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# The Ultimate Tax Reform: Public Revenue from Land Rent

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## Introduction

Most Americans believe the federal tax system is too complex, too intrusive, and takes too much money from a worker's paycheck.<sup>1</sup> Some tax reformers propose a simpler income tax or replacing the income tax with a national sales tax, but these alternatives would still hurt workers and businesses.

There is a better option that not only lets people keep *all* their earnings from labor and enterprise, but also does away with audits and record keeping. That option is to tax land rent rather than wages and earnings from capital. This *Heartland Policy Study* sets out to show why, if taxes there must be, then taxes on land rent are the most efficient and least burdensome of all.

Taxes in the U.S. fall mainly on income.<sup>2</sup> Besides federal and state income taxes, payroll taxes, such as for social security, are deducted from wage income. Most states have sales taxes, and the federal government has excise taxes on the sales of some items such as gasoline and airline tickets. Since most of consumption is done by those earning income from wages, the burden of sales taxes also fall mainly on wage income.

In contrast to labor, land is lightly taxed. This is often overlooked because property taxes fall on improvements as well as land, obscuring the fact that the portion falling on land takes only a small part of the rent. One reason is assessments that do not reflect current, higher land values. Another reason is the depreciation of housing, which is done afresh with each new owner, a legal fiction that in effect depreciates the land as well. A third reason is the postponement and avoidance of taxes on real estate by buying new properties. A fourth reason is capital gains taxes that can be lower than taxes on current wage and interest income. Finally, as in California, the law can limit the increase in property taxes when the real estate is not transferred.

The present tax system is just the opposite of the way an ideal tax policy would operate. Instead of taxing income (or sales, which is almost the same thing), we ought to be only taxing land rent.

If you have to pay property taxes on a home or business, you may be shaking your head at this point. You don't want to read about a proposal that would make your taxes even more

onerous, and who could blame you? But please keep reading, because the proposal made below would most likely reduce your tax bill, since it *totally eliminates taxes on your earnings and spending*.

In other words, this is not a “tax swap” scheme that lowers some taxes while raising other taxes by an even greater amount. This is a fundamentally different way of assessing taxes that would lift taxes off the fruits of your labor (everyone’s labor) by taxing something that is available in abundance, but which is not earned, and which currently bestows unearned windfalls of wealth on a lucky few. That “something” is land rent.

It is sometimes said that there are no new ideas, only old ideas rediscovered. The tax reform proposed below is not new: America’s founding fathers endorsed it, and it is already in place and working in many countries around the world. The idea probably obtained its greatest popularity in the U.S. around the turn of the century, when economist Henry George made it a key element of a broad-based movement for social justice. It has many proponents today, but their voices have not been heard in the popular debate over tax reform. With this report, the author hopes to contribute to a larger effort to change that situation.

Part One of this report sketches the outline of an ideal tax policy: one that does not violate a citizen’s right to the fruits of his labor or his privacy, that does not distort incentives to work and save, and that generates just enough revenue — and no more — to pay for the services government provides.

Part Two explains why income taxation fails to meet the requirements of an ideal tax policy, and Part Three similarly demonstrates how sales (or consumption) taxes fall short. Part Four describes how a land tax meets the requirements of an ideal tax system. Part Five explains how a land tax could be implemented.

Part Six contains a long list of people who have endorsed land taxes. Many of the names will be very familiar to you, such as Adam Smith, Thomas Jefferson, and Winston Churchill. If you are familiar with economics, you will recognize the name of such Nobel Laureates as William Vickery.

Part Seven explains how shifting to a land tax system would have the natural effect of rejuvenating our nation’s federalist system by restoring authority and independence to state and local governments. Part Eight contains a brief conclusion.

## **1. Is There an Ideal Tax Policy?**

What qualities make for the best, or least-worst, tax system? Adam Smith and Henry George both put forth “cannons of taxation” by which to compare tax systems. Smith’s criteria in the *Wealth of Nations*<sup>3</sup> were equality, certainty (clear manner and quantity), convenience, and

economy in collection. George's criteria in *Progress and Poverty*<sup>4</sup> were minimal excess burden, economy in collection, certainty (least opportunity for corruption and evasion), and equality.

The optimal tax policy is a tax that does not burden the economy. The ideal tax would only be a tax in form, in the manner of making payments to government. In substance, in its moral character, the optimal tax would not be a "tax" in the sense of imposing an arbitrary cost on the payers, but would be a payment for services received or for the use of others' property.

## 2. Problems with Taxing Income

The problems caused by income taxes include: 1) the excess burden on the economy; 2) the disincentive for investment and growth; 3) the invasion of privacy and abusive enforcement. There is also the fundamental moral dimension of taxing wages and the products of labor: if wages are legitimately earned, what is the moral basis for taking some of the wage away by force, even if it is spent for the public good? This question becomes more acute if there are alternative sources of revenue available which do not forcibly extract the income earned by the worker.

Income taxes burden the economy in two ways. First is the direct cost of compliance: filling out forms, paying lawyers and accountants, and trying to comprehend the complex requirements. The compliance cost of lost time in the U.S. is 5 billion hours per year, the equivalent of two million people working full time just to process the tax. In terms of dollars, the compliance cost is estimated to be over \$200 billion per year.<sup>5</sup>

The second type of burden is the tax wedge, the difference between the cost of labor and capital to enterprise and the net wages and returns on capital. The tax wedge makes labor more expensive to the employer, but also leaves the worker with a lower take-home pay. This creates a disincentive to work and to hire workers. The tax wedge on capital reduces the gains from investment and leads to less investment. This reduces growth and therefore leaves us with less income and wealth in the future.

Income taxes also create the injustice of taxing equal income unequally. There is the well-known "marriage penalty" where a married couple can pay a higher tax than two single persons with the same total income. The different tax brackets also lead people to set up complex tax shelters to reduce taxation, which diverts resources from goods that people actually want.

Dividend income suffers from double taxation, since a corporation pays an income tax and then when it pays a dividend, the shareholder pays a tax again on that income. The income tax also goes beyond the income to tax the capital. For example, if you are getting five percent interest and inflation is three percent, the real gain from \$5 in interest is \$2 in purchasing power. But the income tax is on the \$5, which also taxes the inflation part. This therefore really taxes your capital as well as the interest. Income taxes thus penalize savings, reducing savings and therefore reducing investment.

A purely flat income tax, with the same tax rate on all income, and without double taxation, would be an improvement, but even a flat income tax imposes a tax wedge and a burden on the economy. Even worse, some "flat tax" proposals are not totally flat, but impose a tax on wage income while eliminating taxes on income from property, such as rent and interest. This unfairly shifts the burden even more on labor. The ideal tax reform is the opposite: take the burden off of labor and entrepreneurship entirely and onto rent, which can be taxed without hurting production or investment.

### **3. Problems with Taxing Sales**

Some are proposing eliminating the income tax and shifting to the taxation of sales or consumption instead. This shows that we do not learn from history.

