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Publication Date

1984

Peer reviewed



Institute of Business and Economic Research

University of California, Berkeley

CENTER FOR REAL ESTATE AND URBAN ECONOMICS WORKING PAPER SERIES

WORKING PAPER 84-85

TAX SHIELDS FOR LOW INCOME HOUSING AND ALTERNATIVE REAL ESTATE INVESTMENTS COMPARED:

BEFORE E.R.T.A. AND AFTER D.R.A.

BY

ALAN R. CERF

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by

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The author is indebted to the Center of Real Estate and Urban Economics of the University of California, Berkeley, for support.

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TAX SHIELDS FOR LOW INCOME HOUSING AND ALTERNATIVE REAL ESTATE INVESTMENTS COMPARED: BEFORE E.R.T.A. AND AFTER D.R.A.

ABSTRACT

Congress uses tax incentives to stimulate development of low income housing. Other forms of real estate investment such as apartment houses, shopping centers and commercial buildings compete in attracting funds from investors.

Relative stimulus to alternative forms of real estate after the Deficit Reduction Act of 1984 are compared to stimulus prior to the Economic Recovery Tax Act of 1981. Comparison is made in a decison making context using present value of tax savings and payback approaches. Given the risk inherent in low income housing investment the differences in tax stimulus to low income housing relative to certain other forms seems to be too small to impact decisions and therefore is a revenue loss to the government. Superior stimulus should be given through either the fast amortization method as is done for rehabilitation of low income housing or by tax credits as used for rehabilitation of older commercial buildings.

TAX SHIELDS FOR LOW INCOME HOUSING AND ALTERNATIVE REAL ESTATE
INVESTMENTS COMPARED: BEFORE E.R.T.A. AND AFTER D.R.A.

As a result of the Deficit Reduction Act of 1984 (DRA) there are different tradeoffs in the various tax stimuli for real estate investment as compared to prior law. Stimulus to low income housing relative to other forms of real estate investment is considered to be an important national goal.

This paper compares the stimulus to low income housing to alternative real estate investments such as shopping centers, office buildings, or residential housing under current law. It compares the changes in relative advantages to alternative forms prior to the Economic Recovery Act of 1981 (ERTA) to after (DRA). It attempts to discern a pattern in the changes in the law as to Congressional intent on how alternative forms should be impacted. It looks at the quantitative stimulus required to cause investors to choose one form of real estate investment over the other on the theory that it is a waste of government funds to give a stimulus that is not sufficient to influence decision makers.

Provision of low income housing is an important objective of Congress. Congress has determined to use the tax law as one form of stimulus to develop low income housing along with government loans and rental subsidies. Low income housing has a 15 year life under DRA compared to 18 years for alternative forms. Rehabilitation of low income housing is subject to a 5 year write off.

Much has happened over time to the relative stimulus for low income housing which has significantly changed the relative tax consequences of investing in alternative forms of real estate. The impact of the accelerated cost recovery system (ACRS) which was introduced by ERTA through rapid depreciation write offs provides the investor with a significant alternative to

investment in low income housing. This is true even with the increase in required useful life to 18 years for property other than low income housing under DRA.

To attempt to accomplish the objectives of this analysis first generally accepted criteria for a superior tax system are examined. Alternative methods used to make decisions to invest in real estate are examined because it is necessary to hypothesize on whether decisions will in fact be impacted by the different stimuli for alternative forms of real estate. A general examination of the evolution of tax incentives and disincentives for real estate from 1954 to 1984 follows to attempt to provide some insight as to how and why the rules have developed.

Major tax incentives and disincentives to alternative real estate forms after DRA are presented. Depreciation and tax credit shields for alternative forms of real estate are compared after DRA using a \$100,000 improvement amount. The present value of depreciation and tax credit shields for a 50 percent tax bracket taxpayer for alternative holdings periods are examined. Relative incentives for low income housing relative to alternative forms are examined by looking at the quantitative differences in present value for different holding periods. This is followed by a comparison of tax rules before ERTA and after DRA. The present value of tax benefits for a 50% taxpayer from an investment of \$100,000 prior to ERTA and after DRA is compared for alternative forms.

Tax Criteria

The tax system has evolved in response to economic, political and social influences. It is not a system which was designed to specification according to a master plan promulgated by experts. The result is a complex system which has developed in response to changing economic, political and social objectives and trade offs between these objectives.

Certain criteria for a superior tax system have considerable support. These criteria will be used to compare alternatives for stimulus to different forms of real estate investment. It is important to note that these objectives are difficult to measure. Further there are conflicts between objectives.

A tax system should be equitable. This covers the concept of horizontal equity and vertical equity. Horizontal equity considers people with equal ability to pay should pay equal taxes. Vertical equity considers difference in progression should correspond to accepted standards of fairness.

Taxes should be neutral. They should minimize interference with economic decisions. However, when the tax system is used to achieve other objectives such as renovation of low income housing it should be done so as to minimize distortions in equity of the system.

Congress has indicated its desire that stimulus to low income housing is important enough to depart from the criteria of equity and of neutrality.

The tax system should facilitate the use of fiscal policy for growth and stabilization objectives. The tax system should permit fair and nonarbitrary administration. Administration and compliance costs should be low as comparable with other objectives. In the case of real estate shelters the law has changed many times and has become extremely complex. Taxpayers have developed creative methods of using the tax rules to their benefit. In turn Congress and the Internal Revenue Service has reacted to stop abuses by a variety of new laws and regulations. All this adds to the administrative and compliance cost.

