One, land use. Sizable areas of non-residential land will cut off a market area. It might seem that an industrial area would provide employees as customers, but the data indicate that few shopping trips start from industrial areas.

Two, accessibility. Transportation routes can alter the boundaries of market areas in ways closely but not directly related to travel time. This factor is more important for secondary market areas where travel times are greater.

Three, competition. The attraction of one shopping area vis-a-vis competing districts or individual stores will limit its market area in every direction where there is a market to be captured. It appears, however, that the simple pattern of competing market areas meeting each other and being thus bounded seldom exists. Where most shoppers walk to the store, market areas come closer to meeting in this way, but today primary market areas are usually shaped by auto travel. Overlapping market areas are especially evident if competing districts are only a few blocks apart: note the two pairs in Figure 2: 1 and 2; 12 and 13. In less auto-oriented, older districts located close to each other, there is some evidence to suggest that a primary market area often extends up to but not past the stores in the competing districts. In the newer auto-oriented shopping centers, primary market areas will often go considerably beyond a competing district—a pattern that is not surprising when the ease of travel is considered. Closely spaced shopping centers affect the intensity of the market areas more than the boundaries of the areas: trip densities throughout the market areas are reduced while the extent of the trip pattern changes little.

In conclusion, it should be emphasized that patterns of retail market areas change.[5] Changes in commercial outlets at various places in the city, changes in the numbers and types of people in the market areas, and changes in the ease of access can alter market patterns quite rapidly. Analysis of such change was beyond the scope of this study.

NOTES

[1] These data form one segment of a larger study of Denver commerce being done by the City and County of Denver Planning Office. The principal research publications are *Denver Commerce: Retailing, Customer Services* (Bulletin 5–1), and *Denver Commerce: Wholesaling* (Bulletin 5–2). These are available without cost from the Denver Planning Office.

[2] Of the total 1,818,782 person-trips per day, shopping accounts for 19 per cent, personal business for 12 per cent, and medical-dental care for 2 per cent.

[3] This area is sometimes referred to as the tertiary market area. Large comparison districts will draw a small but significant number of shoppers from outside the metropolitan area, but normally the unstructured market area does not extend beyond the urbanized area.

[4] Facilities such as bowling alleys occasionally create a second boundary line for a commercial district which has little or no comparison goods sales.

[5] Applebaum and Cohen examined this subject at length in "Store Trading Areas in a Changing Market," *Journal of Retailing,* XXXVII (Fall, 1961), 14–25, 56.

REVIEW ARTICLE

LAND VALUE TAXATION: PROMISES AND PROBLEMS

by Clyde E. Browning

The problems of land development and property taxation have been a source of discussion and debate for as long as we have been a nation. Lately, however, with the continued growth of metropolitan areas, our urban land problems have become increasingly urgent. The situation has been stated succinctly by Harvey S. Perloff (35):

> As more and more of the nation's activities center in our urban agglomerations, urban land increasingly must be viewed as a precious and a scarce resource whose use and abuse are of the greatest public interest. The critical issue is how land is to be allocated and managed so that private equities are not abridged while the more general public interest is served.

The heightened concern over the most appropriate methods to develop and redevelop our urban areas has shifted attention once again to a re-examination of our tax policies as they affect the use, re-use, and the mis-use of land. As in virtually every other aspect of our economic life, the "tax angle" plays a major role in the timing, type of improvement, and location of land development. The behavior of people acting in this economic environment cannot be fully explained unless the tax implications are known. As the editors of *House and Home* have written: "Ours is a tax-activated, tax-accelerated, tax-dominated economy. Every business decision must be checked and rechecked against its tax consequences."(22) The federal income tax law is of considerable importance in this area, as convincingly demonstrated in an article by Arthur D. Sporn (44). However, our main concern here is with the property tax, specifically as it is applied to land.

Reforms in our tax system would have a number of advantages, but the restructuring of the property tax would have a particularly beneficial influence upon the use and re-use of urban land. The chief means of accomplishing this goal would be a shift of the property tax burden from improvements to the land. We shall have more to say on the presumed benefits to be derived from this policy later. For now we will simply quote one of the advocates, Mary Rawson, who wrote, "To exempt improvements and at the same time to tax land more heavily would provide a double incentive to the owners of derelict buildings to demolish them and to use the land more intensively. Here surely is a golden key to urban renewal, to the automatic regeneration of the city—and not at the public expense."(39)

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If altering the property tax on land is indeed the "golden key" to urban development, it should receive top priority in the planning profession. Curiously, however, there has been relatively little manifest interest on the part of planners (as evidenced by articles in the *Journal* and other sources) in this topic which exerts such a fundamental influence on many of their activities. We may go even further and take this opportunity to mention that planners—as exhibited by their writing and planning curricula—lack an elementary knowledge of many aspects of real estate which strongly influence and determine the success (or lack of success) of their planning operations. Such topics as the legal framework of property rights, the real estate market, appraising, and financing are given little attention. Yet these very topics have a constant impact on the way real property is used, and they continually condition the outlook and behavior of real estate investors. It may rightly be said that too many people engaged in the building, financing, and merchandizing of real estate have an incomplete, if not distorted, view of the goals and methods of city planning. Conversely, the available evidence would suggest that too many planners are innocent of any knowledge which would help them understand the nature of real property.