In the 1800s, state and federal taxes were mainly on sales and consumption, including high tariffs. Many excise taxes were collected with revenue stamps that were attached to goods. In the latter 1800s, consumption taxes were regarded as unfair, since the rich spent a lower portion of their income on taxable goods and more on services which were not taxed. That is why the income tax was advocated by "progressive" reformers, so that the rich would pay a "fair" share of taxation. Now that we see the burdens and injustice of income taxes, some want to go back to the sales taxes Americans rejected in the 1800s.

While income taxes punish savings, sales taxes punish borrowing. For example, if you borrow \$10,000 to buy a car and there is a 20 percent sales tax, you need to borrow an extra \$2000 to pay the tax and then you have to pay interest on the extra \$2000. Some sales-tax advocates want to reduce consumption to encourage savings, but if we reduce consumption, we also reduce production, so this is a futile policy. If we punish borrowing, we reduce investment and growth. It's best to leave both savings and borrowings to the market rather than try to manipulate them.

What economists call the "incidence" or the ultimate burden of sales taxes fall on the sources of the income that pay the taxes, which is mostly wages. So sales taxes pose the same moral question as general income taxes: is it right to take the fruit of a worker's labor when there are alternatives which do not?

### **4. The Alternative: "Lower Taxes to the Ground"**

The taxation of productive human action, either through income taxes or sales taxes, has a social cost in placing a burden on the economy as well as on the persons taxed. But what about a tax on things not produced by human action?

There are things that have been provided by nature and not by human action, namely land,

defined as all natural resources. Taxing land does not impose the kind of burden on the general population and commerce that results from attempts to tax the results of human action. Taxing land rather than human activities could even be beneficial to society if it serves to discourage activities that are harmful.

Taxing land would be fair, since such a tax would act as a fee for benefits received by the landowner. Payments for the use of land are user and beneficiary fees because the land holder uses or benefits from the locational services such as streets and security.<sup>6</sup> People pay land rent to have these benefits by being located near them, so a tax or assessment on the land rent is the best (or least-worst) way to price and pay for site-specific public services.

With respect to equality, the land tax uniquely helps to equalize income without reducing incentives, by giving everyone equal access to the benefits created by nature and communities. The tax on land rent preserves the equal right to natural opportunities while safeguarding the equal right of each person to his labor and to what his labor produces. With respect to certainty, taxing land rent could help smooth out the business cycle<sup>7</sup> and, would make tax evasion much less of a problem, since land is visible.

Regarding convenience, a land tax has no fearful audits and no invasion of privacy. (Remember, we are talking about taxing the *land portion of real estate*, not the buildings or other improvements that are the result of human action.) Land taxes have more economy in collection than income and sales taxes, both for government and for the public, since the government just sends landowners a bill, without requiring costly record keeping. Taxes on land rent are fully borne by the owner at the time of the tax shift, and have no excess burden on the economy.

A tax on land rent, therefore, appears to fulfill the canons of both Adam Smith and Henry George, unlike taxes on income or sales. The ideal reform, then, would be a shift from taxes on income, sales, and buildings to payments based on land value or land rent. Before seeing how that would work, let's define some of the terms we've been using.

## **A. What are Land and Rent?**

The economic meaning of "land" includes all natural resources. Among the various types of land are the three-dimensional space on the surface of the earth (including space in and on water); material land such as minerals, water, and oil; the electro-magnetic spectrum; wildlife (including wild animals and forests); the genetic codes of living beings; and satellite orbits. The most important of these for taxation is space.

Spatial land cannot be created. Filling in water just transforms the material contents of space from liquid to solid. The amount of space surrounding the earth is therefore fixed, as is the amount of space within any jurisdiction, such as a city.

In economics, the term "land rent" has a specific meaning. A "rental" is what a tenant pays a landlord for the use of real estate or other property. The "economic rent" of land is the highest amount that would be bid just for the land, not including that part of the rental that compensates a landlord or his agent for the labor and capital used to service the site. Owner-occupied land also has an economic rent of what the site would fetch if it were rented out - the owner in effect pays it to himself. The taxation of land rent would tax a percentage of only the economic land rent and not the rest of the rental. The buildings and other improvements would not be taxed.

The economics of land and its rent has several features. As noted above, the amount of space is fixed within any jurisdiction: within a city or county limits, the three-dimensional space cannot be expanded or moved. Factories cannot manufacture space, nor can space be imported. This prevents the supply from becoming reduced when rent is taxed.

The fixity of land results in capitalization: the local infrastructure, public works, and services such as streets, parks, security, and public transit increase the demand for sites and therefore increase their rent and land value. Such services become capitalized into land value. Therefore, when rent pays for these services, government just takes back the value it created in the first place. Indeed, capitalization provides a market measure of the benefit from government-provided public works and services: if the increase in rent is less than the cost of the infrastructure or service, this indicates that the works are not economical.

## **B. Why Taxing Land Rent is Superior**

Taxing rent does not impose an economic burden, it does not invade privacy, it does not require complex record keeping, it does not create an illegal underground market, and as a bonus, there are no audits. On the moral dimension, if human equality makes it improper for some to take away the labor done by others, and if human equality endows us with equal rights to natural opportunities, then a tax on the rent created by nature and community activity is preferred to taxing labor and capital.<sup>8</sup>

Since the amount of space in any jurisdiction is fixed and immobile and has no cost of production, when rent is taxed, there is no reduction in the supply of land, and no increase in its cost. In contrast, when produced goods are taxed, there is a cost of production in having to pay for labor, materials, and other inputs, and so the tax adds to the price of the good, and then the higher price reduces the amount purchased and produced. When a fixed resource is taxed, the tax cannot be passed to the tenant or user. The zero cost of production means that because of competition among landlords, the rent will not be increased, and the tax on rent is fully absorbed by those who are owners when the tax is increased.

Since the burden on the tax on rent falls only on those who own land at the time when the tax is enacted, the tax reduces the price of land by the proportion of the rent taxed, so that if half

the rent is taxed, the price of land falls to half the untaxed price. Any new buyer has no burden at all, since with the lower land price, his return on the purchase price is the same as for any other asset, relative to risk. So as an ongoing policy, after the transition, there is neither a social nor an individual burden to a tax on land rent.

Financial capital, such as money, is mobile and will flee the places where it is highly taxed. Labor is also mobile, over time, as new workers seek the better paid opportunities. Capital goods are also mobile, new investments seeking out the highest returns. But space is fixed in its place. It cannot be manufactured or imported. So the owner bears the burden of the tax on rent.

Spatial land is inherently public in being visible. The owner cannot hide it or evade a tax on its rent. So there is no invasion of privacy in taxing the land rent, unlike taxes on income, sales, improvements, and value added. The government just assesses the value and sends the title holder a bill, like a utility bill. So there are no complex records to keep, and the landowner does not have to hire tax accountants and lawyers. There are no tax shelters, since all land is taxed at the same rate. And there are no intrusive and abusive tax audits. If one disagrees with the tax assessment, one may appeal it, similar to appealing real-estate taxes today.