When special incentives are included in the tax structure a cost benefit analysis should be performed. Special incentives result in lost revenue to the government and therefore a cost to the entire system. Attempts should be made to measure benefits in so far as they fulfill the objectives of congress. Economic incidence rather than statutory incidence is what is important to consider. Certain taxpayers may shelter income and in certain markets may shift the tax burden. Tax benefits tend to be impacted in the prices of specific markets. If tax rules are drastically changed decision makers revise their requirements for return on investment which in turn impacts the prices of the property involved.

Characteristics of System

Tax cuts and increased government spending has resulted in large federal deficits. There is considerable agreement that these deficits should be reduced by both political parties. The Deficit Reduction Act of 1984 (DRA) has made numerous changes but has not resulted in a major significant reduction in the deficit.

The federal income tax structure is considered by some to be seriously defective and to distort economic activity. Many consider it is not fair and is overly complex. Several bills in Congress at this writing are designed to provide for a more fair and simplified tax system.

Tax policy is generally regarded as a legitimate devise for promoting economic objectives providing the particular measures are effective in accomplishing their objective. To be effective the stimulus must cause a decision maker to shift funds to the investment Congress wishes to stimulate from other uses. A stimulus which does not influence decision makers is a windfall to those already investing in a project and lost revenue to the

government. If there are no new investors then the stimulus was not needed and is an unnecessary expenditure by the government.

Tax Incentives and Disincentives

Tax incentives and disincentives are reviewed here to provide a back-ground for the discussion of relative stimulus provided to low income housing relative to alternative forms of real estate investment. Each of these provisions are complex and the reader is referred to standard tax services such as those published by Commerce Clearing House, Prentice Hall, Inc. or Research Institute of America for the specific details.

The rules provide for considerable incentive to investment in real estate which varies according to form of real estate such as low income housing, residential, commercial and whether there is a rehibilitation or not. There are many important disincentives as well. The particular importance for the purpose of this discussion is that the disincentives are likely to increase risk. As risk incerases the investor is likely to demand a higher return. If a higher return is demanded then there must be more stimulus to cause an investor to invest in one type of an investment rather than another.

The two major objectives of real estate tax shelters are to defer payment of taxes and to convert ordinary income into long term capital gains. Whereas ordinary income is taxed at marginal rates to a maximum of fifty percent, long term capital gains are subject to substantially lower tax rates. Currently given a sixty percent long term capital gain deduction the effective tax rate for net long term capital gains is twenty percent for the highest bracket individual taxpayers.

Deferral of tax payments results primarily from depreciation deductions

in the early years of life which substantially exceed real economic depreciation. Exhibit I summarizes the major incentives and disincentives to real estate investment. Deferral of tax is accomplished by the accelerated cost recovery system which was introduced by the Economic Recovery Tax Act. This act provided that most real estate could be depreciated over a fifteen year life. Prior to this time depending on age and condition most real estate was depreciated over a forty year life. The Deficit Reducton Act of 1984 increased the life for most real estate to 18 years. However low income housing still uses a fifteen year life and double declining balance depreciation. Rehabilitation of low income housing enjoys a special five year straight line write off. Exhibit II summarizes the depreciation lives and depreciation methods allowed by the 1984 Deficit Reduction Act for different types of real estate.

Exhibit | here

Rehabilitation of commercial buildings receives a tax credit depending on the age of the building. A tax credit is obviously worth more than a deduction since it is a dollar for dollar reduction in tax. The investor hopes that the project can be sold eventually at a gain and that gain will be taxed at favorable long term capital gain rates. Another advantage to real estate investment is the existence of the tax free exchange rules of I.R.C. Section 1031 which allows the exchange of like kind property without recognition of gain if specified requirements are met.

Exhibit II here

Real estate has an advantage over other types of tax shelters because of the non applicability of the "at risk rules." These rules provide that tax losses of certain taxpayers are limited to the amount the taxpayer has invested at risk of loss. Such amounts generally include investments of cash or other property and recourse debt. In the case of real estate it is possible for an investor to have deductions in excess of the amount that he or she has at risk.

The tax law is complex and there are many disincentives in the tax law. An investor may be frustrated in pursuit of long term capital gain by the recapture provisions in the law. Gain on the sale or the disposition of certain property may be required to be classified as ordinary income rather than as capital gain if ordinary deductions have been allowed. Exhibit II summarizes the depreciation recapture rules for various types of property. If straight line depreciation is used there is no depreciation recapture. If accelerated depreciation is used the rules vary. For low income housing the excess of accelerated over straight line is recaptured. For commercial all depreciation is recaptured.

The alternative minimum tax is a new minimum tax effective for years beginning after 1982. It is designed so that taxpayers pay at least a minimum tax and do not shelter all their income. Its base is comprised of the long term capital gain deduction and accelerated depreciation on real property to the extent that it exceeds the straight line method. It also includes certain other tax preferences. The amount is reduced by certain deductions and by an exemption. For example the exemption is \$40,000 for married taxpayers filing joint returns. A tax rate of twenty percent is applied to the remainder. If the resulting tax amount exceeds the regular tax, the alternative tax is paid.

Investors that enjoy the benefit of tax shelter in the early years need to prepare for what is referred to as the "crossover" or "turnaround" problem. This happens when a tax shelter investment has exhausted its tax advantages and has begun to generate taxable income without cash flow sufficient to pay the resulting tax. This will happen with a real estate shelter when the property begins to show income for tax purposes but cash flow is minimal because of required principal payments on mortgage obligations.

