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The Tax Treatment of Structures

James R. Hines, Jr.

Structures constitute more than three-quarters of the U.S. tangible capital stock. Despite their relatively low rates of depreciation, structures account for more than half of all gross fixed investment in most years. Tax policies potentially have a major impact on both the level and composition of investment in structures. Two aspects of the taxation of structures—the relative burden placed on structures as opposed to equipment investment and the nontaxation of owner-occupied housing under the income tax—have attracted substantial attention in recent years. This paper explores these two aspects of the taxation of investments in structures.

The U.S. Department of the Treasury (1984), in its recent tax reform proposal, pointed to the extra tax burdens placed on structures relative to equipment as a major defect of the current Accelerated Cost Recovery System (ACRS). The 1985 Economic Report of the President echoes this sentiment, concluding, “The effective tax rate . . . is lower for equipment than for structures. Because different industries utilize different mixes of capital goods, differential taxation of assets results in differential taxation of capital income by industry. The average effective Federal corporate tax rate on fixed investment varies widely by industry.” The decisions of the Congress in 1984 and 1985 to scale back the depreciation benefits to structures but not to equipment is perhaps surprising in the light of these conclusions.

The allegedly favorable treatment of owner-occupied housing has long been a target of academic critics of the tax system, although

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suggestions for reform have generated little if any political support. The failure to include imputed rent is often treated as a tax subsidy. A large literature summarized in Rosen (1985) has estimated the welfare loss thought to come from tax-induced changes in tenure choice. And the corporate income tax is often opposed on the ground that it exacerbates the distortions caused by the nontaxation of owner-occupied housing.

While the tax system may well have a potent impact on the level and composition of the investment in structures, conventional analyses of this effect are very misleading. This paper reaches two main conclusions on the subject. First, under current tax law, certain types of investment in structures are very highly favored. Overall, it is unlikely that a significant bias toward equipment and against structures exists under current law. Second, the conventional view that the tax system is biased in favor of homeownership is wrong. Because of the possibility of "tax arbitrage" between high-bracket landlords and low-bracket tenants, the tax system has long favored rental over ownership for most households. The 1981 reforms, by reducing the top marginal tax rate, reduced this bias somewhat.

Many earlier analyses have reached different conclusions because of their failure to take account of several aspects of the behavior of real world investors who tend to reduce the effective tax burden on structures investment. First, structures may be depreciated more than once ("churned") for tax purposes. Particularly where devices can be found to reduce the effective rate of capital gains tax below the statutory rate, the effective purchase price of a structure may be substantially reduced by the knowledge that it can be depreciated several times. Second, some types of structures, particularly commercial buildings, are very easy to borrow against because they are quite liquid assets. To the extent that the tax system favors the use of debt finance they too will be favored. Third, certain types of investments, especially residential rental capital, facilitate tax arbitrage.

This paper is organized as follows. Section 4.1 reviews trends in structures investment over the past few years and highlights the dramatic increase in the rate of investment in commercial buildings that has occurred. Section 4.2 describes the tax rules on churning capital assets and considers under what circumstances churning will produce a tax advantage. Section 4.3 considers the role of leverage and raises the possibility that investments in structures are favored under current tax law because of their ability to carry debt. Section 4.4 examines the tax advantages to homeownership and shows that the tax law actually provides incentives for most households to rent their homes. Section 4.5 concludes by discussing the implications of these results for tax reform and for future research.

4.1 Patterns of Structures Ownership and Investment

A number of studies, notably Auerbach (1983) and Fullerton and Henderson (1984), have made rather elaborate calculations of the dead-weight losses arising from the failure of the tax system to impose equal burdens on different types of corporate investment. In large part, the assumed differential taxation of equipment and structures drives the results of these studies. This differential taxation creates inefficiencies in production within industries and also favors some industries at the expense of others. Despite the results of many academic experts and of staff analyses suggesting that the then current law was heavily biased in favor of equipment, Congress in 1984 chose to scale back the depreciation benefits associated with investments in structures but not to alter the tax treatment of equipment investments. The 1984 action was taken at least in part because of a widespread perception that the 1981 acceleration of depreciation allowances had led to the rapid growth of tax shelters based on investments in structures.

How can one rationalize the perception that structures are a common tax shelter vehicle with calculations suggesting that they are among the most heavily taxed assets? Part of the answer may be found in the composition of the stock of structures in 1983, the most recent year for which data are available. Corporate structures represented less than a quarter of all structures in 1983 and less than half of all depreciable structures.