The "single tax" on land rent is "single" in two ways. First, the single tax accomplishes what Henry George proposed: "To abolish all taxation save that upon land values."<sup>9</sup> The single tax replaces the multitude of current taxes, including many hidden and indirect taxes, with one visible, single tax. That way people know how exactly much government is costing them.

The tax is also "single" in another way. Public works on streets, parks, schools, security, and other services increase land values. If the taxes fall on wages and profits, they shift income from workers and enterprises to landowners. Folks then pay twice for the public services: once through taxes, and again in paying for land or rent. When the tax is also the rent, folks only pay once for the services. A tax on rent is therefore a single tax both in being one type of tax and in having to pay for service only once.

Shifting to land taxes would help solve the economic crises that many countries have fallen into. Since land does not run away when its rent is taxed or assessed, taxing land would solve the problem Russia is having as it imposes high taxes that are evaded and result in capital flight. Taxing land and untaxing labor and capital would keep the Russian capital at home and enable its underground economy to surface. A switch to taxing land rent and untaxing productive activity would also jump-start the depressed East-Asian economies.

Taxing land rent would also help resolve the ethnic conflicts in Northern Ireland, Israel and Palestine, Kashmir, and Bosnia. Behind the veil of ethnic conflict is a struggle to possess land. When the land is possessed at a price, having to pay rent for it, then the political and military conflict can be transformed into a market for land, those wanting it most paying the rent and thereby compensating the others for the use of the land.

The public collection of the land rent induces a productive use of land, which raises wages, minimizes excessive urban sprawl<sup>10</sup>, reduces urban blight by encouraging construction and upkeep, and has landowners pay back the rents generated by government infrastructure.

Those favoring and advocating the public and community collection of land rent, suggesting such far-reaching consequences, have been accused of exaggerating its beneficial effects, but much of the economic benefit actually comes from "lowering taxes to the ground," to ground rent. Freedom from punitive taxation may not be a panacea, but the infliction of arbitrary costs on enterprise and the skewing of market signals such as prices and profits is indeed a universal cause of economic woes, so it is not an exaggeration to propose that this removal would have many beneficial results, just as one's health improves considerably if one stops taking poison.

### **C. How Much Revenue Would Land Rent Yield?**

The total land rent is not being reported in national income statistics, and the official figures for rental income that are published only take into account certain types of rent obtained by certain owners, and even then, the figures are usually so under-reported that they are essentially meaningless.<sup>11</sup>

The national rent in the UK has been estimated at 22 percent of national income, which exceeds the income tax<sup>12</sup>. Steven Cord<sup>13</sup> estimated the annual economic rent of land in the U.S. in 1986 at \$680 billion, 20 percent of national income, while Michael Hudson<sup>14</sup> calculates it at 25 percent. Making up about one fifth of national income, rent would provide about 60 percent of current US federal, state, and local government revenue. The other 40 percent of current revenue could be obtained by user fees and pollution charges.

Since the cost of enforcing income and sales taxes would be eliminated, while the cost of land-rent taxes would not be much higher than that of existing property taxes, there would be a substantial reduction in the cost of government. Decentralization, privatization, and the elimination of wasteful government programs would further reduce the amount needed to fund government.

These estimates are only the static figures of rent, the amount of rent at the time of the tax shift. The amount of rent in the economy would increase over time for two reasons. First, a shift from taxing production to taxing rent would eliminate the lost output due to taxes, which is about \$1.5 trillion per year.<sup>15</sup> One fifth of that would be rent, thus increasing rent by \$300 billion.

Secondly, the economy would grow faster, which would also increase rent over time. Public revenue from land rent is the most complete application of "supply-side" economic policy. Supply-side policy attempts to increase production and the supply of goods by decreasing costs, such as by lowering taxes and eliminating excessive regulations and barriers to trade. A complete

shift in taxation away from taxing production to taxing rent is the ultimate supply-side policy, since it removes the excess economic burden of taxation. The public collection of land rent is thus the ultimate in tax reform, the best we can do.

Greater incomes would reduce the demand for government welfare programs, reducing the cost of government. So rent, along with user fees and pollution charges, would be quite adequate to fund even today's big government.

#### **D. Scope of the Tax**

As noted above, land takes many forms, and a land tax would tax the rents in various different ways. The most important type of land is geographic space, the three-dimensional area around the earth, including the space over water. Space, aside from the matter within the space, is a natural resource that does not get used up or altered with use. The market value of space is largely locational, and in areas with active real-estate markets, ground rents can be assessed from actual sales and rentals. The most valuable spatial land is in urban commercial centers, especially the downtown financial centers. Material land, including minerals, oil, and water, also has a rent when the market prices are above normal costs of production.

The electro-magnetic spectrum now has a market value of many billions of dollars, value that has mostly been given away to the broadcast industry. Rather than restrict and regulate broadcasting while letting the industry keep the rents, government could tax the rent and liberate broadcasting from censorship and restrictions.

Airline routes are a special type of space that also has rents. Taxing the rent would provide revenue for air traffic control and airport services more efficiently than taxing airline tickets, making the payment a fixed annual cost rather than one that varies with passenger prices.

Satellite orbits are also a natural resource, and as ever more satellites fill the limited number of orbits (especially orbits which are geosynchronous, stationary above locations on earth), they have a rent as well.

Wildlife, including forests and animal life, is a special type of land that requires special treatment. With some wildlife, such as forests and animals, private ownership can help to preserve it. Besides being held by conservation organizations, some forests can be harvested on a sustainable commercial basis. Primal native people should have title to their traditional lands, which they can often preserve very well. Such lands can obtain revenue from tourism as well as from products.

Other forest, such as very slow-growing trees, are uneconomical to harvest without destroying them, but provide beneficial ecological services. When these areas are nature preserves, the owners, including governments, would also pay the market rents of these lands, but

government could then pay back the rents to the agencies owning the lands. This preserves the principle that all owners of land, including governments, pay rent, and the expenditure of rent for preservation then puts the preservation into the explicit budget so we can tell how much is being spent for conservation.

The genetic stock of all the living beings on earth is a natural resource, and its destruction imposes a cost on society. Therefore, those who destroy species, either directly or by destroying the habitat, owe a payment for this social cost.

Pollution charges are also a type of rent payment. Consider a dump near a city. If the owner of the dump can charge people for dumping, and the cost to the owner is low, the dump will have a market rent, since most of the revenue will be rent. Similarly, if a lake is used as a dump for pollution, users can be charged for dumping, which gives the lake a rent. When the atmosphere is used as a pollution dump, charges for pollution are also therefore a type of rent, as well as compensation for damages. Thus, pollution charges can also be considered to be a type of land rent for using land as a dump.

