Chapter 8

The Income-Stimulating Incentives of the Property Tax

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1. Reputation of the property tax

IT WAS common practice in the 1990s to proclaim the unpopularity of the property tax in the United States.

Unpopularity, of course, is generic with taxes. Property taxes are levied in relatively large sums once, twice or at best only a few times each year, an inconvenience that may aggravate the attitude more so than for taxes that are "candy coated". But is there something universally detrimental in this case? Or is the attitude fostered by the holders of large properties who find other taxes easier to escape? The architects of good government need to know.

The hard evidence supports the latter explanation. But whatever the explanation the electorate's prejudice, where it exists, is misconceived. The facts are clear enough. Where a large share of fiscal revenue comes from property taxes, individual income tends to be high. There is a clear propensity for the local economy to grow faster than in those states which are less dependent upon the property tax than on taxes linked to income or sales.

Our findings begin with an analysis of two states - New Hampshire and California - which differ in that choice.

New Hampshire shows a strong and stable aversion to taxes on income or consumption (Table 8:I), and a strong preference for the property tax. It is the only state in the Union where more than half of all government revenue, both state and local, comes from the property tax. In fact, nearly two-thirds of all state/local revenue is from that source.

But that is not the only distinctive feature about New Hampshire. For example, it has been growing twice as fast as its neighbors - such as Maine and Vermont - and that difference needs explanation. Could there be a connection between the property tax and prosperity?

California's use of the property tax has diminished sharply since the change known by its enactment: Proposition 13. Its tax history has been more typical of the 50 states as a whole, during the two or three decades when the "unpopularity" claim emerged. Limited sharply in property tax use, it has turned of necessity to taxes on both sales and income. Its once vigorous growth rate has been slowed. Could there be a connection between the decline of the property tax and the slump in the state's economic prosperity?

The two states differ in other ways, too, so we have looked at a wider number of states, grouping them by a range of differences, in search of valid conclusions.

As unpopularity was charged against the property tax, voters came to oppose it sharply enough to make political leaders propose, as alternatives, new taxes on labor, industry, trade and money flow. The property tax, once the principal source of money to fund state and local governments, dwindled in the latter half of the 20th century. Having "provided some 80% of all state-local revenue until the early 1920s, [it] was providing only 45% of that total in the mid-1950s" and had fallen to about 30 % at the start of the 1980s (Netzer 1983: 222).

Some states shifted away from it sooner than others. New Hampshire refused to make the shift at all. The results make it possible, by a comparison of tax structures in the 50 United States, to draw some conclusions about cause and effect.

California's basic state rate for sales taxes is 7% (1997), but counties may add to it. The top combined rate in San Francisco county is 8.5%. Ever since Proposition 13, sales taxes have risen to make up for the losses.

There is no clear pattern to the new taxes adopted by states as the property tax waned. Texas, Wyoming, South Dakota, and Washington are among states which have no personal income tax but do have general sales taxes. Oregon has no sales tax, but a personal income tax ranging from 5% to 9%. Several states have corporate income taxes. Most states have added many sundry "nuisance" taxes like a surtax on hotel rooms, tuition hikes at state universities, sin taxes, etc.

All things taken into account, New Hampshire's state tax burden is the lightest for any of the 50 states when measured as a percentage of *per capita* income. When local taxes are included, the total burden moves up a little in the rankings, but the essential fact is that those local taxes are on property. And by a number of different measures, the state is among the most prosperous states.

Table 8:I
Rates of Three Major Taxes Selected States, USA, 1992: %

	Individual income tax (range)	Corporation income tax (range)	General sales taxes
New Hampshire	(a)	8.0	0.0
California	1.0-11.0	9.3	6.0
Maine	2.1- 9.89	3.5-8.93	6.0
Vermont	(b)	5.5-8.25	5.0
New Jersey	2.0-7.0	9.0	6.0
New York	4.0-7.87	9.0	4.0
Pennsylvania	2.95	12.25	6.0

SOURCE: Tanzi 1995:21, Table 3-1, which drew from data furnished by the Advisory Commission on Intergovernmental Relations (ACIR).

Note (a): New Hampshire has only a twilight shadow of a personal income tax. A 5% tax on income from interest and dividends is a left-over from the earlier revision of personal property taxes on securities. Local assessors had found it hard to keep up-to-date information on them, so the state imposed the tax on income. The total income subject to it in 1995 was only 2.5% of all individual personal income.
Note (b): Vermont's income tax was pegged at from 28% to 34% of federal income tax liability.

Could this correlation be due to its heavy dependence on the property tax, coupled with a low dependence on other taxes?

California, by contrast, has been running down its use of the property tax as a revenue-raiser. Can we accurately see, as a result of this, the relative collapse of its economic prosperity and the quality-of-life of its citizens?

Figures published by ACIR in its two-volume *Significant Features of Fiscal Federalism* (SFFF) for 1994 provide some data that will help. They are for the year 1992.

Since the search is for evidence of cause and effect, it is necessary to be concerned with relationships. This explains the fact that many of the numbers in what follows are ratios: a measure of relationship.

It makes sense to examine the relationship between the property tax

and all state and local taxes, taken together. We start at the top and at the bottom of the list, with New Hampshire and Alabama, comparing them with the average for the nation. And because the population of the 50 states varies so greatly, it is not total dollars that interest us, but dollars *per capita*.

Table 8:II
Taxes *per capita* ($)

	Property Tax	All state/ local taxes	Ratio
United States	699	2178	.32
New Hampshire	1344	2098	.64
Alabama	174	1435	.12

The top and bottom are highly suggestive. They accurately symbolize our more general findings. However, we need to look at the figures for more states, and to the ratios between more of the factors under consideration. We start by grouping those states with high ratios of property tax use and those states with low such use ratios, so as to compare those highs and lows, and other factors.

The top five states in this Property Tax/All Taxes ratio have higher *per capita* incomes than the bottom five states. It means extra columns; the three above, plus one for state/local tax burden in dollars per thousand and another for the *per capita* income ranking within the whole country.