While detailed data are not available on the ownership of different types of structures, it is clear that the vast majority of residential capital is owner-occupied housing; the bulk of the remaining residential capital represents partnerships and proprietorships. Only a negligible fraction (2.5%) of residential capital is held in corporate form.

The ownership of nonresidential structures is more complex. It appears likely that most of the noncorporate structures are commercial buildings owned by partnerships or proprietors. The other main categories of nonresidential structures—industrial buildings, mines, and public utility structures—are probably largely owned by corporations.

4.1.1 Patterns of Structures Investment

Table 4.1 presents some information on the composition of structures investment in 1980 before the introduction of ACRS and in 1985. The table highlights some aspects of structures investment needed to assess neutrality arguments that suggest a tax bias against such investments. First, for a substantial share of structures investment, the effects of taxes cannot be analyzed sensibly in isolation. In 1985, for example, public utilities accounted for about 20% of all investment in structures. The profit rate of most public utilities is regulated; in many cases, the

Table 4.1 Structures Investment in 1980 and 1985 (Billions of Constant 1982 Dollars)

	1980	1985
Total Structures Investment	273.8	338.9
Nonresidential Structures	136.2	165.8
Industrial Buildings	16.0	14.2
Commercial Buildings	34.7	54.2
Office Buildings	15.3	28.3
Other	19.4	25.9
Education, Religious and Hospital	7.9	8.6
Mining and Petroleum	31.7	39.8
Public utilities	30.3	31.8
Farm structures	6.1	3.4
Other	9.5	13.8
Residential structures	137.6	173.1
Owner-occupied	60.7	95.3
Rental	76.9	77.8

Source: Unpublished data, Bureau of Economic Analysis, U.S. Department of Commerce.

benefits associated with tax incentives, especially the investment tax credit, are passed on to consumers.

About 40% of structures investment takes place in forms where other public microeconomic policies are involved in guiding the allocation of resources—educational and hospital buildings, mining and petroleum, and farming. Thus, as with the case of public utilities, examining the effects of tax benefits in isolation is likely to be very misleading.

For the remaining 40% of structures investment, in industrial and commercial buildings, tax considerations presumably are of primary importance. What is perhaps surprising, though, is that industrial buildings (plants) represent only about 10% of all nonresidential investments in structures. Commercial buildings account for the remaining 30% of nonresidential investment in structures.

Second, the table indicates that there has been a fairly dramatic shift in nonresidential investment in structures toward commercial buildings, and in particular office buildings, over the last five years. The dollar volume of investment in commercial buildings more than doubled between 1980 and 1985, compared with an increase of less than 50% in overall structures investment. The category of industrial buildings has been particularly weak over the same period, so investment in commercial buildings is now four times as great as investment in industrial buildings, compared with a ratio of two to one in 1980.

It is perhaps ironic that the 1981 tax cut, which had as a major objective spurring corporate investment, has been followed by a dramatic spurt in investment in commercial buildings, much of which is

outside the corporate sector. Between 1980 and 1985, real investment in commercial structures increased by 56%; of that figure, office building investment rose 85%, while overall nonresidential construction increased only 22% and investment in equipment increased 26%. As discussed in detail later, the dramatic divergence between patterns of investment in commercial buildings and in other structures raises the suspicion that the tax system affects them very differently, despite their identical depreciation schedules.

Table 4.1 also indicates that residential investment has been surprisingly strong over the last five years: the dollar volume of residential investment has increased by more than 50%, and real investment in residential structures has increased by 26%, the same rate of growth as investment in equipment. Virtually all of the real growth in residential investment is attributable to owner-occupied housing, which has risen 57% despite the fact that it was the only type of structure to receive no new tax incentives in 1981.

4.2 Tax Churning of Nonresidential Real Property

As is now well understood, the present value of the depreciation allowance on a capital asset has an important impact on the incentive to invest in that asset. Indeed, differences in the treatment of depreciation among assets is often regarded as a major source of non-neutrality in the tax system. Unfortunately, calculation of the present value of the depreciation allowances on a given capital asset is not straightforward because the assets may be transferred and depreciated more than once for tax purposes. Particularly in an inflationary environment, there may be large advantages to turning assets over (“churning”) to increase their depreciable basis. Even without inflation, asset sales raise the value of prospective depreciation allowances as long as those allowances are more accelerated than economic depreciation. However, the incentive to churn assets is mitigated by the capital gains taxes and “recapture” taxes that must be paid when depreciable assets are sold.

