How Much Revenue Would A Land Value Tax Raise In the United States?

by

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At this writing, the available evidence clearly indicates the benefits from taxing land values more and buildings and wages less:

• A higher land value tax encourages landowners to put their sites to their best use; otherwise, there would be too little income to cover the increased land tax expense.

• Down-taxing buildings makes new construction more profitable, and down-taxing wages permits more take-home pay.

• Considerable evidence supports this theoretical analysis. See these issues of Incentive Taxation (C.S.E., 580 N. 6th St., Indiana, Pa. 15701): Spring 1980, Dec. 1980, Oct. 1981, Oct.-Nov. 1982, Sept. 1983, Oct. 1983, Nov. 1983; also other issues contain supporting data and will be sent upon request. Also see the book Catalyst! (Ibid., published 1979).

No wonder so many urban tax experts endorse a higher land value tax. The prestigious Urban Land Institute, for instance, says of such tax that it is "a golden key to urban renewal, to the automatic regeneration of the city - and not at public expense," (ULI Research Monograph #4, p. 28).

But one question remains: how important is the land value tax? It may be desirable, but if land values are as minor a factor in our economy as most people think they are, then taxing them, desirable as it might be to do so, might be merely a property tax reform and little more; the impact of such a tax would be minor, focused upon the urban level, with little possibility of containing the major economic problems of inflation, recession, unemployment and poverty. Let us indeed tax land values more say many economists, but let us not expect that doing so would much affect the big economic problems we face. Those economists feel the land value tax would have beneficial but limited impact.

It is the purpose of this paper to test this commonly held perception by examining the empirical evidence on the amount of land values in the United States. We could then ascertain the revenue from a full tax on land values and compare it to the amount of taxes on labor and capital which are currently being levied and then we can compare it to the U.S. national income in order to see whether its impact on our national economic problems would be of major benefit or just minor only.

Now to the facts.

U.S. Census Bureau Estimate

At first glance, the task of estimating what a full land value tax might collect would seem overwhelming. Obviously, the first step is to determine the

country's land values, but there are in the U.S. nearly 100 million real estate parcels. Fortunately however, there are at least two reliable organizations who have undertaken the task of compiling U.S. land values.

The first is the U.S. Census Bureau which has just issued its 1982 Census of Governments Report on "Taxable Property Values and Assessment-Sales Price Ratios" (see Vol. II, 1984). It gives data for 1981, the latest year available.

This compilation lists the gross assessed value of locally assessed taxable real property (land and buildings) at $2514.868 billion (Table 4, p. 7). But this figure is 37.2% of arms-length sales prices of sold property (statewide size-weighted average, Table 11, p. 20), so that we can estimate the current market value of locally assessed taxable real property at $6760.398 billion.

But this is a land and building figure; how much of it is land value only? Mason Gaffney, a leading land economist, says it is more than 50% (Gaffney, "Adequacy of Land as a Tax Base," in Daniel Holland, The Assessment of Land Value [T.R.E.D. Series, 1970, Univ. of Wisconsin Press. 292 pp.], p. 173). His prime source of information was an unpublished assessment study he did for Milwaukee. Allen Marvel performed a broader-based study, quite exhaustive, for the National Commission on Urban Problems in 1968 - see his "Trends in the Value of Real Estate and Land, 1956 to 1966" (Report #12). He estimated the land value component of all types of real estate combined - urban, farm, vacant - to be 41.4% of the total land plus building values. But this figure did not include mineral-bearing real estate, an important omission since this category which I estimate to be about 12% of all categories (see later) certainly has a much higher land ratio than 41.4%. To be sure, Marvel's study dates back to 1968, but it is generally accepted that land values have far outpaced all other housing costs except mortgage costs during 1968-1981. But let us proceed cautiously and estimate the land to land-and-building ratio to be 40%, in which case the land value component of the $6760.398 billion of the total real estate assessed market value (1981) approximates $2704 billion.*

