

LAND TAXATION AND ECONOMIC DEVELOPMENT*

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This topic was chosen shortly before I left to participate in a conference, "International Seminar on Land Taxation, Land Tenure and Land Reform in Developing Countries", in Taiwan, Republic of China. My intention had been to bring the fruits of the papers and discussions there, supplemented by my own thoughts on the subject. Unquestionably, the conference was excellent. Yet it yielded less for this paper than I had expected.

Change in Rural Land Ownership and Use

The Free Chinese on Taiwan have had a most successful land reform, one representing very great progress. To the outside observers from a dozen countries and some international agencies the results seem very fine indeed. Tax policy, however, played almost no role. There was no use of property taxation in the sense of (1) a more or less permanent annual charge, (2) a once-for-all capital levy, or (3) a series of special assessments on landowners for a few years with the funds used to pay government expenses. More over, the program involved almost no governmental expenditure in the ordinary sense. Government paid 30 percent of the compensation of landlords but used shares of stock in companies taken over from the former Japanese occupiers.

Important elements of the Chinese program on Taiwan were unique. One has difficulty, therefore, saying how much of the total "package",

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including its lack of the use of tax measures, might be applied successfully elsewhere.

Papers and discussions of the land reform experience of other lands in Southeast Asia, Japan, and Korea contained little which seems appropriate to examine here. In some cases so little progress has been made in rural land reform that one can hardly find helpful general lessons about the possible use of taxation, or inability to it, as an instrument of "social engineering". There was a consensus that any new burden on landlords in societies in which they hold great political power cannot be easily imposed through governmental action. In other cases, reported where land reform has come about, land taxation was not a major tool of policy. Australian experience has also been unique. Therefore, I shall not say more here about the actual use of taxation as an instrument of rural land reform.

In theory or in principle, the potential benefits are impressively attractive. There are several points. I speak first of annual tax on the capital value (current worth in the market) of *land* - and at a tax rate which may be high because even a high rate will not reduce the quantity of this productive resource.

The tax can yield revenues for the local government and thus help pay for local services. Each community can choose to some degree the amount of money it will pay to provide services for itself. Independence for local activities can be obtained when the residents have power to provide or not provide funds.

A tax on capital value of *land* differs significantly from a tax on net or gross income. The tax because it is fixed according to capital value will not discourage effort and the degree or intensity of use of land. (I assume that the determination of land price rests upon estimates of potential use as against what the present occupant is actually doing with the land). Two points are relevant. (1) The necessity of paying tax in money will sometimes force a person to put land to use, or use it more effectively. Where land is held out of cultivation, or out of the best potential use, for reasons of prestige, family tradition, social standing, or just lack of energy and initiative, a tax payable in cash will add inducement to make some use which will bring in money. The tax may *force* such use. Some undeveloped countries, for example, include family holdings of land which are not devoted to the most productive cultivation reasonably possible. A tax on capital values, not on income, will put pressure for more and better use.

(2) The cultivator (a) who is an owner or (b) one who does not work on a basis of shares with the owner, will be truly "working for himself". Extra effort will be for himself and his family with no compulsory sharing of the increased output with the government. The land tax on capital value, therefore, has an advantage over an income tax because of the incentive difference. The marginal rate of the land tax on the results of extra effort, of greater efficiency, and of more capital will be zero. The tax on pure land value, in other words, in no sense acts against effort, work, or the use of more capital.

The tax on land value (the capital worth) does not discriminate against use of the market. Both income and excise (sales or consumption) taxes do put burdens on market transactions, burdens which are not found in barter or the subsistence economy. The person who gets and uses money income pays income and consumption tax which he would not have if he chose to keep out of the money part of the economy. Economic development will generally benefit from the "division of Labor" in the familiar words of Adam Smith. Exchange and specialization are phenomena of the market and they are mighty aids to economic advance. Taxes which discourage them thereby hinder somewhat economic development. And any tax which favors barter and self-provision over exchange in the market will have some such adverse result.

A tax on land reduces the price of land. In effect, a purchaser will pay less in price after a land tax has been imposed, but then he will pay more each year in tax. Government in a meaningful sense has changed the conditions of ownership to favor the person with less capital. He can acquire land with less outlay of capital and less financing charge. Each year thereafter he must, however, pay more to the government but less to the lender of money. A tax on capital value does work against present owners of land. In some cases it can be a substitute for seizure or expropriation. It may serve to aid reform. I do not advocate taking landlords just to reduce their wealth or to force disposition or to bring about change for the sake of change. But where change in land holdings will be desirable for other reasons, or where revenue is needed, such a tax can be better.