This section examines the effects on investment incentives of the possibility that assets can be depreciated more than once. After a review of the legal treatment of depreciation allowances and recapture, the section analyzes the desirability of churning different classes of assets. The results show the incentive to churn and the related incentive to invest to be rather sensitive to both tax rates and assumed discount rates.

4.2.1 Depreciation and Recapture Rules

The Economic Recovery Tax Act of 1981 established shorter and faster write-offs of capital costs for new investment in equipment and

structures. The ACRS included a provision for depreciation of most classes of structures by a 175% declining balance method over fifteen years. The ACRS replaced the Asset Depreciation Range (ADR) system, which by comparison was far less generous in its treatment of capital depreciation allowances.

The 1981 tax law permits investors to choose from a variety of options for depreciating most classes of real property. Besides using 175% declining balance with switch-over to straight-line over an asset life of fifteen years, investors could select a straight-line depreciation method for an asset life of fifteen, thirty-five, or forty-five years as they chose. Under normal business circumstances, of course, an investor who planned never to sell his assets would always choose the shortest and most accelerated depreciation method. However, the recapture provisions of the law depend on the chosen method of asset depreciation.

For investors who choose straight-line depreciation and who sell their assets, the difference between the sales price and the tax basis is treated as a capital gain and is taxed at the capital gain rate. However, for investors in nonresidential structures who choose the 175% declining balance depreciation scheme and who sell their assets at a gain, the value of all depreciation allowances taken to date are recaptured as ordinary income (rather than as capital gains). This recapture of all past depreciation deductions normally is sufficiently costly that an investor would be better off using straight-line depreciation if he or she intended to sell the asset at any point.

Congress has modified the tax treatment of structures since passage of the 1981 act, although not substantially. The 1984 Deficit Reduction Act (DEFRA) lengthened the tax lives of most structures to eighteen years and slightly changed the tax treatment of installment sales. Tax lives of structures were further extended to nineteen years in 1985. Depreciation and recapture provisions were otherwise unaffected by these laws.

4.2.2 Evaluating the Incentive to Churn

The feasibility of churning an asset depends on its characteristics. A specialized industrial structure is likely to be difficult to sell because its functional specificity limits the range of potential buyers. It may also be difficult to sell and lease back because of the moral hazard and other problems associated with rental contracts. Most commercial real estate, on the other hand, is not highly specialized and is therefore easily leased. Indeed, Pan Am rents space in the Pan Am Building and Exxon rents its space in Rockefeller Center. A natural conjecture then is that, if the tax benefits to churning are substantial, a significant tax distortion may be created in favor of liquid assets. I explore this possibility by considering the magnitude of the tax incentive for the churning of commercial buildings.

Consider an investor, corporate or noncorporate, who invests in a commercial building in 1985, expecting that the tax law, inflation, and the interest rate will not change in the future. There are three possible depreciation strategies. First, the investor can use accelerated depreciation (with straight-line switch-over) and never churn the asset. Second, the investor can use accelerated depreciation and churn at the optimal point. Third, the firm can use straight-line depreciation and churn at the optimal point.

The potential tax benefits of churning are sensitive to the choice of capital gains tax rate. Previous calculations of the tax effects of asset sales have assumed that all capital gains are taxed upon realization at the statutory rate. Particularly for individuals, but to some extent for corporations as well, there are devices available that permit capital gains taxes to be avoided or deferred. This makes the churning of assets much more attractive. The features of the tax system that permit capital gains taxes to be avoided or reduced in present value include installment sales, variations in marginal tax rates, step-ups in basis, artificially generated losses, and outright cheating. Of these, the most important is probably the widespread use of installment sales, which delay and therefore reduce the real cost of capital gains taxes. These features are described in detail in Gordon, Hines, and Summers (1987).

The combination of these factors suggests that capital gains arising when structures investments are churned are effectively taxed at much less than the statutory rate. Therefore, the calculations also consider the incentives for churning that arise when individuals' capital gains are completely untaxed and when they are taxed at half the statutory rate, as well as corporations' incentives when their capital gains are taxed at half and three-quarters the statutory rate.