The "New Hampshire five" have high property tax *per capita* as the sum of two reasons: first, higher taxes *per capita*; and second, a higher ratio of property tax to all state and local taxes. Of the two reasons, the second is stronger. Here are the ratios for the means above: first, 3091/1606 = 1.92; second, .41/.15 = 2.73

Do the top five levy higher taxes *per capita* because of higher *per capita* income? The ratio for the means here are 24.3/16.0 = 1.52. This direction of causation would require that a 52% rise of income *per capita* caused a 92% rise of all taxes, and a 173% rise of property taxes. That seems extreme, and therefor implausible. It is more plausible that the heavier dependence on property taxes caused the rise of personal income *per capita*. We explore this further below.

Table 8:III
States Ranked by Property Tax *per capita ($)*

	Prop Tax	All Tax	Income ratio	*per cap* ($ 000s)	Rank
TOP FIVE					
New Hampshire	1344	2098	.64	21.9	8
New Jersey	1268	2926	.43	26.1	2
Connecticut	1198	3061	.39	27.2	1
New York	1178	3534	.33	24.1	3
Alaska	1069	3835	.28	22.1	7
(Unweighted Mean)	1211	3091	.41	24.3	4.2
BOTTOM FIVE					
Louisiana	277	1654	.17	15.9	45
Arkansas	261	1518	.17	15.6	46
Oklahoma	243	1635	.15	16.4	42
New Mexico	217	1788	.12	15.5	49
Alabama	174	1435	.12	16.5	41
(Unweighted Mean)	234	1606	.15	16.0	44.6

Hypothesis 1
A high ratio of high property taxes to all taxes is associated strongly with high personal income per capita.

This is important enough so that we should complete the ranking by the ratio of property taxes to all taxes. The source of data is the same as above. The new columns at the right are personal income *per capita* and the ranking for that measure.

The mean personal income *per capita* ranking of the high eleven is 19.3, versus a ranking for the low eleven of 36.3.

The mean all-tax revenues are higher in the Top Eleven (Table 8:IV). This refutes the conventional argument that states like New Hampshire skimp on public spending (although New Hampshire itself is slightly below the United States mean of $2,178.)

The starkest contrast is between New Hampshire itself, with 64% of its state and local revenues coming from the property tax, and Alabama and New Mexico with only 12%. New Hampshire ranks eighth in personal income *per*

Table 8:IV
US States Ranked by Ratio of Property Tax to All Taxes

	Alltax	Proptax	ratio	rank	PI/cap	Rank
TOP ELEVEN						
New Hampshire	2098	1344	.64	1	21.9	8
Michigan	2173	950	.44	2	19.6	20
New Jersey	2926	1268	.43	3	26.1	2
Wyoming	2335	991	.42	4	18.2	27
Vermont	2283	954	.42	5	18.8	26
Rhode Island	2243	943	.42	6	20.3	18
Oregon	2096	864	.41	7	18.6	28
Montana	1770	707	.40	8	16.2	43
Connecticut	3061	1198	.39	9	27.2	1
Illinois	2205	849	.39	10	21.8	9
Texas	1857	730	.39	11	18.4	30
Mean	2277	982	.43	20.7	19.3	
BOTTOM ELEVEN						
Tennessee	1471	348	.24	40	17.7	35
North Carolina	1814	374	.21	41	17.9	34
West Virginia	1660	294	.18	42	15.6	47
Kentucky	1755	297	.17	43	16.5	40
Arkansas	1518	261	.17	44	15.6	46
Louisiana	1654	277	.17	45	15.9	45
Hawaii	2935	481	.16	46	22.2	6
Oklahoma	1635	243	.15	47	16.4 42	
Delaware	2341	330	.14	48	20.7	14
Alabama	1435	174	.12	49	16.5	41
New Mexico	1788	217	.12	50	15.5	49
Mean	1819	300	.17	17.3	36.3	

capita. Alabama ranks as number 41. New Mexico ranks as number 49.

It would be a mistake not to take into account some of the non-statistical factors: geography, history, weather, for instance.

Alabama and New Mexico are in the fast-growing sunbelt, but they are not high growth states. New Hampshire is an old state in an old region - one of the original 13 colonies - but it is a growth state. Over the past several decades it has been the fastest growing state in the northeast.

Among eastern states, it is the only one except Florida in which more of its residents have moved into the state than those who were born there.

New Mexico is between Arizona and Texas, two of the fastest growing states, but New Mexico does not grow much. Nearby Utah, Colorado and Nevada all grow, but not New Mexico.

New Mexico is a border state, with a minority population which doubtless lowers its mean personal income. So, however, is New Hampshire. The immigrant Canadian fraction (Quebec is New Hampshire's neighboring province) of the New Hampshire population probably exceeds the immigrant fraction in New Mexico, and certainly that of Alabama.

New Mexico has attracted a number of very wealthy land buyers who hold ranches in the million dollar league. Ted Turner is well known; Robert Anderson of ARCO has long been another; Maurice Strong and his consortium of water-rights speculators are a third. The distribution of landownership in New Mexico is extremely unequal, as documented in Gaffney (1992), New Hampshire is at the other extreme, as shown in the same source.

We cannot attribute the higher property tax/all tax ratio of New Hampshire to higher incomes in that state, because its other taxes are much lower. It is, in fact, below the United States mean in all state and local taxes *per capita*. The conventional explanation on income is that it arises independently of tax expenditures, and taxes are a kind of consumption item, reflecting a consumer taste for state and local services. This blanks our minds to the possibility that a better tax system might raise incomes, and/or attract people of higher income.

New Hampshire is a rugged, mountainous, northern-tier New England state with harsh winters, no outstanding farm resources, or minerals, or fuels, or seacoast, or natural urban confluences. It is a summer vacational and winter ski-land. It has many old mill towns where obsolescent plants are still to be found, although computers and other technological industry has begun to multiply.

Its major natural or non-institutional "lucky break" advantage would seem to be its Boston suburban bedroom communities on the Massachusetts fringe, but it is doubtful if they make up a large share of its population much north of the border.

The mild winters of New Mexico and Alabama enable people to survive with lower incomes than are required to survive in New Hampshire. On the other hand, this factor tends to increase land values in the milder states, and should therefor make it easier to raise property tax revenues. This clearly has not been done in New Mexico and Alabama.