Urban Economic Development

In "emerging" lands, and also in the "emerged", all over the world, much of mankind's economic development and growth are taking place

in cities. Sometimes one thinks that there may be too much in view of the inability of urban areas house, and to employ, floods of newcomers on any satisfactory basis.

Whatever one's tastes or prescriptions for a better world as regards the rate of growth of cities, two facts are related but distinguishable can serve in helping to get insight into directions for governmental public policy. (1) Cities and their surrounding areas are growing rapidly. (2) Some parts of urban areas are already old, and all cities are aging. Both these facts seem to me to call clearly for certain kinds of tax policy, at least in the general systems of public finance with which I am familiar. The rest of this paper can apply to varying degree to economies in all stages of development.

Real Estate (Property) Taxation as a Source of Revenue for Local Government. It seems to me desirable that a considerable part of the total use of "government" be based in local units, as distinguished from national or state government. Strength in local government requires ability to finance activities, ability which has a substantial element of monetary independence from other levels of government. At least such is the case in the United States, as said earlier. One revenue source which has both theoretical and practical appeal for local government is an annual tax on the capital valued real property, especially land. This tax would be in addition to any general tax on income which included income from property as well as all other sources.

Government spending today runs "high", high enough to put heavy demands on taxpaying capacity. Even if tax bases are broad, tax rates will be high. High tax rates in themselves have significant *nonrevenue* effects. Therefore, one largely unintended byproduct of large government spending will be the various nonrevenue effects of high tax rates. Consequently, wise publication must include the framing of tax laws with recognition of the results which are other than money yield to the treasury. The taxes for local government are likely to be high enough — they are today in many urban areas in the United States — to exert appreciable influence on family and business decisions. Overwhelmingly, the biggest local tax is that on real estate. The rates are often over 2 percent a year on actual, full capital value — sometimes almost twice that amount. The tax may be as much as one third of gross income and frequently equal to a sales tax on pure cost of occupancy, chiefly housing, of one fourth or more. The greater the reliance upon property taxation,

and the higher the tax rate, the greater the attention which should be given to the nonrevenue results.

The Real Estate Tax : Two, Not One, Taxes

In a highly important economic sense, the tax on real property is not one but two taxes. This fact results from the very different natures of land and buildings.

Land in the important sense of space on the surface of the earth cannot move in many localities the quantity is absolutely fixed; rarely will it be subject to more than light change (in relation to the whole) by the filling in of low land, extending surface into water areas, drainage, erosion, and other actions which are under the direct control of man or subject to natural forces for which man's action can make allowance.

In general, human beings have done nothing to create the space within the boundaries of urban areas. That space will continue to exist regardless of almost anything individuals or governments do, more specifically in tax policy. Yet this space commands prices which are often very high. From these facts follows a conclusion of high significance for tax policy, as I shall discuss later.

Buildings and other improvements on and in land, however, present a strikingly different reality. They result from man's actions. Buildings are constructed and destroyed as seems to be to the interest of an owner (an individual, a business, religious, or some other private group, or a government). Other manmade improvements consist of leveling, drainage, putting in water and sewer lines, landscaping, and so on. Occasionally in urban areas—more often in other places mining and any other drawing out of minerals or changes in soil fertility will represent changes in the worth of what is commonly called land but which in fact differs from pure space on the surface of the earth. Over a period of years, taxes can most certainly influence what happens, in mineral extraction for example.

In an economic sense some such elements are much like buildings. Their existence creates difficulties for the kind of tax policy I shall propose. These difficulties arise because of the practical problems of separating the changeable features from the pure space element in the valuation of real estate. The difficulties can be reduced to manageable proportions by special analysis and action. Nevertheless, the imposition of

high tax rates does call for care and effort to get good quality of administration.

Proposed Basis of Taxation : Basic Elements()*

My tax proposal is suggested not only for economies like the United States and others which have urban areas. The basic element would be a materially higher tax rate on land than on improvements, all on capital values rather than income. The rate on land, pure site value, might be three or four or even six times that on improvements. As compared with the present in the United States, the tax rate on buildings would go down. The "detaxing" of improvements is one of the real objectives of the proposal for the United States.