Finally, the scope of rent as payment for government and community services includes private payments to the owners of private communities that provide territorial services. Land trusts, condominiums, residential associations, marinas, mobile home parks, and shopping centers are examples of proprietary owners and associations providing services that are paid for by assessments and fees that are economically rent.

## **5. How it Would Work: Collecting Land Rent**

### **A. Taxing Land in Theory**

Land, as all natural resources, has various forms, and taxing the rent differs among the forms. The basic principle is that all land is taxed in proportion to its market value or its rent.

For land as space or sites, there is usually a market for real estate that sets prices for typical properties. Assessors and appraisers then distinguish the value of the improvements from that of the land. Insurance companies, for example, appraise the land value separately because insurance only covers the improvements.

There are several methods of assessing land value or rent. One way is to calculate the replacement value of the improvements, and then subtract the depreciation of the buildings. What is left is land value. For commercial property, one can take the net income and subtract the return on the improvements (using some interest rate), the remainder being land rent. In some places there is vacant or bare land that has a market price, and sometimes there are separate owners for the land and the improvements.

Using all this data, the assessors then enter it into maps, now often computerized. They can then interpolate or smooth out the prices of lots between those they have recent sales or rental data for, since land values tend to be similar in a neighborhood unless there is some special feature such as corner lots. In the village of Arden, Delaware, the land is owned by a trust that collects the land rent, and elected assessors assess the land value using formulas derived from actual differences in values for lands closer to parks and other amenities.

It does not matter much whether the tax is based on the land value or the land rent, unless 100 percent of the rent is taxed. The price of land is related to the rent by a formula, where  $p$  is the price,  $r$  the annual rent (assuming constant rents),  $i$  the real interest rate (after subtracting the inflation rate), and  $t$  the tax rate on the price (so if  $t = .1$ , the tax is 10 percent of  $p$ ):

$$p = r / (i+t).$$

The proportion or percentage of the rent taken is

$$x = t / (t+i)$$

where  $x$  is the portion of the rent taxed.

Alternatively, given the percentage of the rent that is taxed ( $x$ ), the tax rate on the land price  $p$ , given interest rate  $i$ , is

$$t = xi / (1-x).$$

The rent for oil, minerals, and water is more complex. Government often subsidizes water, especially to agriculture, whereas efficient provision would base the price on the cost and demand. Offshore oil leases are commonly bid on by companies, and the bids are basically the rent they pay for the leases. There can also be extraction fees that take the rent as the raw material is taken out. Such fees can be paid for taking natural resources such as timber and wildlife.

The frequencies of the electro-magnetic spectrum can also be taxed as a type of land. The market for the frequencies will set the rent. If an active market does not exist, then the current users can self-assess, subject to having to sell if another user wishes to buy it at that assessment plus some set premium.

## **B. Taxing Land Rent in Practice**

The concept of using land rent for public finances is an old idea that has been used since antiquity. England during the Middle Ages used land rent for its finances.<sup>16</sup> The economists in France during the 1700s, calling their theory "physiocracy" (the rule of natural law), recognized that land rent is the best source of public finance and they proposed a model of economic development that uses the rent to finance public works that then increases rent further, leading to

an upward spiral of development and prosperity. Adam Smith, who visited the physiocrats, praised their system.

This physiocratic policy was adopted in two countries: Japan and Taiwan. In Japan after a revolution in the 1860s, the government transferred farmland to the farmers, who then paid a tax on its rent. The Japanese government used this rent to finance public works as well as education, which further increased rent. This created a powerful upward spiral that turned Japan into a major industrial power. (Japan later switched to taxing income due to political pressure from the landowners.)<sup>17</sup>

The German colony of Kiaochow, China, established in 1898, had a single tax on land rent at 6 percent of the price.<sup>18</sup> Its main city, Tsing-tao, developed into a fine modern city. The Germans lost the colony in 1914 at the outbreak of World War I, but their experience influenced the Chinese revolutionary Sun Yat-sen, who became the head of the government of China. He and his successors in the Nationalist Party were not able to implement the system, but when they moved to Taiwan in 1950 after the communists took the mainland, Chiang-kai shek implemented a land-to-the-tiller reform accompanied by a tax on the land rent. This small island then developed into a major industrial power.

Many cities worldwide have had a real-estate tax only on the land value. These include Pretoria and Johannesburg, South Africa and Sydney, Australia. Some cities in Pennsylvania have a two-rate system where the tax on the land has a higher rate than that on the improvements. Pittsburgh is the largest city in the state that does this, and the two-rate tax helped it renovate its downtown area and become a thriving city despite its declining steel industry. Many cities in Australia and New Zealand have had a real estate tax only on the land value. Hong Kong and Singapore became major commercial centers based in large part on basing much of their public finance on rent rather than taxing trade and commerce.

Followers of Henry George, who proposed a "single tax" on land rent, established several model communities. One of them, which still continues the practice, is Arden, Delaware. The residential land is owned by a trust, which collects the rent and pays the property taxes. That way, a leaseholder only pays for the land, and does not have to pay the tax on the buildings. Arden has prospered as a community with fine houses and lively community activities.<sup>19</sup>

Many private communities implement the "single tax" system in effect, collected as a fee or assessment. In condominiums, for example, an owner owns his own unit and a share of the "common elements" such as apartment building exteriors, landscaping, and recreation facilities. The unit owner pays an assessment often based on its "percentage interest" that is based on the market value of the unit relative to other units. So in effect, the unit owner is paying a rent for the use of the common elements.<sup>20</sup>

Guests in a hotel pay a rental for one room, and then receive hotel amenities such as transportation (elevators), the lobby, hallways, and swimming pool. Owners of mobile homes pay

rent for sites along with services, and boats similarly pay for a space along with amenities. All these are examples of paying rent for the use of private community and locational services.<sup>21</sup> This shows that market agents choose rent as an efficient form of financing community services, unlike many governments which instead levy taxes on sales or income or wealth, with little or no direct relation to services.

### **C. Steps To A Rent-based Public Finance**

As noted above, the only burden of a tax on land rent is on those who own land at the time of transition. Even then, many landowners would not have a net burden if they also have income from wages, profits, and interest, which would become untaxed, since the increase in the tax on land value is offset by the elimination of the tax on their buildings and other improvements.

There are two ways of dealing with any net burden of the current landowners: 1) compensate them; 2) implement the shift gradually. A gradual implementation can include a pre-shift transition: even before the shift from taxing production to taxing rent, land values fall because buyers will expect to keep less of the future rent. If the tax shift is preceded by a political movement and public debate, real estate values will fall as the movement gathers strength. By the time the shift is made, the real estate market may have already accomplished much of the shift.