The most likely causal relationship, therefor, is from the tax system to the personal income. Let us, for that reason, pose a second hypothesis.

Hypothesis 2

Heavy reliance on property taxes, as opposed to others enacted in recent decades, tends to cause higher incomes per capita.

The data supports the hypothesis.

It will be helpful, as a cross-check, to rank states by personal income *per capita*. This will sort out the effect of personal income on taxes. States with higher personal incomes *per capita* will also have higher totals of all taxes *per capita*, because of income elasticity of demand for public services.

However, higher income will not cause higher reliance on the property tax. (If anything, it would cause higher reliance on the income tax.) Therefore, a finding of higher ratio for property taxes to all taxes in high income states indicates that the high ratio itself caused the higher incomes.

Summary of and inferences from Table 8:V

First, the U.S. means ratio of property taxes to all taxes is .32. Six of the Top Ten states are above it. The other four are Maryland with .28, Hawaii with .16, Arkansas with .28 and Nevada with .24. These exceptions are explained below. The unweighted mean for the Top Ten states is .35

Nine of the Bottom Ten states, on the other hand, are below the .32 ratio. The sole exception is Montana. The unweighted mean for the Bottom Ten is .21

In sum, a high ratio of property tax to all taxes is associated with the Top Ten, while a low ratio is strongly associated with the Bottom Ten. Thus a tax-mix that is rich in property tax is not the only cause of high incomes, but a tax-mix that lacks property taxes seems to guarantee low incomes.

Second, moving from the means of the Bottom Ten to the Top Ten:

- Personal income *per capita* rises from 15.8 to 23.4, a rise of 48%.
- All taxes rises from 1607 to 2751, a rise of 71%.
- Property tax rises from 344 to 940, a rise of 173%.

One might explain the rise of all taxes as an effect of the rise of income. There is nothing, however, about a rise of income that would explain a higher preference for the property tax over all other taxes. This leaves us with the more likely finding that the preference for the property tax explains the higher incomes.

A weaker statement is that high incomes permit higher use of all taxes, which acts as a brake on further rises, except that people learn to switch

Table 8:V
US States Ranked by Personal Income *per capita*

	PI/cap	rank	Alltax/cap	Proptax/cap	ratio
TOP TEN					
Connecticut	27.2	1	3061	1198	.39
New Jersey	26.1	2	2926	1268	.43
New York	24.1	3	3534	1178	.33
Massachusetts	23.7	4	2554	877	.34
Maryland	23.3	5	2332	653	.28
Hawaii	22.2	6	2935	481	.16
Alaska	22.1	7	3835	1069	.28
New Hampshire	21.9	8	2098	1344	.64
Illinois	21.8	9	2205	849	.39
Nevada	21.7	10	2031	488	.24
Mean	23.4		2751	940	.35
U.S.	20.1		2178	699	.32
BOTTOM TEN					
Alabama	16.5	41	1435	174	.12
Oklahoma	16.4	42	1635	243	.15
Montana	16.2	43	1770	707	.40
South Carolina	16.2	44	1584	451	.28
Louisiana	15.9	45	1654	277	.17
Arkansas	15.6	46	1518	261	.17
West Virginia	15.6	47	1660	294	.18
Utah	15.6	48	1701	461	.27
New Mexico	15.5	49	1788	217	.12
Mississippi	14.1	50	1323	357	.27
Mean	15.8		1607	344	.21

to a higher use of property tax in the mix because it is less of a constraint than other taxes.

Third, moving from the mean of the Bottom Ten to the Top Ten, the ratio of property taxes to all taxes rises from .21 to .35, a rise of 67%.

Fourth, the unweighted means of the Top Ten exceed the U.S. means as follows:

- Personal income *per capita* is 23.4, exceeding the U.S. mean of 20.1 by 16%.

- All taxes *per capita* total 2721, exceeding the U.S. mean of 2178 by 25%.
- The property tax mean is 940, exceeding the U.S. mean of 699 by 34%.

Fifth, the unweighted means of the Bottom Ten fall below the U.S. means as follows:

- Personal income *per capita* is 15.8, or 21% below the U.S. mean.
- The mean of all taxes is 1607, or 42% below the U.S. mean.
- The property tax mean is 344, or 51% below the U.S. mean.

Moving from the bottom state, Mississippi, to the top state, Connecticut, we see the following rises:

- Personal income *per capita* rises from 14.1 to 27.2, or by 93%.
- All taxes rises from 1323 to 3061, or by 131%.
- Property tax rises from 357 to 1198, or by 236%.

Another difference between the Top Ten and the Bottom Ten is that the latter states are more rural. There is no obvious reason, however, why being rural would create a preference for all other taxes over the property tax. A plausible hypothesis, however, is that a bias against the property tax would inhibit the growth of cities and commerce. New Hampshire is a state that has become quite urban in spite of its lack of any great natural urban confluence, whereas Louisiana, Mississippi and Alabama are all located on great waterways.

2. California: a sudden break

WHAT HAPPENS when a state abruptly changes its degree of dependence on the property tax? California provides the most obvious case study. A great many of the states have shifted gradually away from the property tax in the past several decades. California did it suddenly.

In 1978 the electorate was persuaded to support Proposition 13, which put a cap on the rates of the property tax. California's rank in personal income *per capita* dropped from seventh place in 1978 to twelfth place in 1992.

The drop in real personal income *per capita*, and especially in wage income *per capita*, is considerably greater. Both rents and housing prices soared after 1978, such that only ten years later, in 1988, one could not find an apartment for less than $600 a month. Between 1980 and 1989, according to reports in the press, real disposable income fell for a majority of the region's residents. The average household's income in 1985 was $26,500; in 1990, it was $50,800, but when we adjust for inflation those gains disappear. This was a gain of 91%. This compares with the consumer

price index, which rose 64%; with median rent which rose 132%, from $274 a month to $635 a month; and with the median price of owner-occupied homes and condominiums which rose 163%, from $98,100 to $257,800. (These data are from *San Francisco Examiner*, September 27, 1991, page B-1.)

