Elimination of Urban Blight Through Inverse Proportional Ad Valorem Property Taxation

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INTRODUCTION

SINCE 1949, the urban renewal program has provided local renewal agencies with federal funds in an effort to eliminate or at least substantially alleviate urban blight. Among other things, the program was intended to relocate slum dwellers, stimulate large-scale private rebuilding, obtain new tax revenues for cities, revitalize downtown areas, and halt the exodus of middle class whites to the suburbs. However, urban renewal has not achieved its general aims; in fact urban blight and slum formation have continued to develop in contemporary America until now they are problems of major proportions. The social cost of inequities at least partially attributed to urban blight such as insufficient and poor education (1), inadequate health and sanitation programs, increased crime rates, and a stifling environment are incalculable. Thus, a search for public policies which would alleviate these problems has been stimulated. The purpose of this paper is to present a new approach for controlling urban blight.

I

RELATION TO OTHER PROBLEMS AND PREVIOUS LITERATURE

MANY AUTHORS (2) believe that the way for cities to control urban blight is to make better use of such tools as zoning, building codes, inspection and policing power. These have failed in the past and we do not believe that their enforcement can be strict and fair enough to control urban blight.

We agree with Henry George, "There is but one way to remove an evil—and that is to remove its cause (3)." Property taxes as they exist in the majority of the cities and counties of America encourage slum formation and urban blight because as real property depreciates and deteriorates, it is usually assessed at a lower value (4), and thus the tax liability is reduced. We feel it is the general decrease of tax assessment that deters upkeep and property maintenance. A rational property owner would not make improvements to encourage higher assessments which would minimize utility that would come with higher taxes. Therefore in order to eliminate the continual problem of the less than optimal use of urban areas, existing makeshift proposals which only attack part of the problem must be dropped for a more concrete solution.

Recently, there has been a unique approach to the problem of urban blight. The Douglas Commission has directed attention to the existing system of local property taxes. It has been pointed out that that system is a regressive one. The present system of real property taxes is divided between taxes on land and taxes on buildings. Taxes on buildings are levied in such a way that any improvements in the buildings are heavily taxed. Thus, this is bound to discourage if not prevent property owners from improving their buildings. Taxes on land are relatively lower than those on improvements. The Douglas Commission suggests that there be a shifting in priority from the tax on improvements to the tax on land. This, then would suggest substantially lower taxes on improvements and higher taxes on land. In fact, Netzer and Richman have suggested the elimination of all taxes on improvements (5). The purpose of this action would be to encourage improvements not only of buildings, but land as well. A higher tax on land would pressure owners to use the land more efficiently so as to bring in sufficient income in order to realize profits and maintain possession. These alterations would make the present system more progressive. We agree with this concept but feel they have not gone far enough. They have removed a tax which helps increase the decay rate and thus the formation of new slums should be slowed down but the improvement in existing slums, if any, would be extremely slow.

The Douglas Commission would continue to have property (*i.e.* land) taxes to provide the financing for a major part of local government. Curtis declares that ". . . the third myth is that the real estate property tax is overburdened" and later suggests that ". . . many local governments could significantly increase their property tax rates"(6). We do not agree. The fact that property taxes are a direct, regressive tax, one that frequently is inequitable, has caused a taxpayers' revolt. The magnitude of this revolt is such that it is politically, if not economically, unsound to raise real property taxes. This is effectively demonstrated by the federal government revenue sharing program and increased state aid for local schools. Although it is not the purpose of this paper to deal with the problem of financing local government, we are convinced that a fair broad-based, progressive tax must be devised for this purpose. In fact, the concept of inverse proportional ad valorem property taxation is based on the assumption that the property tax can be an excellent vehicle for social improvement if there are no constraints involving the raising of revenue.

II

AN INVERSE PROPORTIONAL AD VALOREM PROPERTY TAX

THERE ARE TWO basic economic causes of urban blight problems. The first is that of rising relative and absolute costs of ownership of property held by individuals and the second is profit associated with ownership of slum property. Thus, one might approach the problem in such a way as to lower ownership costs in the former case, and lower profits in the latter. This can be done through the property tax vehicle. Thus, we have attempted to develop a tax model that would motivate real property owners to improve their property values. To be equitable, the model should apply to all existing property within the municipality. In general, we suggest a reduction in property taxes for those individuals who improve their real property, on the one hand, and on the other hand, an increase for those who let property values deteriorate.