The transition to the taxation of land rent can be accomplished in these steps:

1. If it does not already exist, each county creates a register of all real estate and the title holders, including all lands owned by governments.
2. Local real-estate taxes are split into two taxes, one on land value or rent, and a separate tax on the improvements.
3. The county real-estate assessment is transferred to land-value assessment boards, with representatives from the federal, state, and county governments as well as from municipalities and real-estate professionals and scholars. They appoint assessors. An appeals process is included, similar to real-estate tax appeals.
4. All plots are assessed at the current market value.
5. Over a period of years, depending on how much land values have already been discounted in anticipation of the tax shift, the tax on improvements is reduced, while the tax on land values or rent is increased.
6. Sales taxes are reduced and eventually eliminated, and pollution charges are increased to make up the revenue. Tariffs and excise taxes are also reduced to zero.

7. The personal exemption in federal income taxes is raised each year, until it eventually includes all income, at which time all state and federal income personal taxes are abolished. The taxation of corporate profits is phased out.

8. Rent from material land (minerals, oil, water, etc.), the electro-magnetic spectrum, naturally growing forests, and other natural resources become taxed at gradually increasing rates up to the full rent, or to at least 80 percent of the rent.

9. An amendment to the Constitution is enacted prohibiting any taxation of wages, sales, value-added, or produced wealth, and any profits and revenues other than from the economic rent of land and natural resources. The amendment also establishes a land-tax commission with representatives from the federal, State, territorial, and Indian-nation governments to divide the rent. Generally, rents for off-shore oil and water, atmospheric pollution, airline routes, and other continental uses would be allocated to the federal or national government, and the rest would be allocated to the local and State or provincial and Indian-reservation governments. If the national government legislates additional revenue, it is obtained from the state or provincial governments in proportion to their land value, as was specified in the Articles of Confederation that preceded the US Constitution.

10. Top-down revenue sharing from federal to state and from state to local government stops. Many services, functions, and agencies are transferred from the central government to the state/provincial and local governments.

## 6. **Endorsements of the Idea**

The concept of using land rent for public revenue is ancient. Even the Bible says "The profit of the earth is for all" (Ecclesiastes 5:9). As noted above, the French economists of the physiocratic school of thought concluded that the most effective system of public finance was an "impot unique" or single tax on land. The major physiocratic economist, François Quesnay, stated "*That taxes ... should be laid directly on the net product of landed property, and not on men's wages, or on produce, where they would increase the cost of collection, operate to the detriment of trade, and destroy every year a portion of the nation's wealth.*" [Emphasis in the original.]<sup>22</sup>

John Locke, the philosopher whose influential thought is reflected in the American Declaration of Independence and the Bill of Rights, wrote that "the things of nature are given in common"<sup>23</sup> and that "no man could ever have a just power over the life of another by right of property in land..."<sup>24</sup> Locke recognized the right and benefits of the individual possession of land, which one could originally obtain by mixing one's labor with the land, but this was subject to the famous Lockean proviso that such possession is held on the condition "where there is enough and as good left in common for others."<sup>25</sup>

Locke did not explicitly state how the proviso could be implemented when land of equal quality is no longer available for homesteading, but the payment to a community of the rent, which measures the extra productivity of superior relative to inferior land, would satisfy the proviso, since this would keep in common the benefits of holding the better lands.

The physiocratic idea that rent is the best source of public revenue was taken up by the classical economists, starting with Adam Smith, who wrote that "Ground-rents, and the ordinary rent of land, are, therefore, perhaps, the species of revenue which can best bear to have a particular tax imposed upon them. Ground-rents seem, in this respect, a more proper subject of particular taxation than even the ordinary rent of land."<sup>26</sup> In the late 1700s, Thomas Spence proposed communities made up of leaseholds, thus financing community expenses from the rent.

Thomas Paine, the 18th-century political philosopher and activist known for his important role in the American revolution, also advocated in *Agrarian Justice* that rent is the proper source of public revenue.<sup>27</sup> Paine wrote, "It is the value of the improvements only, and not the earth itself, that is individual property. Every proprietor, therefore, of cultivated land owes to the community a *ground-rent*, for I know no better term to express the idea by, for the land which he holds; and it is from this ground-rent that the fund proposed in [my] plan is to issue..."<sup>28</sup>

Taxing land rent instead of income or sales would put in place a key part of the original public finance framework envisioned by the founding fathers of the United States. Thomas Jefferson believed "that the earth belongs in usufruct to the living"<sup>29</sup> and that "The earth is given as a common stock for men to labour and live on."<sup>30</sup> In 1797, Jefferson suggested that "a land tax supply the means by which the individual States were to contribute their quotas of revenue to the Federal Government."<sup>31</sup>

From 1778 to the adoption of the US Constitution in 1789, the United States was governed by the Articles of Confederation. Article VII stated that the expenses of the Confederation "shall be defrayed out of a common treasury, which shall be supplied by the several states, in proportion to the value of all land within each state, granted to or surveyed for any person, as such land and the buildings and improvements thereon shall be estimated according to such mode as the United States in Congress assembled, shall from time to time direct and appoint. The taxes for paying that proportion shall be laid and levied by the authority and direction of the legislatures of the several states within the time agreed upon by the United States in Congress assembled."<sup>32</sup>

The founders of the United States thus enacted a public finance system in which the states would collect taxes for the federal government in proportion to the land value in each state, although the tax would fall on real estate including improvements.<sup>33</sup>

A key economist in the development in the theory of rent was David Ricardo, who wrote that rent could be taxed without affecting production. Ricardo's classic statement is:

A land tax, levied in proportion to the rent of land, and varying with every variation of rent, is in effect a tax on rent; and as such a tax will not apply to that land which yields no rent, nor to the produce of that capital which is employed on the land with a view to profit merely, and which never pays rent; it will not in any way affect the price of raw produce, but will fall wholly on the landlords. In no respect would such a tax differ from a tax on rent.<sup>34</sup>

The Scottish philosopher and economist James Mill also recognized that the taxation of ground rent does not burden the economy: "It is sufficiently obvious, that the share of the rent of land, which may be taken to defray the expenses of the government, does not affect the industry of the country."<sup>35</sup>

The American economist Henry George expanded the theory of rent to urban rent, recognizing that much of the rent in an economy comes from the population, commerce, and public works or infrastructure such as streets, parks, security, and utilities. George also introduced a moral element to public finance, arguing that it is morally wrong to tax wages, since it violates the natural right of each person to his labor, wage, and the products of labor, but that human equality implies sharing the rent.