More study is needed to learn the exact relation between the two rates which would be best suited to the needs of modern cities. In all probability, the conclusions about the apparent ideal would vary from one place to another. They would need to take account of practical problems of administration of the tax, and these would be serious. The tax itself, and the transition from an existing system to the new one, would reduce land prices and thereby the tax base. But the cut in tax rates on buildings would have the opposite effect.

A complex set of interrelations would call for careful study in advance in each specific case and then follow-up as the tax went into effect(**).

Another feature might well be a tax on *increment* in land value. The tax which I have already proposed to burden land values at "high" rates

(*) I am not discussing the total revenue to be raised from property taxation. So many factors bear upon this issue in each particular locality that generalized discussion is not appropriate here. By assuming no change in total revenue, I avoid introducing the effects of different amounts of local government expenditures on property values.

(**) Many years ago a distinguished American, Henry George, whose views I obviously draw upon, proposed a **single tax**, one on land only. He believed that a tax on land values would yield enough revenue to pay for all local governmental services. Whatever may have been the case when George wrote, spending today is much too large to be paid for by any feasible tax on land. So as a practical matter the single tax is not now a realistic alternative. Even if it were, I should seriously question the wisdom of such an extreme change. The tax rate would be so high that unintended and adverse effects would result, especially in view of practical problems of valuation.

would, of course, also apply to the increment portions of land prices. Yet more of any rise in values would remain. A large part of such totals are the result of the growth of population and the general development of society. Values so created are highly appropriate as the subject of taxation. Of course, if capital gains in general are subject to income tax, some increases in land prices will in effect go to finance governmental spending. As a rule, however, tax on capital gains will apply only in those cases in which land is sold. A more inclusive tax on increments in land values seems to me desirable in principle. One merit is that the tax would yield funds to the government of the locality where the value changes occur rather than to a remote national government.

Let us note emphatically, however, that not all of what would appear as increments in land worth do result from *social* forces, with the owner passively taking what comes. By their investment of capital and their efforts, some owners do actively influence what happens. For this reason, as well as because of difficulties of administration, moderation in imposing an increment tax is clearly called for.

Still a third possibility is what we in America call the *special assessment*. The costs of street paving or improvements, water and sewer lines, and perhaps parks and other projects, these costs are charged to the owners of the land in proportion to the benefit each receives. Although practical problems of administration are not easily solved, a very great deal can be accomplished. Payment will be spread over a period of years depending upon the amount. Many urban improvements in cities all over the world could be financed by this general means. The free Chinese in Taiwan have made a good start in combining special assessment type of tax with land increment tax to finance special improvements in cities.

What Would Be Gained?

Two rather different kinds of results would be expected results in the general public interest.

Two nonrevenue results could be real and substantial. One would be a better pattern of land use. The second would be better balance between old and new structures. I would not claim for the results produced by the tax itself as much merit as do some advocates of the tax general proposal to shift tax burden from structures to land. Overenthu-

siasm has led to exaggerated and unrealistic claims, and they have tended to discredit a meritorious policy.

Let me now indicate some defects of high property taxes on improvements. These defects exist in the United States and seem likely to be inevitable results of any tax on the capital value of buildings. Lowering the rates would reduce the ill effects.

ADVERSE EFFECT OF HIGH TAX RATES ON BUILDINGS(*)

No single paper can take account of all elements relevant to the analysis. Here I ignore, among other things, the effects of different revenue yields on local government spending which will benefit owners and users of property and thus capital values. The order of presentation of the subjects does not necessarily indicate my estimate of their relative significance.

A Hidden Burden : Sacrifice of Potential Benefit

A tax on buildings produces rarely recognized effects of a type which impose hidden burdens on the public. They result in what economists call "excess burden". Consequently, the tax deprives the user of property of more real benefit than the dollars which are paid to the government. The source and nature of this hidden loss can be explained, but the amounts cannot be measured.

The cost per cubic foot of construction of *residential* units declines with increases in the size of the house, apartment, or other unit(**). In terms of one of the major things generally desired in housing — cubic contents — unit construction cost will drop as room size increases. One estimate, for example, finds that if the cost per cubic foot of a more or less typical, good quality, single-family residence of 1000 square feet is 100, the cost per cubic foot for the same type of construction goes up to 115 if the unit has only 700 square feet and drops to 86 if the size is 1,600. For another type of structure, with 1,000 square feet size as an index of 100, the cubic foot cost is 23 percent higher for a 700 foot unit, and 20 percent less for a 1,400 foot(***)).