Now if we multiply this asset figure by the going interest rate for 1981, we can arrive at an approximation of the annual land rent figure which a full land value tax would collect. A problem presents itself here, however, because the interest rate in 1981 was an abnormally high 16.428% (this was the average weighted yield of mortgages accepted under Federal Home Loan Mortgage Corp. weekly purchase program - Wall Street Journal, 7/2/81, p. 29). In the 1980's, interest rates have been fluctuating widely and it is difficult to choose a realistic interest rate for our purposes. But in order to be conservative, let

*Interestingly, Marvel in his study suggests that his 41.6% estimate is too low and should rather be 46.8% (p. 14). He says this because he thinks land assessments were 11.1% lower than the estimate he actually used.

us choose 14% to be the interest rate for land in 1981 rather than the mortgage rate in that year of 16.428%: 14% x $2704 billion = $379 billion in U.S. land rent for 1981, so far.

To this figure we must add the amount of land rent being collected by the existing property tax. Property tax collections for 1981 came to $81.918 billion (Table 1, p. 1). Since land is generally under-assessed, we would not be wise to use the above 40% ratio of land-to-total-real-estate; we will do better to use a 33 1/3% ratio, in which case the existing property tax in 1981 was collecting $25 billion. When we add this to $379 billion, we arrive at an estimated $406 billion for land rent in 1981.

To this figure we must add the amount of land rent now being collect by the federal government. It collected rents and royalties of $10.1 billion on the outer continental shelf (offshore) (U.S. Statistical Abstract 1984, p. 316 citing U.S. Off. Mgmt. & Budget, "Budget of the U.S. Govt. 1981," and p. 340 citing Ibid.). In addition, the states obtain offshore lease rentals and royalties to an unspecified amount, but if this is ignored and we add only the federal offshore lease rentals and royalties to our previous total land rent of $406 billion, we get an estimate of $416 billion for land rent in 1981, and that is what a full land value tax would approximately collect if the U.S. Census Bureau figures are correct.

But the figures are clearly underestimates, and for these reasons:

(1) Official assessed market values are generally under-estimated if only because assessments are not done each year - usually every third year or more. That means that gross assessed value in any given year will reflect values about three years or more out-of-date. In addition, land assessments are often based on current rather than potential use; this is generally illegal but sometimes it is mandated by law (as with agricultural-use assessments). For a fuller discussion of the under-assessment of land values, see Mason Gaffney's excellent article in The Assessment of Land Value (U./Wisc. Press, 1969, pp 167-176). And lastly, the above calculations of assessed land value were for locally assessed real property; the fifty state governments independently assessed certain other properties (usually utilities) - which omission Allen Marvel estimates would increase assessed land values by about 5% (an estimate which is borne out by Table 2, p. 2). All these factors together should increase the above land value figure of $2704 billion by 20% or $541 billion (that this is conservative is indicated by the fact that land values grew by half from 1977 to 1981, according to the Federal System's Balance Sheets for the U.S. Economy, 1945-83, April 1984, p. 15, about which

more later; the 1981 assessment figures cited by the Census Bureau might originally have been issued by the Bureau's sources in 1977, on the average). We now have a land value figure of $2704 + $541 billion = $3245 billion.

(2) Tax-exempt land owned by government, hospitals, charities and churches was not included in the Census Bureau's estimate of assessed land value. If we conservatively assume that 25% of the real property in urban areas is tax-exempt, and so is 10% of rural real property, then we are safe to add 20% of $3245 billion to total U.S. land value (urban land values are about four times rural). Tax-exempt land rent would then approximate $649 billion, for an adjusted total land value (1981) of $3894 billion.