With this view in mind, this article has been prepared to serve a twofold purpose: first, to act as a general introduction to the field of property taxation with the focus on problems and prospects of land taxation and its possible implications for planning; second, to introduce the reader to some of the standard references in the field as a guide to further study.

THE PROPERTY TAX AND ITS CRITICS

If any tax could have been eliminated by adverse criticism, the general property tax should have been eliminated long ago. One searches in vain for one of its friends to defend it intelligently. It is even difficult to find anyone who has given it careful study who can subsequently speak of its failure in temperate language. . . . Should some prosecuting attorney drag the tax as a culprit before a bar of justice, he would be embarrassed by the abundance of expert evidence against it. No writer of repute, writing on state and local taxation in the United States, has failed to offer his bit of derogatory testimony. No commission appointed to investigate any state tax system, which has had time, means, and inclination to secure the evidence, has failed to recommend the abolition of the tax or measures toward its fundamental modification.

These words, written more than thirty years ago by Professor Jens Jensen in his *Property Taxation in the United States* (26), still ring true today. A more recent study subjected the property tax to the two principal standards of taxation—ability to pay and benefits received—and found it lacking on both counts. A purely rational decision might be to junk the system and look elsewhere for public revenues. But as Jensen remarked, "the tax persists," and persist it will for it is still the main source of revenue for local government and school districts; and these are precisely the governmental units whose increasing demands have exerted the greatest upward pressure on taxes. The median real estate tax load for 90 large U. S. cities has risen from a level of about $160 in Jensen's time to $307 in 1962 (62). If the abnormally low World War II period is taken as the base, property taxes have risen nearly 300 per cent in the last 15 years. Repeated rejections of increased taxes in many local areas indicate that voter resistance to the sharp, presistent rise in property taxes is becoming more widespread.

This development has been one of the reasons compelling a re-examination of the tax structure and a search for solutions to ease the burden and reduce inequities. In this connection the arguments put forth many years ago by Henry George take on fresh significance. As George saw the tremendous fortunes being accumulated in the late nineteenth century by land speculators, his sense of economic and social justice became outraged. He began setting his beliefs on paper and due to his writings—chiefly *Progress and Poverty*—he became one of the most influential social critics of his day. A central feature of George's beliefs was the conviction that all government revenues could be raised by a single tax, a tax on land. The single tax movement was for a time quite popular; but as critics began to examine more closely its basic assumptions and propositions, it fell from favor and was discredited. Recently, however, there has been the feeling on the part of a number of laymen and scholars that the critics may have thrown the baby out with the bath. Although George's emphasis upon a single tax remains absurd under today's high tax conditions, the question whether land should not bear a greater share of the real property tax burden has been asked again.

PROBLEMS IN URBAN LAND VALUATION

Before reviewing some of the major studies related to land value taxation, we shall first examine some background material necessary to the understanding of the nature of land valuation. Our review will consider some of the factors which affect land values and the techniques used to value land as commonly applied by appraisers and assessors.

THE SOURCES OF LAND VALUE The classic statement on land values was written by Richard M. Hurd nearly sixty years ago. His book, *Principles of City Land Values* (24), is the principal theoretical formulation in the field, and his successors have not added greatly to his original presentation. Stated in its simplest form, the theory of urban land values rests on the assumption that the value of urban land is determined by discounting future net income attributable to a given site by virtue of its locational qualities.

At this point we will digress for a moment by pointing out the belief held in some quarters that it is not feasible to value land and improvements separately. Ratcliff has argued that it is impractical to determine the portions of the net income attributable to land and buildings (38). Similarly, Wenzlick asserted "it is impossible to separate economic land value from the total value of a property which is developed to its highest and best use" (61). He continued, "once these improvements are made, however, the land and buildings become a joint product similar to a chemical compound in which the various elements no longer exist in their pure state. In chemistry there is quite a difference between a compound and a mixture. Silver nitrate is no longer silver, nitrogen and oxygen. It is a new substance having practically none of the characteristics of the three elements which went into its composition."