(*) The term "building" will be used to include all improvements, including any on, in, and under the land, positive and negative.

(**) W. A. Morton, *Housing Taxation* (Madison : University of Wisconsin Press, 1955) develops the point.

(***) E. H. Boeckh, *Boeckh's Manual of Appraisals* 4th ed. (Indianapolis : The Rough Notes Co., Inc., 145), p. 63 and p. 101.

A difference of two-to-one, as in the last illustration, must be much too great to be passed off as merely incidental or the result of poor statistics.

The difference in cost of construction per unit of space reflects the fact that cubic content rises more than in proportion to floor, wall, and ceiling area. Moreover, much the same plumbing, wiring, kitchen, heating, and other facilities can serve larger, as well as smaller rooms (and buildings) through a range of sizes. As a result, therefore, the general public welfare can be served best by the construction of rooms, houses, and buildings of larger, as opposed to smaller, size. The annual tax on capital value of a building will add to occupancy costs. By doing so, it creates pressure for building smaller units; the tax thus makes for poorer resource allocation, poorer in the sense of less longrun benefit to users than would be obtainable from the real resources. No corresponding advantage occurs for either government or third parties (no desirable externalities).

A study of American family spending leads, as one would expect, to the conclusion (other things being the same) that the higher the price of housing, the *smaller the quantity* of space purchased. Similarly, the *quality*, the amenities, enjoyed will be less as their cost goes up. The data leave much to be desired for measuring amounts and anything other than the direction of the relationship. Nevertheless, one tendency or relation is clear. By adding to price of purchase or use, the tax will reduce both the quantity and quality of housing space used. Each one percentage point of higher housing cost leads consumers to settle for about one percentage point less of quantity, the latter comprising both quantity and amenities(*). Averaging over the years and within the general range of prices of our appearance, apparently, the dollar amounts spent on housing by a family of given income will be about the same whether price (including tax) is high or low. This conclusion means that to make up for a higher price due to tax, a family will curtail the *amount* and *quality* of space obtained.

Not observably from one year to the next, but unobtrusively and mixed with many changes which occur slowly, the property tax — through the nature of consumer demand for housing — will lead to the construction of rooms, apartments, and buildings which are somewhat smaller

(*) Dick Netzer, **Economics of the Property Tax** (Washington: The Brookings Institution, 1966), pp. 63 ff., drawing on Margaret Reid, **Housing and Income** (Chicago: University of Chicago Press, 1962).

than would be built in the absence of tax. And smaller units are less suitable and less commodious. They yield less utility per unit of real input needed to building them the labor and materials and even the land and the street water, sewer, and other such facilities. The tax thus produces "excess burden", more real loss to the taxpayer than, the money yield to the treasury. The public unknowingly deprives itself of opportunity to exploit fully the potential benefits form "law of the cube". The public bears a hidden burden, one hidden far more deeply than is the typical indirect tax, and this burden is more infortunate because it is also "excess". It is the sacrifice of the benefits of greater economies in construction, per unit of space and quality, as unit size is larger rather than smaller.

Let us illustrate. Assume that a family would spend \$ 1,500 a year on year on housing for building occupancy alone. In a market free form housing taxes, the family would get that amount of pure occupancy. But in fact the tax is 30 percent on the structure. (We ignore the portion of tax on land). Then the total cost for the facilities alone would be \$ 1,950. The family actually spends \$ 1,500; of this total, only, \$ 1,155 can go for space. The other \$ 346 must go for the tax. The physical amount of housing obtained (allowing for quality) must be smaller because of tax. Some such result is the very essence of government finance - the tax frees resources so that they can be used in providing government services. But the materials and labor used in producing such space - the houses or apartments costing \$ 1,154 per year (before tax) - will provide less in cubic contents, less of what people want, per unit of real input than if those inputs had been used (along with others) in producing housing units to cost \$ 1,500.

The principle would seem to apply universally. The size of actual relationship will vary depending upon construction costs. The past cannot be redone. Most Americans must live most of their lives in housing whose quality has been adversely affected by past effects of the tax on types of construction. For the future, however, conditions can be made better - by reducing the tax rate on buildings.

Maintenance vs. Deterioration : Taxation and Housing Quality :

Most of the world's stock of housing will always be "not new". Much will have been built before the birth of the occupant. Buildings gradually lose their ability to provide satisfactory shelter services unless labor and materials are devoted to offsetting the effects of time and of use. The quality of the residential space actually available to society therefore, will depend significantly upon maintenance.