California's unemployment rate has become the highest in the United States, rising to over 9%, three percentage points above the national rate. It was "good news" when it fell to 8.5% in May, 1994 - high above the national rate of 5.6%. Its student/teacher ratio, grades K-12, deteriorated. Most telling of all, spending per pupil dropped from fifth place in 1965 to fortieth place in 1985. It is hard to see how a state can continue to win and hold the high-tech professionals required for California's high-tech industries to remain competitive, with one of the worst school systems in the nation.

California was one of three states where median household incomes fell by 2.1% in the two years from 1992 to 1994. California's poverty rate in 1994 was 17.9%, compared with the U.S. rate of 14.5.

The *Los Angeles Times* (October 11, 1995) chronicled the continuing decline. Colleen Kreuger, explaining a new Census Bureau report by Census staffer Kristin Hansen, on geographic mobility from March 1993 to March 1994, said a smaller fraction of people in the country as a whole were moving, possibly because of hard times. In California, however, the trend was reversed. There was a net outmigration from California to other states of 236,000. Out of a population of 31,000,000 that is .76%. Hansen told Kreuger, moreover, that more accurate "Census estimate" put the outmigration into other states at 426,000 people, or 1.37%, including international migration (which showed a net inflow). And worse yet, excluding international migration the loss ran even higher, at 2.3%. Most of the loss was from Los Angeles-Riverside, a "large metro area."

Economist Michael Boskin blamed defense cutbacks and government regulations. This turned attention away from Proposition 13 and its effects. Daniel J.B. Mitchell of UCLA, writing a forecast in the UCLA Quarterly, helped to shift the cause in people's minds by blaming a downturn in the "real estate industry," and predicting the creation of new jobs ahead.

California's counties lack funds to maintain existing stretched-out roads. Riverside County is responsible for 2,500 miles of roads. In the eight years to 1995 it repaved an average 19 miles per year. At that rate roads are repaved once every 130 years. It should be once every 20 years, according to industry standards, if roads are to be correctly maintained.

California's bond rating dropped to last among the states. Some cities and neighborhoods are especially devastated. In 1976, San Bernardino

was an "All-American City," one of ten receiving the award as a "city on the go." But two decades later, and after the sharp turn away from the property tax, 40 % of its 185,000 residents were on welfare, up from 18% in 1985. Orange County, known as the epicenter of wealth and conservatism, actually went bankrupt in 1995, and some other counties are close to it.

Still, median home value in 1995 in San Bernardino was $94,000. High as that is, it is the lowest in southern California. A shack rents for $550. Absentee ownership and tenancy are rising, because in the 1980s speculators moved in from Los Angeles and Orange County, thinking values had to rise. (So thinking, they ruined neighborhoods and caused values to fall.)

Downtown Los Angeles remains a basket case. It was boom and bust carried to the nth degree, as has been the case in Hawaii. Federal tax breaks encouraged speculative office building. Then, floor space rents dropped over 50% from their peak, and values dropped even more.

Walkaways and bankruptcies multiplied.

Large parts of the San Fernando Valley are failing to renew themselves following the Northridge Earthquake of January, 1994. California was quickly rebuilt after many previous earth quakes. This time it is different.

It is too easy to "explain" California's recent fall by the ending of the Cold War, the loss of defense jobs, and cutbacks in aerospace. Many professional "explainers" seize upon these factors. The events of recent decades must be compared with the similar, but much more severe, external events after World War II. Wartime immigrants did not languish unemployed, then, or return home. They remained to create or join in a fantastic burst of growth.

Things went otherwise before the scuttling of the property tax. By the end of 1945, Los Angeles lost three quarters of its aircraft workers, and 80 % of its shipbuilders. Motion pictures went into a decline. Los Angeles was left without much of its former "economic base" of export industries.

Yet, during 1945-there was an increase in jobs (Jacobs 1969: 151-54). Los Angeles grew by replacing imports. It became remarkably self-contained, as large metropoles do. New local companies prospered.

One eighth of all new businesses started in the United States during those four years were in Los Angeles. Firms which formerly sold materials to Los Angeles opened branch plants there: Detroit auto-makers, for instance, and Akron time-makers.

What was different about 1945-49? Why did Los Angeles thrive then, but not now? The difference in which to look for cause and effect is in the fact that in those earlier years California was taxing property heavily, and

land heaviest of all. Absentee land speculators, rushing in to free-ride on California's enterprise, were required to share in bearing its public costs. Holders of prime land were pressed to sell or use it to pay the taxes. Anecdotal evidence comes from executives of interstate firms, who commented on the greater pressure toward land performance in California.

The state's fall did not begin until 1978, with Proposition 13. It continues. When we compare California with other states that ranked high in property taxation in 1977 - Alaska, New Jersey, New York, Connecticut, Wyoming and New Hampshire - we see that they performed better.

3. New Hampshire: prospect for growth

NEW HAMPSHIRE can be seen as the stable element in this study of what happens as property tax use dwindles as a part of the state/local fiscal revenue mix.

It has stayed with the property tax, as other states have shifted steadily into an increasingly heavy dependence on sales, income or other taxes on labor and industry or cash flow.

As the northernmost of the 13 original colonies, and one of the smaller in both area and population from the start, it has had a relatively fixed position in economic terms, near the center of the cluster. It lost population for a few years in the middle of the 19th century, as the continent was being opened up, but for the most part has kept pace.

It was not until the start of the national disenchantment with the property tax that the state's place began to move up.

In 1967 it stood exactly in the center - in 25th place - on the best indicative measure: all state and local taxes *per capita*.

The only major change in tax policy, during the time in which the other states were shifting, came early in the seventies when one of three categories subject to the property tax - personal property - was, for the most part, removed from the base. The tax was eliminated on stock in trade, livestock, mills and machinery, and most other types of personal property.

A growing professionalism in the field of assessment has resulted in more realistic land values, so that land as a part of the remaining tax base has increased in three decades from just under 20% of the total to a high of 39.7% in 1990. That high level was due, in part, to some increase in speculative investment. It was prompted by a growing prosperity which started with the removal of personal property from the base, coupled with the fact that, despite the steady improvement in property tax administration, only part of the growing land rent was being collected. The result was a

short-term downturn, which has since been reversed, and land values started climbing again.

