

The unknown revenue potential of land: fifteen hidden elements

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The revenue potential of land is greater than almost anyone thinks. This is a progress report on a study that identifies and unclosets elements of enhanced revenue potential by using truer and more comprehensive measures of rent and land values. It should go without saying, but these days does not, that the purpose of raising more land revenues is not to fatten vexatious bureaucrats, but to replace other taxes, to provide needed public infrastructure and services (including a reasonable national defense), to pay off public debts, and to fund social dividends if desired (including existing social dividends like Social Security).

There are at least fifteen elements of land's taxable capacity that previous researchers have either trivialized or overlooked and "disappeared" entirely, by neglect or design. Items 1-3 below correct for the downward bias in standard data. Items 4-11 broaden the concepts of land and its rent. Items 12-15 show how exempting production and capital uncaps potential tax rates.

Correcting for downward bias in standard data

1. Standard data sources neglect and understate real estate rents and values. These standard sources include:

- a. Assessed valuations used for property taxation. I will only enumerate, not elaborate much on the many reasons assessed values usually fall short of the market. This in itself is a dizzying experience, and you may want to skip ahead to point b. Scanning the bullets below, however, gives a clue as to how landowner pressure has subverted the property tax over the years.
 - Conventional use of fractional assessments in many states.
 - Lag of assessments behind rising land values, and behind building values that fall with depreciation. Increasingly, this extra-legal process has been institutionalized, following the pattern of Proposition 13 in California.
 - Use of capitalized income method for assessing business properties (other than apartments). The bias is against intensive uses in zones of transition (ecotones), at every margin between lower and higher uses.
 - Conventional preference given to acreage, regardless of location, regardless of industrial use. (Allis-Chalmers example in center of West Allis, Wisconsin. Omission of acreage from otherwise helpful studies by Allen Manvel.)
 - Classification of land for taxation, with preferential low assessment for lower uses (rarely are assessments above the market for any use, except apartments and rentals for the poor). In California, some favored use-classes are farming, timber, and golf. Alabama has another set of low-tax classes, favoring land in forests and hunting grounds, catering to the Heston vote in league with absentee corporate owners (and, for no visible theological reason, organized fundamentalists).

Classified lands or land uses are assessed by capitalizing their visible money income from the official use, thus exempting from the tax base all values from rustic manorial, recreational, and blood-sport uses, and all speculative values based thereon. In vast rural and sylvan areas these other influences are the main source of market value.

- Assessments capped by zoning, even when the market does not believe the zoning will endure, or be enforced.
- Regressive assessments, swayed by case law that reflects differential ability to finance lawsuits and appeals.
- Discounts for large lots or other holdings that should be subdivided.
- Failure to publicize assessed values. In some states the values are not even open to public inspection—Lee Reynis has told this audience of secrecy enforced by law in New Mexico.
- Reluctance to recognize premium for plottage potential.
- Exempt lands, owners, and land uses. (Churches, often targeted, are relatively minor. Cemeteries include commercial ventures holding vast lands for future sale. Commercial or not, they consume more than their share of water, often at preferential rates. In industrial-dependent Milwaukee, cemeteries preempt more space than all industry, which helps account for the city's 20% population decline since 1960. Public lands held by schools and the military tie up much of San Diego. New York City and Washington, D.C., are notorious for their “free lists” of exempt lands. Once an agency acquires land it never again appears in the budget, so bureaucrats squander it.)
- Homestead exemptions, in some states—widely abused.
- Preferential underassessment of lands with low turnover. Extreme underassessment of lands that do not sell: corporate holdings; proprietary golf clubs; dynastic holdings; inherited lands.
- Rail and utility adjunct landholdings, i.e., other than their rights of way (ROW). (These are state-assessed, not on local tax rolls; are assessed as acreage, usually, which means underassessment; anyway, taxes are passed on to ratepayers in the rate-regulation process. Vast holdings by rails, e.g., 10% of Chicago; 5% of Milwaukee; vast Southern Pacific holding south of Market Street in San Francisco, and statewide. Hydrocarbon holdings by regulated utilities.)
- ROW. Assessors ignore monopoly power inherent in ROW, assess ROW land on its value in the best alternative use.
- Discounts to large owners who have a policy of slow sales or leasing. (Such discounts are given to Oregon timber, to Appalachian coal, and many extractive resources. They are given to laggards in ecotones.)
- Conventional reluctance to base assessments on speculative values, even when condemnation awards are so based.

- Failure to assess land first, using maps (with building value as the “residual”).

b. Use of IRS data on reported rents

Many economists rely on data generated by the IRS, taken from tax returns, to tell them the sources of income in the U.S. This is an exercise in crediting bad data. The standard tax procedure of landlords is to deduct alleged “depreciation” from their net operating rents (“cash flow”) to arrive at taxable rents. They accelerate depreciation enough, usually, to report little or no taxable rent. This is what the IRS then aggregates and reports as the sum of all rents—it is pure fiction. To accept it as fact is inexcusable, but economists do it anyway. Their credulity lends their authority to the IRS, while the IRS’ “official” status helps legitimize their work—a circular process that is the despair of those seeking simple truth.

When owner A has exhausted his tax “basis” by overdepreciating, he sells to B for a price well above the remaining basis. B then depreciates the same building all over again, then sells to C, who sells to D, and so on, so each building is tax-depreciated several times during its economic life. In any one year, well over half of all income properties in the U.S. are being depreciated for the second, third, fourth, or fifth time.

In addition, all owners after the original builder are in a position to depreciate some of the land value, as well, because the “allocation of basis” between depreciable building and non-depreciable land is mostly in their control. The IRS has no defense against this avoidance device. Congress, responsive to landowner pressures, has never authorized the IRS to develop any capacity to value land by itself. The most the agency does, if it will not accept the word of the tax filer, is to look at allocations used by local assessors. These parties, in turn (with a few notable exceptions), underassess land relative to buildings, by using the faulty and fallacious “land-residual” method of dividing land from building value. This is partly to accommodate their local constituents—assessors are locally elected or appointed, and do not report to the IRS.

When A sells to B there is a large excess of the sales price over the remaining or “undepreciated” basis. This excess is taxable income. Congress has defined this kind of income as a “capital gain.” Most rents, therefore, show up as capital gains. These, in turn, are subject to lower tax rates, deferral of tax, and a dozen additional avoidance devices known to every lawyer and accountant, but not, apparently, to most economists, who lazily report that “rents” are a low fraction of national income.