4.2.3 Results

Table 4.2 reports values of net before-tax corporate depreciation allowances and effective tax rates for representative parameter values, described in Gordon et al. (1987). The table presents results for investors with 2% required real rates of return. As Summers (1987) argues, if anything, this rate is higher than those suggested by theory but is rather lower than those actually used by corporations. This and other parameters used are standard in the literature on effective tax rates.

For the churning scenarios, it is assumed that the firm chooses the depreciation method and interval between asset sales so as to maximize profits. As this table makes clear, corporations will seldom want to churn structures for tax reasons under current law. This is hardly surprising, since the recapture provisions of the tax law were designed to prevent such transactions. If the marginal corporate investor faces less than the statutory capital gains rate, then it may become slightly preferable to churn structures.

Table 4.2 Depreciation Benefits and Effective Tax Rates

Corporations: Depreciation Method				
Inflation Rate	Accelerated Depreciation	Churning: Effective Capital Gains Rate		
		0.14	0.21	0.28
3%	0.69 (37%)	0.81 (26%)	0.71 (36%)	0.59 (44%)
6%	0.58 (44%)	0.60 (43%)	0.48 (50%)	0.36 (55%)
10%	0.47 (50%)	0.41 (53%)	0.33 (58%)	0.24 (59%)

Individuals: Depreciation Method				
Inflation Rate	Accelerated Depreciation	Churning: Effective Capital Gains Rate		
		0.00	0.10	0.20
3%	0.69 (41%)	1.06 (-14%)	0.90 (18%)	0.75 (35%)
6%	0.58 (48%)	0.85 (26%)	0.68 (42%)	0.53 (51%)
10%	0.47 (54%)	0.69 (41%)	0.48 (54%)	0.36 (59%)

Note: Top entry is the present value of depreciation benefits; bottom entry in parentheses is the corresponding effective tax rate.

The bottom panel of table 4.2 presents similar calculations for top-bracket individuals who invest in structures through such devices as partnerships or proprietorships. As the table suggests, individuals have much stronger incentives to churn structures than corporations do. The top individual tax rate for ordinary income is 50%, and the top capital gains rate is 20%. Even ignoring the likely ability of individuals to avoid more of their capital gains liability than corporations, the 30% spread between the ordinary income and statutory capital gains rate is a much stronger incentive for churning than the 18% spread faced by corporations.

At a 3% rate of inflation, individuals always choose to churn their assets. If they can avoid capital gains taxes, they may face negative effective tax rates. Even at higher inflation rates, churning is a tax-preferred activity for individuals. Whether corporations or individuals face higher effective tax rates at a particular inflation rate may depend on their marginal capital gains rates. The source of funds matters as well, since the double taxation of corporate earnings may make the required corporate rate of return for new savings capital substantially

higher than the rate for, say, partnership investors. Section 4.3 treats this issue in more depth, but it is sufficient at this point to note that individuals may face strong incentives to invest in structures and sell them later. In particular, these results suggest that the tax code favors individual rather than corporate ownership of structures.

4.2.4 The Extent of Churning

The limited available empirical evidence suggests that churning is an important part of the depreciation strategy for investors in structures. Table 4.3 presents data on the depreciation methods chosen by corporations and partnerships for their structures investments in 1981 and 1982. Corporations used straight-line depreciation for 38% of the value of their structures investments in 1981 and for 33% in 1982. Except in very unusual circumstances, straight-line depreciation makes sense only when firms plan to sell their assets at some date. In addition, under

Table 4.3 Choice of Depreciation Method under ACRS (Millions of Current Dollars)

	1981	1982
Corporations		
Total allocable fifteen-year real property other than low-income housing and public utility property		
Accelerated depreciation	24,836	25,276
(%)	(62.3%)	(67.0%)
Straight-line,	9,362	8,353
(%)	(37.7%)	(33.0%)
Unallocable property, foreign property, and tax-exempt organizations	6,171	5,294
Partnerships		
Total allocable fifteen-year real property other than low-income housing and public utility property		
Accelerated depreciation	29,044	46,553
(%)	(40.3%)	(39.4%)
Straight-line	17,344	28,209
(%)	(59.7%)	(60.6%)
Unallocable property, foreign property, and tax-exempt organizations	1,879	1,492

Source: Unpublished preliminary data, Statistics of Income Division, Internal Revenue Service.