The employment "problem" in New Hampshire since the effects of eliminating taxation on personal property began to show up has not been a shortage of jobs, but a shortage of people to fill them. The unemployment rate had remained, during most of the past two decades, at least two points below that of the nation. And the availability of jobs, in turn, attracted people to the state, which encouraged growth.

Stability - as a basic characteristic of the state - is to be seen in the fact that a return to both full employment and steady population growth began to emerge in the numbers within two years of the speculative "bust" of 1990. The downturn was brief.

New Hampshire's place in this study, based primarily on the 1992 figures used in the Advisory Commission's SFFF for 1994, was eighth, measured by personal income *per capita*.

The state led all the rest of New England in income growth from 1993 to 1995 (Economic and Labor Market Information Bureau, NH Employment Security: Jan. 1997). But more revealing for purposes of this study, it had the tenth highest percentage gain for the country as a whole. (That agency's annual report, *Vital Signs* reports that in 1995 New Hampshire "leapfrogged over Maryland to have the sixth highest *per capita* disposable income in the nation.")

The most recent income rankings from the U.S. Commerce Department in its monthly "Survey of Current Business" (Vol. 76, No. 10, October, 1996) move New Hampshire up to seventh place for personal income *per capita*, but to fifth place for disposal income, a two-place difference which can be explained by the low total state/local tax burden *per capita*.

4. Why some high-income states are exceptions

FOUR of the Top Ten states listed in Table 8: 4 seem different than the other six in that they have low property tax to all tax ratios. They need to be examined if our hypothesis is to remain valid. The four are Maryland (.28), Hawaii (.16), Alaska (.28) and Nevada (.24).

Hawaii is the most glaring anomaly. There are at least four factors involved in that case:

First, the cost of living is very high, especially due to housing values and rents. Income data are not adjusted for this, even though Federal pay scales have long contained a cost-of-living allowance for location there.

Median values of owner-occupied homes in Hawaii, according to the

1990 census, were the highest in the nation, at $245,000 as compared with $79,000 for the country overall.

Second, the 1993 data is for the end-of-boom phase. Hawaii is marked by high instability, based on the inrush and outrush of outside speculators.

When Japan crashed, Hawaii crashed, too. It is very likely that its personal income *per capita* is now lower.

Hawaiian prosperity was just a shadow of Japanese prosperity. Now, Japanese lenders are foreclosing or taking properties back. Hawaii was hardest hit; it received a quarter of all Japanese investment in the United States in 1985-90, about $16 billion. Japanese speculators have lost one-third of that: their timing was terrible. Hawaii has a history of boom/bust cycles, based on first mainland, then Canadian investors, most recently Japanese (and some Korean, and probably Taiwanese). The Pacific rim problems which exploded late in 1997 are factors which should be looked at carefully when things settle down again.

Third, the balmy climate and long coastline of Hawaii attract wealthy retirees whose incomes, derived from property elsewhere, are credited to Hawaii in the 1992 numbers. This would even include many Japanese billionaires, whose penchant for buying Hawaiian shorefront homes is famous.

Fourth, Hawaii feeds heavily on United States naval base spending.

Turning to Alaska, it even more than Hawaii has high local cost of living. Coupled with the harsh interior climate and gloomy, rainy coastal climate, it results in premium salaries required to keep workers in the state. These reflect payment for hardship, rather than being true higher incomes in the welfare sense.

Maryland, like the District of Columbia and Hawaii, feeds off Federal spending. Being suburban to the District, it attracts the more highly paid federal workers, lobbyists and others unusual enough from the ordinary to affect the comparisons being made.

Nevada depends on gambling. It feeds off neighboring states where gambling is outlawed.

5. Verdict

OUR ANALYSIS of the statistical evidence supports this hypothesis: *There is a correlation between the relatively heavy use of property taxes, as a part of the state/local tax mix, and high* per capita *incomes.*

This invites one final question: How much larger would these differences be, and how much better the results, if one end of the fiscal spectrum were socially-created land rents alone, clearly distinguished from the other end - the labor and industry of individuals?

Appendix 1

An Inventory of Rent-yielding Resources

Mason Gaffney

MANY NATURAL resources of great value are not comprehended in the simple colloquial concept of land as platted or surveyed land surfaces. These natural resources yield rents that are part of the proposed land tax base.

Resource rents may be classified into three categories: the major, the minor, and the huge aggregate. (Overlap among classes is minimized but unavoidable in certain cases.) Bibliographical sources used in this appendix appear at the bottom of this inventory.

The Major Sources of Rent

1. Energy

a. Hydrocarbons

In 1959, Alfred E. Kahn (1959) put the fraction of rent in oil and gas firms at 32-38% of sales. Paul Davidson (1963, 1964) put it even higher. Of course this fraction varies from field to field, and firm to firm, and is hard to summarize in a single figure. Oil firms studiously conceal as much of it as they can, to avoid taxation. Still, this was before the OPEC price revolution and the oil price shocks, a time when you could fill your tank, have your glass cleaned, oil, water, battery and air pressure checked, use a clean restroom and get a free map, for $3.25 or so, indicating rent must be a higher fraction today. This and other material is summarized in Gaffney (1967: 409-15. *See also Gaffney 1977, 1981, 1982*).

We know that oil and gas rents support all or most of government spending in various oil-rich nations, as in the Persian Gulf and Caspian Sea areas. Dmitri Lvov (1994) estimates that Russian oil and gas revenues

alone could support the entire national government budget. In Norway, in several years the mere *change* in the value of petroleum reserves has exceeded the entire GDP of Norway (Aaheim and Nyborg 1995: 65).

Appreciation is a form of rent, on top of unit-of-production rent charges. Oil deposits normally appreciate many times over between when claims are first established and actual extraction begins, and more yet before it ends. A large fraction of industry "profit" is taken this way, but not usually declared for tax purposes. In 1980 the American Financial Accounting Standards Board (FASB) required oil firms (for the first and only time) to report the change in the value of their reserves. In that year the Getty Oil Co. reserves, for example, rose by 3.8 times as much as the profit they showed otherwise (Gaffney 1982, from Getty Annual Report). These gains now receive at worst preferential "capital gains" treatment, and at best become the basis for depletion allowances such that they are never taxed, but become a tax shelter. For this and other reasons, rent from oil and gas deposits has long enjoyed a high degree of immunity to present tax systems. Some of those nations that have found ways to tap this rent for public revenues are notoriously prosperous (although others have corruptly squandered their riches).