In addition, the IRS reports nothing at all for the imputed income of owner-occupied lands, because this kind of non-cash income is not taxable. Todd Sinai and Joseph Gyourko of the Wharton School report aggregate “house” values in the U.S. in 1999 were \$11.1 trillion. The annual rental value of that, figuring at 5%, would be roughly half a trillion dollars a year—quite a chunk to omit from the rental portion of national income. We also know that the prices of lands for both housing and recreation have risen sharply since 1999, perhaps by 50% or so, so that \$11.1 trillion may be \$16.7 trillion now. That means both that the imputed value is 50% higher, and also that the net worth of the owners has risen by about \$5.6 trillion. Such silent gains are also a form of income from land. To all that, many economists remain blind and dumb, as though willfully.

Sinai and Gyourko’s treatment is superior to what one usually sees, so I do not single them out to criticize, but even they, like others, write of the imputed income of owner-occupied “housing,” exclusively. That is doubly misleading. First, it emphasizes the house, the building,

de-emphasizing the land. That is wrong because the income proper imputable to the house, per se, is much less than its rent equivalent. The house requires constant expenses for upkeep, heating, maintenance and repairs, cleaning, painting, etc. The house also depreciates, physically. Those expenses and the depreciation must be deducted from the rental equivalent to get the net income.

The land, that is the space and location, requires none of those expenses. Its rental equivalent is its net current income. It does not depreciate physically. Instead, it usually appreciates in value, and that annual increment is also a current income. So the “imputed income of owner-occupied housing” is mostly attributable to the land.

Second, it is misleading by omitting vast lands beyond the “house” value, narrowly defined. We may presume that “house” includes the land under it, and a little yard or curtilage, but what about other lands held for the owners’ personal enjoyment? No agency collects data on such lands and their values, but common observation tells us they are vast and valuable.

c. Use of “NIPA” accounts from the U.S. Department of Commerce

The standard source of data on GNP and its components is the National Income and Product Account (NIPA), kept and published regularly by the U.S. Department of Commerce. When it comes to rent, however, NIPA depends on the IRS figures, which thus are passed along to all students of economics as the official accounting. We have just seen how far from reality these data are.

NIPA is worse, in a way, because NIPA explicitly excludes “capital gains” from national income. “Capital gains” is an artificial term that includes all gains realized from the sale of what Congress defines at any time as “capital assets.” “Capital assets” include land and improvements, housing, common stock, growing timber, breeding herds (including race and show and riding horses), mineral and hydrocarbon reserves in the ground, and several other favorite holdings of the rich and well-connected. As we saw in point b, most commercial rents show up as capital gains, so that NIPA does not report them at all. Then along come highly visible economists like Paul Samuelson, Robert Solow, Theodore Schultz, Edwin Mills, Jan Pen, and others to declare that land rents are no more than 5% of national income, and cannot possibly support modern governments. This is unfortunate, and quite misleading.

NIPA is better by virtue of its making a gesture at including the imputed value of owner-occupied housing. Whether they do it right is a question on my agenda.

d. Federal Reserve Board (FRB) estimates

Another source of data is the FRB. Unfortunately it is ensnared in the same intellectual webs as the other agencies, so its nominal independence is wasted. Michael Hudson has dissected FRB methods, which he found to report rents of income property so far below reality that they became negative. These negative numbers were reported for a short time until someone noticed, and decided to discontinue the series.

e. Economists instinctively look to the National Bureau of Economic Research for numbers

Thus, Raymond Goldsmith's estimates of U.S. land values are widely cited as authoritative. Yet they do not bear examination. They were generated as incidents to other work in an offhand and indefensible way.

It is not easy to retrace Goldsmith's steps; one must track interlocking footnotes from several sources. At the end of the trail, however, he simply takes residential land value as 15% of building value (which comes to 13% of land and building value). The basis of this allocation is the share of land in the cost of one to four family houses insured by the Federal Housing Authority, which was about 20%. It is not explained why he cut this down to 13%.

This basis is then applied to nonresidential real estate as well. Corporate-held lands are valued at book value.

These methods are not worthy of the faith with which the results have been cited by several economists. In the first place, FHA-insured houses are not typical. They tend to be new and on cheap land. Those not new are not very old—in 1967 the median age of insured existing homes was thirteen years. To apply such data to a typical American city, most of whose dwelling units antedate 1920, is preposterous.

FHA clientele is lower middle class, which means the land share is low, land being both a consumer luxury and a rich man's hedge, and the land share rising sharply with value. The high land share in Beverly Hills or other enclaves of great wealth is missing from FHA data.

The FHA is most active at the expanding fringe of cities. A basic fact of urban land economics is that the land share rises toward the center. In Manhattan, for example, the share of assessed land value has always been higher than in the other boroughs.

Goldsmith also seems to omit vacant lots and unsubdivided land.

As to applying a land share derived from residential data to commerce and industry, that is not permissible. The land share is highest in retailing, the more so now that retailing entails vast parking areas. We have seen something about filling stations and auto dealerships, to which we might add lumber yards, junkyards, open storage of all sorts, tank farms, parking lots, railroad yards, utility easements, industrial reserves, dumps, drive-ins, salt beds, terminals, and so on. In downtown Milwaukee, half the assessed value is land. In Manhattan, it is instructive to consider the Empire State Building. If ever a structure overdeveloped a site, the world's tallest building on a fringe site should be it. Yet in two transactions since 1950 the site was valued at one-third the total. What this implies of the whole island, I leave to inference.

Several case studies may be cited. The Whitstable Report is a study of land value rating (that is, taxation) in an English city by valuer H. Mark Wilks, commissioned to report to the English Rating and Valuation Association. He began by valuing residential land:

"It was soon noticed that the figures of rateable value we were producing were very much lower than those in the current orthodox valuation list. Indeed, at one time it was feared that the total rateable value would be so low that to produce the same rate income as at present, a rate poundage of well over 20 shillings would be necessary... [But] our fears were groundless, for the loss in rateable value in the outer-lying residential areas was more than made good by the increase in the other areas." 66 The report gives detail on how central, vacant, and derelict land made good the losses.