For our present purpose, these doubts whether improved land can be valued separately are rather academic since most assessing districts are required by law to make separate value estimates of land and buildings. Further-more, established appraising practice commonly makes a separate estimate of the value of the land, and income tax deductions for depreciation allowances must automatically mean a separate valuation between depreciable improvements and land. Nevertheless, it should be noted in our review of appraisal and assessment theory that the feasibility of separate value estimates for improved land has been seriously questioned.

It has often been said that the value of rural land is the result of its physical qualities (such as fertility) and urban land the result of its location. While this statement is something of an over-simplification, it does highlight the crucial role of location in the estimation of urban land value. Unfortunately, location, while commonly recognized as important, becomes a rather nebulous concept when we attempt to identify it precisely and above all, to use it. Like the weather, everyone talks about location, but no one does anything about it, in this case making location a more explicit and identifiable variable. The general use of the concept begs the question: Location in relation to what? We shall have more to say on this general topic later, but it has been introduced to illustrate the complexity which lies beneath a relatively simple surface. William Alonso has identified one facet of the problem by remarking, "When a purchaser acquires land, he acquires two goods (land and location) in only one transaction, and only one payment is made for the combination. He could buy the same quantity of land at another location, or he could buy more or less land at the same location" (1).

COMPONENTS OF LAND VALUE The forces which affect the value of land are infinite in variety and they influence residential, commercial, and industrial land in different ways. One authority listed 79 factors together with a rating scale which attempted to indicate the impact (as either an asset or liability) on various types of properties (37). Another source reduced the multiplicity of factors to three general groups: *one,* those which affect values over a wide area such as an assessment district, city, or region; *two,* those which have a local or neighborhood effect; and *three,* those which affect only the value of individual parcels.

The first group may be illustrated by such factors as the income level, population density, rate of growth or decline of the community, and governmental policies (lax or rigid zoning laws for example). The second group, neighborhood influences, are probably the most important and yet the most difficult forces to identify and measure. The chief factor is accessibility, which will be considered in greater detail in another portion of this review. Other influences are the age of the neighborhood and its character from the standpoint of incompatible land uses, ethnic and racial groups, and the presence and quality of streets, utilities, schools and other community facilities. The last group is concerned primarily with the physical characteristics of a lot as they affect its value, such as size, shape, corner vs. interior location, and topography.

A chapter on site analysis in the American Institute of Real Estate Appraisers' text gives a check list of factors which appraisers should note preparatory to making a site valuation (3). As with most check lists, the appraiser or reader is left to assign his own weights to individual categories subsumed under three major headings: Title and Record Data; Physical Data; and Relation to Land Pattern. This deficiency is occasioned in part by the widely varying demands of different types of establishments and buildings which would occupy the sites.

APPRAISAL APPROACHES TO LAND VALUE Having identified some of the factors affecting land value, what are the established methods used to estimate land value? The A.I.R.E.A.'s text recommends four methods of valuing land:

Market Data Method The market data method is preferable if adequate comparable sales data are available. The value estimated by this approach is often defined as the price at which a willing seller would sell and a willing buyer would buy, neither being under abnormal pressure. The comparative transaction must meet these tests:

1 The sale must be voluntary and bona fide.
2 The sale property must have similar characteristics.
3 The sale must have occurred within a recent period.

Sales which have resulted from such situations as necessity to pay taxes, settle estates, and jury awards on condemnation suits, are not generally considered voluntary. Transfers between relatives, trades, and sales for income tax or capital gains purposes, are usually eliminated as not being bona fide.

Under heading of similar characteristics, the sales being considered for use as comparables are reviewed according to *one,* the legal rights involved and title information; *two,* the lot size, shape, and physical characteristics; and *three,* locational features. The three main areas of comparison are thus: location, physical characteristics, and time.

If all parcels of land were alike with respect to the above features, there would be little problem with the market approach. Provided the sales met the test of the market definition requirements, they would furnish a ready comparison with the subject property. In reality, however, no two parcels are alike and adjustments must be made to bring the comparable properties more closely in line with the subject property. Exact similarity is not essential to qualify a sale as a comparable. The appraiser, consequently, usually makes adjustments based upon his experience and judgment in the process of comparison. Perhaps the comparable is in a better neighborhood or the sale was made three years ago when the market was lower. The adjustments are made generally as a percentage—say 5 or 10 per cent above or below, or in dollar amounts. Land is compared on a front foot or square foot basis, depending upon the type of property and the location.