Congress and the treasury department has attempted to reduce the number of abuses that were often present in tax shelters. The 1984 Deficit Reduction Act provides for tax shelter registation, tax shelter promoter penalties, and a special interest rate for tax shelter cases.

Real estate shelter in addition to tax considerations enjoy the advantage of leverage. A property often may be financed for example by twenty percent of capital and by eighty percent of borrowed money. Depreciation will be calculated on the basis of the total cost of the improvements.

Unfavorable tax consequences can occur when an investment fails. If there is debt on the property that exceeds its tax basis, the law may find a constructive sale of the property that results in taxable income, most or all of which may be ordinary income from depreciation recapture. In this case an investor may find that there is a tax obligation without the receipt of cash with which to pay it.

The result of the variety of incentives and disincentives is to create many opportunities but also to provide for many pitfalls. Some of the pitfalls can be avoided by careful planning. Nevertheless the disincentives act to increase the risk in the project. As the risk increases investors tend to require greater potential rates of return. To the extent they require greater returns the tax stimulus which will influence investors to invest in one project rather than another must be greater.

Evolution of Real Estate Tax Shelters

Tax advantages to real estate and to low income housing in particular are partly the result of deliberate action by Congress. Advantages have been modified by I.R.S. regulations, rulings and court decisions.

This section will examine the developments in stimulus to real estate with the objective of determining whether there is any discernible pattern. It appears that the development of the stimulus has evolved without a clear cut determination of objectives and a study of how to meet these objectives. The development has been influenced by the planning of lawyers, accountants, builders, and developers. Where Congress perceives there have been abuses Congress has responded by establishing new rules to stop these abuses.

Accelerated depreciation was allowed for buildings in the Internal Revenue Code of 1954. This went along with the allowance of accelerated depreciation for machinery and equipment. Arguments at this time centered around whether assets depreciated more quickly than straight line depreciation. There is some evidence that buildings may depreciate more slowly than straight line (Congressional Budget Office, 1977).

The Tax Reform Act of 1969 was important in that it scaled back many benefits for real estate but added an important incentive to rehabilitation of low income housing. Accelerated depreciation for commercial real property was reduced as well as for used residential rental property. This gave a relative advantage to new residential over other forms of real estate investment such as shopping centers or office buildings. All excess depreciation of post 1969 non residential rental property was now recaptured as ordinary income on sale at a gain. A new provision was added which allowed certain expenditures to rehabilitate low income rental housing to be amortized on a

straight line basis over a period of only five years. Section 167(k) thus was added to the code which significantly changed the relative tax advantage between rehabilitation of low income housing and other real estate investments. In addition, Congress permitted the deferral of gain on the rehabilitation of projects through section 1039. This section permits the rollover of gain on rehabilitation projects when the buildings are sold to the tenants and the proceeds are reinvested in another qualifying rehabilitation project.

As the following excerpt from a Senate Committee Report (Senate 1969, p. 211) indicates, Congress wanted to cut back on abuses:

...it has become the practice to promise a prospective investor (in real estate) substantial tax losses which can be used to diminish the tax on his income from other sources. Thus there is in effect substantial dealings in "tax losses" produced by depreciable real property. The Committee, agreeing with the House, believes the solution is the elimination of these losses in those cases where there is no true economic loss.

In this period there was a great deal of concern within Congress and the Executive Branch about the "crisis" which existed in the low and moderate income housing markets. The enactment of the Housing and Urban Development Act of 1968, and the Kaiser Committee report (Kaiser Committee 1968) focused attention on the problems of housing. There was particular concern over low income housing and particularly substandard and overcrowded dwellings (Meir 1972).

The tax act of 1969 also introduced a new minimum tax on "tax preference" income including accelerated depreciation as a tax preference. This reduces the attraction of accelerated depreciation to investors who are seeking to shelter large amounts of income.

The ability to use limited partnerships in real estate ventures has provided developers with the ability to pass through tax losses to investors.

Construction of FHA sponsored rental housing was encouraged by the Hous-

ing Acts of 1961 and 1964 where changes were made to permit partnerships to own and operate FHA sponsored rental housing.

The Tax Reform Act of 1976 reduced further preferential tax treatment for real estate. Construction period interest and taxes now had to be capitalized and written off over a period of time. There were differences in the application with preference given to rental housing. Important changes were made in the minimum tax rules to reduce the advantages of accelerated depreciation for investors with significant amounts of tax sheltered income. The five year amortization subsidy for low income housing rehabilitation was extended for two more years. This has been repeatedly continued and is currently still in effect. A number of new tax advantages were established for the rehabilitation of certain historic structures. Recapture rules were also tightened. For all real property except low income rental housing, all depreciation deductions in excess of straight line will be recaptured when the property is sold.

Real estate received a relative advantage over non-real estate shelters. Under the new "at risk" rules, limited partners may not take losses in excess of the amount they have "at risk." Included in the "at risk" base is the amount the investor has actually invested in the project plus whatever debt they are personally obligated for. Real estate tax shelters are explicitly exempted from this new rule.

The Economic Recovery Tax Act of 1981 (ERTA) provided an important stimulus to all real estate investment. For most depreciable real property lives were reduced to fifteen years. It had been forty years for most property in the past. The thrust of the act was to stimulate the economy. The combination of short depreciable lives and accelerated rates of recovery often produce substantial tax losses in the early years of a tax shelter.

