Site Value Taxation and the Timing of Land Development:

A Comment on Temporary Use with Termination Costs

By ATHANASSIOS SKOURAS

R. W. DOUGLAS JR. has claimed in a recent article (1) that I have made an error in stating that a land tax discourages early development when such development involves a later change to a preferable use for which compensation has to be paid (2). But this statement is, in fact, a *correct* conclusion that can be drawn from B. L. Bentick's analysis to which my previous comment was addressed (3). My note was not at all concerned with this correct result (which was only mentioned in a footnote) but concentrated on Bentick's *mistaken* conclusion that a land tax is neutral and has no effect on speculation. The note provided a simple proof that a tax on land ownership encourages development by reducing the length of time that land is held idle prior to its optimal development (4).

Douglas attributes to me the correct conclusion that can be drawn from Bentick's analysis but then claims that I am in error. My mistake, according to Douglas, is that "Skouras overlooks the fact that the termination cost is itself a negative component of market value and is therefore subject to a higher discount factor if a tax is imposed." This statement is a complete non-sequitur. There is no doubt that, in estimating the present value of a project which involves the immediate adoption of an inferior land-use that will be later discontinued in order to be replaced by a superior one, the termination cost of the initial land-use is a negative component of the present value. But it certainly does not follow that "the termination cost is subject to a higher discount factor if a tax is imposed."

Why should the imposition of a tax make higher the discount factor that is relevant to the estimation of the present value of the termination cost? A tax is normally levied on the income (or value) of land and has no bearing on

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termination costs such as, for example, those that are involved in the demolition of existing buildings or in the compensation for the discontinuation of a contract. It is therefore not at all clear why such cost will be subject to a higher discount factor if a tax is imposed. If a higher discount factor is not applicable, the tax will clearly discourage immediate use of land since it will reduce the after-tax income from the temporary use of land while it will not affect the termination cost.

The present value of the termination cost can be reduced if there is a tax refund associated with such an outlay. This does not seem to be standard practice but even if it were, Douglas is still wrong in claiming that a higher tax would encourage early development. Early, temporary use would be encouraged by the imposition of the tax only if there were nore-then-full tax refunding so that the present value of the tax refund would become higher than the present value of the tax payments. Furthermore, a *higher* tax rate would have the effect claimed by Douglas only if it increased the present value of the tax refund faster than the present value of the tax payments. But, surely, this is a rather fanciful tax system to postulate!

Douglas seems quite unaware of the strange assumption which is required for his claim to be valid. If we consider the more common case of the termination costs being unaffected by the tax, the condition for choosing to put land to a temporary use rather than keep it idle is quite simple. Land will be put to immediate, temporary use only if the present value of the net-of-tax income steam from such use is higher than the present value of the termination cost. This means that Douglas' example in footnote 8 needs to be corrected so that the condition for choosing "present development plus termination" is satisfied when $R / (1 + i + r) > K / (1 + r)^2$. The higher the rax rate, the more difficult it is to satisfy this condition and the more likely that the land will not be put to immediate use.

It should be noticed that the above result is quite consistent with the conclusion that a tax on land ownership encourages development by bringing closer the time of optimal development. A tax on land ensures that land will be put to its optimal use sooner than in its absence even though inferior, temporary use that involves a termination cost may be discouraged.

1. R. W. Douglas Jr., "Site Value Taxation and the Timing of Land Development," *American Journal of Economics and Sociology*, Vol. 39, No. 3 (July 1980), pp. 289-94.

2. A. Skouras, "The Allocation of Land Between Speculators and Users Under a Land Ownership Tax: A Comment," *Economic Record*, Vol. 50, No. 131 (September 1974), pp. 449-50. The statement is made in footnote 4.

3. See B. L. Bentick, "Improving the Allocation of Land Between Speculators and Users: Taxation and Paper Land," *Economic Record*, Vol. 48, No. 121 (March 1972).

4. A considerably fuller treatment that reviews critically the relevant literature can be found in chapter 6 of my book; see A. Skouras *Land and its Taxation in Recent Eonomic Theory*, (Athens, Greece, Papazissis Publishers, 1977).