A. Assessment Policy. Equitable assessment policy is a most important factor when considering property taxation. Curtis points out that ancient and unfair assessments is one of the major problems with our present property tax policies.

Since assessment policy is a most important key to equitable taxation, we incorporate in our model the assessment of all real property at certain time intervals (7). Thus, the incentive to build new real property at a very low cost and then add to or improve the structure later in time in order to enjoy lower property taxes will be eliminated. This can be partially assured in the long run, because construction costs will not fall on the lowest point of the average total cost curve. The usage of the multi-time building technique subjects the owner to higher construction costs caused by either inflation or by the inefficiency of later additions or improvements that could have been completed at the time of original construction.

Our model assumes that an assessment is made every time there is a change in ownership of real property. Therefore, it incorporates the effects of inflation, zoning changes, etc., on property values. The assessed value will be the selling price, but adequate precautions must also be taken at the time of appraisal for special cases, such as gifts, special sales prices or trades. These special situations should not present a major problem because most real property transfers are evaluated in terms of worth by some intermediary, such as a bank or mortgage company. If at the time of title transfer there is no independent evaluation, the municipal government will require the new owner to provide such an assessment.

If over time a property owner improves his property, his property tax should be decreased. The owner should have the option of having his property appraised at any time either upon his request or automatically when a new building or improvement permit is recorded. To detect property which is deteriorating, all real property would be appraised at least once every five years. The cost of an appraisal may be significant, and an equitable policy must be established to determine who pays the bill for the assessment. A suggested policy could be:

1. For a change in ownership the new owner assumes the cost of the evaluation if the selling price is not fair evaluation, or
2. For all other evaluations the party who benefits from the change will pay for the appraisal, *i.e.,* if the taxes go down the owner pays, and if the taxes go up the local government pays the cost.

B. Taxing Policy. Taxing policies are different for different types of real property. We will consider only two cases: 1) owner-occupied single residential, and 2) income-producing real property.

1. Owner-Occupied Single Residential. In this case the value of land and buildings are integrated and the tax rate is applied to the total valuation. When a single dwelling is built at time t_0, *i.e.,* time equals zero, an amount of tax is established, say T_0. The amount T_0 is determined in the conventional manner, *i.e.,* appraised value times tax rate. After T_0 has been determined, the amount of taxes paid will vary as the appraised value changes but the tax paid will be based on T_0, not on a tax rate. This procedure will remain in effect until there is a change in ownership. Consider the variation in the amount of taxes paid during a single ownership where there are only three possible situations. These are that the appraisal of the property will: 1) remain constant, 2) increase, or 3) decrease. For the first two cases, the amount of tax will decrease as a function of time and for the last case the taxes will increase.

Case 1_a: Constant Property Valuation. The case of constant property value is simplest and will serve as a reference for the remaining examples. In the situation where property values do not change after each appraisal, the tax will decrease every five years until, at the end of thirty years the property will experience zero tax. This is a step function which is approximated by a continuous function for ease of exposition. In the remainder of the paper, let the following functions represent the tax paid when the property evaluation remains constant.

$$f(t) = T_0 - T_0 \cdot t/30 \qquad 0 < t < 30$$
$$f(t) = 0 \qquad\qquad\qquad\quad t > 30$$

Thus a home owner who maintains his property is rewarded by periodic

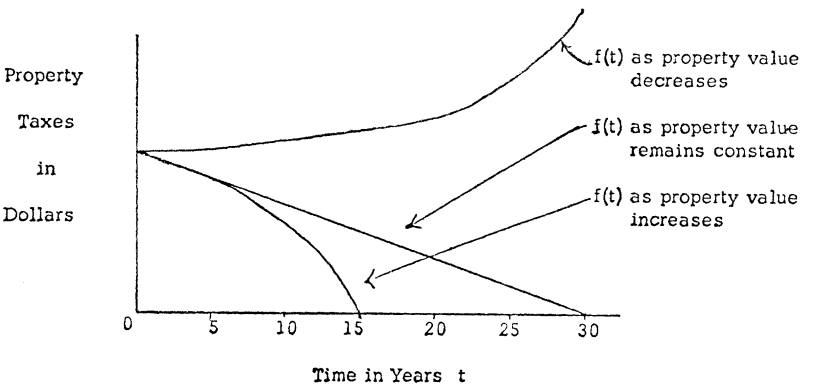
reductions in his property tax until it reaches zero.