These losses contribute significantly to the investment as the investor can use these losses to offset other income. ERTA also changes the relative advantages of alternative forms of real estate investment. This is discussed when the pre-ERTA rules are compared with the post DRA rules.

Because of the rapid depreciation write off and favorable recapture rules real estate tax shelters grew rapidly. Congress began to be concerned that investment was diverted from more productive investment pro-Congress extended the 15 year depreciation period to 18 years for real property other than low income housing. Prior to DRA when real property was sold at a gain in an installment sale the taxpayer could recognize the gain as princpal payments were received regardless of the character of the income. DRA provides that all depreciation recapture income on sales or real or personal property is taxable to the seller in the year the sale takes place, even if no principal payments are received. The act also provides that the tax free treatment given a taxpayer who transfers property on a particular date in a like kind exchange does not apply if the property to be received by that taxpayer is not identified within 45 days of the transfer date and is not actually received by the earlier of the due date, including extension of the taxpayer's return for the year of the transfer or within 180 days of the transfer date.

Likelihood of audit appears to be increased for tax shelters as a result of DRA. Organizers of tax shelters must register it with the Treasury. A purchaser of an interest in a shelter must receive the shelter's I.D. number and place it on his or her tax return. A shelter is defined as any investment in which it can reasonably be inferred from the representations made that the ratio of the deductions and 200 percent of the credits from the

shelter to the cash and other property contributed to the shelter exceeds 2 to 1 as of the close of any of the first 5 years.

DRA enacted changes in the taxation of partnerships in order to reduce perceived abuses in the use of tax shelters involving partnerships. It also provided for more stringent tax shelter promoter penalties and increased interest rates for underpayments in tax shelter cases. Reporting requirements were added for receipt of mortgage interest and for foreclosures.

New rules involving deductions for interest are designed to avoid a perceived abuse under prior law. Formerly real estate could be purchased for a note accruing interest but not requiring payment until maturity of the note. An accrual method issuer could claim annual interest income until received. The result was the accrual method taxpayer had inflated front end interest deductions. For example, under prior law an accrual taxpayer might deduct interest at a rate of 14 percent while only paying 8 percent. This resulted because there was not sufficient cash flow to pay the 14 percent specified on a current basis.

Reviewing the history of the tax provisions indicates two particularly important times where real estate was given a big stimulus. This was the allowance of accelerated depreciation in the 1954 Act and the drastic reduction in lives in 1981 under ERTA. Rehabilitation of low income housing has been given a special preference. At times Congress has expressed a preference of residential over commercial real estate. The exemption of low income housing in the increase in real estate lives from 15 to 18 years under DRA seems not to be too significant. Throughout the history of the provisions there have been many changes which have added to the complexity of the rules. Often changed and tightened depreciation recapture

rules, minimum taxes, and increased reporting requirements which increase the likelihood of audit act to counteract the incentives provided by the depreciation methods and lives. All in all the pattern does not seem to follow an objective determination of what Congress intends for real estate investment and particularly for low income housing relative to other forms of investment.

Decision Process

The purpose of stimulus through the tax code is to cause the shift of resources from one form of investment to another. Otherwise Congress would not violate the generally accepted concept of neutrality. Exploration of the decision process for real estate investment tax shelters is done to hypothesize on the magnitude of stimulus necessary to cause an investor to shift from one investment to another.

Decision makers in real estate investments seem to follow two primary approaches. One group of investors or their advisors attempt to use either the internal rate of return or net present value approach. Another group follows a pay back approach where they ask how long will it take to get back their investment. Since most of their investment is returned in tax savings they strive for a situation in which their tax money has gone to an economic project with potential capital gain rather than to the government. This attitude is evidenced by highly speculative shelters—such as those based on alternative energy sources which have been able to attract money in situations where there is little or no track record of economic energy production.

A key item involved in both approaches is the amount of risk involved.

There is risk in future cash inflows, future cash outflows, cash flows on

disposition and risk in changes in future tax rates and tax regulations. There is risk in potential recapture and in "turnaround" problems. Recall the turnaround problem results at the time when the investment shows a positive taxable income but does not have positive cash flow because principal payments are being made on debt. The higher the risk the higher the discount rate required in the internal rate of return method and the shorter period demanded in the payback method. The investor must evaluate the risk involved in the investment. This is due to the uncertainty of the components of cash flow. Tax laws may change or the investors tax bracket may drop so he can not make full use of tax shelter. Operations may yield negative cash flows rather than positive cash flows. The property may not appreciate so that there will not be a capital gain on sale.

An investor nevertheless should attempt to measure the potential return on an investment. He then can compare alternatives in determining the return on investment that is acceptable in light of the risk involved in the alternative investments.

Using the internal rate of return approach or the net present value approach an investor evaluates the potential cash flows that are likely to come from an investment. In the case of a tax shelter these take the form of tax savings, cash flows from current operations and cash flow from disposition.

A generally accepted method of analyzing an investment is to determine the net present value. The projected cash flows are discounted at the investor's required rate of return for that investment. If the result is a positive number the investor knows that the investment exceeds the rate of return she has set for the investment. Alternatively an internal rate of return may be computed. This is the rate that will discount future cash

flows to an amount that yields the amount invested. This is the discount rate at which the net present value is zero. Internal rates of return can be computed through the use of computer programs. There are problems with the internal rate of return in that the internal rate of return is the measure only of the return on the amount that remains invested. There is also a problem if there are future negative cash flows such as required additional investments.