Paul Wendt has documented the higher land share in the central business districts of San Francisco and Oakland, and Bronson Cowan has done the same for Sydney, Johannesburg, Wellington, and other cities that tax only land value.⁶⁷ A much higher share of local taxes comes from the center when only land is taxed. The same relationship holds in Fresno, as reported by Griffenhagen-Kroeger, Inc., to the California legislature.⁶⁸ Eli Schwartz and James Wert found the same in Bethlehem, Pennsylvania.⁶⁸

Another study is my Milwaukee cadastral map discussed above. As stated, my co-workers and I estimated market land values by tax book districts. We divided these by the equalized full value assessment of land and buildings. The resulting fraction is an estimate of the share of land in the value of real estate. (See Table 9.3.)

The districts with low land shares comprise at least three kinds. Numbers 24 and 28 are far out, on the south side of the city between Oklahoma Avenue and Howard Avenue. This is the less prestigious side of town, newly built, fairly filled up. Numbers 4, 8, and 9 are in and alongside the black ghetto on the near north side; buildings are old but dense. Number 9 has breweries, together with blighted depressed residential land of low value. Numbers 17, 19, and 13 have valuable industrial plants.

Districts with high land shares are of different kinds. Those above unity probably reflect acutely lagging assessment: Numbers 27 and 31 are largely vacant, highly speculative, on the extreme south and northwest respectively. Number 29 is just inside number 31 and partly resembles it. Number 10 is downtown and its leapfrogging western edge. Number 14 includes Mitchell Street, the older south side shopping area.

Extension of the map into the suburbs inside Milwaukee County shows similar patterns. The land share is low in tight, fully built bedroom suburbs: Shorewood and Whitefish Bay. It is low in industrial suburbs with blue-collar housing: Cudahy, South Milwaukee, West Allis. The land share is high in sprawled suburbs with empty land: River Hills, Oak Creek, Greendale, Greenfield, Franklin. It is moderate in complex suburbs subject to offsetting influences: Glendale, Wauwatosa, Brown Deer.

On the whole, these findings bear out Wilks's findings in Whitstable, although the Milwaukee patterns are much more complex. Some of the districts and suburbs include a variety of conditions and defy sweeping characterization. But one thing is crystal clear: Goldsmith's transfer of the land share in a few new FHA residences to all urban real estate is a momentous error that dominates his estimates and probably destroys any value they might have.

Goldsmith's studies for the NBER, using FHA values. [Garland and Goldsmith, 1959, also exclude subsoil assets - Scott, 1986 p.44 cit. Dwyer 2003 p.33. Fancy the effect of that in Huntington Beach);

- f. Most figures published by the Lincoln Institute for Land Policy its staff and grantees.

- g. Some published surveys of real estate (land and buildings) market values that pick up sales prices where only the equity trades. Equities are net of debts, of course, and also of lease obligations, where relevant. Most modern economists who look into these matters rely upon these standard sources, mindless, or perhaps even glad, of their downward biases.

2. Recent rises, and likely future rises. Prices of land and resources have risen sharply in recent years. For example, forty years ago leading economists like Alfred Kahn, Paul Davidson and Paul Douglas found that most oil profits were rents, at the lower prices prevailing then. Oil firms were a byword for tax avoidance. Since then, prices have risen sharply in several giant steps following the first OPEC price revolution, while tax reform has been cosmetic at best. Natural gas prices, stable for a while, have doubled in the last six years. A price that doubles downstream more than doubles upstream at the source¹. Few among today's power elite of economists and pundits will address these facts. They have been differently screened and conditioned than the giants of "The Greatest Generation." They are leaving an intellectual vacuum to fill.

3. The Land Fraction of Real Estate Value (LFREV) is much higher than standard modern sources show. One indication is that on most assessment rolls the value of old "junker" buildings, on the eve of demolition, is listed as higher than the land under them. It should be obvious that the old junker has no residual value: that is why it is being junked. Real estate people recognize this concept instantly. It is not obvious to everyone, everywhere, which helps keep it concealed, and provokes a lot of nostalgic resistance. People who make a virtue of recycling old cans and papers can be oblivious to the much higher social value of recycling old urban sites. Many of these old junkers even appear sound and valuable, as in enclaves of high values like Winnetka, Illinois, or Beverly Hills, California, but suffer from "locational obsolescence," which is the key concept. That means the growing value of the underlying site for recycling has cannibalized the residual building value.

Erroneous use of "land-residual" method of separating land from building values.

B. Broadening the concepts of land and its rent

1. Rents tappable by variable charges. Many lands and resources that yield rents are not observed or measured in traditional real estate markets. There is a new realization, flooding in unseen like a riptide below the waves and spume, that "taxes on rent" are much broader than the traditional property tax on real estate ex buildings.

As esteemed a Georgist as William Vickrey often pronounced the prime virtue of land taxes to be that they are a constant lump sum, invariant with production or sales. He thus identified them solely as property taxes, and not any variable charge like a severance tax on withdrawing water or oil, or a parking fee, or a gas tax, or a bridge toll (even though he favored all of these, for what he saw as other reasons). He did not see the corporate income tax (which he opposed) as being in part a rent tax. It is a cliché of economics texts to class land taxes together with poll taxes as having the peculiar, and apparently sole, virtue of not being based on any variable input or output. They call them "lump sum" taxes for that reason, and often let it go at that. In this mindset, there are no differences worth mentioning between poll taxes and land taxes—an

1. This seemingly obvious relationship is missing from the encyclopedic and "definitive" works issued from Resources for the Future, Inc., which have undergirded an unwarranted resource optimism for the last fifty years.

instance of tunnel vision and an involuted mindset that would be surprising in any discipline except, alas, modern economics.

The term “single tax” has been unfortunate in helping perpetuate the narrow fixation on property taxes and the resulting underestimate of revenue potential from rents. Many of the siblings in what Netzer (1973) calls “a family of user charges” (which he would substitute for building taxes) are in fact means of collecting rent for the use of city streets. So strong is the “single-tax” stereotype, though, that not even Netzer (1998) thinks to include user charges as part of land revenues. Then there are mineral revenues from severance taxes and/or royalties, plus income taxes. These are already so great that some polities get much, or even most, of their revenues therefrom. And yet the confining “single-tax” tradition is so very strong that Netzer does not include mineral revenues among land-based taxes—not even in the rents tapped by oil-rich Norway and other North Sea nations. It is a major omission. In one year the mere increase in the value of Norway’s undersea reserves exceeded its entire national income.

