LAND TAXES AND LAND VALUES.

(For the Review.)

A practical and easy scheme for the inauguration of the Single Tax would be the gradual increase of the present local tax on land. As the land tax grew, the other taxes could dwindle, to disappear when the land tax had become large enough to defray all the expenses of local and general government.

In the elimination of other taxes, those which bear most heavily on the land-privileged classes would naturally be retained longest. In the national budget, the tariff on luxuries, the inheritance tax and the excise for champagne and cigars would survive till the last. The local taxes on corporation improvements could be kept long after the abolition of the poll and road tax.

It may be of interest to trace the manner in which a gradually increasing land tax would affect the selling price of land. The selling price of land is governed by two factors: its present actual or potential (if properly improved), rent-yielding power and the speculative chance of a change in rental value. These two factors will now be considered in order.

Let us assume that the scheduled time for the gradual shifting of all the tax burden upon land will be twenty years. In the United States about 20 per cent. of the total taxation is now on the land, so that the land tax must be quintupled to yield the whole budget. According to Thomas G. Shearman, in "Natural Taxation," half of the gross land rent would equal the aggregate taxes of the United States. Hence the present land tax is but 10 per cent. of the rent, and when quintupled it would be 50 per cent. With these premises, if only the "natural" tax or half the rent is the desired limit of assessment, we might figure an illustration as follows: assuming that the rent remained stationary during the twenty years' transition period, and that the selling value was twenty times the net return to the landlord (on the 5 per cent. basis).

A numerical illustration will now be given on the basis that the "natural" tax (taken at 50 per cent. of the rent), is the limit of assessment. The selling value of land at present, if reckoned on a 50 per cent. basis, would be 20 times the net rent to its owner. Such a basis would apply to tracts whose rental income was reasonably sure ahead, as downtown sites in great cities; if there was danger of rent decreases, the selling basis would be proportioned to such risk, and might be 10 per cent. or more. During our 20-year tax transition period, however, the true selling value would not be the whole capitalized net rent, for a sinking fund must be subtracted from the latter, which would amount at compound interest to the final loss in selling value.

The algebraic formula for calculating this sinking fund (P) is that of the present worth of an amount (A) for n years at a compound interest, which is

$$P = \frac{A}{(1 + r)^n}$$

For the illustration, take a tract now renting for $100 yearly, the present tax, being 10 per cent. of the rent, is $10, the net return to the owner is $90, and the selling value $1,800. The rate of assessment is hence 10,000 ÷ 1800 or 5 5-9 mills on the dollar. Under the natural or 50 per cent. tax the tax would be $50, the net return $50, the selling value $1,000, and the rate 50 mills. In passing it may be remarked that while the tax has quintupled and the rate of assessment increased ninefold, the net return and the selling value have decreased less than 50 per cent.

Thus the loss in selling value for our change to the 50 per cent. tax would be $800, and this would be the loss (A) to be liquidated by the payment of a sinking fund (P) at the beginning of the transition period. Applying the above formula with n = 20 years and assuming r = 5 per cent or .05 and we have

$$P = \frac{800}{(1 + .05)^{20}} = \frac{800}{2.684} = \$298. \text{ nearly.}$$

Hence the inauguration of our change would at once knock the selling value of the tract from $1,800 to $1,502, and the rate of assessment would then be 6.64 mills to produce the $10 tax.

A uniform increase of the tax from $10 to $50 in 20 years would mean an increment of $2 yearly. Therefore, a year after the change the tax would be $12, the net return $88, and the capitalized net return

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would be $17.60 Here the loss in 19 years would be $1,760.—1,000.=760 and, by the formula, the sinking fund

$$P = \frac{760}{(1 + .05)^{19}} = \frac{760}{2,526} = \$300. \text{ nearly.}$$

Then the selling value is $1,760.—300.= 1,460. and the rate of assessment is 8.22 mills. Similarly, after 10 years, the tax would be $30., the net return $70. and the capitalized net return $1,400. From this the sinking fund payment is $163., the selling value $1,237. and the rate of assessment 24.8 mills.

Should the limit of taxation be taken at the ideal of Henry George, or the full economic rent, the final tax on our tract would be $100, the net return and consequently the selling value nil, while the rate of assessment could not be reckoned on a non-existent selling value, but might be estimated as 100 per cent. of the rent. The transition period, to inaugurate the full Single Tax, would have to be somewhat less than double the 20 years, proposed for the 50 per cent. tax, if it was desired to cause no greater fall in selling value at the start.

The last four paragraphs deal with a constant rent during the transition period. When the rent varies, as it generally would during such a period, the solution is similar. Taking the same tract, let us suppose that the gradual influx of population led the land dealers to estimate that the rental value was increasing $10 yearly at the start of the tax change.

This would cause the rent after 20 years to be $100. + (20 X 10) = 300, the tax $150. and the selling value $3,000. or a gain of $1,200. Thus the depreciation due to the tax change would be more than balanced by the growth in the rent. The selling value at the start of the change would therefore be increased, instead of lessened, by a sinking fund payment equal to the present worth of the expected final gain. This by the formula would be

$$P = \frac{1,200}{(1 + .05)^{20}} = \frac{1,200}{2,684} = \$493. \text{ nearly.}$$

The selling value of the tract for any subsequent year of the transition period could be similarly calculated. An expected decrease in rent would be compensated in the selling value by substracting from the capitalized net return of the year a sinking fund for the final loss.

With a correct assessment of the full Single Tax, the rent fluctuations would but affect the income of the government, as the landholder would only own the improvements. With the 50 per cent. tax fluctuations in selling value could still occur, but they would bear a close relation to the passing changes in rent. The present periodic epidemics of land value inflation are due to the fact that large areas can be held idle at small expense; not only because of the small rate of assessment, but because of false classification, as anthracite coal tracts under the arable, or iron ore beds under the forest class.

Personally I advocate the natural rather than the full Single Tax, and not only because it would arouse less opposition from the landowning class. It would give the assessor a margin for error in his appraisals and would be elastic enough to enable a nation to dispense with domestic borrowing for such emergencies as war. Most important, it would, while eliminating the idle, speculating class, preserve the most valuable features of private land exploitation by allowing to the original and daring industrial adventurers a reward for success, in difficult developments, commensurate with the skill exercised and the risk involved.

R. B. BRINSMADE.

[We print this very able article of Mr. Brinsmade, and will ask our readers to make their own comments. We must, however, dissent from the last paragraph. It seems to us that society need hold out no inducement to the adventurous settler beyond the assurance of security in what his labor produces.—Editor SINGLE TAX REVIEW.]

THE common sense test of municipal ownership reduces it to two propositions: First, does it decrease the burden of taxation? Second, does it take monopoly away from private possession and control? If it does these two things, there can be no question either as to its policy or its ultimate success. — *Tennessean*, Nashville (Tenn).

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