Because of the many uncertainties involved many investors base their decision on their knowledge and experience or on their faith in the reputation of the promoter or manager of the project. Many investors approach an investment by asking how long it will take to regain their investment. This method ignores future cash flow, future tax liabilities, future potential gains, and the present value of money. This payback method does not distinguish between the timing of future cash flows and doesn't say anything about the rate of return on investment.

Because of the uncertainty involved investors use payback alone or use it along with net present value or internal rate of return. Sometimes this is lack of sophistication. Other times it is lack in faith in projection of cash flows particularly as they are further in the future. If a very high discount rate is applied to future amounts the present value of that amount is low. Thus the emphasis is on current and near current cash flows.

The crucial point is that current and near term current amounts are what are most important. This follows from the discounting process. It also follows from the behavior of investors who look particularly at how long it takes them to get back their investment.

Congress in developing incentives must consider the importance of current and near term current tax savings. This points to the superiority of

tax credits such as used for rehabilitation of commercial buildings and fast amortization such as used in the case of rehabilitation of low income housing over depreciation shields over longer periods of time. Tax credits are certain and immediate. Future depreciation shields depend on the ability to use these shields.

Risk

Low income housing generally will require a higher rate of return than investment in other real estate shelters. Low income housing has the relative advantage of government assistance on loans, and government assistance in rental payments. They have relative disadvantages in limits on rental increases, and selection of tenants. They are perceived to have more actual depreciation in value than apartment houses, shopping centers or commercial buildings because of greater management and maintenance problems. They are perceived not to have the upside potential that is associated with other real estate investments.

Real estate investment is highly competitive and subject to numerous risks. Neither the partnership interest nor the underlying property is readily marketable. Fluctuations in occupancy rates, increases in energy cost and other expenses, variations in rental schedules, local economic considerations, supply and demand for property, zoning laws and other laws and regulations add to risk. Debt service and real estate taxes do not generally decrease with decreases in occupancy which may result in expenses exceeding income. If sufficient income is not generated which is sufficient to pay the debt obligations foreclosure may result which can result in adverse tax consequences to investors. When the property is sold the price may not be sufficient to pay off the mortgage indebtedness and allow

for distributions to investors sufficient to pay off other indebtedness.

Different ventures have varying amounts of diversification which can cause investors to be dependent on the operating results of only a few properties.

As a result of the numerous risks involved most public offerings include minimum income and net worth requirements.

The implication for this paper is that real estate carries numerous risks and low income housing is perceived to have more risk. From a decision making standpoint this means that the required discount rate is higher or the required pay back period shorter. This in turn means that tax stimulus must be higher.

Value of Tax Shields after Deficit Reduction Act

An investor faces alternative tax stimuli for different forms of investment. The value of these shields depends on his or her marginal tax bracket and future marginal tax brackets. This in turn depends on future statutory rates and the ability of an investor to have sufficient taxable income to use deductions at a certain marginal rate as well as the discount rate to be employed.

To estimate the values of tax benefits the dollar depreciation and tax credit shields for alternative forms of real estate for \$100,000 of improvements after the Deficit Reduction Act of 1984 was computed. An assumption was made that the taxpayer was in the fifty percent bracket. This is consistent with the high risk nature of these investments and general standards of appropriateness of these kinds of investments.

The present value of the depreciation and tax credit tax shields for a 50 percent taxpayer for alternative holding periods and for alternative forms of real estate was computed using a twelve percent discount rate. A

twelve percent discount rate is at this writing the yield on a long term government bond. An investor would use a higher discount rate if there was doubt concerning his or her ability to have sufficient future income to use the deductions. Note the risk to be considered here is the risk of using the tax benefits, not the risk inherent in the project.

Depreciation and tax credit shields for alternative forms of real estate for \$100,000 improvements after DRA is presented in Exhibit III. This table reflects the eighteen year life except for low income housing which remains at a fifteen year life and rehabilitation of low income housing which has a five year amortization. It also reflect the allowable methods which are detailed in Exhibit II. Because of the high risk in real estate investors are mostly interested in near term deductions. This also is inherent in the present value analysis which means near term amounts are worth more than later amounts. Relatively superior stimulus is evident for rehabilitation of commercial buildings through the five year write off. Rehabilitation of historic structures also receives a tax credit. It must be recognized that each of these allowances is subject to a variety of rules.

Exhibit III here

The present value of tax benefits for a fifty percent bracket taxpayer for alternative holdings periods and for different forms of real estate is presented in Exhibit IV. The dollar benefit to a taxpayer in the fifty percent bracket is one half of the depreciation allowance plus 100 percent of the tax credit. The present value of each annual amount then was computed using a 12 percent discount rate. For example in five years low

income housing has depreciation allowances the present value of which is \$19,275. The present value of the benefits for commercial or residential is \$14,663.

Exhibit IV

The differences in the present value of tax shields for low income housing relative to alternative investments for different holding periods are also presented in Exhibit IV. For example low income housing has a present value for five years that is \$4612 better than either commercial or residential for improvements amounting to \$100,000. This is computed by subtracting the present value for commercial buildings of \$14,662 from the \$19,275 present value of low income housing shown in Exhibit IV. Examining the five year column it is apparent the superior stimulus is to rehabilitation. Rehabilitation of low income housing is \$16,771 better than low income housing. Commercial rehabilitation is \$8,734 better than low income housing.