By 1980, in developing countries, host country shares of oil profits sometimes exceeded 80%. Conrad and Gillis (1985: 27) cite Colombia, Malaysia, and Indonesia. Oil taxes were 50%-66% of total revenues in Ecuador, Mexico, Trinidad and Tobago; and two-thirds of taxes in Indonesia, Nigeria, Venezuela, Gabon, and Congo.

b. Uranium.
With China turning to nuclear energy, we may expect rising demand for this scarce mineral.

c. Hydro.
Most American jurisdictions prodigally give away this cleanest, cheapest source of power to private firms. Canada sets a better example of how provinces and the nation can tap these rents for the public.

2. Minerals

Hardrock, sulfur, sand, clay and gravel, misc. After 1965, hardrock minerals produced 10%-20% of total public revenues in Chile, Thailand and Malaysia; and over 25% in Bolivia, Gabon, Jamaica, Liberia, New Caledonia, Papua New Guinea, Zaire, and Zambia (Conrad and Gillis 1985). These are mostly

naive people dealing with highly sophisticated and even ruthless foreign firms, so it is reasonable to infer that the true rents are higher than the figures given.

3. Fresh water and adjunct resources

In arid lands, like the western half of the U.S.A., dry land surface *per se* has only low value. The scarce, limiting resource is water. Yet, claims to water resources are not on the tax rolls and are not counted when we add up all tax valuations. Water is not held by title deeds, but by a complex system of licenses, customs and legal precedents. Thus there is a great deal of rent and value here above and beyond that counted in other ways (Gaffney 1992, 1997). Some of the valuable items are listed below.

a. Licenses to withdraw (for farming, domestic, industrial, recreational, lacustrine uses);
b. Aquifers and recharge beds;
c. Dam and reservoir sites;
d. Power drops (cross-ref. 1,c);
e. Fish (fin and shell), fishing banks, waterfowl, other wildlife (high value of quotas);
f. Scenic use (from bays to tarns to waterfalls);
g. Right-of-way, navigation servitude and priority and exemption from liability;
h. Riparian values (also apply to salt water): beaches, foreshores, water lots, frontage on water, access to water, views, fresh air;
i. Eminent domain for access to divert and "wheel" water;
j. Watersheds (water blotters, for storage and regulation of flow);
k. (Formerly) source of ice;
l. Recreation use (flatwater, whitewater);
m. salinity repulsion;
n. Waste disposal.

Waters almost all belong to the Crown, the states, or the federal government (depending on the jurisdiction), in trust for the people. Levying proper public charges on some or all of the above resources would fulfill that trust in the most efficient, equitable way.

4. Timberlands

The area is vast - one-third, in the case of the U.S.A. Unit values are low, but even low values add up to a lot over such an area. The annual value (rent) for growing wood is a fraction of the harvest value. The fraction varies with the time period and the discount rate, but if the time period is

20 years, and the real discount rate (inflation-adjusted) is 5%, the annual value (rent) is 3.0% of the net harvest value (applying a standard financial formula, "the sinking fund factor"). As a very rough cut, *if* the harvest value were $20,000 per acre, every 20 years, the rent would come to $600 per acre per year. One-third of the U.S.A. comprises 771 million acres. At $600 per acre per year, that would come to $462 billions annually. This is probably too high an estimate, since many lands classified as "forest" are less productive than the example; but it is a hundred or more times higher than taxes actually levied, for timberland enjoys virtual tax-exemption, even compared with other properties that are lightly taxed (like all California real estate after 1978). In Mendocino County, California, taxes on timberland are at about 1/36 of its annualized rent value from timber culture alone (Gaffney 1995).

Land uses declared by law to be "compatible" with timber go completely unrecognized in the legislated low valuations for property tax. These include grazing, resorts, vacation (but not retirement) homes, campsites, fishing, hunting, watershed protection, tourism, rifle ranges, rights-of-way, mining, log storage, landings, roads, logging camps, etc. There is also marijuana, possibly California's most valuable crop, but unrecorded: officially it does not exist.

Some timberland also has high ripening values for "incompatible uses" like urban subdivisions that require formal changes of zoning. These growing values go completely untaxed until conversion actually occurs - by which time the accrual of value, which is part of rent, will have gone completely untaxed.

Mature trees contain a lot of stored-up rent, most of which was never taxed. It is not too late to tap this store, with interest, by using yield taxes that the industry itself has lobbied through to displace the property tax on standing timber. In general, yield taxes are not an efficient way to tap timberland rents, but there is a place for them during a transition period towards a tax-free economy, and they are popular with preservationists because they tend to slow cutting cycles. Currently legislated levels of yield tax rates are much too low to compensate for the revenues previously lost, but raising the rate is a simple matter. Revenue-neutral rates may be calculated by formula, coupled with some judgment calls (Gaffney 1997).

5. Radio spectrum

Almost everyone now recognizes that radio spectrum is a natural resource, of enormous value, and part of the public domain. The uses of spectrum are many and growing: radio, TV, cellular phones, telephones, satellite linkages, fax, email, internet, and who knows what future forms of

transmission. Nationwide, there are 16m radio dispatch units (RDUs) in use; and 14m cellular phones. In Los Angeles alone, there are 550,000 RDUs.

Assignments of licenses to use spectrum are territorial, like most natural resources. Values differ widely with the territory covered, like all rents. The next big thing may be Personal Communications Services (PCS), low-power cellular, mobile phones for the masses. Construction costs are half those of cellular. Licenses are expected to go for $100-$150 per potential customer. With 250 million potential customers in the U.S.A., that comes to $15.6 billions for PCS uses alone.

Past assignments have been based on a giveaway policy. The Federal Communications Commission, charged with meting out these rights, in 1993 began pricing new assignments by auction, which helps raise the value of old ones. As economists would predict, the result has included much "rent-seeking" effort, with resulting premature acquisitions of spectrum. Licenses are now going for about double the maximum value at which a firm could break even in the first years. The rest is "rent-seeking": wasting capital today to secure rents for tomorrow.