The Distribution or Allocation Method The appraiser or assessor generally prefers to use market data to support his estimate of value, but many properties are situated in built-up areas where vacant lots are either nonexistent or not suitable as a source of sales data. Without sales the market approach is not feasible; and in this situation one of the methods used is the distribution or allocation method. The basis of this approach is the assumption that there is a relationship between the value of the site and the total property value, as indicated by the sale price. In a given neighborhood it may be assumed to be 15 per cent, in another 20 per cent, depending upon the type of structure and the age of the neighborhood.

A variation on this method is to allocate from the total sale price of the comparative property that part which could be assigned as the building value. The remainder could, ordinarily at least, be considered as the value of the land. Appraisers will sometimes use the division between land and building indicated by the tax assessor, provided they have confidence in local assessing practice.

This method is generally employed in combination with other methods of land valuation and should be used with care. Some types of property have no fixed relationship between land and buildings. If the land value estimate is derived by first subtracting the estimated value of the improvements, the amount of depreciation allowed—especially for older buildings—becomes a problem.

Anticipated Use or Development Method This method is applied primarily to parcels of land situated in the rural-urban fringe which appear ripe for residential (or occasionally commercial or industrial) development. Essentially, the appraiser or assessor places himself in the role of a developer and makes the necessary decisions on the type of layout, size of lots, etc. He estimates (or employs a technician in the field to do the job) the costs of streets, sewers, advertising, etc. His estimate of what the land will bring fully developed, less the cost of raw land and all services plus his profit, is the value of the land. This approach, if carefully done, can give an accurate estimate of the value of raw land suitable for development. It is time consuming and expensive, however, and undoubtedly many appraisers and assessors use a rough rule of thumb instead as a basis for estimating the value of raw land when subdivided for a given use.

Land Residual Method The land residual method is one of a number of residual techniques which assume certain data as known and from those determine the unknown. In the case of the land residual method, the value of the land is unknown. A simplified illustration may make the method clear.

Assumed building value	\$100,000.00
Assumed net income to property	12,000.00
Capitalization rate for building 10% (\$100,000 × 10%)	10,000.00
Net income imputable to the land	2,000.00
Land value: \$2,000.00 capitalized at 5%	\$40,000.00

To be valid, this method requires the appraiser to be correct in assuming that the building represents the highest and best use and that the value of either the existing building or a hypothetical building is equal to its present reproduction costs.

ASSESSORS' APPROACHES TO LAND VALUE Theoretically, at least, the assessor's approach to land value should be essentially the same as the appraiser's. In actual practice, however, it is suspected that the assessor's approach differs from established standards. I repeat, "suspected," since I have never come across any study which closely examined actual assessing practices. It is a bit misleading to think that assessment manuals provide a clear and detailed guide to land valuation. At best they provide more of a check list of factors to consider than a step-by-step procedure. With their comparatively limited resources and the need to make mass appraisals, the assessors' offices often take the line of least resistance and prefer to give emphasis to the tangible rather than the more nebulous intangible value factors: hence their eagerness to note improvements or additions to structures rather than the more difficult—but perhaps more significant—impact of such factors as highway improvements. Land values can be easily adjusted as to whether the streets are paved or not, but not as easily in terms of new traffic patterns. In built-up areas there is evidently heavy reliance on the distribution or allocation method (taking a standard proportion of total value to represent the value of land).

Undoubtedly, assessors in general and some assessing districts in particular, have made substantial improvements in their performance regarding land valuation, especially in the last ten years. However, the tremendous changes which have occurred in the postwar decade in our society and cities have placed an additional burden upon the assessor's office. Not only have fast moving developments, particularly in metropolitan areas, made it more difficult to keep abreast of the market, but changes in our urban structure have in turn altered the land value pattern. Consequently, many assessments fall far behind the going price of the land and the approaches, techniques, and attitudes established decades ago persist in spite of changes which have rendered them obsolete.

MAJOR RECENT STUDIES

For the individual who wants a well-written, well-illustrated introduction to our topic, the August, 1960, issue of *House and Home* (22) is recommended. Written with the collaboration of two respected economists, Ernest M. Fisher and M. Mason Gaffney, the substantial resources of this Time, Inc. affiliate were poured into making *land* the theme of the entire issue. The result is an extremely well-done document that has the persuasive and potent impact of superior journalism. However, a word of warning is in order. *House and Home* is a leading spokesman for the home-building industry and the sharp increase in land prices has led the builders to vote land costs as their most critical problem. Caught in the squeeze between increased labor and material costs and buyer resistance to higher prices, the builders are seeking relief. Hence, their eagerness to support any proposals which might have the effect of stabilizing or lowering land values. As a consequence, the *House and Home* presentation is definitely slanted, although a number of convincing points are made. The treatment of suburban sprawl and the effective manner in which the specter of an urban land shortage is demolished, are masterfully done. Land speculators and slum landlords are given a fearful drubbing; and the cause is championed by a series of quotations from such historical figures as Moses, Locke, Blackstone, Jefferson, Mill, George, and an extended passage from Winston Churchill.

