1982), 237.

FIGURE 3

Interest and Capitalization Rates of Office Building Mortgage
Commitments by Selected Life Insurance Companies 1966-1981;
Quarter Rates Are Indicated from 1976-1981



Source: American Council of Life Insurance, *Investment Bulletin* (Table L, various issues).

NOTES

1. Homer Hoyt Institute, "The Relationship of Land Costs to House Prices, 1925-1980," *Land Review* (September 1981), 6-7.
2. Homer Hoyt Institute, "Land Price Index Declines," *Land Review* (November 1981), 8.
3. Homer Hoyt Institute, "Land Costs Outpace Inflation, But Not Housing Prices," *Land Review* (August 1981), 5.

4. Homer Hoyt Institute, "Regulations, Zoning Are Main Culprits of High Land Cost," *Land Review* (November 1981), 6.

5. Homer Hoyt Institute, "Recent Sales of Shopping Centers and Office Buildings," *Land Review* (January 1982), 5.

Look for the next Seldin On Change article in the Fall/Winter 1982 edition of REI.

The Case Of The Nude Dancer

by Earl A. Talbot

This story is set in the small, bedroom community of Mt. Ephraim, New Jersey. On the commercial strip along Black Horse Pike, Jim Schad operated an “adult” bookstore. In some areas of this country, Schad’s operation would be called a “porn shop.” Whether he sold any “porn” is not known, but he did show skin flicks. To stimulate business even more, he hired Jane Doe to dance for his patrons — in the nude.

Jane must have done pretty well, for soon the city fathers of Mt. Ephraim had Schad hauled before the bar of justice, where the local judge found him guilty of violating the town’s zoning ordinance. Schad appealed the judge’s decision. The appellate court sided with the judge and the city fathers. The New Jersey Supreme Court, where Schad went next, supported the lower courts, and Schad took his case before the U.S. Supreme Court¹ which sided with him and directed the New Jersey courts to “un” convict him of wrongdoing.

Zoning Ordinance Violates Right to Free Speech

Why the U.S. Supreme Court even bothered with Schad’s nude dancer is a mystery. Schad is an obscure fellow engaged in a sleazy operation in an insignificant town close to Camden which is near Philadelphia. None of the actors or events in this drama is of any particular importance. Moreover, the Court in 1976 had permitted, under the guise of zoning control, the regulation of “adult” movie houses in *Young v. American Mini Theaters, Inc.*²

In Mt. Ephraim, however, the justices perceived that the free exercise of expression, protected by the First and Fourteenth Amendments to the Constitution, was at stake. The Supreme Court decided that by enforcing

Mt. Ephraim’s zoning ordinance, the city fathers and New Jersey courts had run roughshod over Schad’s constitutional rights.

The nude dancer is actually a red herring in this case. Instead of Schad being convicted of corrupting the public morals or indecent conduct, he was brought in for the innocuous wrong of having live entertainment at his business, which the zoning ordinance in Mt. Ephraim prohibits. At least that is what the city fathers claimed in their charges against Schad. The kind of live entertainment was not an issue. Whether or not that is true is not clear since live music was tolerated by the city fathers at three saloons in the vicinity of Schad’s adult bookstore. Apparently, these musicians were not prosecuted for violating the zoning ordinance on the theory that live music was performed in the three emporiums prior to the revision of the existing ordinance. Hence, the music performances in these watering holes were nonconforming uses.

In the course of the case the city admitted that under its ordinance even a high school play would be prohibited if admission were charged. Plays are a form of free speech protected by the First Amendment, as are music³ and even nude dancing.⁴ Mt. Ephraim’s ordinance thus denied free speech and its land use regulation clashed head on with Schad’s First Amendment liberties. The town’s zoning came out second to Schad’s free speech.

Zoning ordinances are an exercise of the government’s authority to protect the health, welfare and safety of the community. If reasonable in its terms and application, a zoning ordinance will withstand an attack that it violates a person’s constitutional rights. Ordinarily, it is the complainant’s burden to demonstrate that an ordinance is unreasonable in content or application.⁵ When a protected liberty such as free speech is involved, however, the burden shifts and the government must show that the ordinance is reasonable.⁶ Mt. Ephraim failed in this regard.

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The city stated that it prohibited live entertainment because of accompanying problems of parking, trash, police protection and the availability of medical facilities, but it offered no proof of the existence of these problems. The justices could see no difference between these problems and live entertainment and the same problems and entertainments such as movies.

Mt. Ephraim also suggested that live entertainment, particularly nude dancing, was available in nearby areas outside the town. The court rejected this claim and said that no facts had been offered to prove this statement. The Court also said that one's liberty of self-expression could not be restricted just because it could be freely exercised elsewhere.