Benefits for the first five years are 87 percent higher for rehabilitation of low income housing relative to low income housing. Low income housing is only 31 percent higher than commercial. Commercial rehabilitation is 45 percent better than low income housing in the first five year period. There is no difference in commercial and residential.

If the tax law is to be neutral there should be no difference in these present values for alternative forms of investment. If the tax law is to provide a stimulus the differences should reflect clearly the intent of Congress as to the relative incentives to be given to each form of investment.

If for example investors use a five year horizon and if a difference of \$4612 in present value of tax savings per \$100,000 improvements is not sufficient to cause an investor to invest in low income housing rather than commercial the result is a revenue loss to give the additional stimulus to low income housing. Those investing in low income housing would have invested in low income housing without the incremental tax stimulus so there is no need for the stimulus.

The following question results from examination of Exhibit IV. If Congress started from the beginning and was asked to determine the tax shields for alternative forms of real estate investment, would the results be like the figures in Exhibit IV? The priorities are clear as follows: (1) Rehabilitation of low income housing, (2) rehabilitation of historic structures, (3) commercial rehabilitation, (4) low income housing, (5) commercial and residential are not distinguished. One might contend that low income housing should have incremental stimulus relative to residential and commercial similar to the incremental stimulus that rehabilitation has over residential and commercial.

Payback Approach

Exhibit V presents computations of cumulative payback from tax savings for alternative forms of real estate investment. This is based on \$100,000 depreciable improvements and a taxpayer in the 50 percent tax bracket. For example, \$100,000 qualifying rehabilitation in low income housing results in a \$20,000 deduction in year one which results in \$10,000 tax savings for a 50 percent tax bracket taxpayer.

Leverage must be considered in the calculation. As an approximation

to determine the percentage of investment returned each year through tax savingsthe following is assumed: (1) nondepreciable land, \$25,000, (2) improvements, \$100,000, (3) debt \$87,500 which is 70% of gross investment, (4) net investment \$37,500.

The dollar cumulative payback is divided by \$37,500 to indicate the percentage of the investment returned from tax savings. This is of course oversimplified as it does not consider cash inflows from operations. Also recall the payback approach as noted in the section on decision process is subject to numerous disadvantages.

Based on this criteria alone rehabilitation of low income housing is clearly superior to other low income housing. The comparison is complicated of course by the amount of investment attributable to the structure which would be depreciated in the same manner as low income housing. Low income housing has a relative advantage over residential and commercial. This advantage however is not as large as the difference between low income housing and rehabilitation of low income housing.

Comparison of Tax Rules before ERTA and after DRA

The large increase in stimulus to real estate investment came as part of the Economic Tax Recovery Act of 1981. Depreciation lives for real estate were reduced drastically along with depreciation lives for machinery and equipment. Prior to ERTA real estate improvements were depreciated generally over approximately forty years depending on their age and condition. The accelerated cost recovery system which was part of ERTA reduced the lives to 15 years. The rules before ERTA and After DRA are compared in Exhibit VI.

Whereas lives were reduced from forty years to 15 years under ERTA,

they were only increased from fifteen to eighteen years under DRA. Low income housing remained at fifteen years.

Low income housing was depreciated over forty years using the 200% declining balance method before ERTA. After DRA it is depreciated over fifteen years using the same method. New commercial was depreciated over forty years using the 150 percent declining balance method before ERTA. After DRA it is depreciated over eighteen years using the 175% declining balance method. New residential went from forty years using the 200% declining balance method prior to ERTA to eighteen years and the use of the 175% declining balance method.

Since these are competitive investments it seems logical that differences in allowances between alternative forms and changes over time should reflect some specified policy. Examination of Exhibit VI does not seem to evidence a logical policy. Prior to ERTA there was a distinction in methods between new residential and used residential. Further there was a distinction between the allowable methods for residential and commercial.

The present value of tax benefits for a fifty percent taxpayer for improvements of \$100,000 prior to ERTA and after DRA are presented in Exhibit VII for various holding periods. The significant increase for tax shields for all forms of real estate is evident with the exception of rehabilitation of low income housing which still has the highest shield. For example the present value of the tax shield for low income housing went from \$8248 to \$19275 for a five year holding period. New residential increased from \$8248 to \$14663 for a five year period. New commercial went from \$6323 to \$14662.

Exhibit VII here

Relative incentives for low income housing and for alternative forms of investment are compared prior to ERTA and after DRA. The present value of tax benefits for a fifty percent taxpayer for improvements for \$100,000 prior to ERTA and after DRA are presented in Exhibit VIII. For example new residential was equal to low income housing for a five year holding period prior to ERTA. Now it is \$4612 worse.

Exhibit VIII here

The following questions seem relevant.

(1) Are these the differences Congress intends? (2) Are the differences significant enough to cause an investor to choose one form of investment rather than another? For example, would an investor be influenced to invest in low income housing rather than a new shopping center or a new apartment house by a \$4612 present value difference in tax benefits for a five year holding period.

Conclusion

Relative tax stimulus for alternative forms of real estate has changed significantly many times since the allowance of accelerated depreciation in the 1954 Internal Revenue Code. Rules appear to evolve in response to economic considerations, political pressures and perceived abuses rather than being the result of a conscious objective plan on the part of Congress. The many disincentives such as depreciation recapture, the minimum tax and increased reporting requirements create complexity and add to risk premiums demanded by investors.