The general argument is so convincingly and dramatically presented that by the time the reader has finished the issue he may feel the urge to grab the nearest weapon and go forth to slay the high land-value dragon—which is just the feeling the editors wanted to evoke.

It might be expected that economists—concerned as they are with factors of production, one of which is land—would have made considerable contribution to the topic, but such has not been the case. Ralph Turvey, a British economist, whose book *The Economics of Real Property* (49), is virtually the only analytical work in the field, sadly noted, "The subject of this book has received very little attention in recent years. In the latter part of the nineteenth century the case was different; property taxation, for example, was widely discussed and many books and official reports were published." He goes on to mention the absence of articles in learned journals and lack of attention in texts. He concluded, "Whatever the causes of this state of affairs, it is surely deplorable. On the one hand people concerned with real estate problems, such as valuers and town planners, lack one of the essential tools for their work. On the other hand, economists have done little to help them and are failing to take up interesting and important problems."

Turvey's book presupposes some economic background and those unfamiliar with economic graphic illustrations may find the going slow. The writing ranges from lucid to obtuse, with the American reader finding the numerous examples set in Britain sometimes puzzling. Nevertheless, the book is important for anyone wishing a better understanding of the economists' view of the subject.

Land value taxation over the decades has generated considerable "talk" and expression of opinion but relatively few empirical studies. One of these empirical works was recently published by the Urban Land Institute, *Property Taxation and Urban Development* (39). It was developed from a master's thesis in planning at North Carolina by Mary Rawson, who used Burnaby, British Columbia—a suburb of Vancouver—as her laboratory. In her statement of the problem, Miss Rawson roundly scolds the land economists of the R. T. Ely "school" for their attitude toward land taxation: "one is driven to the conclusion that the question of land taxation is under a taboo in the academic world, a taboo which, when traced to its source, appears to have arisen largely out of Professor R. T. Ely's aversion to the Single Tax." She continues, "In spite of rumblings about and eruptions of discontent with real estate taxation, the legacy of prejudice and confusion engendered in earlier days by controversy over the Single Tax still impedes rigorous research in the field. Planners, by the nature of their work, cannot remain aloof from the problem, and by default of the economists are left holding the bag in this research." The results of her study indicate that a shift in the property tax burden to land would mean lower taxes for residential properties, higher taxes for commercial, industrial, and vacant land, and a higher tax load on central sites compared to improved peripheral sites.

An earlier study by a group at Lehigh University, *An Analysis of the Potential Effects of a Movement Toward a Land Value Based Property Tax* (40), was directed toward the same objective—although using somewhat different techniques than Rawson. Pennsylvania law allows municipalities to levy different rates on land and buildings, and the city of Bethlehem was used as the case area. The group first recommended that it would be necessary to re-assess the various land values and keep them up to date before a reform tax base could be reasonably instituted. Their conclusions, given the existing development and conformity of the city, were:

"(1) the present tax burden on industrial development would somewhat diminish,
(2) taxes on the central commercial area would raise somewhat,
(3) a small amount of tax relief would appear for residential development in the newer areas, and
(4) a re-assessment would prevent an undue shift of tax burden to the older residential areas."

The authors felt that over a period of time these tax policies would gradually shape the development of the city in the direction of *one,* more intensive and modern use of the central commercial district, *two,* more extensive use of industrial land, and *three,* more rapid development of idle land.

The Urban Land Institute has launched a rather ambitious series of studies and conferences under the general banner "Urban Land Dynamics." One of the major areas which is being investigated under this program is the impact of taxation on land use. Two publications in the series have been issued: *Changing Urban Land Uses as Affected by Taxation* by Jerome P. Pickard, the Institute's research director (36); and *Property Taxation and Urban Land Use in Northeastern New Jersey,* by Morris Beck of Rutgers University (6).

The report by Pickard is a good introduction to the general topic of taxation as it affects land use. The first four chapters contain a capsule review of the topics considered by study groups meeting in four cities. The selection of the conference cities followed a definite plan. Washington, D.C. was selected as the place in which to discuss the impact of federal taxes. Boston—notorious for its high property taxes—was selected in order to examine at first hand the impacts of high effective rates of local property taxation. Pittsburgh was chosen because it is the only large American city that now makes use of a "graded" (land emphasis) property tax. And finally Newark was selected, since the conference in that city considered Professor Beck's study in detail.