Court Presents Opposing Views

The Court was not unanimous in its opinion. Chief Justice Berger and Justice Renquist dissented saying that the local municipality should be allowed to shape the nature of its own community, and they found no basic liberties violated because the town excluded live entertainment from its borders.

Underlying the opinion of the majority is the notion that Mt. Ephraim was being selective in the enforcement of its statute: nudity on film and music performed by live entertainers were tolerated, but live nudity was not allowed.

The unfortunate aspect of this case is that it seems inconsistent with a decision rendered by the Court in 1976. In the *American Mini Theaters* case, the Court allowed a Detroit zoning ordinance that required adult movie theaters to be at least 1,000 feet apart or 1,000 feet from a regulated use, that is, an adult bookstore, etc., and no closer than 500 feet to a residential zone. The city was attempting to spread out the places to prevent excessive concentrations of these uses, and had city planners and real estate experts testify on the reasons that these restrictions were necessary.

The Court saw that Detroit's restrictions did not totally prevent the expression of the protected liberty involved, and felt that the ordinance was justified by the city's interest in preserving the character of its neighborhoods. The record also disclosed a factual basis for the Detroit regulation.

Mt. Ephraim, on the other hand, took a different route. It did away with all types of live entertainment while permitting some nonconforming live entertainment to continue with no requirement for amortization. It also permitted other forms of entertainment; Schad's nude movie machines, for example, had received licenses from the town. In addition, Mt. Ephraim made no effort to establish a factual basis for its ordinance, which can be viewed as being excessively broad, unreasonable since no connection was made between the regulation and the harm it sought to prevent, and capriciously enforced.

Nevertheless, the nude dancer case is important in that it is the Court's most recent pronouncement on the drafting and enforcement of zoning laws. In addition, it attempts to establish the outside limit for using zoning controls to prohibit sexually-related commercial activities. There is a movement in large cities and in some small ones, too, to prohibit activities such as topless bars, adult bookstores, x-rated movie houses, and the accompanying array of prostitutes, panderers and their patrons, or to move them into designated "adult entertainment" districts or disperse them as was done in Detroit. To accomplish these goals, municipalities use zoning controls instead of laws banning obscenity, pornography and indecent conduct.

The nude dancer case indicates that in any such zoning ordinance the factual justification for such restrictions must be apparent and the restriction should be carefully tailored to attack the exact harm which it seeks to prevent. Otherwise, the drafters could end up like Mt. Ephraim, unable to explain why and what they were doing.