(3) Although some government land values are included in the tax-exempt figure of (2) above, not all are. Much government-owned land, especially that owned by the federal government, is not assessed at all, not even as tax-exempt assessment. This had got to be a significant omission inasmuch as the federal government owns 731 million acres, or more than one-third of the land area of the nation (U.S. Statistical Abstract 1984, p. 339). An additional 7% of the U.S. land area is owned by state and local governments (USDA 1978 survey by Gene Wunderlich). A study by the well-known Conference Board entitled The National Wealth of the United States (845 Third Ave., New York, NY. 10022; 1976) estimated government-owned land values at 26.9% of all land values in 1975 (pp. 72-74), but the problem for us is that some of this land value is figured in the tax-exempt category of (2) above. All things considered, it would seem wise only to add 10% to our previous land value total of $3894 billion or $389 billion. This is equivalent to an annual land rent of $54 billion ($389 billion x 14% interest rate).

Adding only $389 billion to our total land value figure is surely conservative when it is realized that the federal government collected $21 billion in 1981 for land-leases, offshore and on-shore, and this was on only a small fraction of its vast holdings (U.S. Statistical Abstract 1984, p. 317 and p. 340).

(4) The Census Bureau's 1981 estimate of the value of land containing minerals seems vastly understated. That value is a component of the category listed as "Other and Unallocable Locally Assessed Taxable Real Property" which is estimated at only $88.327 billion (Table 4, p. 7). If 40% of that is considered land value, then the Census Bureau is saying that mineral land values are less than $35 billion - less by an unspecified amount. In fact, according to the Census Bureau figures, mineral land value plus "other and unallocable value" is only 1.4% of the total national income, and is considerably less than even vacant platted lots. So an upwards correction seems to be in order.

Our first task is to determine the percentage of total mineral production - $187.812 billion in 1981 (U.S. Statistical Abstract 1984, p. 715) - a portion which could be ascribed to annual land rent. In the U.S. a 12½% royalty plus modest bonuses and annual leases are ordinarily paid to landowners by oil and gas drillers. This figure is undoubtedly too low and the oil companies are pocketing some of the land rent. In Canada, the customary royalty is 16 2/3% and in the Mideast it is 50% and more (although admittedly in the latter region the oil is close to the surface and easily gotten at). One investigator reports that leasehold costs in the U.S. approximate 30% of exploration costs (James W. McKie, "Market Structure and Uncertainty in Oil and Gas Exploration," Quarterly Journal of Economics, Nov. 1960, 74 p. 551). Non-fuel mineral production (about one-seventh of fuel mineral production) has an even higher land value component because exploration costs are lower, leaving more of the product for rent. Taking all of this into account, we can very conservatively estimate that 15% of the total mineral production for 1981 is land rent, or $28 billion a year.

But this takes into account only land in actual mineral production. We must also find out the value of land containing proven reserves of minerals. This can be truly a wild card in our figurings, but let us be conservative.

To approximate the value of proven reserve land, we can multiply the estimated proven reserves of the four mineral fuels - crude petroleum, natural gas, coal and uranium (the latter is minor) - and the 57 metallic and non-metallic ores by their in-ground price. Then we must discount future income from such reserves at, say, a 14% interest rate.

Take crude petroleum, for instance. Its proven reserves as of 12/31/81 was 29.426 billion barrels (U.S. Statistical Abstract 1984, p. 723, citing U.S. Energy Information Administration, "Petroleum Refineries in the U.S. and U.S. Territories"). The well-head price was $31.77 per barrel (Ibid., p. 723), half of which is considered the in-ground price. This reserve would last 4.7 years at the then-current rate of production (Ibid., p. 715; $\frac{\$99.4 \text{ billion annual production}}{\$15.89/\text{barrel}} = 6.26$ billion barrels annually; $\frac{29.426 \text{ billion barrels reserve}}{6.26 \text{ billion barrels annual production}} = 4.7$ years reserve.

At a 14% annual discount rate, we must discount the 1981 value of crude petroleum reserves by .697. So - 29.426 billion barrels x $31.77/barrel x ½ x .697 = $326 billion worth of crude petroleum proven reserve land value.