The treatment of Pittsburgh, as an example of a city with the graded tax in action, is surprisingly short and sketchy. When originally adopted in 1913, the law provided for a gradual shift over 12 years to a graded tax on land at twice the rate on improvements. Actually the Pittsburgh example is rather inconclusive, since only the municipal tax is graded. The county and school levies—which are the largest—are not graded. This has meant in fact that improvements in 1960 were taxed at 71 per cent of the rate on land, not at 50 per cent. A detailed study of the effect of the graded tax by J. P. Watson was completed in 1932, but since then little has been done (57). Some observers have argued that the graded tax has helped spark the Pittsburgh "renaissance" as exemplified by the Golden Triangle development (64), but so many other factors have been operating in this regard that even a very careful analysis would have difficulty determining the role of the graded tax. Most of the discussion on Pittsburgh centers on the variable taxation and fiscal fragmentation of the region's crazy-quilt pattern of municipalities and taxing districts.

Morris Beck's study (6) is set in New Jersey, a state with an unusually high reliance on the property tax to finance state-local government. Not only are property tax rates high, but there is substantial variation by community within highly urbanized northeastern New Jersey. The main focus of Beck's study was the examination and attempted explanation for this variation—particularly as it related to land use. He identified the characteristics of high tax rate vs. low tax rate communities. He concludes, "So long as the property tax is called upon to produce two-thirds of all public revenues, and the distribution of property remains highly uneven, the property tax may be expected to encourage sub-optimal patterns of land use."

The untaxing of improvements and taxing of land has been in operation for a number of years in many Commonwealth countries, chiefly Australia and New Zealand. This development is described in a publication by H. Bronson Cowan under the auspices of the International Research Committee on Real Estate Taxation (16). While published in 1958 in this country, the writing was largely done during World War II; hence it is somewhat dated. The report is well illustrated and glowingly describes the improvements in these countries attributed to land value taxation. The fact that the system is actually in operation—including a number of large cities such as Sydney and Johannesburg—has given sustenance to those followers of George who have continued to champion the cause, albeit without the single tax slogan.

One of the best reviews of the impact of taxes on land use has recently been issued in three parts by the Tax Institute (56). The articles were written by Mabel Walker, executive director of the Tax Institute, a veteran and perceptive observer of the tax scene who established her reputation with a well-known book, *Urban Blight and Slums,* published in 1938 (52). Her long familiarity with the subject lends an air of special authority to her views. The articles were issued under the general title, "Land Use and Local Finance," but Miss Walker admitted that this title encompassed more ground than she was able to cover. A more suitable title, she felt, would have been "A Brief Consideration of Some Aspects of Real Property Taxation and Land Use." Her discussion, therefore, has a direct relevance to many planning problems as they involve land use.

She identifies a number of the criticisms leveled at the real property tax and then takes up suggested remedies under the headings of procedural reform and substantive reform. Under the procedural reform category are discussed such topics as: larger taxing areas, improved tax administration, and state taxation of large enterprises. Among the substantive reforms considered is the graded land tax which is discussed in some detail. She sets forth four major arguments in favor and then critically examines each argument. Since the pros and cons of land value taxation will be discussed later in this article, we will not review this part of her statement here except to mention that her over-all opinion might be described as cautious if not doubtful.

Aside from the graded tax, a number of other suggested property tax reforms are evaluated. One of these would be an increment tax on land values, to be imposed at the time property was transferred (43). Proponents of the increment tax claim this tax, unlike the graded tax, would not diminish or destroy the capital value of land, but would affect only future increases of land value. They maintain the increment tax would tend to curb speculation and could be used to recapture a considerable part of the gains resulting from community development. Miss Walker concludes:

> This subject has not been fully explored by researchers, but if there is a genuine desire to curb speculation in real estate, or at least to enable the local government to share in the large increments of value which it helps to produce, it would seem worth while to study this whole question very carefully and to check the possibilities of a graduated increment tax which would fall lightly on the little fellow who sold his home for a few thousand more than he paid for it, but which would constitute a sizable—but not confiscatory—tax on the get-rich-quick boys in real estate.

The effectiveness of the tax would depend on the rate at which the tax was set. If it were too low, the effect would be negligible; if it were too high (it should be remembered it would be in addition to the present 25 per cent capital gains tax), its acceptance would be difficult to obtain.

Another basic reform of the real estate tax which has been proposed would be the shift of the tax from assessed capital value to an income basis. In the case of rented properties the rent paid would be used. In the case of owner-occupied properties, studies would be made to determine a suitable imputed rent. Advocates of this plan claim this method would be more equitable than our present *ad valorem* tax, and they point to the British system as an example of the feasibility of this approach in actual practice (47).