Unfortunately, much of the stock of housing is already poor, not only because it was "inferior" when originally built, but also because it has been allowed to deteriorate more than necessary. How much so? I have no way of knowing. But undermaintenance forms one way by which an owner can reduce his net investment in a building. When anything, such as a property tax reduces the net income, an owner has incentive to reduce his investment.

The maintenance done, or not done, on even a minority of properties can materially affect a larger neighborhood - for ill or good. Outlays for maintenance can be combined with spending for improvement. Often they are, perhaps on a more or less carefully calculated basis (relating benefit to cost). Or as is the case of owner occupied houses) expenditures for repair and maintenance and improvement are made without careful, explicit calculation but on balance represent net new investment. Over time, some owners (and even occupants) of housing do more than merely preserve earlier quality. Betterment results. Its good effects can "spill over" into the neighborhood, making it a somewhat more suitable place to live.

Any complete social system for making the best of the huge stock of existing structures will assign key roles to (a) the prevention or minimization of deterioration and (b) the avoidance of discouragement of improvement. On both counts the property tax on buildings over the long run works against both the social interest and that of particular owners and users. At tax rates as high as on many buildings today, the tax exerts adverse influence, all of the time, on all (non-governmental) owners. How? Taxes on buildings influence maintenance in three ways. (i) Tax payments which reduce the net return from property also reduce its attractiveness as an investment. Owners who rent out some of their properties but do not get satisfactory return on investment will be especially sensitive to taxes as a cost. Any increase in tax will be especially onerous if a considerable time is required for full shifting to tenants. Any force depressing net yield will induce some decline in the supply of housing (compared with what would otherwise be the case) by undermaintenance which reduces average quality(*).

(*) See James Heilbrun, **Real Estate Taxes and Urban Housing** (New York : Columbia University Press, 1966). The fact that the U. S. income tax has results in the other direction helps explain why the conditions as they can be observed are not so adverse as one would predict from knowledge of the tax on buildings alone.

(ii) The money used to pay tax will not be available to finance maintenance. Owner-occupants, for example, cannot use the funds which go to the local government treasury to keep the property in good condition. The realities of capital markets do not permit easy debt financing to offset in full the cash or liquidity effects.

(iii) The owner may believe that maintenance expenditures will lead to higher assessments (valuations) for tax purposes and hence a bigger tax. The higher the tax rate, the greater are likely to be his fears and thus, also, his incentive to avoid actions which may raise the assessment(*).

High property tax rates do seem to deter maintenance more than rationality would justify. And the types of maintenance which owners do make are not those which are wisest economically, structurally, aesthetically, and upward reassessment, e.g. "inside" as against "exterior". Yet the latter probably have more social, neighborhood results.

Many owners of real estate are not sophisticated in property management. Some of the millions of owners of America's single-family houses certainly fall in this category. There also are many suppliers of rental housing who own one or only a few properties - a 2 - or 4 - family building acquired as a home and a source of rental income; or the place where the family business is carried on; or inherited property; etc. The attitudes, beliefs, information, and financial capacities of such owners will differ in almost every conceivable way. But we can be sure of one thing: The cumulative effect of their decisions about property maintenance will have a material effect on the quality of urban housing.

We now have the findings of a recent survey of owners of tenement housing (of poor quality for the most part). They were asked about the

(*) In principle, purely maintenance outlays ought not to affect values for tax purposes except by influencing the rate of deterioration over time. An owner seeking to act in a logical way would not be deterred by real estate tax in maintaining his property if such investment offered the best after-tax return. In fact, however, misconceptions can, and apparently do, exert undue influence. As already noted, work which involves repair refurbishing, and replacement on a building may also include some improvement. Often the two elements are inextricably combined separation requires more sophisticated analysis than will be made. With or without good reason, the owner may fear that a "repair and maintenance" job which has visible results, or even one which is reported to the authorities as needed to get a building permit, will result in an appreciable assessment increase.

factors which determined their outlays for maintenance and improvement. The replies indicated that high and rising property tax rates had hindered maintenance - by reducing the income from investment and by adding to the fear of upward reassessment.

Perverse Character of Burden in Relation to Costs of Government :

The property tax as it applies to structures distorts resource allocation perversely where there is older property, especially in urban areas. New, well - constructed, high-quality buildings are taxed far more heavily per unit of internal space than are slums and "junk"(*).