Note: Entries correspond to dollar values of fifteen-year real property (other than low-income housing and public utility structures) put in place and depreciated by the indicated method in these years. Unallocable property could not reliably be assigned to either the accelerated or straight-line depreciation category. These data exclude investments for which the IRS was unable to determine from the tax form which type of capital was being depreciated.

the generous pre-1984 recapture rules for installment sales, some firms may have used accelerated depreciation even if they wanted to churn their assets later. Through such extensive use of straight-line depreciation, the corporate sector gives up the substantial tax benefits of acceleration presumably in order to avoid costly recapture when the structures are sold later.

The bottom panel of table 4.3 presents far more striking information on partnerships. Fully 60% of the value of structures put in place by partnerships since the introduction of ACRS was depreciated straight-line. Of course, this is quite consistent with the finding that churning can be very attractive for individual investors and that individuals are more likely than corporations to take advantage of churning. The 60% figure in table 4.3 is likely to understate the extent of straight-line use for nonresidential investment, since the entry includes residential investment other than low-income housing. The absence of a special recapture penalty makes it very likely that partnerships use accelerated depreciation for their residential investments; the fraction of nonresidential structures depreciated straight-line is probably above 60%. The results in this section suggest that taking account of the attractiveness of tax churning may help to explain the recent boom in commercial building.

4.3 Corporate Financial Policy and the Effective Tax Rates on Structures Investment

So far, this analysis has considered features of the tax treatment of investments in structures that are common to individual investors, partnerships, and corporations. The current conventional wisdom that current tax law favors equipment over structures is derived from studies that have focused on corporate rather than overall investment. The calculations underlying these claims are almost always based on a variant of the formula for the user cost of capital derived by Hall and Jorgenson (1967). This formula, however, ignores a variety of factors, among them personal taxes and corporate financial policy. This section argues that, when the effects of personal taxes and corporate financial policy are taken into account, there is a much smaller difference between the calculated effective tax rates on structures and equipment and perhaps even a tax advantage to investments in structures.

The tax law seems to treat debt-financed investments favorably. Therefore, to the degree that a project can be financed with debt, it becomes more attractive. Investments in structures should be financed much more easily with debt than investments in equipment: structures are used as collateral for a loan easily, there is a dense secondary market for most types of buildings where a creditor can go if the collateral

must be liquidated, and the market value of a building used as collateral is normally much more predictable than the values of many other assets. Therefore, a firm should be able to obtain a much larger loan on a building than on many other assets without imposing any effective default risk on the lender.

At the margin, corporations have a tax incentive toward debt finance. Corporate income is taxable both under the corporate tax and again, either as dividends or as capital gains, under the shareholders' personal income tax, while income accruing directly to shareholders is taxable only under the personal tax. For the same return, shareholders would thus prefer to loan money to the firm as debt rather than to purchase shares whose return is taxed twice. Corporate financing costs reflect this preference, so debt finance is less expensive.

In spite of this tax incentive to use debt finance, firms do not use debt exclusively because the possibility of bankruptcy leads to conflicts of interest between debt and equity holders, with associated real costs. There is every reason, however, to expect the optimal value of the debt-value ratio to vary by type of capital, for the reasons described above. It should also vary by industry, and observed debt-value ratios do. According to the figures reported in Fullerton and Gordon (1983) for a select group of industries in 1973, the observed debt-value ratios ranged from 0.08 in construction to 0.787 in real estate. The average in the economy was 0.399.

Given plausible parameter values and an assumed ability to finance new structures investments with 40% more debt than would be possible for equipment, the estimated effective tax rate on structures drops dramatically from 0.421 to 0.193. In contrast, the estimated effective tax rate on equipment reported by Auerbach (1983) for 1982 was 0.084. At least with these parameter values, the difference becomes minor. These results are sensitive to the choice of interest rate, debt-value ratio, and tax rates for marginal investors. Gordon et al. (1987) describe the calculations, which show effective tax rates to be as low as 7% in other realistic scenarios.

4.4 Taxation and Tenure Choice

It is widely believed that the tax system favors owner-occupied housing. This conclusion is repeated in many textbooks and forms the basis for much research on the effects of taxation on tenure choice. The standard argument is straightforward. The services of owner-occupied housing are untaxed while rental payments are treated as taxable income. While landlords are permitted tax deductions that are not permitted to homeowners, as long as there is some positive effective tax rate on rental income, home ownership is nonetheless thought to be

tax favored. As a number of authors, including Litzenberger and Sosin (1977), Titman (1982), and Hendershott (1987), have recognized, there is an important defect in this argument. It ignores the possibility of tax arbitrage between high-bracket landlords and low-bracket tenants. High-bracket taxpayers have a comparative advantage over low-bracket taxpayers in making use of interest deductions that they can exploit by borrowing in order to buy real estate that they then rent to low-bracket taxpayers.