We explore in this work the revenue potential of variable charges on road crowding, water withdrawals from surface and underground sources, minerals extraction, air and water pollution, spectrum use, fish catches, billboards, and so on. Some of these are major additions to land revenues. California, a major oil-producing state, does not even have a severance tax, not even a token. In the fiscal crisis of 2003, with 136 or so candidates running for governor, only one (Arianna Huffington) has even mentioned it, so total is the mental blackout in the state.

[[RE BILLBOARDS. 17. Products that cause damage, antisocial behavior, and inflated demand for publicly subsidized medical care may reasonably be taxed. Our most lucrative agricultural industry, marijuana, would provide high tax yields, should we ever decide to legalize it instead of trying vainly to suppress it. As a byproduct we would save the high public costs of the "narcocracy," the counter-industry that depends on drug users for its very existence. We would save a substantial fraction of the money spent on jails and warding. This would make a splendid example of trading "Negabucks for Megabucks."]]

Graffiti might be administratively difficult to tax, but what about billboards? These are merely legalized graffiti with social standing. Anyone who doubts the reality of visual pollution might shed all doubts by driving through Vermont, a state that outlaws billboards. The aesthetic and cultural differences are hard to miss. One could anticipate, too, that a society that penalizes billboards might have an easier time persuading the young to stop spraying graffiti.]]

[[RE Geothermal. Superior resources should bear an extraction charge. Failures in Imperial Valley point up the lack of value in some geothermal sources; high values near Santa Rosa point up the rentability of others. In 1984 a source near Santa Rosa went for \$350 million from Occidental Petroleum to a Kuwaiti owner, as part of the trend toward the Banana Republicanization of this highly rentable state.]]

[[Re polluters. Taxing air and water polluters by levying "effluent charges" won the favor of the economists dominant in the 1960s. The reasoning was pure Georgism: make them pay for preempting publicly owned air. Reaction later moved towards creating private property in pollution rights, but public outrage is now throwing back that notion, which only a Chicago economist could love.]]

Taxing pollution surrogates is also popular, especially to deal with nonpoint pollution that does not lend itself to effluent charges. The policy has its limits, but is part of any program to combat nonpoint pollution. (Cf. the speaker's "Nonpoint Pollution: Tractable Solutions to Intractable Problems," in Vladimir Novotny (ed.) Nonpoint Pollution, Milwaukee: Marquette University Press, 1988.)]]

2. In addition, taxes on the *income* from property can easily be made into a means of collecting land rent while exempting the income imputable to real capital.

[[Inserts here.

Prop 13 does not proscribe less efficient taxes, taxes that might impose some marginal disincentive, some "excess burden." There are those who favor these anyway, because they consider participation and risk-sharing to be better ways to assert what Walras called the "co-proprietorship of land by the state." Maybe they are partly right. Certainly many private landlords write participatory leases in preference to fixed cash rents. The fisc can develop this option, too. Indeed it already has, under Walter Heller, JFK's Chair of the CEA. It was an idea from John R. Commons, a leading figure in the Economics Department at the Univ. of Wisconsin when Heller studied there (cite Commons).

The income tax base includes income from land. For this we have to thank a few Georgist congressmen of 1894 who got land included in the base of the income tax that Congress enacted then. In *Pollock v. Farmers' Loan and Trust Co.*, 157 U.S. 429 (1894), the Supreme Court threw out the whole law for that specific reason, leading to the 16th Amendment of 1913, which was necessary, basically, to let land income be included in the base.

Corporate income was successfully taxed from 1909, before the 16th Amendment, as an excise tax on the privilege of doing business as a corporation. "The excise tax used net income as a measure of the privilege of corporate business practice." [Bernard Herber, *Modern Public Finance*, p. 190.] The legalistic circumlocution suggests how creative lawyers can implement what Congress really wants. Someday another text might read "The excise tax used land value as a measure of the privilege of holding title to natural resources." Indeed, the Nolan-Jackson Bill of 1920 and the Keller Bill of 1924 used exactly such language as the constitutional basis for imposing a national 1% charge on holding title to land.

But that may not even be necessary now. State legislatures, like Congress, have nearly complete control and discretion over what kinds of income to include or exclude from the income tax base. They have abandoned most of their discretion by piggybacking on federal laws, but they have not abandoned all of it, and they could take it all back.

The income tax can be converted into a tax on land income in two steps. The first one is surpassingly simple: exempt wage and salary income from the tax, in whole or in part. One could also tiptoe up on this by raising the earned income exemption, the standard deduction, personal exemptions, etc. Workers paying the Social Security tax should be allowed to deduct it from taxable income. Raise the rates on what remains of the income tax base, which would now be mostly property income. If that seems shocking or radical, recall that from 1913 to 1941 (before withholding, and the explosion of the FICA deduction) most wage and salary income was in fact

exempt. What is really shocking and radical is the massive shift of tax burden off property income onto wage and salary income, a shift that has perverted the whole notion of income taxation as originally adopted in 1913.

The second step is to remove capital income from the base. This is harder to understand, but easier to accomplish because it has already been done in part. Let me explain.

The present tax law includes several devices designed to lower or effectively eliminate any tax on the income from capital. Basically, this is done by letting investors write off what they invest at or near the time they invest it. The investment tax credit even goes farther and lets them write off more than they invest.

"Expensing" of certain capital investments means writing them off 100% in the year made. This privilege is so valuable it reduces the effective tax rate to zero (0), because after expensing, the Treasury receives a return on only its own share of the investment. Accelerated depreciation is a substantial move in the same direction. Even straight-line depreciation is really accelerated compared to the true depreciation paths of durable capital, especially when coupled with the use of tax lives that are much shorter than economic lives of durable capital items.

None of those devices apply to land, however, because *land is not depreciable*. That is again thanks to generations of Georgists, starting with those in the Progressive movement when the income tax was shaped. Who else would keep officials conscious that land is different? Standard-brand academic economists keep pushing the notion that land is just a form of capital.

To convert the tax fully to land, then, we need only to complete step two by allowing universal expensing of all new investments. *Voila!*

At the same time we must plug many loopholes designed especially for land income. One of these is depreciating land, even though land does not wear out. This is illegal, strictly speaking, but is often winked at in practice when old buildings are depreciated from their purchase price by new buyers. I have published elsewhere a long list of other loopholes for land, and will not recite them all here. (Hearings on *Economic Analysis and the Efficiency of Government*, U.S. Congress, Joint Economic Committee, Subcommittee on Efficiency in Government, Part 2, pp. 405-15, 1969. Also available from the author, c/o Dept. of Econ., UC Riverside, Riverside, CA 92521.)