Can justification for such discrimination be found in the cost differences which the two types of property and their occupancy impose on local government (per unit of floor space or cubic contents)? Most probably, "No". Just the contrary, in fact. The badly run-down and less heavily taxed building is more likely to be associated with the greater cost of government, if only for fire and police protection(**). When high-and low-quality buildings are being compared according to the sort calculus recommended by economists — matching benefits and costs, both private and public — taxes on new as compared with old buildings do not help to harmonize for society as a whole. They operate in a way just the opposite of what will serve the social interest.

When taxes on buildings are higher because the structures are new, the taxes represent a cost to the private owner for which there is no cost to government or society in general.

The user's payment for the services of local government goes down, relatively, as the building gets worse. This result occurs even though public expenses attributable to the property are unchanged or many even increase. To repeat, the "junkier" the building, the less the tax element of the cost of occupancy operates inversely and perversely as regards government costs and benefits. Occupants who put the com-

(*) Income tax can operate in the opposite way. Large depreciation deductions for new structures, or exemption of the income for a year or two or more, can offset effects of the type discussed here.

(**) The social and economic evils associated with slums should not be ignored; but the cause-and-effect relations are complex. Neither poverty nor public assistance for the poor and similar welfare outlays are assumed here to be either a cause or an effect of lowquality housing in any simple relationship. The complicated issues involved range beyond our analysis.

munity to relatively heavy expense pay less in tax, other things being the same, than do the occupants of higher quality buildings.

The person who wishes to shift from poorer to better quality housing, or business property, cannot do so without also paying more toward the costs of government. In United States cities the relation will often be \$ 1 of taxes for each \$ 3 to \$ 4 of pure occupancy expense. Ordinarily, however, such a shift to better facilities will not add to services received from, or the expense to, government.

The property tax creates an incentive against upgrading of quality in just those parts of older cities where need seems greatest. Such discouraging of private effort to raise the quality of urban areas can serve no useful public purpose. One possible type of economic pressure to replace with something better does not exert its full potential influence

New for Obsolete : Obstacles to Urban Renewal :

Heavy taxation of new buildings must stand as a tragically apt example of mankind in creating needless obstacles for itself. Cities which urgently need to replace obsolete, decayed, degrading "buildings" nevertheless put tax impediments in the way of progress. Nobody "planned" to set up a tax system with such deleterious influence. No one tried deliberately to base American local government finance so largely on a tax that would favor holding on to the decrepit structures, many of which spread evil influence through a larger area, while penalizing the new, the good. An annual tax of 3 per cent on full value — a rate found in many large American cities — is high in relation to what most property produces. To illustrate, let us assume that a new building will have a life of 60 years. Its construction involves the owner in a commitment to pay property tax for each of 60 years. The magnitude of these future tax obligations can be expressed in terms of today's dollars. For doing so, each of the 60 future tax bills must be discounted at some rate of interest to compute the present worth. Let us use 5% and assume that the tax rate is 3% a year on the construction cost. Then the *present value* of the taxes of the taxes due over life of the building will equal about 50% of the construction cost(*).

(*) M. Mason Gaffney, "Property Taxes and the Frequency of Urban Renewal", *Proceedings... National Tax Association... 1964* (Harrisburg: National Tax Association, 1965), pp. 272-285. The calculations make approximate allowance for reductions in assessment as the building ages.

Whatever the precise figures in a particular case, the property tax bill unquestionably goes up when a new building replaces an old one. And the more that is spent for features of good quality, etc., the larger is the new tax liability. The size of this unfortunate result depends, of course, upon the height of the tax rate. The desirability of putting capital funds into new buildings varies inversely with the tax rate. The property tax on structures, in short, creates a clear bias against the replacement of old buildings by new ones. If the construction of a new building requires demolition of an old one, the cost which the builder faces will include not only the land and the new construction. The added expense will also include the value remaining in the old building plus demolition costs - a sort of deadweight burden. We shall ignore the land for simplicity in understanding the particular point at issue here; the land, of course, is the same with either of the two uses illustrated.

Assume that a new apartment house would cost \$ 300,000. It would displace two antiquated buildings worth a total of \$ 30,000. If the tax rate is 3%, the tax on the new building would be \$ 9,000 a year. The gross income from the old buildings is 10% of their value — \$ 3,000 — and the tax \$ 900. If the old structures are junked, the owner gives up \$ 3,000 minus \$ 900 (\$ 2,000) a year. He assumes an obligation to pay \$ 9,000 a year of new tax.