NOTES

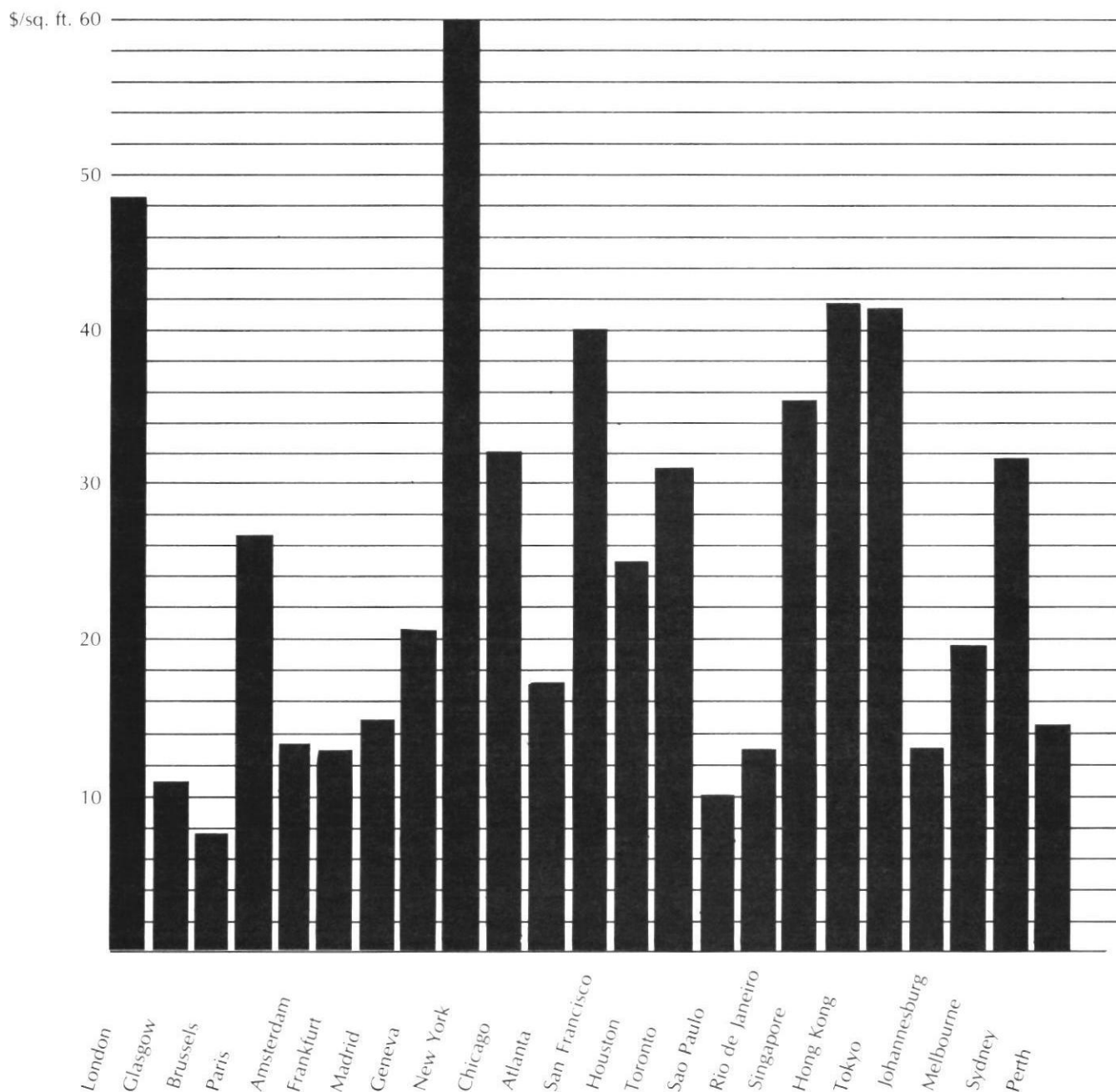
1. *Schad v. Mt. Ephraim*, _____ U.S. _____, 68 L. Ed. 2d 671, 101 S. Ct. 2176 (1981).
2. 47 U.S. 50, 49 L. Ed. 2d 310, 96 S. Ct. 2440 (1976).
3. *Joseph Burstyn, Inc. v. Wilson*, 343 U.S. 495, 96 L. Ed. 1098, 72 S. Ct. 777 (1952); *Schacht v. United States*, 398 U.S. 58, 26 L. Ed. 2d 44, 90 S. Ct. 1555 (1970); *Jenkins v. Georgia*, 418 U.S. 153, 41 L. Ed. 2d 642, 94 S. Ct. 2750 (1974); *Southeastern Promotions Ltd. v. Conrad*, 420 U.S. 546, 43 L. Ed. 2d 448, 95 S. Ct. 1239 (1975); *Erznoznik v. City of Jacksonville*, 422 U.S. 205, 45 L. Ed. 2d 125, 95 S. Ct. 2268 (1975); *Doran v. Salem Inn, Inc.*, 422 U.S. 922, 45 L. Ed. 2d 648, 95 S. Ct. 2561 (1975). See also *California v. LaRue*, 409 U.S. 109, 118, 34 L. Ed. 2d 342, 93 S. Ct. 390 (1972).
4. *Jenkins v. Georgia*, 418 U.S. 153, 41 L. Ed. 2d 642, 94 S. Ct. 2750 (1974).
5. *Agins v. City of Tiburon*, 447 U.S. 255, 260, 65 L. Ed. 2d 106, 100 S. Ct. 2138 (1980); *Village of Belle Terre v. Boraas*, 416 U.S. 1, 39 L. Ed. 2d 797, 94 S. Ct. 1536 (1974); *Euclid v. Ambler Realty Co.*, 272 U.S. 365, 395, 71 L. Ed. 303, 47 S. Ct. 114, 4 Ohio L. Abs. 816, 54 A.L.R. 1016 (1926).
6. *Schneider v. State*, 308 U.S. 147, 84 L. Ed. 155, 60 S. Ct. 146 (1939).

WORLD RENTAL LEVELS

Richard Ellis Research compiled a table and graph on the cost of renting office property in the business centers of the world as of January 1982. Rent costs for this guide were provided in British currency. The table and graph here have been modified to reflect the exchange rate as of May 20, 1982, and rent costs have been converted to U.S. measure and currency based on the more recent exchange rate. (The 1981 report was printed in the Spring/Summer 1981 edition of REI.)