Henry George also noted the beneficial economic effects of shifting taxes to land rent:

The advantages which would be gained by substituting for the numerous taxes by which the public revenues are now raised, a single tax levied upon the value of land, will appear more and more important the more they are considered... With all the burdens removed which now oppress industry and hamper exchange, the production of wealth would go on with a rapidity undreamed of... [It would be] like removing an immense weight from a powerful spring....<sup>36</sup>

Many economists have recognized and agreed with rent-based public finance. Knut Wicksell, a Swedish economist who integrated classical, neoclassical, and Austrian economic thought, wrote that "the general economic development of the community" increased the value of its land, and he proposed taxing such increases.<sup>37</sup> Léon Walras, known for his development of general-equilibrium theory, wrote that land rent provides the best means for funding a state.<sup>38</sup>

Harry Gunnison Brown was the key Georgist economist during the first half of the 20th century.<sup>39</sup> E. C. Harwood recognized the fundamental requirements for a prosperous economy as economic freedom, sound money, and rent-based public finance. Contemporary economists who have written favorably about rent-based tax reform include Kris Feder, Mason Gaffney, C. Lowell Harris, Fred Harrison, Michael Hudson, Nicolaus Tideman, and the late William Vickrey, winner of the 1996 Nobel Prize in economics.

Vickrey, along with some other public-finance economists, have created mathematical models of Henry George's concept of land rent as the single source of public revenue, and these models have become known as the "Henry George Theorem." The theorem demonstrates that the amount of land rent equals the optimal amount of public works which have economies of scale, having high fixed costs and low variable costs. An example of this technical literature is Vickrey's statement:

*In an economy of efficiently organized cities in a state of perfect competition with each other, the aggregate of land rents (calculated as the marginal social cost of holding land) generated by the urban agglomeration produced by the existence of activities with economies of scale within the city will equal the subsidies required to enable these activities to sell their output at prices equal to their respective marginal costs. [Italics in the original.]* In other words, if a perfectly efficient world is to be organized on a classical decentralized basis, it is necessary that all of the land rent generated by the presence of the city be appropriated to the subsidy of the decreasing-cost industries within the city. If any of these land rents are appropriated by private landlords for their own purposes, this action will preclude the achievement of complete efficiency.<sup>40</sup>

Vickrey here uses the term "subsidy" in the technical sense of funding a fixed cost when the user pays the marginal or variable cost, which can be zero. For example, if you use a hotel elevator, the hotel does not normally charge for that transportation service, it being "subsidised" by the room rentals. This is economically efficient, and quite different from a government subsidy to privileged interests unrelated to the cost of a service. That's because the "free" elevators make the rooms much more useful and attractive, enabling the hotel to charge a higher rental.

Vickrey adds that the "Use of land rents, or, at least, of a major fraction of them, for public purposes is therefore not merely an ethical imperative, derived from the categorization of these rents as an unearned income derived from private appropriation of publicly created values, but is, even more importantly, a fundamental requirement for economic efficiency."<sup>41</sup> This analysis goes beyond saying that taxing land rent does not hurt the economy, unlike other taxes, but that maximum social productivity actually requires that site rent be used to finance civic works, because these works generate public benefits that create the rent in the first place. It should be noted that such "public purposes" need not be produced and provided by government, but can also be and are provided by private communities that are financed by the land rents they generate from their own civic works and services.

Other philosophers who wrote favorably on using rent for public revenue include John Stuart Mill (who was also an influential classical economist) and Herbert Spencer (Spencer was first favorable, and then later hedged his position). On the ethics of the benefits from land, Spencer wrote, "all men have equal rights to the use of the earth."<sup>42</sup> Equal rights to the benefits

of land can be obtained by having each landholder pay a community rent: "Instead of paying his rent to the agent of Sir John or His Grace, he would pay it to an agent or deputy agent of the community."<sup>43</sup> Spencer adds, "it is manifest that an individual may, without any infringement of the rights of others, appropriate to himself that portion of produce which remains after he has paid to mankind the promised rent."<sup>44</sup> This, said Spencer was consistent with and is required by the law of equal freedom.

The Russian novelist Lev (Leo) Tolstoy was influenced by Henry George and advocated taxing land rent. Leo Hecht writes that "One of the very few concessions that Tolstoy ever made in his anarchist thought was to accept the single tax as a transitional mode to a purer society shorn of any rules and institutions except man's personal relation to God."<sup>45</sup> Tolstoy wrote, "Everyone has an equal right to the land and the inalienable right to the products of his labor.... For the attainment of these rights only one means is necessary: the establishment of a single land tax, which would be of an equivalent value to what the land generates."<sup>46</sup>

Among the leading government officials who favored rent-based public finance was British prime minister and member of parliament, Sir Winston Churchill. In a speech in 1909 to the House of Commons, Churchill declared that "The immemorial custom of nearly every modern State, the mature conclusions of any of the greatest thinkers, have placed the tenure, transfer, and obligations of land in a wholly different category from other classes of property."<sup>47</sup>

In a speech delivered at Edinburgh in 1909, Churchill related how aid that is intended for the poor often ends up in the pockets of their landlords. In London there was a bridge on the Thames, which many poor workers crossed six days a week to go to work, paying a toll of one penny. The municipality eliminated the toll in an effort to reduce the burden on the working poor, saving them 6 pennies per week. "Within a very short period from that time the rents on the south side of the river were found to have advanced about 6d. a week, or the amount of the toll which had been remitted."<sup>48</sup>

Other government leaders who preferred the public collection of rent to taxing production were Sir Thomas Stamford Raffles (British governor of Java 1811-1816 and founder of Singapore in 1819),<sup>49</sup> Lord Aberdeen (British foreign secretary who shaped Hong Kong's public finance), Alexander Kerensky (Russian leader in 1917 between the Czars and Lenin), Sun Yat-sen (first president of China after the emperors), Chiang Kai-shek (president of nationalist China and Taiwan), Ludwig Wilhelm Schrameier (founder of the German single-tax colony Kiaochow in China),<sup>50</sup> and Anne-Robert Jacques Turgot (controller general of finance in France, 1774-6).

Libertarians who have recognized rent as the source of public finance most compatible with liberty include Albert Jay Nock, Frank Chodorov, Jack Schwartzman, David Nolan, Karl Hess, Jeff Smith, Dan Sullivan, Michael O'Mara, and this author.

Albert Jay Nock distinguished between the improper political means of obtaining wealth, such as from arbitrary taxation, and the proper economic means, from enterprise. He regarded

public revenue from land rent as within the economic means, since the "Monopoly of economic rent, on the other hand, gives exclusive rights to values accruing from the desire of other persons to possess that property; values which take their rise irrespective of any exercise of the economic means on the part of the holder."<sup>51</sup>

Frank Chodorov, like his friend Albert Jay Nock, was a fervent individualist and opponent of big government and war. He was the founding editor of *The Freeman*, still a leading libertarian journal of ideas published by the Foundation for Economic Education, and in 1937, he became the director of the Henry George School of Social Science at New York City, serving until 1942. Chodorov regarded a tax on land value as not a true tax but a "payment for the use of a location, determined by the higgling and haggling of the market, and it makes no difference to the land user whether he pays rent to the city fathers or to a private owner."<sup>52</sup>

Chodorov also noted that in a pure market, community services would be funded by rent: "If taxation were abolished, for instance, the cost of maintaining the necessary social services of a community would fall on rent."<sup>53</sup> Explaining that site values derive to a great extent from community services, rather than the efforts of the landowner as such, Chodorov states that "It would seem logical that this value -which we call land rent - should go to defray the expenses of these common services."<sup>54</sup>

## **7. Community Rent and Decentralized Governance**

The United States is a federation of States (and Indian-nation reservations), with many government functions such as criminal law, education, and local services provided by the States. Since the federal income tax was enacted in 1913, taxation and power have shifted ever more to the federal government. In 1902, federal taxes were 37.4 percent of total government revenue. By 1986, federal taxes made up 64.8 percent of total revenue.