The pre-tax annual income expected from the new property must provide \$ 11,000 a year - for the new tax plus \$ 2,100 for the loss of old income - before *anything* will be available to those who supply the \$ 300,000 if new capital. Were it not for the tax on the *new* building, the obstacle to junking the old ones would be the loss of \$ 2,100 a year (the rentals they bring, less tax). Assume that rentals on the new are 10% of the \$ 300,000 - \$ 30,000. This is an increase of \$ 27,000. But after the \$ 9,000 of tax, the owner would have only \$ 18,000 more than before. This would be only 6% of the new investment of \$ 300,000(*). Out of this would have to come depreciation and operating expenses, before anything would be available as a yield on capital.

In today's market, such an outcome would not justify undertaking the new investment. The old buildings would be retained. If the tax

(*) The \$ 30,000 expense of acquiring the old buildings is excluded because the cost figures used here include the \$ 3,000 loss of income. To include both, would involve double counting. Omission of demolition expense does understate the cost of the replacement.

rate were higher than 3%, the tax obstacle to replacement of the two old buildings with a far better new one would be even greater. However, if the tax bill remained unchanged, \$ 900 as on the old buildings, the attractions of venturing the new would be greater - but not enough. Even if the tax rate were as moderate as 1%, new investment in the illustration would hardly be attractive. Giving up the \$ 3,000 on rentals from the old plus paying \$ 3,000 of tax (at 1% rate) on the new, would leave \$ 24,000 net increase in receipts. This amount would be 8% of the new capital, not enough to cover depreciation plus other operating expense and yield a satisfactory return.

Tax Islands and the Central City : Inter - Area Differences :

Not only high tax rates but also difference in actual, effective rates among localities have other non-revenue results. Tax rates much above the average in one locality will discourage business investment there, at least a little. They will do more. The high rate will also reinforce opportunities and incentives for creating "islands" of relatively low tax rates nearby - for both business and residential purposes.

Among the numerous localities which make up most metropolitan areas in the United States, a few will have tax resources which are much above average in relation to obligations to provide governmental services. These particular, independent units of services. Consequently, there communities can attract investment and become low - tax enclaves. If they are predominantly industrial and commercial, then a company operating there will incur little property tax per unit of output. Such businesses get something of a competitive advantage - and contribute relatively little to helping pay the expenses of local government anywhere.

Some communities, typically by the use of zoning power and building codes, are able to exclude types of property associated with high governmental expense. By requiring each single-family house to use a rather large amount of land and prohibiting apartment buildings. A suburb may, prohibit the high-density housing which brings many children, and heavy school costs, per acre. The parts of a metropolitan area which succeed in such restrictive policies can hope to finance relatively high-quality local service with a tax rate which is less burden-

some than the rates nearby. The latter rates, however, tend to be higher and to go up and some elements of a vicious circle gain strength. Upper-income families, seeking good governmental services and low tax rates, gravitate to the "island".

"Lower" tax rates on the fringes of an urban area encourage dispersal and the development "far out" of activities (including housing) which in a full economic sense ought not to be so distant. (The "ought" as used here rests on the full accounting for all social costs and benefits). Property nearer the center will be subject to high tax rates; and each tax rate increase reduces the value of the property and the tax base. Many buildings will already have deteriorated but yet have years of "useful life", and of prolonged decline, before replacement becomes economical. Few new structures will be built in the older areas. Therefore, the tax base tends to go down. The decline of the tax base in itself adds to the need for still higher tax rates to pay for local government services. A vicious circle gets more oppressively confining.

Business, especially commercial (both retail, including service, and wholesale) become vulnerable to competition from outlying neighborhoods. Tax differences are by no means the major force, but they aggravate the tendency.

Unless the users of buildings in central cities believe that the benefits of local government go up with tax obligations, the repelling forces gain strength. A destructive process gains force, one somewhat self reinforcing. Get in may be scarcely perceptible from one election to another.

The existence of enclaves where tax rates are relatively low, "tax islands", does more than put neighboring localities at a competitive disadvantage and accentuate the difficulties of older areas. The existence of "tax islands" and of areas of low density, as is typical of many suburban localities in American urban areas, creates pressures which operate under the surface. Residents of the area who wish to escape the urban center (for many reasons among which taxes may in fact not be of obvious importance must then "leapfrog" over the enclaves. The policies of exclusion require people to go further out. The resulting land use imposes higher costs on the whole society than if population were spread without regard to tax factors which are essentially irrelevant to the inherent reality.