Many will object, and with some reason, that the income tax hits only *realized* income from land, and exempts the holder who neglects or underutilizes land. True enough, but consider two points. First, we are surveying second choices after Prop. 13 has foreclosed the best choice. Second, observe the behavior of private landlords and tenants. They often prefer arrangements that share risks and returns, like the income tax, instead of fixed cash rents that resemble the property tax. The cases are not perfectly analogous in all particulars, but suggestive.

Third, use the two in tandem, on the Taiwan model.

In addition it seems clear that a legislature could define "land income" as a fixed proportion of land value, regardless of use. Plenty of economists would come forth to testify that that is a reasonable definition.

3. Substituting taxes for subsidies to promote conservation.

[[11, Water²

Here is a high potential to turn "Negabucks into Megabucks" for the Treasury. Currently, and for generations past, we have subsidized landowners to withdraw water. The benefits of the subsidy have gone roughly in proportion to the area of irrigable land owned. As a result, water is maldistributed, underpriced, and wasted. Today, for a change, there is support (at least intellectually) for a groundwater extraction charge, purely as a conservation and efficiency measure, and to obviate megabuck "rescue" projects. However, if we can wrench our mindsets away from the crazy tradition of subsidizing waste and maldistribution, there is also great revenue potential in water. In an arid land, water is life. Some, perhaps much, of the land rent now imputing to fee simple lands can be transferred to the holders of water, simply by raising its price.

Why should we want to transfer wealth to the holders of water? Because water belongs to "the people of California." A license to withdraw the people's water is not real property, and is not sheltered by Prop. 13. The state can serve free market efficiency and raise revenue in one stroke by putting a charge on water withdrawals. Such a charge would not prevent, but would expedite, the powerful current movement to market water.

An economic charge should of course be geared to the economic value (locational, mainly) of waters. Groundwater has been mentioned. Surface water could bear higher charges because it is already at the surface with no pumping. This charge might be called a "tax," or a rental for state property, as legalism and politics may require. The charge should cover not just active withdrawals, but "dog-in-the-manger" licenses to block withdrawals by others. Value-data to help set a proper charge would come from the proposed free market in tradable water licenses.]]

4. Unearned increments as current rents. There is a swelling of "capital" gains (mostly land gains, actually) as a component of income. In this case there is no corresponding realization among economists or the public that capital gains on land are a form of land rent, eminently taxable. On the contrary, as gains grow so do the wealth and political power of the movement to untax them. So much greater, then, is the need for objective economists to establish the taxability of capital gains, to show how to tax unrealized gains as they accrue, without disincentive effects or administrative nightmares, and to estimate the new revenue potential that now largely escapes taxation.

There is more. INSERT MODULE FROM ALTB on increased government borrowing power. Also see V, J, re interest on public debt.

Capital gains as a revenue source can be quite unstable. California's current (2003) fiscal bind illustrates the problem. This should not be taken to be a drawback of the present proposal, however, for the proposal here differs from the current income tax on capital gains in several ways.

²See the writer's "The Taxable Surplus in Water Resources," 1992. *Contemporary Policy Issues* 10(4): 74-82, October. (This note added after 1992.)

- My proposed tax is focused on unearned increments to land values. Current income taxes include gains from a variety of other sources, like building up a new business. During the dot-com boom, it was this last element that was most unstable.
- My proposal is to tax gains as they accrue, rather than upon sale.
- During a land boom and bust, land taxes are a strong stabilizing factor. IMPORT MATERIAL FROM CHICAGO PAPER.
- My proposed tax excludes gains on common stocks.

5. Variant kinds of land resources, hitherto neglected or not classed, or only recently classed with land, show great revenue potential. Some examples are the radio spectrum; telecom relay sites; slots in the geosynchronous orbit; fishing quotas; quotas of all sorts on production and marketing; pollution permits; licenses to withdraw water; power drops; parking spaces; highway access; mooring spaces, etc. Many in the Green Movement see the double efficacy of Pigovian taxes to curtail overuse and pollution of common airs and waters, while also raising revenue (Costanza, et al.). (Many academicians, sadly, are dragging their feet and making themselves part of the problem by bickering over whether this is possible.)

6. Variant forms of tenures to resources, omitted from standard tax rolls, show great revenue potential. Refer to III, D for full treatment.

7. Rents that are now dissipated, but need not be.

- a. Dissipation by open access
- b. Dissipation by rent-seeking in the process of tenuring

C. Uncapping the tax rate

1. Removal of reasons for avoiding high tax rates

- a. The base is not erodable (tax capitalization is not erosion).
- b. There is no taxable event, hence no Laffer Effect or Excess Burden (except as in B-1 above, where the slow-down effect is deliberate, for conservation reasons).
- c. Base is highly concentrated, making the tax progressive in impact. Tax not shifted, so ultimate incidence is same as impact. Progressivity minimizes number of true hardship cases, and hence the cost of relieving them.
- d. The tax encourages both saving and investing, leveling them upwards, the macro-economists dream.
- e. The tax base is the after-tax value of land, making the real rate much lower than the apparent rate.
- f. Using the tax to obviate other taxes raises the tax base via the ATCOR Effect.
- g. The tax fosters better allocation of the tax base, raising its taxable capacity. Green or Pigovian taxation opens new horizons for improving resource allocation by targeted use of inhibitory taxes. (Gaffney at Oxford on Red Light taxes.)

- h. The tax hits absentee owners of land, without discouraging the inflow of capital. There is a strong local multiplier effect from this. Refer to E-2.
- i. Ownership of wealth generally, and land and capital gains particularly, are highly concentrated. They are much more concentrated than incomes from productive labor, and increasingly so. Thus, taxes based on land rents and values are progressive in their impact and incidence; at the same time they are pro-incentive in their allocative effects. This combination of virtues is unique. It belies the cliché that governments must always choose between equity and efficiency in taxation. It makes it possible to raise tax rates to high levels without either stifling good incentives or embracing regressivity. This greatly enhances the revenue potential of such taxes³.