We can do the same with natural gas proven reserves. These reserves came to 202 trillion cu. ft. as of 12/31/81 (Ibid., p. 727, citing U.S. Energy Information Administration, "U.S. Crude Oil, Natural Gas, and Natural Gas Liquid Reserves,"

annual). The wellhead price was $1.84223/1000 cu. ft. (Ibid., p. 578, and for conversions see p. 571. We use this price rather than the $1.98/1000 cu. ft. listed on p. 727 because it is lower and therefore leads to a more conservative estimate); one-half of that was the in-ground price. 1981 production came to $39.95 billion (Ibid., p. 715), or $\frac{\$39.95 \text{ billion}}{\$1.84223/1000 \text{ cu. ft.}} \times \frac{1}{2} = 43.4$ trillion cu. ft. produced each year. The 202 trillion cu. ft. reserves would therefore last $\frac{202}{43.4} = 4.7$ years, and at a discount rate of 14% annually, the 1981 value of natural gas proven reserves must be discounted by about .697. So - 202 trillion cu. ft. reserves x $1.84223/1000 cu. ft. x ½ x .697 = $130 billion worth of natural gas proven reserve land value.

Now to coal. The demonstrated coal reserve base was 472.7 billion tons as of 1/1/80 (ASI/MF3, item #429-T-11, 3168-25). Half of that, probably more, is considered to be recoverable (the unrecoverable coal being left to keep up the roof). The price of coal in the ground approximated 50 cents a ton in 1981 (7/9/84 conversation with Louis Ducca, Indiana, Pa., ex-col mine operator). So - 472.7 billion tons reserve x .5 x $0.50/ton = $118 billion reserves. But this has to be discounted at 14% a year over the average number of years this reserve could be expected to last, which is the $118 billion reserve divided by the 1981 production of $21.75 billion/year or 5.43 years; the discount factor at 14%/year comes to .669; $118 billion x .669 = $79 billion as the value of all land containing proven coal reserves.

The production of crude petroleum, natural gas and coal constituted 87% of the dollar value of all mineral production in 1981, so rather than do the above calculations for each of the 57 metallic and non-metallic ores plus uranium, we can estimate their land value by multiplying the total land values for oil, gas and coal reserves ($535 billion) by $\frac{100}{87}$ to arrive at total mineral reserve land value. This figure comes to $615 billion.

This $615 billion represents the land value with proven mineral reserves. If we add this to the $28 billion in land value under current mineral production, then we have an estimate of $643 billion for all mineral land value, which is $608 billion more than the $35 billion listed by the Census Bureau as "other and Unallocable Locally Assessed Taxable Real Property," not all of which is mineral land value. $608 billion x 14% = $85 billion in mineral land rent.

Now let us put together all our components of annual land rent for 1981:

Land rent based on the Census Bureau's figures	$379 billion
Lane Rent collected by the local property tax	27 billion

Land rent collected by the federal govt. on the outer continental shelf (offshore)	10 billion
Under-estimate of assessments used by the Census Bureau ($2704 billion x 0.2 x .14)	76 billion
Tax-exempt land rent ($3245 billion x 0.2 x.14)	91 billion
Federal government-owned land rent - addition only ($3894 billion x 0.1 x .14)	55 billion
Mineral land rent - addition to Census Bureau estimate	85 billion
TOTAL 1981 ANNUAL LAND RENT	$723 billion

The Federal Reserve Board Estimate

Another reputable statistics—gathering organization has compiled an estimate of U.S. land value, and that is the Federal Reserve Board. In its "Balance Sheets for the U.S. Economy, 1945-83" (F.R.B., Rm. B5100, Washington, DC 20551; April 1984), we find land values estimated at $2973.422 billion for 1981 (p. 15). This figure includes an estimate for tax-exempt land values, which the Census Bureau study did not, but it did not add any additional sum for un-assessed federal land value (7/11/84 phone call with F.R.D. statistician Betsy Fogler, 202-452-3482), which we have previously estimated to be $330 billion.