The share taken by State governments rose from 11.4 percent in 1902 to 21.5 percent in 1986. In contrast, the share of revenues obtained by local government fell from 51.3 percent in 1902 to 13.7 percent in 1986.<sup>55</sup> It is difficult to impose high local and state income taxes, since business will then move to lower-tax areas. A uniform national income tax eliminates this avoidance, especially since US citizens are also taxed even if they are abroad.

Revenue sharing is then in effect a tax cartel among the states, collusion to tax the population and then divide the funds among the states. National taxation also encourages spending by the federal government instead of the states, so now we have federal departments and agencies for education, housing, health and welfare, energy, and other fields that were once under local or state government, or private-sector matters.

The centralization of power further reduces local control by imposing conditions on revenue sharing. Local and state government must abide by mandates in order to obtain the

funds, moneys that were taken from their residents in the first place. This lets the federal government sidestep the 10th Amendment to the Constitution, which states that powers not specifically allocated to the federal government are reserved to the people and the States.

The public collection of rent, or land-value taxation, shifts economic power back to State and local government. Land is suited to local taxation because it does not run away, unlike enterprise, capital, and labor. Land is also the logical source of local public finance because it does not burden enterprise, so that entrepreneurs don't even want to run from it. Indeed, entrepreneurs welcome it, not only because their economic profits are not taxed if all taxation is on land rent, but also because the tax reduces the price of land, so they do not need to borrow so much when they invest funds in an enterprise.

Instead of revenue trickling down from the federal to the states and then to local government, when public finance comes from rent, the funds flow the other way. Currently, real-estate taxes are assessed and collected mainly by county governments. With most revenue coming from land rent, funds would flow up from the counties to the states and then to the federal government.

This would create a decentralizing force, shifting or "devolving" power down to local government in accord with the principle of subsidiary, which states that what can be efficiently done by individuals or smaller jurisdictions should not be done by larger or higher-level jurisdictions. Government functions would then come under more observation and control by the voters, who can much more easily monitor and alter local governments than remote agencies.

## **8. Conclusion**

An ideal tax policy is one that respects a citizen's right to all of the fruits of his labor as well to his privacy, does not discourage work or savings, and generates just enough revenue to pay for the services government provides. While income and sales taxes fall woefully short of this ideal, taxing land values fulfills each requirement.

Replacing taxes on income and sales with taxes on land values would be the ultimate tax reform. So sweeping would be the changes — all of them for the better — that envisioning a world where land-value taxation was the rule rather than the exception can be difficult. Imagine the increased prosperity and opportunities for advancement that would exist if people could keep all of the money they earn, if billions of dollars in waste caused by efforts to avoid high income taxes were suddenly brought to an end, and if government growth were constrained by a tax system that would only raise enough to pay for services actually provided?

What surprises many people the most about land value taxation is that the idea is so central to the political philosophy of the founding fathers of the United States. Far from being a new idea, or the idea of a small group of thinkers, it is a concept embraced by many of the figures

we all read about in high school and college: John Locke, Adam Smith, Thomas Paine, Thomas Jefferson, and J.S. Mill. Land value taxation is part of America's proud and distinguished tradition of political philosophy.

Tax reform should focus on the tax most compatible with liberty and prosperity: a single tax on the economic rent of natural resources. Just as entrepreneurs in the market process recognize rent as the efficient source of revenue for proprietary communities such as condominiums and hotels, so too should governments look to taxing land rent as their most efficient and least disruptive source of revenue.

The public and community collection of land rent upholds one of the three pillars of a truly free economy: free trade, sound money, and benefit-based public finance. Surely it belongs in the national debate over how best to reform the nation's tax system.

###

Fred Foldvary, Ph.D., is [Add here.]

## Endnotes

- 1 Add survey from CATS or Tax Foundation.
- 2 In 1986, the individual income tax was 43 percent and the corporation income tax 7 percent of US federal taxes. Payroll taxes (social security, etc.) made up 40 percent of federal revenues. On average for the US States, individual income taxes were 25% and corporate income taxes 7 percent of government revenues. For local taxes, individual income taxes were 4 percent and corporate income taxes 1 percent of government revenue. Combining all levels of government, individual income taxes were 33.5 percent, corporate income taxes 8.2 percent, payroll taxes 29.2 percent, and death and gift taxes .8 percent of revenue. Richard A. Musgrave and Peggy B. Musgrave, *Public Finance in Theory and Practice* (New York: McGraw-Hill, 1989), page 318.
- 3 Adam Smith, *The Wealth of Nations*, Vol 2., Ed. Edwin Canaan, Chicago: University of Chicago Press, (1976, 1776), pages 349-52.
- 4 Henry George, *Progress and Poverty*, New York: Robert Schalkenbach Foundation, 1879 (1975), pages 408-21.
- 5 Arthur P. Hall, *Compliance Costs of Alternative Tax Systems*, Special Brief, June 1995, Tax Foundation, Washington DC. See also <http://www.ncpa.org/~ncpa/pi/taxes/pdtx.html>.
- 6 Walter Rybeck, "The Property Tax as a Super User Charge." In *The Property Tax and Local Finance*. Ed. C. Lowell Harris. (New York: Academy of Political Science, 1983), pages 133-47.
- 7 Fred Foldvary, "The Business Cycle: A Georgist-Austrian Synthesis." *American Journal of Economics and Sociology* 56 (4) (October 1997), pages 521-541. For the relationship between real estate and business cycles in Japan and other countries, see Fred Harrison, *The Power in the Land* (New York: Universe Books, 1983).
- 8 For a derivation of a "universal ethic" that applies to all humanity, see Free Foldvary, *The Soul of Liberty* (San Francisco: The Gutenberg Press, 1980).
- 9 Henry George, *Progress and Poverty* (New York: Robert Schalkenbach Foundation, 1879 (1975)), p. 406.
- 10 Mason Gaffney, *Containment Policies for Urban Sprawl* (Lawrence, Kansas: University of Kansas Publications, 1964).
- 11 Fred Foldvary, "Rental Income in the USA: the Mystery of the Missing Billions." In *Costing the Earth*. Ed. Ronald Banks. (London: Shephard-Walwyn, 1989), pages 177-81. See also Mason Gaffney, "Adequacy of Land as a Tax Base." In *The Assessment of Land Value*. Ed. Daniel Holland. (Madison: Univ. of Wisconsin Press, 1970).
- 12 Roland Banks, "Terra Incognita," in *Costing the Earth*, ed. Ronald Banks (London: Shephard-Walwyn, 1989), pages 37-48.
- 13 Steven Cord, "Land Rent is 20% of U.S. National Income for 1986," *Incentive Taxation*, July/August 1991, pages 1-2.
- 14 Michael Hudson, "Where Did All the Land Go? The Fed's New Balance Sheet Calculations." Manuscript. (New York: Robert Schalkenbach Foundation, 1997).