Public service obligations, anti-merger restrictions, and regulatory control, never adequate, are now being relaxed and sloughed off, raising spectrum values. On February 18, 1993, President Clinton created a small stir when he estimated that the airwaves would sell for $4.1 bn. In the event, the 1993 auction fetched $9 billions, but it was like selling off the badlands after giving away the beachfront properties. The truth is much more stirring. AT&T paid $12.6 billions for McCaw Cellular, a smallish regional firm, whose assets consisted of spectrum licenses (*Los Angeles Times*, Aug.17, 1993, p.1). In 1995, Disney Co. paid $19 billions for Capital Cities/ABC Inc., comprising 30 TV stations and the ABC network. On this deal Warren Buffett, the second richest American, made over $2 billions, an unearned increment, a form of resource rent that we include in the proposed tax base. These were, of course, only a tiny fraction of all the outstanding licenses. Like other untaxed natural resources, spectrum is being concentrated in a few strong hands. At the auction of March, 1995, a few deep-pocket firms dominated the bidding: these were AT&T, the Baby Bells, and The Wireless Co. (Sprint, Tele-comm Inc., Cox Cable, & Comsat). Westinghouse and CBS together own 15 TV and 39 radio stations that reach one-third of the U.S. population.

These values are based mostly on economic rents, almost as though the assets traded were bare carparks. At Westinghouse, profit margins are 45% of revenues; at ABC the rent fraction is higher; at CBS, somewhat

lower (*Los Angeles Times*, 2 August 1995, p.1). Rents show up as above-average rates of return on capital. In cellular phones, rates of return have ranged from 40-100% per year (Morgan Stanley Inc., 1994). During the long giveaway period before 1993, many applied for licenses "and then sat on them until they could resell them for a large profit." From 1985-94, 85% of cellular licenses turned over. In such sales, the license "accounts for approximately 60% of the sale price..." (Cohen 1995).

In addition to basic spectrum, high values attach to ancillary sites like hilltops for transmission relay stations. Even orbits like the geosynchronous orbital band and LEO (Low Elevation Orbits) are assuming a value. Many of these hilltops are on public lands, and are generally given away in what are essentially "sweetheart deals."

Teledesic (Bill Gates and Craig McCaw) next plans to link the whole globe with phone, video, and data services, using 840 satellites. Each one, of course, requires spectrum assignments from the public domain of various nations. These are Low Earth Orbit (LEO) satellites, at 435 mi. up, the cheapest kind, with the shortest life. Gravity pulls each one out of orbit every eight years or so - but the spectrum assignment remains, and spectrum lasts forever, rising in value (*Los Angeles Times*, 22 March, 1994, p.D1).

A few other major firms are aggressively expanding worldwide, seizing spectrum and orbital positions as they go, vying for the needed political influence. One of their vehicles is the ITU (International Telecommunications Union, a U.N. body with 182 members), dominated by U.S. money and national power, by which the firms exploit national power for private gain. Vice- President Al Gore, U.S. Government point man on this matter, is pushing hard, using U.S. power. "Gore said the U.S. will throw its weight behind the global network project" (speech in Buenos Aires to the ITU (*Los Angeles Times*, 22 March, 1994, p.D1).

Is it feasible for the public to collect spectrum rents? It is a simple matter of adapting classical economic theory to modern technology. Techniques and venues change; principles perdure. Professor Harvey Levin worked out feasible methods 25 years ago (Levin 1971). It only remains to apply them.

6. Rights of way, easements, etc.

Rights-of-way (ROW) occupy enormous areas. In cities, especially, streets occupy from one quarter to one half of the entire improved area. Right-of-ways have strategic monopoly bargaining power limited only by what the traffic will bear or what regulation permits. When privately owned they

owe their very existence to the state, which not only granted the original land surface, but in almost every case loaned its power of eminent domain to cobble the ROW together. The power to extract rents from taxing and rating ROWs is almost limitless (Gaffney 1988). It is limited prudentially by the case for economical (marginal cost) pricing to maximize use, but this can be provided via various forms of price discrimination (declining block rates) that are compatible with extracting rent from customers on high-rent lands.

Some basic ROWs are streets, rails, highways, canals, navigation servitude with priority and subsidy and freedom from liability, air corridors with overflight privileges, ROW for power lines, phone lines, cable lines, gas lines, water lines, storm sewers, sanitary sewers, flood-control channels, drainage lines, etc.

When ROWs are congested, direct use has high marginal social cost, and could and should be used to raise revenues. Peak load tolls on ferries, bridges, and controlled highways are obvious cases. Parking fees for downtown streets are another: think what revenues New York could raise from the street parking it now gives away on land worth up to $2,000 per square foot, or about $600,000 per parking space. Moving vehicles also take up scarce space: electronic means of measuring vehicle space usage are now technologically and economically feasible and in actual use in several stretches of congested space, like California #91 in Orange County. Taxi medallions in Manhattan now trade for over $200,000 apiece, values that could easily be socialized. Oversized, space-hogging vehicles can and should pay more.

Utility ROWs are the essence of the franchise's monopoly power. Through the common devices of price discrimination they can be and are used to extract rents from consumers, limited only by regulation. A public agency might easily use such discrimination to tap rents from customers with high land values (Gaffney 1988).

ROW monopolists are often required to provide "common carrier" service to all applicants. In practice, some of them comply with the letter, but not the spirit of the law by giving outsiders and interlopers low priorities of usage, reserving the prime times for themselves. This results in monopoly profits, a form of rent, that should be taxed away, if it cannot be prevented altogether.

The common tax practice is to value utility lands on the same basis as ordinary private lands adjacent thereto - lands lacking the eminent domain premium. This results in ignoring the eminent domain premium in ROWs - in effect, valuing it at zero. A proper tax on rents would assess its monopoly value and tax it accordingly.