2. Unseen reservoir of high internal valuations and holdout prices. Observed land markets understate the value of land to most landowners. These owners' internal valuations are above the observed market: that is why they do not offer to sell. In commodity markets, annual turnover is 100% or more, giving a true idea of value. In most land markets, turnover is 5% or less. Assessors take that sample to estimate the value of the whole. The other 95% of landowners in effect "sell" or "rent" to themselves each year. How accurately does the 5% turnover sample the entire invisible "market" for land? Many owners routinely declare, "This land is not for sale, get away from my door," or "I will not sell for any price."

Some take it as a matter of pride not to sell. "I will never sell!" Deep breath. "At least I won't sell until taxes get me"—Mahlon Vail, heir of the 87,000-acre Vail Ranch in Riverside County, 1956. It was just the "western branch" of Vail's Empire Land and Cattle Co., Arizona. In 1964, he did sell, and Vail Ranch became Temecula and Murrieta. (TPE 16 Feb 04 B1). What if Prop. 13 had passed in 1956?

Modern environmental economics has spawned the discipline of "contingent valuation" to appraise damages to resources that seldom pass through markets. It turns out there is a major difference between WTP values ("willingness to pay"—what will you pay for cleaner air?) and WTA values ("willingness to accept"—what must I pay you for permission to pollute YOUR clean air?). WTA >> WTP. (Willingness to accept is much greater than willingness to pay.) Where there are market dealings to observe, they are based on WTP values, so the observed market conceals WTA values, which are much higher than the active, visible "market." The "willing seller" concept is mostly fictional: it is the "motivated" seller who makes the market—the observed market, that is. Most sales are in some way "forced." Other owners hold out for much higher prices. Cite work of Carson and Mitchell on dismissing WTA values, and Knetsch and Hanemann and others showing WTA >> than WTP. See "What Price Water Marketing,"

Status-quo theory is shaken to the roots by survey findings that WTA >> WTP. Its criterion for acceptable policy changes is based on Pareto's and Edgeworth's notion that you mustn't deprive one rich landowner, even to help a thousand starving orphans, because you can't compare their subjective feelings. When, however, we acknowledge common birthrights to a clean environment, the shoe is on the other foot. Now you can't pollute anyone's air or water because

3 . That is, if one believes, and the voters believe, that taxation should be progressive. It meets opposition from critics like Jon Coupal, who favors limiting the franchise to landowners, and opposes majority rule because "you are essentially allowing those who don't own property to levy taxes on those who do." Refer to I, L-N.

the victims own it. They can be as unreasonable as any great landlord. This explains the busyness of theorists seeking to plug the dike. It was 1974 when a survey first showed $WTA \gg WTP$, "in contradiction to received theory (i.e., Coase and Stigler)." This sent dozens of professors and think-tankers scurrying to torture the data and logic until they confessed otherwise, and save Coase and Stigler. Mitchell and Carson, for example, slog through a long literature survey, apparently impartially, but in the end find ways to stick with WTP after all (1989, pp. 37-38). (See also Wahl, Cummins, et al.) They have succeeded in keeping the mass of economists in denial on the matter, so economists don't even see its implications.

The meaning for tax policy is that there is scope for raising tax rates substantially without flooding the market with distress sellers. That will disappoint those (including myself) who see land taxes as a means to cheapen land for new buyers. This goal will take high tax rates; but en route to the goal (and also after the goal) we can raise great revenues, which is the present point.

The flip side of high internal valuations by owners is that roughly one-third of American families are renters. Their internal valuations of what they rent are obviously lower than the market value of these or comparable quarter. (See progressivity.)

3. Raising taxable rents by untaxing capital and labor, production and exchange: the concept of ATCOR (All Taxes Come Out of Rents).

The meaning and relevance of ATCOR is that when we lower other taxes, the revenue base is not lost, but shifted to land rents and values, which can then yield more taxes. This is most obvious with taxes on buildings. When we exempt buildings, and raise tax rates on the land under them, we are still taxing the same real estate; we are just taxing it in a different way. We will show that this "different way" actually raises the revenue capacity of real estate by a large factor. There is much recent historical experience with exempting buildings from the property tax, in whole or part. It has shown that builders offer more for land, and sellers demand more, when the new buildings are to be untaxed. The effect on revenue is the same as taxing prospective new buildings before they are even built, even though the new buildings are not to be taxed at all.

Land value is what the bare land would sell for. It is specifically and immediately most sensitive to taxes on new buildings, and on land sales, as well as to new and more stringent building-code requirements or zoning that often discriminate against new buildings. Lowering the income tax rate on capital gains has doubtless contributed to the following run-up in land prices.

Where new buildings are "coded" more severely than old, it enhances the value of the old land/building packages. This premium should be considered part of land value, and taxable as such.

a. Examples of ATCOR

1. Historical experiences with exempting buildings leading to land booms

- NYC, Western Canada, HK, Taiwan, Australia, South Africa, San Francisco after the fire, Chicago after the fire, California I.D.s, Cleveland 1903-1920, Toledo, Detroit, Portland, Seattle, Houston, San Diego.

- Re Australia, Hutch 1963 pp14-15. Divides Australia into UCV States (Qnd, NSW, West Aust) and Improvement-value rating states (N.A.V.) (S. Aust, Victoria, Tasmania). Table p.14 shows value of impr. cf. with U.L.V. as 100, for town, country, and whole state 1939/40. UCV states are much higher. This is not because of lower LV: **p.16 table shows UCV per land taxpayer was nearly the same in both groups, ca. £11k per land taxpayer.** (Data base: 23rd Report, Commissioner of Taxation dealing with the Commonwealth Land Tax. Data cannot be extended because: 1, Commonwealth retired from taxing land from July, 1952)

2. Familiar micro cases

- Lowering corporate income tax raises stock markets.
 - Commercial rents, multipartite, lower share of gross revenues is traded off for higher fixed rent. Examples from retailing; oil leases; Port of Milwaukee leases; farm rents; Cheung studies, etc.
 - Payroll taxes and disincentive kinds of business taxes make firms leave California, currently, lowering demand for land. [[Walter Rybeck has sagely suggested that we distinguish two functions of “business”: wealth-creating and resource-holding. A good tax system will not make people pay for creating wealth but for simply holding resources.]]
3. The Peace Dividend Effect. World history of peace dividends ff. by land booms.
 4. The Resource Curse Effect: an influx of mineral revenues, obviating other taxes, leads to land booms.
 5. Historical experience with an income tax exempting wages: the U.S., 1916-40. “Pay-as-you-go” war finance in the U.S. during World War I.
 6. Utility-rate effect. Lower rates mean higher land values. Hotelling, Vickrey.

b. The Logic of ATCOR

1. Land supply fixed, capital and labor elastic, demand elastic.

The thesis that all taxes are shifted to landowners follows logically from two premises. One, after-tax interest rates are determined by world markets, so the local supply of capital is perfectly elastic at a fixed, after-tax rate. Two, labor has been reduced to so low a level that it cannot bear any more tax burden. Anyone may test the premises by observation.