But to these components of 1981 U.S. land value we must add the annual rent on mineral land, which we have already found to be under-estimated by the Census Bureau by about $79 billion a year, and since the F.R.B. study used the Census Bureau's mineral land value figures (Ibid.), we must add this $81 billion a year to the total land rent as based on the F.R.B. study.

Furthermore, we must add in the private land rent now being collected by the government in the current property tax, which we have already estimated to be $27 billion. Another addition: the $10.1 billion collected by the federal government in 1981 for offshore lease rentals and royalties.

Now let us put together all the components of 1981 U.S. land rent as based on the F.R.B. study:

Land rent based directly on the F.R.B. study ($2973.42 billion x 14%)	$ 416.28 billion
Land rent collected by the local property tax	27.0 billion
Land rent to be imputed to federal govt.-owned land - addition only ($389 billion x 14%)	54.0 billion
Mineral land rent - addition to Census Bureau estimate	85 billion
Land rent collected by the federal govt. on the outer continental shelf (offshore)	10.1 billion
TOTAL 1981 ANNUAL LAND RENT	$ 592.38 billion

This is to be compared to the $723 billion estimate of annual land rent for 1981 as based on the U.S. Census Bureau compilation. The latter is 18% less than the Federal Reserve Board estimate, which might be considered reasonably close. In round numbers, we could settle on a $658 billion annual land rent figure.

I personally prefer to work with the Census Bureau estimate, since the sources and methods of the F.R.B. study are not as clearly described. The F.R.B. study adjusted the Census Bureau figures in an unspecified way, added some figures (unspecified) from the capital stock estimates of the Bureau of Economic Analysis, and used a different but unspecified land-to-building value ratio than the Census Bureau. Its description of its sources and methods occupied only 1.2 pages, whereas the Census Bureau study devoted 58 pages to those important subjects.

In any case, by either study it is clear that a land value tax would collect a substantial portion of the national income. In 1981, the latter was $2373 billion (U.S. Statistical Abstract 1984 p. 450). If land rent in that year came to $658 billion, then it would come to 28% (658 ÷ 2353) of the national income. If an amount of this dimension is misappropriated, both morally and economically, then it cannot be a matter of small moment and the land value tax can have a major impact on such economy-wide problems such as inflation, recession, unemployment and poverty.

So speaks the empirical record. And as in the U.S., more so in other countries where the land rent ratio to national income is considerably higher.

Indirect Effects

But we are not yet finished with our inquiry, because there are two important indirect effects which we must consider:

(1) Current land values are increased when land is not used efficiently. This inefficient use results when landowners hold sites out of full current use because they have bought them for speculation; they hope to sell for a higher price in the future. Or they may not know how to use the land efficiently, or they may lack the capital to do so. The result of this withholding of land from full current use is that an artificial land shortage is created and this increases the rental price for land. But once we start to tax land values heavily, inefficient land use becomes heavily penalized and less land - eventually none - will be held out of use. In effect, this increases the available supply of land and reduces the price of land.

But by how much? There are some guidelines. According to a study appearing

in the prestigious academic journal Land Economics in November 1971 (Ray Northam, "Vacant Urban Land in the American City"), in American cities with population of more than 100,000 for which data was available - and that was for the great majority of them - fully 21% of the land area was vacant. To be sure, this does not refer to land value; that figure would be lower. In addition, we must consider the partially developed sites in these cities, and that could cover another 21% or more of land area - less of land value. As for agricultural and mineral resource lands, if they were taxed their value would surely fall since their property taxes would probably increase and there is now much land speculation going on in those sectors. On the other hand, because valuable sites are under-used (as above), then other sites are over-used; i.e. if a couple can't build their new home on an in-town site because it is too expensive, they will build in the country on a cheaper site which would otherwise have remained unused or less intensively used. So in our accounting, we must consider that land speculation in one place adds - not subtracts - land value in other places, although not by as much.*

It would seem, then, that if we want to determine what a full land value tax would raise in government revenue, it would be somewhat less than the estimate of current land rent (both collected and imputed). But how much less? We can only make an educated estimate of the percentage a full land rent tax would bear toward the current land rent, but we would be further off the mark were we to make no estimate at all. My experience and research leads me to deduct a full 30% from current land rent (collected and imputed).