Miss Walker finishes her review of the various reform proposals with the statement that they merit careful and objective study and she suggests that the eventual solution might well entail a combination of taxes. In this respect she quotes Dick Netzer, Economic Consultant to the Regional Plan Association of New York, who said: "I suspect that urban development in general would be well served by replacement of the traditional property tax with a three-tiered device which taxes improvements on earnings, land stiffly on a capital value basis, and land value increments on a capital gain basis." (33).

She concludes her rather lengthy review with an examination of property tax expedients designed to affect land use. These include: expedients for housing and urban renewal; expedients for open space; and tax incentives for industrial development. While not objecting to the noble goals and the good motives of the proponents of many of these proposals, Miss Walker is not favorably disposed towards this approach:

> Contrasted with the reforms designed to make basic and general improvements in the real estate tax with respect to equity, administrative efficiency, and desirable overall economic effects of a long-term nature, are the expedients which are intended to achieve some specific or limited objective or to favor or penalize some particular group of tax payers. Such expedients are rarely favored by the serious students of taxation, who are more aware of the many complexities and difficulties involved and who realize that piecemeal tampering with the tax system for limited objectives can bring distortions in its wake which may be more serious than the original ill which the expedient is designed to correct.

Finally, it is interesting to contrast the cautious, skeptical, questioning tone of Walker's writing with the vigorous, emphatic, writing of many tax reformers—for example, the *House and Home* article. Perhaps this is due to Miss Walker's long experience in seeing various reform groups dash themselves against the property tax only to be slowly broken on the rocks of unforeseen technical difficulties, the opposition of special groups, and the apathy of the general public.

PROS AND CONS OF LAND VALUE TAXATION

Much of the literature pertaining to land value taxation has been written by advocates of the tax whose enthusiasm often knows no bounds. Disinterested, objective discussions are rare. Consequently, a useful summary of the question might take the form of a list of the arguments which have been advanced for and against placing a greater part of the property tax burden on the land. While I have endeavored to be objective, I do not claim I have attained that goal, nor do I intend that this list be considered exhaustive.

THE ARGUMENTS FOR LAND VALUE TAXATION According to its advocates, placing a greater share (if not the entire share) of the property tax burden on land would have the following benefits:

1. Encourage building and rehabilitation. Property taxes today penalize building and the improvement of property while encouraging poor maintenance and underimprovement. Place all or most of the tax load on land and the situation will be reversed. Improvements or additions—no matter how costly—will not be affected, while land which is not developed to its highest and best use will nevertheless pay its share of taxes. Under today's system, the home-owner may even face a double jeopardy if he makes a major improvement. Not only will the tax assessor add on the cost of the improvement, but in the process, he may very well re-assess the property at a higher level.

2. Discourage land speculation. Present property tax law favors land speculators by permitting them to hold land indefinitely at low tax rates in anticipation of substantial gains. Placing higher taxes on land would tend to discourage this type of speculation.

3. Reduce urban sprawl. One of the causal factors associated with urban sprawl and the resulting checkerboard pattern of development has been the ability of property owners to hold land off the market in anticipation of higher prices. The result has been the continued existence of vacant lots in otherwise built-up areas, and a roadblock in the way of the developer who finds it difficult to assemble the necessary large tracts of land due to hold-out property owners. Higher land taxes would encourage more compact, efficient, and costly urban development.

4. Reduce the "unearned increment." Substantial increases in the price of land result not from the enterprise and industry of the owner, but are largely the consequence of community created improvements—streets, schools, utilities, etc. Hence the origin of the famous phrase "unearned increment." Higher taxes on land would restore to the community some of the increase in value due to community improvement.

5. Reduce the cost of land. A higher tax on land would have the eventual result of lower land values since the income to be capitalized would be reduced by the higher taxes and hence mean a lower capital value. Land costs have risen faster in the last decade than any construction cost component. Home-owners and business enterprise could then afford to build better with the same investment as a result of lower land costs.

6. Redistribute the tax load among land uses. A higher land tax would probably mean less taxes to the home-owner and higher taxes on commercial, industrial, and vacant land. This shift would have wide political appeal because most of the voters are home-owners.

CRITICISMS OF LAND VALUE TAXATION Many of the arguments against land value taxation are designed to counter or question the assumptions and conclusions of its proponents. Critics are not necessarily unsympathetic to the need for property tax reform, but they are unable to accept all the claims made in its name; and they have doubts about its feasibility, implementation, and chances for gaining popular approval. Among these criticisms are:

1. Would foster premature development. A higher tax on land would tend to force premature development and thus prevent a more efficient permanent land use pattern. Land, for example, might have to be sold to tract developers for single-family housing when it might appropriately be developed in a more intensive use at a later stage in the neighborhood's development. Open spaces would disappear as the necessity to pay the high land tax exerted a pressure for higher density development. The counter argument in this instance by the land-taxers maintains that this drawback could be avoided by greater use of planning and zoning to control proper development and insure adequate open space.

