

Sta. Clara Talk, 2-06

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Outline, "Land-value Taxes as an Instrument to Make Markets Work Better."

Mason Gaffney, for a seminar at the Civil Society Institute, Santa Clara University,
February 15, 2006

- I. The land market as an intertemporal tie-in sale.
- a. DCF as the sum of two values
 - i. Possessory value of the current use
 - ii. "R" value (Reuse, Resale, Reallocation, etc.)
 - b. "Perfect knowledge" of and "rationality" about the remote future would be omniscience, not a human quality
 - i. Optimistic bias, winner's curse
 - ii. Aspects of human irrationality
 - iii. History of giant swings in land prices; herd-like movements; lack of anchor in reproduction costs
 - iv. Need to forecast future discount rates, as well as revenues from and costs of using land
 - c. Differential credit ratings *Lenders' Risk & Investor's Risk*
 - i. Causes
 - ii. Appendix for display: differential sensitivity of Possessory and R-values to discount rates

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Start here

- II. Not taxing land means having to levy other taxes, with excess burdens
- a. Trivializing excess burdens by use of Harberger triangles: not relevant because you cannot universalize the excise tax effect of partial analysis into a general principle *& it has no quantum leaps.*
 - b. Universalizing excess burdens via the Laffer Curve: not relevant because
 - i. Treats all taxes the same
 - ii. Ignores positive effects of taxes on incentives: income effect, liquidity effect, wealth effect
 - c. Excess burdens seen in the effect of taxes on intensity of land use
 - d. Why focus on land use?
 - i. The "ATCOR" principle
 - ii. Inelastic supply of land within any tax jurisdiction
 - iii. Mobility of capital and labor *Open ec.*
 - iv. Ramsey and his misquoted principle of where taxes lodge *(over)*
 - e. Appendix for display: "The Quantum Leap Effect"
 - f. Only a tax on land values raises revenue without disturbing the ranking of market-determined highest and best use
 - g. Why the same virtue cannot be claimed for the personal income tax, because it includes the gross income of labor *& is cascading*

Unpack the supply curve

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- III. The tempering effect on land cycles of keeping land assessments current

Re Ramsey: there is no inelastic demand -
unless you own the thing demanded, like dwelling place

Your parents have been pouring K into you since before you
were born. Student loans tell you how much,

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- a. The error of thinking that one year of taxing land values will create an expectation of permanence. Values are based on future expectations, extending far into the future. (Debt may do it)
 - b. Reproduction costs temper the valuation of most human products
 - c. Location, the major element of land value, is not reproducible
 - i. High land values cause capital to be reallocated to substitute for land, within limits – a tempering factor, but historically associated with unstable and wasteful waves of territorial expansion. To pursue this is beyond the present scope.
 - d. Fee appraisers echo and magnify each others' errors by using "comparable sales" as reference points because they lack reproduction costs as an anchor
 - e. The tax assessor who uses comparable sales to follow a misguided land market is a force for stability
 - f. Appendix for display: the algebraic interplay of tax rates and growth expectations in valuation of land

Ideas for Sta. Clara talk

Change from a buy-and-hold attitude to a build-or-sell attitude

Table 1: DCF Factor for Possessory Interest: $(1-I^{-n})/i$

Where $I = (1 + i)$ (for simplicity in writing)

i	$n = 10$	20	30
.02	8.98	16.4	22.4
.04	8.11	13.6	17.3
.08	6.71	9.82	11.3
.12	5.65	7.47	8.06
.16	4.83	5.93	6.12

Table 2: "R" value factor: $(I^{-n}/i, \text{ or } 1/[iI^n])$

i	$n = 10$	20	30
.02	41.0	33.6	27.6
.04	16.9	11.4	7.71
.08	5.79	2.68	1.24
.12	2.68	0.864	0.278
.16	1.42	0.321	0.073

Table 3: "R" value factor / DCF Factor

i	$n = 10$	20	30
.02	4.57	2.05	1.23
.04	3.31	0.84	0.85
.08	0.86	0.27	0.11
.12	0.47	0.12	0.03
.16	0.29	0.05	0.01

Heavy wt. for R

Light weight for R

NOTE #1: If $b/a = 10$, multiply each figure in table 3 by 10

NOTE #2: "i" is short for The Cap Rate, which is $(i+t-g)$, where "t" is the property tax rate, and "g" is the annual growth rate of rent. Thus, if "g" is large, move to the top rows of the tables; if "t" is large, move to the bottom rows.

So "t" holds down the effect of "R"