Case 1_b: Increased Property Valuation. If a property owner increases the value of his property, he is rewarded by having a larger tax reduction. This property tax behavior is represented by the following function: $f(t) = T_0 + T_0 \cdot t/30 - c \cdot t^2$. Since we have no conclusive data to help us determine the optimum value of the constant, c, it is suggested that an appropriate value be $T_0/k(15)^2$, where k is the ratio of the new property value to the old. With this value of c, $f(t)$ equals zero in fifteen years if a person doubles the value of his property.

Case 1_c: Decreased Property Evaluation. Since the purpose of inverse proportional taxation is to prevent the depreciation of property values, a harsh penalty would be imposed when properties deteriorate. This is accomplished by simply changing the signs in the function for the case of the increased evaluation and thus $f(t)$ becomes

$$f(t) = T_0 + T_0 \cdot t/30 + T_0 \cdot t^2/k(15)^2$$

Figure 1



Since $0 < k < 1$ in this case, $f(t) \to \infty$ as $k \to 0$. Thus as k decreases, and t increases, the taxes will become larger in a quadratic manner and it will soon be economically necessary for the owner to do something about the value of his property. Figure 1 shows the relationship of these three functions in single owner dwellings.

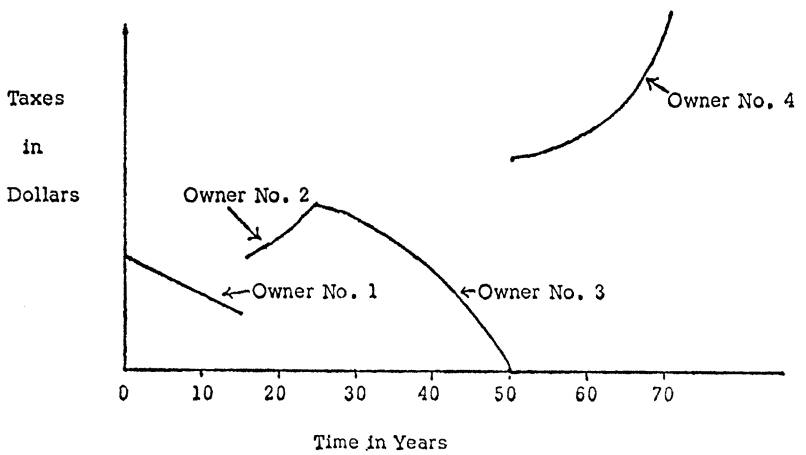
If we follow the present policy of having the amount of tax remain unchanged when a title is transferred and then have taxes increase or decrease according to whether property values appreciate or depreciate, wealthy homeowners would be paying little or no tax and the poor a very high property tax. To partially offset this problem, the tax duplicate would be adjusted everytime a title is transferred.

This adjustment will determine a new T_0 that will always be at least as high as the T_0 of the previous owner. This is accomplished by having a constant tax rate for the establishment of all T_0. In other words, if at the time of sale, the property is appraised at the same or at a higher value, the new T_0 will be at least as high as it was for the previous owner. The new T_0 could not be based on new and lower evaluation in the event that the appraised value has decreased.

If the property tax were based on a new lower value, the tax would be smaller than before and property blight could develop and be perpetuated simply by having property change owners frequently. In order to prevent this, when a property title is transferred and appraised at a lower value, the existing tax will continue.

Figure 2 illustrates this cyclical tax pattern. It is a tax function over a

Figure 2

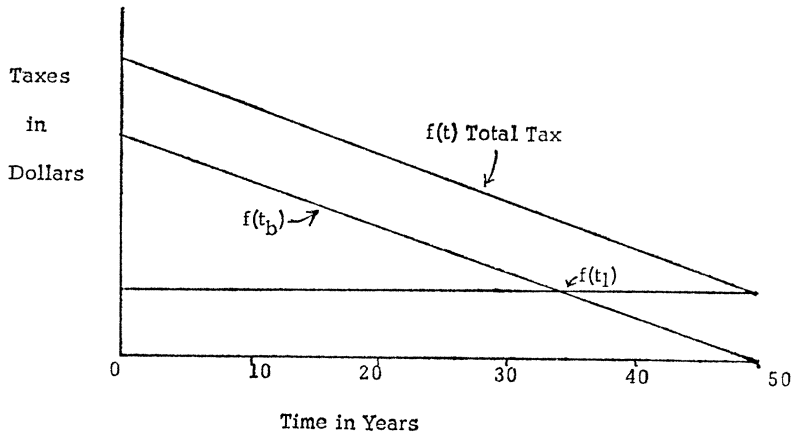


seventy-year period for a house that had four owners. The first owner possessed the house for fifteen years before he sold it. At the time of sale the value of the house was the same as when it was built, with the first owner experiencing a reduction of tax of one half over the fifteen years of ownership. The second owner permitted the value of the property to physically deteriorate for the ten years he lived in the house before selling it. This is shown by the upward quadratic curve of $f(t)$. The value of the house at the time of sale being less than it had been at the previous sale causes the third owner to begin paying a higher property tax equal to the amount of the last tax duplicate paid by the second owner. The third owner lived in the house twenty-five years and made substantial improve-