2. The problem of land valuation. Land tax advocates evidently assume that the value of land—particularly when it is improved—can be accurately determined. However, many assessors, and this reviewer as well, are less sanguine on this matter. Aside from the still unresolved question of whether the value of improved land can indeed be determined, there is the nagging suspicion that our present techniques for estimating the value of land—especially on a mass appraisal basis—are inadequate. Presently, this deficiency does not occasion much concern since land bears a relatively small share of the tax load. If the emphasis were placed on land, however, these deficiencies would become more painfully apparent.

Currently, it appears that the type and extent of improvements strongly influence the tax on land. Many assessors evidently use the allocation method and simply estimate the land value as a proportion of the value of the entire property. This procedure may explain the otherwise puzzling discovery of a tax reform group studying New York City's property tax (14). They found nearly identical proportions of land to total property value for a group of urban renewal areas and the entire borough of Manhattan. A logical assumption would have anticipated a much higher proportion for the urban renewal project areas since by definition they are composed largely of blighted and deteriorated properties. This assessment policy ties the value of land to the type and condition of the structure and ignores the highest and best use of the land.

3. Reduction in land value. Builders and others would welcome lower land prices which presumably would result from higher land taxes and, consequently, less net income to capitalize into value. Land owners—and they need not be speculators—would, however, view the new system with suspicion and resistance.

4. Political fragmentation. It might be asked whether it is feasible to place a higher tax on land in one or a number of municipalities within an urban region. Would these municipalities be disadvantaged in the search for new commercial and industrial establishments? If the only feasible way to accomplish the change is by a complete switch of all municipalities, is this realistic in view of political probabilities?

5. Shifting incidence of the tax. A heavier tax on land might transfer an additional tax load to land uses and social groups which could ill afford it. Since land values make up a high proportion of central business district property values, this area would be hit hard at a time when it needs tax relief. An increased levy on land might fall heaviest on older people living in older, depreciated housing—underimproved structures, if you will. They would undoubtedly greet this event with loud protests and would probably receive a sympathetic hearing from politicians.

CONCLUSIONS

A valid criticism of much of the writing in the field of land value taxation is the tendency of authors to oversimplify matters. This review, in the interest of brevity, may have created the same impression. By considering the land tax to the virtual exclusion of other considerations, we do *not* mean to imply that they are "all equal." On the contrary, one of the principal difficulties in this field, and possibly a reason why more empirical work has not been done, is the complexity of the situation and the difficulty of adequately separating out the effects—or the presumed effects—of a change in the property tax. As Mabel Walker has written (56),

> Consideration of land development and taxation has been, and is, largely a matter of blind fumbling because we do not yet know what we are trying to achieve. The various professional groups involved in this complex subject have not done their homework sufficiently well to enable us to handle this topic competently. The economists—at least until very recently—have largely ignored the study of taxation impacts on land use. The political scientists have not yet evolved a satisfactory pattern of local governmental units. Nor have planners devised any ideal patterns of land use distribution for various categories of populated places. Even the land use data that are available are far from satisfactory.

Although she devoted 44 pages to a review of the "Fiscal Aspects of Land Use," she released it "with a feeling of considerable disappointment." "As the work progressed, it became apparent that the problem was so complex and embraced so many diverse facets that it was far beyond the scope of a single article."

If the complexity of issues in property taxation precludes an easy answer, it is heartening, on the other hand, to note a definite revival of interest in this topic. Economists, for example, are now showing signs of bringing their talents and techniques to bear on the problem. Researchers in other fields are also tackling various facets of this subject. In fact, it is a rather safe prediction that the next five to ten years will see substantial progress made on a variety of fronts which will enable us to estimate more confidently the probable results of changing the property tax structure. Planners need not necessarily become involved in the basic research, but they should offer their counsel in terms of the probable consequences for planning.

Should the needed research establish the advantages of a shift in the property tax to land, it would still be necessary to convince the electorate of the need for a change. Tax reform is extremely difficult to accomplish even if the facts are well established, but the impending crisis in the property tax may make reforms possible.

From the viewpoint of planning, tax reform has promise as a means of encouraging better land utilization. The intriguing aspect is this: if we can change the rules of the game so that the players (investors) find it to their advantage to replace worn-out structures and develop land wisely, then there will be less need for restrictive measures such as zoning. I do not mean to suggest this goal could be entirely achieved, but certainly a well-designed tax structure could offer a much needed supplement to traditional planning controls.

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