Current land rent approximates $658 billion (see above), of which the $10 billion collected by federal government in off-shore leases and royalties and the $27 billion collected by state and local government in the current property tax on land would not be affected by this 30% deduction to account for current inefficient land use. So: ($658 billion - $37 billion) x .7 = $435 billion + $37 billion = $472 billion in land rent taxation.

(2) When land rent is collected by the government, taxes on labor and capital disappear but we get the government services anyway. It is true that

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*An example will make this clear. Adjourning where I live has been an empty lot with a selling price of $17,000. Because that price was so high, a homeowner would then purchase an acre of land for $4,000 in the countryside which might otherwise have been used for agriculture at a price of $800 an acre. So current land value is $21,000 ($17,000 + $4,000) or $2940 annual rental value ($21,000 x 14%), whereas a full land rent tax would collect $2492 ($14,000 + $800 x 14%) and no doubt even less since the $17,000 price contains a speculative component.

landowners would then have to pay rent to the government, but that disadvantage as compared to now is exactly counter-balanced by the ability to buy valuable land for nothing (which can't be done now). In essence, the cost of government is much reduced, maybe even to zero. This is like a technological advance which reduces the production costs of some commodity - the benefits of which are diffused among landowners, labor and capital. And so it is when the land rent is collected by the government.

If a land rent tax would relieve labor and capital of $472 billion a year, then some Georgists would say that all of this savings would eventually go to landowners because they think all the benefits of material progress increase not wages nor interest but rent, but I think not for reasons I cannot go into at length here.* It is much safer to assume that the benefits accruing to producers from land rent taxation will be divided among the three factors of production in the same proportion as they now share in the national income.**

For 1981, the national income was $2353 billion (U.S. Statistical Abstract 1984, p. 450), of which $472 billion in estimated land rent is 20%. If the land rent payers - labor and capital - were relieved of $472 billion in taxation, we could assume that 20% of that, or $94 billion, would have gone for additional land rent. $472 billion plus $94 billion = $566 billion in estimated land rent taxation for 1981 - very conservatively estimated.

Comparing the Land Rent Tax to Taxes on Wages & Interest

In 1981, taxes collected by all levels of government - federal, state and local - amounted to $1075 billion (U.S. Statistical Abstract 1984, p. 275). But $27 billion of that and another $20 billion consisted of taxes on land values and another $21 billion consisted of leases and royalties which the federal government was collecting from on-shore and off-shore lands in 1981 (U.S. Statistical

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*For those Georgists I briefly append this explanation: (a) improvements in quality of goods produced might actually decrease the demand for land and hence its rent; e.g., today's computers do more work than those of twenty years ago and yet are much smaller, thereby making less demand on land for resources; (b) transportation improvements can lessen the difference in productive capacity between rentable and marginal land; this lessens rent; (c) we have moved away from agricultural production over the years (now only 2% of America's work force are farmers), and the percentage of production going to rent is higher for farmers than for non-farmers; (d) we have moved toward a service-oriented economy, and services make less of a demand on natural resources than does the production of goods.

**It is true that with land value taxation, the landowners must pay as much more as the actual producers (labor and capital) save. But that is irrelevant to the question of how much will be paid to rent land - remember that only the producers pay land rent, not the landowners.

Abstract 1984, p. 340), so total taxes on labor and capital in 1981 came to $1028 billion.

(3) If a land rent tax, very conservatively estimated, came to $562 billion in 1981, then that is hardly more than half of all taxes on labor and capital. But some of those taxes are clearly specific user charges, in which case they are completely justified and in fact are hardly to be considered taxes at all but specific charges for services rendered. No precept of justice would be violated if these user charges were to supplement the full land rent tax.