ments so that when he sold the house it commanded a much higher price than ever before. The house was reappraised at the sale price, and the fourth owner pays an even higher initial tax. The fourth owner allows the house to deteriorate substantially after twenty years, then property taxes become so high that it is uneconomical to continue ownership of the property. The property was then razed because the deterioration was so extreme that renovation is uneconomical.

Naturally, there are other variables affecting selling price, such as inflation, shifting of location values and zoning changes. These variables will be adjusted for and shifted forward in the process of assessing real property valuation just as they are in the present property tax system and should not present any real problem in this new system.

Figure 3



2. Other than Owner-Occupied Homes. All real property other than single family dwellings, such as apartment houses or commercial buildings, should naturally be taxed in a slightly different manner. In the case of single owner-occupied dwellings, we did not partition the property evaluation into land and buildings because we are interested in maintaining the quality of a residential area. However, when land is used for income-producing purposes, we feel that one should be paid for using a natural resource. This is accomplished by taxing land and buildings separately.

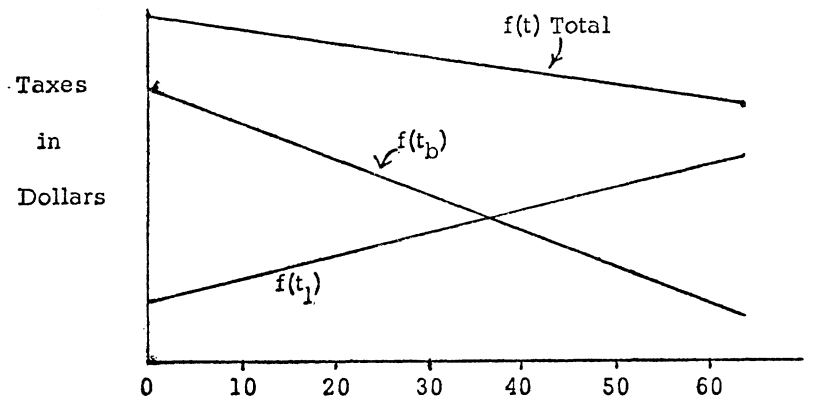
The tax policy on buildings would remain the same as that of taxing single owner-occupied housing, where the amount of tax decreases over time if the buildings are maintained or improved. Income-generating property is frequently held by absentee owners for long periods of time and the reduction in the tax duplicate should be decelerated, *i.e.,* the time it

takes for the tax on commercial buildings to decrease to zero should be fifty instead of thirty years, where: $f(t) = T_{0b} - T_{0b} \cdot t/50$, the subscript b being used to indicate the tax on buildings.

The tax policy on land is the same as the present tax policy, *i.e.,* a flat rate of assessed value. The total taxes paid is the sum of the two taxes and the function of taxes paid is the convolution of the two. The case of maintaining building value and a constant land assessment is shown in Figure 3.

An interesting and extremely important supplementary effect of evaluating both land and improvements is that it is equitable to the property owner. Since the tax policy on the building requires a reassessment at least

Figure 4



every five years, the value of the land would be reassessed at the same time and thus the current effects of inflation, rezoning, etc., are always recognized and taken into consideration. For example, let:

$$f(t_b) = T_{0b} - T_{0b} \cdot t/50$$
$$f(t_l) = T_{0l} + St,$$

where the subscript b = buildings, l = land, and lS is a positive slope showing an increase in land value.

Then,

$$f(t = t_b + t_l) = f(t_b) \cdot f(t_l).$$

A graphical representation of this functional relationship, Figure 4, shows a situation where the land increases in value and the tax on improvements decreases over time. The slope of $f(t)$ total continues to decrease because of proper maintenance of the capital asset.