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Prime Air-Conditioned Offices



TABLE

Offices

See note	Suite of 5,000 sq. ft. Highest standard with air conditioning		Suite of 5,000 sq. ft. Reasonable standard		Other terms and conditions			Exchange Rate (5/20/82)
	1	2	1	2	3	4	4	
City	Rent in local currency and terms	Rent in dollars per sq. ft. per annum	Rent in local currency and terms	Rent in dollars per sq. ft. per annum	Additional charge for services	Period of rent review	Index- ation	
London	£27.00 per sq. ft. p.a.	\$48.10	£17.00 per sq. ft. p.a.	\$30.28	15%	5 years	None	£1.7815
Glasgow	£6.00 per sq. ft. p.a.	10.69	£5.00 per sq. ft. p.a.	8.91	20%	5 years	None	£1.7815
Brussels	BF 3250 m ² p.a.	7.41	BF 2600 m ² p.a.	5.93	30%	3/6/9 years*	Annual	BF .0228
Paris	FF 1600 m ² p.a.	26.42	FF 1200 m ² p.a.	19.81	20%	3 years	Annual	FF .1651
Amsterdam	DFL 350 m ² p.a.	13.55	DFL 250 m ² p.a.	9.68	20%	5 years	Annual	DFL .3873
Frankfurt	DM 30 m ² p.m.	12.91	DM 20 m ² p.m.	8.61	20%	5/10 years*	Annual	DM .4304
Madrid	PTS 1500 m ² p.m.	14.40	PTS 1000 m ² p.m.	9.60	15%	3 years	Annual	PTS .0096
Geneva	SF 400 m ² p.a.	20.18	SF 300 m ² p.a.	15.14	10%	3/5/10 years*	Annual	SF .5045
New York	\$60.00 per sq. ft. p.a.	60.00	\$39.00 per sq. ft. p.a.	39.00	15%	5 years*	None†	N/A
Chicago	\$32.00 per sq. ft. p.a.	32.00	\$18.00 per sq. ft. p.a.	18.00	27%	5 years*	None†	N/A
Atlanta	\$17.30 per sq. ft. p.a.	17.30	\$12.00 per sq. ft. p.a.	12.00	25%	5 years*	None†	N/A
San Francisco	\$40.00 per sq. ft. p.a.	40.00	\$25.00 per sq. ft. p.a.	25.00	15%	5 years*	None†	N/A
Houston	\$25.00 per sq. ft. p.a.	25.00	\$23.00 per sq. ft. p.a.	23.00	19%	5 years*	None†	N/A
Toronto	C\$38.50 per sq. ft. p.a.	31.14	C\$26.00 per sq. ft. p.a.	21.03	20%	5 years*	None	C\$.8089
Sao Paulo	US\$10.00 m ² p.m.	10.00	US\$6.00 m ² p.m.	6.00	30%	3 years	Quarterly	N/A
Rio de Janeiro	US\$13.00 m ² p.m.	13.00	US\$7.00 m ² p.m.	7.00	30%	3 years	Quarterly	N/A
Singapore	S\$74.00 per sq. ft. p.a.	35.59	S\$50.00 per sq. ft. p.a.	24.05	10%	3 years*	None	S\$.4810
Hong Kong	HK\$24.00 per sq. ft. p.m.	41.90	HK\$14.00 per sq. ft. p.m.	24.44	10%	3 years	None	HK\$.1746
Tokyo ⁵	Y 10000 m ² p.m.	41.80	Y 6000 m ² p.m.	25.08	Nil	2 years	None	Y .00418
Johannesburg	R 14.00 m ² p.m.	13.03	R 10.00 m ² p.m.	9.31	Nil	5 years	Escalation 8½% p.a.	R .9310
Melbourne	A\$18.50 per sq. ft. p.a.	19.50	A\$12.00 per sq. ft. p.a.	12.65	30%	3 years	None	A\$1.0543
Sydney	A\$30.00 per sq. ft. p.a.	31.63	A\$16.00 per sq. ft. p.a.	16.87	30%	3 years	None	A\$1.1395
Perth	A\$13.50 per sq. ft. p.a.	14.23	A\$9.00 per sq. ft. p.a.	9.49	30%	3 years	None	A\$1.0543

*period of lease

†some indexation of part of rent

NOTES

1. The rents in local currency are in the terms usually quoted and include landlord's services and property tax where it is standard practice to do so.

2. The rent in dollars per square foot per annum makes allowance for different practices in measuring floor areas and excludes any landlord's services, property tax, or other costs included locally, in order to give net rents which are approximately comparable.

3. The percentage to be added to the net rent in dollars per square

foot per annum for service charges allows for heating, cleaning, lighting, lifts, air conditioning and property tax where applicable.

4. Indexation, where applicable, is an arbitrary increase in rent allowing for the current rate of inflation. Rent reviews provide for adjusting rents to current market levels (usually upwards only). Periods between rent reviews and methods of applying indexation vary widely in each center.

5. In Tokyo the rental market functions in a distinctly different manner from other centers so that comparison of rent is very approximate.

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