The disadvantages take the form of (1) costs in time and money of traveling greater distances from home to work (and for recreation and perhaps schooling); (2) somewhat higher expense of supplying water, sewer, and utility services farther from central locations; and (3) reduction in those economic and social benefits brought by population concentration. Once such disparities are well established, the high tax area cannot protect itself fully. Its high tax rate has helped to start and, then, accentuate an unfortunate process. Again, we refer to tendencies. They may be of small order of magnitude. But they are facts of life.

The tax on buildings has other undesirable nonrevenue results. Business location and operating methods can be distorted slightly. This result will differ from one type of business to another. Public pressure for exempting certain properties from tax will grow; the tax base declines as a result, and inequalities get embedded in the system. "Sociolization" of housing is encouraged for reasons largely not relevant to rational resource allocation or equity in the treatment thereof; seem to be a less expensive way of supplying housing than will private investment.

Space does not permit development of these and other points. They add support to the general theme of this paper - that high tax rates on the capital value of buildings will have more than slight nonrevenue effects of an undesirable nature.

The tax on land :

High property taxes will *not alter* (appreciable) *the amount of land in existence*. But will the height of the rate influence the use made of land? Most certainly it will. The higher the tax rate on land, the greater will be pressure on the owner to put the land to the "highest and best use". Society can actually benefit from a tax (other than merely getting funds to pay for government).

In practice land taxes do seem to speed up the renewal of old urban areas by arousing sleeping landowners, by substituting an explicit cost which can be seen for an invisible one which is only implicit, by forcing a more rational attitude toward "heirloom" land, and in general by adding pressure on landowners to do what their self-interest would seem to have dictated anyway.

The tax on land can influence the availability and the use made of particular parcels. Any underassessment of land (as compared with actual market worth) will actually curtail incentives, and pressure, for best use and for urban renewal. American practice, however, leads to some such inappropriate underassessment of land. As a result the bad effects of property taxation are enlarged; the potential good effects are reduced. The undervaluation follows from attempts to transmit to the land the depressed valuation which are properly attributable to the deteriorated condition of the structures on them. The effect in reducing pressure on the owner of land to use it more productively will be to slow area renewal even more than does the property tax when it operates "normally".

A high tax rate on land will reduce land prices. The full annual carrying costs (implicit and explicit) will not be less. But each year the owner (user) will pay less in interest or its equivalent and more in tax to government. Among other things, as noted earlier, government in a sense has eased the problem of financing land use because a purchaser need not arrange as large a loan or other financing.

If the tax rate on land values were several times the tax rate on improvements but without altering the total revenue for the locality(*), on the average, property owners would pay the same amount of tax. But few would be at just the average. Substantially higher rates on land values would induce owners of low-use land to convert to higher-value uses. Meanwhile, the lower tax rates on buildings would encourage replacement of old structures by new ones, as well as net additions. The benefits to the whole public could be appreciable in a generation — not revolutionary, not earthshaking, but also not insignificant.

(*) Land as it is taxed is something more than space on the earth. It also embodies the capital invested over the years in bringing it to its present physical state. Moreover, land in the sense of what serves us includes the entrepreneurship which influence the use made of any particular parcel; the incentive which leads a developer to promote higher yielding uses may include hope for a rise in land price. If so, part of a rise in land value is not "unearned increment" but rather the reward for a human service. In some cases, therefore, higher property taxes may possibly reduce the quantity of "land" in the sense of the usefulness of the earth's surface .

(*) Part of any refined program would allow for public advantages of present low density uses and also allow reward for development rights, e.g. for open space to serve as parks.

If in addition there were special taxes on increments in land values and special assessments to pay for particular improvements for various particular locations within the city, the both development and redevelopment in cities would progress more rapidly and more rationally.

A word of caution must be added. Administration calls for honesty and skill. Part of the broad reform will include special effort to develop staffs of qualified people and associated facilities for the specific job. One possibility is the use of selfevaluation. Each owner or group of owners can be required to place values on land. These figures can be set individually or by the owners in each neighborhood. Government can assume the right to acquire the land at such a price. The Chinese in Taiwan are using the device with some success. At least this experiment deserves careful attention. Other means to develop accurate valuations must be devised.