These policies provide incentives for environmental improvements in commercial property. These incentives would come in the form of lower costs to property owners who maintain their properties. The results would be higher profits and thus an encouragement of new construction. On the other hand, if real property owners do not maintain their property higher total operating costs would be incurred from the increased property tax and would ultimately lower profits. In extremely severe situations, the appraisal and taxing institution could foreclose delinquent parcels and either raze or resell them to interested buyers for renovation and rebuilding.

III

CONCLUSIONS

THIS PLAN will have many serendipitous effects. The fine tuning of the assessment policy should enable efficient enforcement of local zoning and building codes. In addition, the assessment policy will eliminate much of the inequity in property tax which is one of the primary causes of the present taxpayers' revolt (8).

The taxing policy will provide for the gradual elimination of the regressive tax on single-residential homes. Also because of the separate tax on land for commercial properties the difference between the cost of renting and homeownership will be increased and thus private homeownership would be promoted.

The biggest advantage is that property owners would be encouraged to undertake renovation and maintenance of property and thus the costly ineffective government urban renewal programs could be eliminated.

Although implementation of the approach requires a new broad-based tax for local government revenue, it is not necessary to wait for such a tax before implementing the system. This is because it will take time for property improvements to reduce the tax revenues a local government receives. In fact for the first five years the tax revenues should increase by eliminating inequities and updating assessments before reductions in property taxes.

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1. James Edward Bruno, "Achieving Property Tax Relief with a Minimum Disruption of State Programs," *National Tax Journal*, September, 1969, pp. 379–90.
2. F. H. Finnis, "Slums and Property Taxation," *Canadian Tax Journal*, March 1968,

pp. 154–158; Bernard P. Herber, *Modern Public Finance* (Homewood, Illinois: Irwin, 1967); Dick Netzer, *The Economics of Property Tax* (Washington, D.C.: Brookings Institute, 1966); Mabel Walker, *Urban Blight and Slums* (Cambridge, Mass.: 1938); Mabel Walker, "Property Tax Expedients in Urban Renewal," *National Tax Association Proceedings* of the Fifty-Third Annual Conference on Taxation, September 5–9, 1960, pp. 44–58.

3. Henry George, *Progress and Poverty* (New York, New York: Fiftieth Anniversary Edition, 1942), p. 437. George spells out the basic inequity of real property tax. "The present method of taxation . . . operates upon energy, and industry and skill, and thrift like a fine upon those qualities. If I worked harder and built myself a good house while you have been contented to live in a hovel, the tax gatherer now comes annually to make me pay a penalty for my energy and industry, while taxing me more than you." *Ibid.*, p. 437.

4. Raymond L. Richman, "Real Estate Tax Reform as a Solution to Urban Problems," (a prepared statement), *Hearings Before the National Commission on Urban Problems*, Volume I, May–June, 1967.

5. Dick Netzer, "Impact of the Property Tax Effect on Housing Urban Land Use Local Government Finance," prepared for the National Commission on Urban Problems, Superintendent of Documents, U. S. Government Printing Office, Washington, D.C.; Raymond L. Richman, "Real Estate Tax as a Solution to Urban Problems," *ibid., op. cit.;* "The Incidence of Urban Real Estate Under Conditions of Static and Dynamic Equilibrium," *Land Economics*, May, 1967, pp. 172–80.

6. Thomas B. Curtis, "Towards a Better Understanding of Urban America," printed for the use of the Joint Economic Committee Congress of the United States.

7. Although in practice real property appraisal is difficult, it can be professionalized. See A. H. Schaff, "Effects of Property Taxation on Slums and Renewal: A Study of Land Improvement Assessment Ratios," *Land Economics*, February 1969, pp. 111–17, for an in depth analysis.

8. An example of a state where the problem of raising tax revenues is a state-wide concern is Ohio. See Ralph Winter's article in the *Wall Street Journal*, December 19, 1969, p. 1.

Misplaced Economic Incentives

MANY INDIVIDUALS CITE selfish profit seekers for environmental degradation, rather than laying much of the blame—where it belongs—to misplaced incentives in the economic system. Progress in environmental problems is impossible without a clearer understanding of how the economic system works in the environment and what alternatives are available to take away the many roadblocks to environmental quality. . . .

Another type of misplaced incentive lies imbedded in the tax structure. The property tax, for example, encourages architectural design that leans more to rapid amortization than to quality. It may also encourage poor land use because of the need for communities to favor industrial development and discourage property uses, such as high-density housing, which cost more in public services than they produce in property taxes. Other taxes encourage land speculation and the leapfrog development that has become the trademark of the urban-rural fringe. [From the first annual report of the Council on Environmental Quality.]