Elastic labor supply, as assumed by Keynes, re effect of demand on employment. The supply of "work" (as opposed to "labor," defined as so many warm bodies) is highly elastic so long as there are unemployed. When we find work for the unemployed and underemployed, labor gains without its costing land or capital anything at all. In fact, it is even better: labor gains while benefiting other taxpayers, because of lower dole costs, lower crime costs, etc. The enhanced psychic benefit of universal job security is also worth a lot, although not in direct money. In the era when Keynesianism was in flower, many alleged that the social cost of putting the unemployed to work is zero.

Nowadays, of course, Keynes is out of style with the dominant anti-labor schools. Unemployment is simply leisure, a voluntary choice, a matter of personal taste. And yet,

Chicagoans like Gary Becker freely postulate elastic labor supplies when they blame unemployment, as Becker routinely does, on minimum-wage laws. "It's simple: hike the minimum wage, and you put people out of work"—Gary Becker, *BusinessWeek* 6 March 95.⁴ It's not clear if Becker sees the parallel, but that is a Keynesian assumption.

It is likely that real wage rates would rise, as better land use increased demand for labor and lowered product prices. This was the theme of P&P (George, 1879), and the primary goal of his reforms. However, that was before we had heavy payroll and income taxes on labor. Now, it is entirely possible for the abolition of such taxes to let after-tax wage rates rise while before-tax wage rates remain the same, or fall. There is ample "room" in the present tax system for that to be a likely outcome. In the event, however, that real wage rates should rise enough to absorb some of the gains from tax reform, few would call it a calamity.

Also, the rise of wages in the Georgist system implies a rise of GDP. The rise would result from removing the excess burdens of current taxes, which in turn will first raise the marginal productivity of labor. That would ensue from opening what the English Radical Liberals (who ruled England in Edwardian days) called the "internal frontier." One can also view that as ending the artificial scarcity of land, an approach I use later in this work. This means that workers who now each add, say, £10,000 a year to GDP in menial tasks, or struggling on marginal land, would instead add £20,000 a year each. While this would redistribute income against rents, much of the increase would come from a net rise of GDP.

The net rise of GDP will raise the demand for land for residential and recreational (R&R) uses, because land is a superior good. (Cite P&P, and data herein on the point.) Lowering after-tax rents will, of itself alone, lower the R&R demand for land, but raising other factor shares, including rates of return on real investing, will replace the lost demand from any given GDP. The rise of GDP will more than replace it.

Elastic capital supply, observed and therefore assumed by most economists. Mostly they emphasize world markets, rapid transfers, arbitrage. In addition, even in small closed economies, there is underemployed capital, just like labor. This is because the return is held down by taxation. So it goes into untaxed consumer goods, and tax-exempt forms of capital like housing, eleemosynaries, foundations, government works, personal property, etc. From this would spring a large supply, when all uses of capital are untaxed. Here is the elasticity in supply of capital. George recognized this, although he had his own way of expressing it. He did not regard consumer capital as being "really" capital, but he did observe people living on it while they produced other capital. During World War II we experienced a graphic example of how people can draw down consumer capital to meet an emergency need.

An important and influential exception was E.R.A. Seligman, who expressed his point memorably: "There is no fund of capital floating in the air to be brought to earth by the magic touch of Mr. H.G." Parallel ideas are found in Harriss, Harberger, et al., q.v. below. On the left wing, critics of tax breaks for investing commonly belittle and dismiss the breaks by alleging they only advance a fixed lump of investing, rather than adding to the sum over time. I will show, rather, that the "lump" is full of yeast and can grow: a) by capital formation, b) by better allocation of capital, c) by import of capital, and d) by faster turnover of capital.

⁴ David Card and Alan B. Krueger say otherwise. Becker cites studies saying it is so, by Donald Deere and Finis Welch, Texas A&M; Kevin Murphy, University of Chicago. Papers at Jan AEA meetings.

Land value based on opportunity cost of land in highest and best future use. Calls for drastic reassessment of land when buildings are exempted, because that means FUTURE buildings are to be exempted. The effect on revenues is like taxing future buildings before they are actually built, even though they are not to be taxed at all. Logic validated by experience in growing boroughs of NYC, 1922-1933.

Compact settlement would create new rents via the synergies that are not aborted by scatter.

2. Venerable tradition of ATCOR in the history of economic thought

- Physiocrats, preceded by Locke and Vanderlint
- Adam Smith on “indolence of landowners”
- Paul Douglas; Bronson Cowan; Ebenezer Howard; David Bradford, et al., 1992 NTJ; Dick Netzer (with caveats);
- Others?

3. Muddying the waters of theory

- Forward shifting of proptax, a la Musgrave. This shift requires our assuming the tax is imposed on just one land use, usually housing, in one small jurisdiction. It is what Howard Jarvis seized on and used to promise tenants that lowering property taxes would automatically lower their rents, since property owners, as he put it, do “not pay one cent” in property taxes, but shift them all to tenants. As soon as Prop. 13 passed, rents shot upwards, and have never looked back except in particular micro-markets like cyclical Silicon Valley.
This is one result of displacing production theory by price theory in economic doctrines. In production theory you would assume elastic demand, and focus on the effect on factor proportions (changing productive processes and products, a la Kneese and Bowers).
- Fixed capital supply. Harberger; Seligman; Harriss.
- Twisting the Ramsey Rule by most economists. McLure and Zodrow; Lindsey, and most texts on public finance as examples. Notable exceptions are Ramsey himself, Pigou who inspired him, and Stiglitz.