Real estate carries numerous risks and low income housing is perceived

to have more risk. From a decision making standpoint this means that the required discount rate is higher or the required payback period shorter. This in turn means that tax stimulus must be higher to be effective.

Examination of the present value approach and the payback approach to decisions indicates the advantage of immediate tax credits and near term tax savings such as that provided by fast amortization over depreciation shields whose benefits flow over a longer period of time. This indicates the importance that Congress must give to short term tax savings.

A logical pattern is difficult to discern as a result of the examination of the changes in the law. Differences seem to evolve rather than be the result of a plan which sets out differences which are objectively designed to influence alternative investments.

Comparison of incentives after DRA raises the following questions: (1)

Are these the realtive differences in incentives Congress intends? (2) Are
the differences between low income housing on one hand and residential, or
commercial on the other hand significant enough to cause an investor to
choose low income housing over another form?

The following propositions seem reasonable: A complete reexamination of the rationale for the differences in tax rules relating to alternative forms of real estate is needed. Where Congress does not intend to favor one investment over another there should be no differences. Where Congress wishes to impact a particular form there should be major differences. To stimulate low income housing Congress should use the tax credit approach or the fast amortization approach to provide a significant relative advantage over other forms of real estate investment.

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Exhibit I

MAJOR INCENTIVES AND DISINCENTIVES TO REAL ESTATE AFTER DRA

INCENTIVES	DISINCENTIVES
Deferral of Tax	
Accelerated Cost Recovery System Five year write off for rehabilitation	Depreciation Recapture
of low income housing Preferred life and method for low	Recapture of Tax credits
income housing	Alternative minimum tax
Permanent Reduction of Tax Tax Credit for rehabilitation of	Turnaround problem
commercial buildings	Unfavorable disposition be- cause of project economics
Taxation at Favorable Rates	
Potential long term capital gain	Excessive management and promoter compensation
Tax Free Exchanges	·
Non Applicability of "at risk" rules	Tax penalties
•	Audit reporting requirements
Front End Deductions	Uncertainty re deductions
Leverage	e de la companya de
	Regulatory requirements

EXHIBIT II

Capital Cost Recovery Guidelines: 1984 Deficit Reduction Act

	Rehabilitation Low Income Housing	Low Income Housing	Commercial Rehabilitation Investment Tax Credit	Commercial No I.T.C.	Residential	Historic Structures Rehabilitation
Depreciation Lives Years	, M	15	18	. 8	8	18
Depreciation Method Government Tables	straight line	200% declining balance	Straight line	175% declining balance	175% declining balance	Straight line divided by 18
Depreciation Computation	original basis divided by five	original basis times %	original basis less I.T.C. divided by 18	original basis times %	original basis times %	original less I.T.C. adjustment
Investment Tax Credit	ou	OU	15% 30-39 yrs. 20% 40 yrs.	0 U	о г	25%
Depreciation Recapture -straight line	OU.	ou	ou	οu	ou	. <u>6</u>
-accelerated	accelerated less straight line based on	accelerated less straight line	not eligible for accelerated depreciation	all depreciation recaptured	accelerated less straight line	not eligible for accelerated depreciation
Potential I.T.C. Recapture	0 C	OU.	yes	OU	ou	yes

EXHIBIT III

Depreciation and Tax Credit Shields for Alternative Forms of Real Estate: For \$100,000 Improvements After Deficit Reduction Act of 1984

Year	Rehabilitation Low Income Housing	Low Income Housing	Commercial Rehabilitation Credit 2000(a)	Commercial	Residential	Historic Structures Rehabilitation Credit 25000(b)
-			20000			25000
-	20000	13000	4444	0006	0006	4861
2	20000	12000	4444	0006	0006	4861
က	20000	10000	4444	8000	8000	4861
4	20000	0006	4444	7000	7000	4861
2	20000	8000	4444	2000	2000	4861
9	0	7000	4444	0009	0009	4861
7	0	0009	4444	2000	2000	4861
œ	0	2000	4444	2000	2000	4861
6	0	2000	4444	2000	2000	4861
10	0	2000	4444	2000	2000	4861
11	0	4000	4444	2000	2000	4861
12	0	4000	4444	2000	2000	4861
13	0	4000	4444	4000	4000	4861
14	0	4000	4444	4000	4000	4861
15	0	4000	4444	4000	4000	4861
16	0	0	4444	4000	4000	4861
17	0	0	4444	4000	4000	4861
18	0	0	4444	4000	4000	4861

(a) Commercial rehabilitation requires full reduction of basis by amount of credit (b) Historical structures rehabilitation requires reduction of basis by one half of the credit

EXHIBIT IV

Comparison of Present Value of Tax Shields for Low Income Housing Relative to Alternative Forms for Fifty Percent Tax Bracket Taxpayer After DRA Discount Rate Twelve Percent

	Rehabilitation Income Housing	Low Income Housing	Commercial Rehabilitation Credit \$20000	Residential and Commercial
Five Years Total	36048	19275	28009	14663
Eight Years Total	36048	23415	31038	18323
Twelve Years Total	36048	26209	33763	21390
Fifteen Years Total	36048	27443	35133	22624
Eighteen Years Total	36048	27443	36108	23500
LIH rel. 5 years(a)	16773	Base	8734	-4612
LIH rel. 8 years	12633	Base	7623	-5092
LIH rel. 12 years	9839	Base	7554	-4819
LIH rel. 15 years	8605	Base	7690	-4819
LIH rel. 18 years	8605	Base	8665	-3943

⁽a) compares low income housing (LIH) relative to alternative holdings.