Many ROWs were granted, and accepted, subject to heavy public obligations, like the rails duty to carry the mails free, and carry troops in wartime, and maintain passenger service. Private beneficiaries have become expert at sloughing off these public obligations, and brainwashing the public into accepting it as being in their interest. Deregulation; privatization

Backup lands with special access and/or integration: parking, railyards, power-plant sites, tank farms, fuel stations, moorings, truckyards, rest stops, sales yards for autos, trucks, driveways, laterals, container lots, aircraft parking, billboard sites, etc.

7. Aircraft time-slots, landing rights, gates, airlanes, etc.

a. Busy airports: congestion-relieving landing fees are rent charges.
b. Redundant airports: high unit cost from underuse. Here, user cost equals zero, so users as such should not be charged, leaving benefited landowners to pay it all. Desired economic result: abort such airports, release vast lands for higher uses.

8. Pollution easements, *de facto* and *de jure.*

These include contingent easement (Price-Anderson Act), and subsidized waste-disposal. The alternative is "polluter pays," a "green tax," which is a rent charge (principle of "Tax bads, not goods.")

9. Farm soils

10. Recreation lands

11. Privileged use of congested commons (user charges on commons are rent taxes.)

a. City streets: taxi permits; curb parking; access to congested times and areas; preferential traffic controls; vending licenses, *de jure* and *de facto*, mobile and stationary; licenses for oversized vehicles; surface mass transit; emergency vehicles; cortege right-of-ways; right-of-ways for utilities, with rights to stop traffic for digging, etc.
b. Highways: peakload use; exclusive rights to serve, e.g. trucking, busing; accident investigation and clearance;
c. Parks, beaches
d. Air
e. Common waters
f. Open range (grazing, hunting)
g. Pre-leasing exploration

12. Territorial franchises

a. Publicly granted: bank charters; concessions at parks; utility franchises; liquor licenses; gambling licenses; etc.
b. Privately granted: dealerships; leases that bar competition; etc.

13. Salt water

The Minor sources

1. Privileged access

2. Wildlife habitat zones

3. Misc. energy sources: geothermal, wind, solar sites, firewood, adiabatic sites, tides, currents

4. Zoning

a. Unaccounted-for zoning losses
b. Exclusive use zones, e.g. foreign trade; tax-preferred zones, e.g. urban redevelopment zones (clear case of All Taxes Come Out of Rent); dumpsites; commercial zoning; locally undesirable land use (nuisance) zones;
c. Variances with grandfather protection

5. The gene pool: seed patents; natural herbs, medications; breeding stock

6. Quotas, allotments to produce or import or sell.
Generally, such quotas should simply be stricken, transferring their rents to other lands; but, if not, they are taxable property.

7. Some patents which are indirect means of dominion over natural resources. Shale oil extraction techniques; coal liquefaction; sulfur extraction; etc.

8. Licenses to produce or dispense goods or services that are generally prohibited: nuclear materials; medicinal drugs; pharmacies; alcohol; undertaking & burial; barbering; gambling, liquor, prostitution.

9. Monopoly, with or without government support.
Monopoly or market power may be recognized wherever price discrimination is practiced, or might be.

10. Aspects of advertising
Intruding without leave on public's limited attention span, downgrading associated experiences. Billboards, commercials on media, phone solicitations, junk mail, roadside lights, newspaper ads, skywriting, sound trucks, etc.

11. Easements for views, air rights, etc.
Also the converse: permission to build or maintain eyesores, like the transmission tower on Twin Peaks, San Francisco; overhead wires;

12. Moorings
Riparian and foreshore land has high premium value from water access, but in addition, space on the water itself has another value.

Falsified land values

ECONOMISTS and government statisticians trivialize values and rents of ordinary or "standard" land. To recap the high points, here are some of the devices of false measurement that make land and rent vanish.

1. Narrow meaning of "land" to farmland.
2. Making land and rent the "residual" when allocating value between land and extant buildings. This has its *reductio ad absurdum* when buildings are demolished, indicating a net value of zero, and the tax valuer is still valuing the building higher than the site.
3. Understating building depreciation; ignoring building obsolescence.
4. Granting low assessments based on current use; or current restrictive zoning that market prices ignore; or historical cost; or capitalized cash income.
5. Valuing "acreage" as though it were farmland, regardless of location. *Reductio ad absurdum* comes to light when condemnation values are found to be many times assessed values.
6. Subsidizing some activities by exempting their land from taxation, even though salaries earned thereon are taxed; and neglecting to value the land at market.
7. Omitting the option value of favorable zoning until it is exercised. Likewise, omitting other option values like potential mineral leasing.
8. Omitting the value of grandfather privileges of old buildings.

9. Omitting the value of land and resources outside state and local tax jurisdictions (e.g. the Outer Continental Shelf).
10. "Cashflow bias": overlooking noncash and other less obvious and less easily measurable non-standard values of land. Overlooking or understating imputed income and unrealized gains.
11. Treating corporate values as "intangibles," ignoring the land assets of corporations, thus treating corporate income as though it contained no land income. Ditto for other profits.
12. Valuing ROWs only in lower uses; putting no value on result of using eminent domain.
13. Ignoring the ruse of shifting income to foreign-flag vessels, thus concealing the rents taken by businesses that are vertically integrated.
14. Overlooking the rents taken by extraterritorial assets that enjoy national flag protection, for which payment should be due.
15. Maladministration of public lands, concealing their latent rents.
16. Overlooking the value of *de facto* tenures without formal fee simple titles, e.g. licenses to divert water.
17. Overlooking unrealized gains in value, a form of rent.
18. Overlooking latent strata values ("air rights").
19. Overlooking the value of reservations held back by sellers and lessors.
20. Omitting latent plottage values of wrongly sized or shaped parcels.
21. Omitting the value of favorable leaseholds.
22. Omitting the value of privileged exemption from public liability, e.g. nuclear power sites, old plants with grandfather licenses to pollute, shipping licenses, etc.
23. Omitting the premium value of lands held by firms with superior market power. Adjusting the values of "ordinary" lands (land surfaces that are surveyed and platted) for the above factors results in rent values much higher than anything conventionally measured or reported today. Yet, when we propose taxing rents, those elements of value are all part of the tax base.

It seems reasonable to conclude that aggregate resource rents, in a tax-free economy, would be adequate to replace all present taxes. That conclusion is subject to a comprehensive definition of rent, as explained above.

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