For example, if gas tax revenue was earmarked entirely for road construction and maintenance, then the users of roads - automobile and truck owners - would pay for what they use in proportion to their use. Surely that is justified. If consumers must pay for the water they use in water tax, not only is that justified morally but it is economically necessary, since wasteful water use would then be penalized (a land value tax would not penalize such wastefulness).* The costs of the Environmental Protection Agency should be allocated to the industries being regulated, as much as possible. And so on, with all the other user charges. Such charges must be a significant portion, or could be, of the so-called taxes on labor and capital.

In short, it is quite possible that a land value tax could be a single tax - i.e., it could replace all non-user-charge general taxes on labor and capital.

(4) And that possibility is all the more likely when we consider that if land rent were fully taxed, economic production would jump. So theory indicates and the available evidence substantiates. Why shouldn't production increase if we drastically reduce taxes on labor and capital and if land sites will have to be fully used because their rent is being collected in taxation? When the expected prosperity occurs, two changes will occur which will make the land rent tax even more likely to be a single tax:

- As production increases, so will land rent and therefore so will the revenue from a land value tax.
- As production increases, poverty and unemployment will decrease and so

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*In my hometown of Indiana, Pa., a private company supplies water to consumers. Of course, they should charge a fee for doing so. A municipally owned company in Philadelphia (and many other communities) supplies water to consumers there; shouldn't such a company charge a fee which ought not to be called a tax? And that fee ought to be collected even though surrounding land values are higher because water is supplied.

will the need for government welfare programs and the revenue needed to finance them.

In other words, if the land rent tax is collected, we can expect its revenue to rise as the amount of government revenue needed declines.

Conclusion

We have come to the end of our sometimes tortured path. Surely we cannot say with any exactitude what revenue a land rent tax would precisely produce, but we do have a general idea about its magnitude. These conclusions we can safely embrace:

(1) Land rent (both collected and imputed) is at least 28% of U.S. national income in 1981 - "at least" because whenever a choice presented itself, we chose the conservative (lower) option in estimating land rent. The mis-appropriation of such a significant percent of the national income cannot be a matter of little significance. Clearly, land rent taxers are raising no tempest in a teapot, and if the proposal is a good one, then it is importantly good and not insignificantly so.

(2) The land value tax would collect somewhat less revenue than the current (1981) land rent, but it would still be enough to be a "single tax," in the sense that it could replace all non-user-charge taxes on labor and capital.

So the available evidence indicates. Let those who would minimize the land rent tax present evidence to support their case. The ball is now in their court.

Addendum

What would happen if instead of taking the lowest estimates of the components of land value, we took the highes estimates within the range of reason? Doing this might give us a better fix on the amount of revenue which a land rent tax would collect. For example:

- Suppose we chose 45% instead of 40% for the ratio of land to total real estate values.
- Suppose we estimate that 20%, not 15% of total mineral production is land rent.
- Suppose we assumed that the wellhead price of natural gas was $1.98/1000 cu. ft. as listed on page 727 of the U.S. Statistical Abstract, 1984.
- Suppose we assumed that 60% not 50% of coal in the ground is recoverable.
- Suppose we eliminate the Federal Reserve Board estimate on the grounds that it lacks supporting data.

Taking all of these changes into account, we estimate that land rent came in 1981 to $796 billion, not the $658 billion this paper arrived at. That would be 34% of national income in that year (not 28%).

If we take into account the indirect effects of land value taxation, then land rent as collected by a land rent tax would approximate $764 billion, 26% of national income (instead of $566 billion as estimated in the above paper).

So we see that the reasonable range for what land rent tax could have collected in 1981 was from $566 billion ot $764 billion - from 24% to 32% of national income in that year. An estimate between these two limits would be $665 or 28% of national income.