EXHIBIT V

Cumulative Tax Savings for Fifty Percent Taxbracket Taxpayer for an Investment in Alternative Forms of Real Estate Land, \$25,000, Improvements, \$100,000, Equity 30%

ential	12%	24	32	44	53	75	101	117	133
Residential	\$4500	0006	13000	16500	20000	28000	38000	44000	20000
Commercial	12%	24	35	44	53	75	101	117	133
Сошп	\$4500	0006	13000	16500	20000	28000	38000	44000	20000
ical tation (2)	59%	65	11	77	83	100	124	142	160
Commerical Rehabilitation	\$22222	24444	56666	28888	31100	37776	46664	53330	29996
come	178	33	47	59	69	93	117	133	133
Low Income Housing	\$6500	12500	17500	22000	26000	35000	44000	20000	20000
ation ome Jg	27%	53	80	107	133	133	133	133	133
Rehabilitation Low Income Housing (1)	\$10000	20000	30000	40000	20000	20000	20000	20000	20000
Year		2	က	4	S	œ	12	15	18

(1) Cumulative dollar savings(2) Cumultative percent of 37,500 equity returned

	Before ERTA	After DRA
Rehabilitation Low Income Housing	Five Years Straight Line	Five Years Straight Line
Low Income Housing New	Forty Years 200% Declining Balance	Fifteen Years 200% Declining Balance
Residential New	Forty Years 200% Declining Balance	Eighteen Years 175% Declining Balance
Residential Used	Forty Years 125% Declining Balance	Eighteen Years 175% Declining Balance
Commercial Rehabilitation	Forty Years Straight Line Tax Credit	Eighteen Years Straight Line Tax Credit
Commercial New	Forty Years 150% Declining Balance	Eighteen Years 175% Declining Balance
Commercial Used	Forty Years(1) Straight Line	Eighteen Years 175% Declining Balance

⁽¹⁾ depending on age and condition

EXHIBIT VII

Present Value of Tax Benefits for Fifty Percent Taxpayer for Improvements of \$100,000 Prior to E.R.T.A. and after D.R.A.

												-		
	Rehabilitation	ation	Low Income	Housing	Res	Residential New	Residentia Used	ential ed	Commercial Rehabilitation	rcial itation	Commercial New	mercial New	Commercial Used	ercial ed
	Before ERTA	DRA	Before ERTA	DRA	Before ERTA	DRA	Before ERTA	DRA	Before ERTA	DRA	Before ERTA	DRA	Before ERTA	DRA
Five Year Total	36048	36048	8248	19275	8248	14663	5327	14663	19011	28009	6323	14662	4504	14662
Eight Year Total	36048	36048	10764	23415	10764	18323	7092	18323	22419	31038	8339	18323	6209	18323
Twelve Year Total	36048	36048	12664	26209	12664	21390	8578	21390	25485	33763	9863	21389	7742	21389
Fifteen Year Total	36048	36048	13458	27443	13458	22624	9326	22622	27027	35133	10522	22622	8513	22622
Eighteen Year Total	36048	36048	13943	27443	13943	23500	9857	23500	28124	36108	10980	23500	9062	23500
														-

EXHIBIT VIII

Low Income Housing Benefits Compared:
Present Value of Tax Benefits for Fifty Percent Taxpayer for Improvements
of \$100,000 Prior to E.R.T.A. and After D.R.A.

ommercial New	Commercial New	Commerc New	cial stion	Commercial Rehabilitation	Residential Used	Resi Us	tial	Residential New	ome Ome	Low Income Housing	itation Housing	Rehabilitation Low Income Housing	Lov
ERTA DRA Bef. ERTA DRA	Bef. ERTA DRA I	ef. ERTA	DRA	Bef. ERTA	DRA	Bef. ERTA DRA	DRA	Bef. ERTA	TA DRA	Bef. ERTA DRA	DRA	Bef. ERTA DRA	
24 -4612		-1924	8734	10763	-4612	-2920	-4612	0	Base	Base	16773	27799	
24 -5092		-2424	7623	11655	-5092	-3671	-5092	0	Base	Base	12633	25283	Fight Year Relative
00 -4819		-2800	7554	12821	-4819	-4085	-4819	0	Base	Base	9839	23384	Twelve Year Relative
36 -4819		-2936	7690	13568	-4819	-4132	-4819	0	Base	Base	8605	22589	Fifteen Year Relative
63 -3943		-2963	8665	14180	-3942	-4086	-3942	0	Base	Base	8605	22104	Eighteen Year Relative
ERTA DRA 24 -4612 24 -5092 20 -4819 36 -4819 36 -3943	ERTA DRA 24 -4612 24 -5092 00 -4819 36 -4819 63 -3943	-1924 -2424 -2800 -2936 -2963	DRA 8734 7623 7554 7690	Bef. ERTA 10763 11655 12821 13568 14180	-4612 -5092 -4819 -4819 -3942	Bef. ERT/ -2920 -3671 -4085 -4132 -4086	-4612 -5092 -4819 -4819 -3942	Bef. ERTA 0 0 0	FA DRA Base Base Base Base	Bef. ER. Base Base Base Base	16773 12633 9839 8605	27799 25283 25283 23384 22589 22104	Five Year Relative (1) Eight Year Relative Twelve Year Relative Fifteen Year Relative Eighteen Year Relative

Present value of benefits for rehabilitation of low income housing is 27799 greater than low income housing

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