When this effect is recognized, it turns out that homeownership is tax favored for only a small number of taxpayers. This section demonstrates that conclusion by considering the effects of homeownership in a setting where people would be indifferent between owning and renting their homes except for tax incentives. In reality, of course, other considerations such as transaction costs, desire to own one's own place of residence, and the differing incentive effects of rental and ownership contracts influence tenure choice. But in order to study the incentives provided by the tax system, the calculations abstract from these effects.

It is straightforward to calculate the costs of owner-occupied and rental housing. I assume that competition forces rents down to the point where landlords earn the same risk-adjusted return on rental property as they could on bonds. This assumption is warranted as long as landlords can borrow or lend at the margin. It will become apparent that top-bracket landlords will be able to charge the lowest rents and so represent the marginal supplier of rental housing.

Under ACRS, residential property was permitted 175% declining balance depreciation over a useful life of fifteen years (now nineteen years). In addition, residential property has the desirable feature that accelerated depreciation is recaptured upon sale at ordinary income rates only to the extent that it has exceeded straight-line depreciation. The 1981 act also permits purchasers of used assets to use the 175% declining balance depreciation method. Prior to 1981, asset lives were substantially longer, but investors in new residential structures were allowed 200% declining balance (or sum-of-the-years-digits) depreciation. Purchasers of used assets were required to use 125% declining balance depreciation, thereby lowering the prices of used structures relative to new structures, and reducing the value of tax churning. High marginal tax rates on individuals provided ample incentive for investment in rental housing, however.

Table 4.4 presents values of marginal tax rates for individuals who were indifferent between homeownership and renting for the years 1965–85. The results in table 4.4 describe four scenarios. I examine cases in which individuals who own rental housing avoid half their capital gains liability at the margin and cases in which they pay the full

Table 4.4 Tenure Choice and Tax Status, 1965-85 (%)

Year	Maximum Personal Tax Bracket	Minimum Tax Bracket for Owner-Occupiers			
		Full Capital Gains Liability		One-Half Capital Gains Liability	
		Risky Returns	Riskless Returns	Risky Returns	Riskless Returns
1965	70	0	64	0	70+
1970	73	24	62	27	69
1975	70	59	59	59	59
1980	70	55	63	56	64
1981	69	53	56	53	56
1982	50	32	50+	41	50+
1983	50	28	50	38	50+
1984	50	19	34	37	44
1985	50	11	23	13	29

Note: Entries correspond to break-even tax rates for tenure choice. Taxpayers with lower marginal tax rates will be renters, and those with higher marginal rates will be owner-occupiers.

statutory rate on capital gains. In addition, I separately report specifications in which investors treat depreciation allowances as risky and in which they are viewed as riskless.

The striking implication of the findings reported in table 4.4 is that home ownership has not been favored by the tax code until recently. High individual tax rates before 1982 encouraged most taxpayers to rent their dwellings from top-rate individuals. While the results in table 4.4 reflect changing inflation and interest rates as well as statutory tax changes. The conclusion that falling personal taxes have undone changes in the depreciation provisions to make homeownership much more attractive in recent years is inescapable. From this perspective, it is perhaps not surprising that home ownership and residential investment have been strong in recent years.

4.5 Conclusions

This paper highlights the difficulty of predicting the effects of tax rules on the level and composition of investment. The incentives for investment in the tax law turn out to depend on a number of quite specific features of the law, rather than just on tax rates and depreciation schedules. They also depend on how the tax law interacts with the liquidity characteristics of different types of assets. Analyses that omit these factors are likely to have little predictive power for the effects of tax changes on the composition of investment. Moreover, normative

conclusions based on models that omit these factors are likely to be very misleading.

This paper implies that there are at most minimal allocative losses resulting from the differential treatment of equipment and structures under current depreciation schedules. There are substantial reasons to believe that residential and nonresidential real estate investments made by partnerships are substantially favored under current law, because of the tax advantages associated with churning assets, leverage, and arbitrage between taxpayers in different brackets.

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