4. Summary on ATCOR. The revenue capacity of land, when it is substituted for other tax bases, is comparable to current revenues. Owing to efficiency effects, and renewal effects, it may well be higher. The major reservation is that the supply of labor is not totally elastic, so some of the revenue gains may be “lost” in higher wage rates, but on the whole higher wage rates are socially desirable, and serve to lower many public costs as for welfare, policing and jailing, aggressive military spending, make-work projects, etc.

c. Summary on thirteen new elements of taxable capacity. Previous estimates of rent and land values have been narrowly limited to a fraction of the whole, thus giving an entirely false impression that the tax capacity is similarly narrow. We are adding Thirteen Elements to the traditional narrow “single tax” base:

- correcting omissions and understatements in standard data sources
- updating ancient sources that use obsolete low values

- raising the Land Fraction of Real Estate Values (LFREV)
- adding rents that are best taxed by use of variable excises
- adding rents taxable by income taxes
- substituting taxes for subsidies to foster conservation
- adding current unearned increments as part of ongoing rent
- adding previously invisible and undervalued resources to the tax base
- adding lands held under variant forms of tenure
- adding rents that are now dissipated, but need not be
- noting the feasibility of much higher tax rates on a base that is both non-erosive and concentrated in ownership
- noting the great mass of holdout prices (WTA values) exceed visible market prices (WTP values) by a large factor
- adding the revenue from most existing taxes to the potential land tax base, on the ATCOR principle

Any one of those Thirteen Elements indicates a significantly higher land tax base than economists commonly perceive today. Taken together, they are overwhelming, and cast an entirely new light on this subject.

d. Other rent-raising factors

1. Mortgage interest as land rent

Here is a fourteenth supplement to the land rent tax base, which I am not counting among the basic thirteen because it involves such novel thinking, and is fraught with such controversy, that it might divert us too much from the main chance.

- a. Municipal bonds. When a government borrows on the security of land revenues, it is in effect selling those revenues to the borrower. The bondholder becomes a landowner, and should be taxed as such. ... SEE "PUBLIC BONDS AS LAND VALUE"
- b. Private mortgages. [[One kind of paper is systematically recorded at the county level: mortgages, or deeds of trust. It is administratively feasible to put these into the property tax base, as Professor Don Hagman kept urging.

But is it desirable? A tax on mortgages would be mostly shifted to borrowers in the form of higher interest rates, the supply of mortgage funds being highly elastic. Thus, to tax mortgages is indirectly to tax real estate.

Holders of existing mortgages would suffer? It must be conceded. But someone suffers with any change of tax or other public policy; there are always winners and losers. It is a risk all investors take knowingly. Phasing-in is also possible.

New lending would be discouraged? Yes, at the margins. The most sensitive margin is one which most people would not perceive at first: that is the margin of durability or longevity. The more deferred the benefit of an investment, the more interest-sensitive is its present value.

Finally, is that bad? We are conditioned to answer yes, but as an economist, I doubt it. More funds would be released for other kinds of loans, shorter-term loans, causing higher turnover

both of loans and the nation's capital stock. Both can be shown to have positive macro-economic effects.

Most beneficial would be the effect on stability of lending institutions. In 1988 we were looking at a \$50 billion bailout of S&Ls that got sick lending on real estate. Many commercial banks were deep in the same mire. It is time to revive the old "commercial loan" theories of banking, with their emphasis on liquidity and quality of credit, achieved mainly by sticking to self-liquidating short-term commercial loans, and avoiding long and speculative loans secured by real estate. It is a subject too big to open here, but you will find plenty of support in the history and theory of banking for keeping lenders out of mortgages.

It is widely assumed that cheap long-term credit is essential to let most people buy real estate. Unfortunately that reasoning overlooks the nature of land values, which makes it circular. The main effect of long-term loans has been to inflate land prices, **creating the very problem it offsets**. It is a treadmill effect, like keeping up with the Joneses.

Another benefit of including mortgages in the property tax base is to counter the argument that the property tax discriminates against equity holders of real estate. Many have questioned the equity of focusing taxes on the person with 5% equity in a parcel, while exempting his bank.]]

2. Multiplier effect of taxing absentee owners. [[Transferring rents from them to our fiscal spending the proceeds locally, improves the state economic base and balance of payments. It is alleged that we must avoid taxing absentees, because they will remove their capital from our state, but they cannot remove most land. The only way they can remove oil and gas is by producing them. The present owners of most of our oil and gas became so by acquiring it from existing local owners and producers, so it is hard to argue they ever did bring capital into the state. It is easy to argue, however, that a democratic sovereign state reports to and is responsible to the resident electors, not to absentee owners. It is easy to argue that the quality of life is worsened when absentee owners displace local owners and turn local people into tenants. There is no social value in encouraging absentees.]]

[[A high percentage of real property is owned from out of the state and even out of the country. The percentage is much higher than we may think. It is not just Japanese banks and the Arabs in Beverly Hills. It is corporate-held property, which comprises almost half the real estate tax base. If we assume that California's share of the stockholders equals California's share of the national population, then 90% of this property is absentee-owned; the percentage may be higher because many of these are multinational corporations with multinational owners.

There is a curious silence on the matter. Some critics of capping the property tax rate talk about "business" securing the lion's share of benefits. No one seems to have seized on the fact that half the taxable property in California is owned by people not voting in the state, and not spending their incomes in the state.

Chauvinism and localism can be ugly, as we know. When it comes to discriminating against poor immigrant workers, xenophobia fills the air. Taxing alien property, however, pushes a different button. Yet, here is one instance where localism may be harnessed to help create a more

healthy society. The purpose of democracy is to represent the electorate, not the absentee who stands between the resident and the resources of his homeland.

California's legislative analyst, William Hamm, estimated in 1978 that over 50% of the value of taxable property in California was absentee-owned. This is such a bold, bare, and enormous fact that it is hard to believe that Californians could be misled into resisting the urge to levy taxes on all this foreign wealth. They may be put off by the argument that they need to attract outside capital, but that carries no weight when considering the large percentage of this property that is land value.

Some half of any reduction in California property taxes leaks to out-of-state owners. Nor is this the only leakage. Net federal income tax payments have risen because sales and nuisance taxes raised to replace lost property taxes are not deductible. Sales of local general obligation bonds have stopped and will stay stopped. Revenue bonds are sold instead, with higher interest rates. Fire insurance rates must rise. And private spending substituted for public spending will have a higher propensity to import. Public spending goes for policemen, firemen, teachers, local contractors, and so on.

This substantial leakage of economic base results in multiple declines in state income.]]

Offshore oil and gas is outside state sovereignty and escapes all state and local taxation. One result is unbalanced state hostility to offshore leasing, for the locals suffer the degradation without sharing the gains. Some provision for state sharing in offshore revenues seems indicated.]]