- 15 Nicolaus Tideman and Florenz Plassman, "Taxed Out of Work and Wealth: The Costs of Taxing Labor and Capital," in *The Losses of Nations: Deadweight Politics versus Public Rent Dividends* (London: Othila Press, 1988), pages 146-74.
- 16 See Spencer Heath, *Citadel, Market and Altar* (Baltimore: Science of Society Foundation, 1957), pages 77-80, and Lysander Spooner, *An Essay on the Trial by Jury* (Mesa, AZ: Arizona Caucus Club, n.d.), p. 146. Originally published by Boston: John P. Jewett and Company, 1852.
- 17 Fred Harrison, *The Power in the Land* (New York: Universe Books, 1983),
- 18 Michael Silagi, "Land Reform in Kiaochow, China: From 1898 to 1914 the Menace of Disastrous Land Speculation was Averted by Taxation." Trans. Susan N. Faulkner. *American Journal of Economics and Sociology* 43 (2) (April 1984): 167-77.
- 19 Fred Foldvary, *Public Goods and Private Communities* (Aldershot, UK: Edward Elgar Publishing, 1994), Chapter 10.
- 20 For case studies on condominiums, residential associations, and private neighborhoods, see Fred Foldvary, *Public Goods and Private Communities* (Aldershot, UK: Edward Elgar Publishing, 1994), chapters 11-13.
- 21 See Spencer MacCallum, *The Art of Community* (Menlo Park: Institute for Humane Studies, 1970) on proprietary communities and their private financing from rent.
- 22 François Quesnay, "The 'General Maxims for the Economic Government of an Agricultural Kingdom,'" in *The Economics of Physiocracy*, ed. Ronald L. Meek (Cambridge, MA: Harvard University Press, 1963), pages 231-62. [First published 1756].
- 23 John Locke, *Two Treatises of Government*, ed. Thomas I. Cook, New York: Hafner Press, (1947, 1690), page 143.
- 24 *Ibid.*, p. 34.
- 25 *Ibid.*, p. 134.
- 26 Adam Smith, *The Wealth of Nations*, Vol 2., ed. Edwin Canaan (Chicago: University of Chicago Press, 1976, 1776), page 370 [Book V, Chapter II, Part II, Article I, "Taxes upon Rent"].
- 27 Jack Schwartzman, "Thomas Paine," in *An Anthology of Single Land Tax Thought*, ed. Kenneth C. Wenzer (Rochester: University of Rochester Press, 1997), pages 133-158.
- 28 Thomas Paine, "Agrarian Justice" in *Thomas Paine: Representative Selections*, ed. Harry Hayden Clark (New York: Hill and Wang, 1944, 1961), page 338.
- 29 From a letter written in Paris to James Madison, September 6, 1789, found in Ford's edition of *Jefferson's Writings* (Federal Edition, New York, Putnam's, 1904), Vol. VI, pages 3-4, cited in George Geiger, *The Philosophy of Henry George* (New York: The Macmillan Company, 1933), page 191.
- 30 Letter to Madison's father, written at Fontainebleau, October 28, 1785; Ford, Vol. VIII, page 196, cited in Geiger, page 191.
- 31 Letter to J. Lithgow, Ford, Vol. IV, pages 86-7, cited by Geiger, page 191.

32 California State Senate, *The Constitution of the United States of America and the Constitution of the State of California*, 1995.

33 The US Constitution expanded the powers of the federal government to include indirect taxes (which technically include income taxes, including taxes on the activity of generating rent) and changed the basis of direct taxes paid by the states from land value to population. The federal government abandoned direct taxes on real estate, apportioned by population, in 1861, because representatives of the western states objected that they had much less wealth per capita than the northeastern states.

34 David Ricardo, *The Principles of Political Economy and Taxation*, 3rd edition (London and Melbourne: Dent, 1821, 1911, 1973), page 115.

35 James Mill, *Elements of Political Economy* (London: Baldwin Cradock and Joy, 1824), page 242.

36 Henry George, *Progress and Poverty*, (New York: Robert Schalkenbach Foundation, 1879, 1975), pages 433-4.

37 Knut Wicksell, "A New Principle of Just Taxation" in *Classics in the Theory of Public Finance*, eds. R. A. Musgrave and Alan T. Peacock (London: Macmillan & Co., 1958), pages 113-4.

38 Léon Walras, *Studies in Social Economics*, (Lausanne: F. Rouge and Co., 1896), Book II, section 8. Unpublished trans. by Mason Gaffney, 1967.

39 Christopher K. Ryan, *Harry Gunnison Brown: Economist* (Boulder and London: Westview Press, 1987).

40 William Vickrey, "The City as a Firm," in *Public Economics*, eds. Richard Arnott et al (Cambridge: Cambridge University Press, 1994), pages 344-5. Originally published in *The Economics of Public Services* (London: Macmillan; New York: Wiley, 1977).

41 Ibid., page 349.

42 Herbert Spencer, *Social Statics* (Rpt. New York: Robert Schalkenbach Foundation, 1954, 1850), page 281.

43 Ibid., page 111.

44 Ibid., page 116.

45 Leo Hecht, "Lev Nikolaevich Tolstoy: Tolstoy on Land, Possessions, Work, and the Single Tax," in *An Anthology of Single Land Tax Thought*, ed. Kenneth C. Wenzler (Rochester: University of Rochester Press, 1997), page 387.

46 Leo Tolstoy, "The Only Possible Solution to the Land Question," in Hecht, page 391 (originally in Polnoe sobranie sochinenii [Complete works], Moscow, Vol. 36: 283-9, 1906, Trans. Kenneth Wenzler).

47 Sir Winston Churchill, *Land Price as a Cause of Poverty* (Sydney, New South Wales: Association for Good Government, 1941), page 3. This speech, delivered on May 4, 1909, was included in a collection of Churchill's speeches titled *Liberalism and the Social Problem*.

48 Ibid., page 11. This speech was delivered on July 17, 1909.

- 49 F. T. Hodgkiss, "Raffles of Singapore," *The Freeman* 5 (5) (March 1942), pages 106-7.
- 50 Michael Silagi, "Land Reform in Kiaochow, China: From 1898 to 1914 the Menace of Disastrous Land Speculation was Averted by Taxation," trans. Susan N. Faulkner, *American Journal of Economics and Sociology* 43 (2) (April 1984): 167-77.
- 51 Albert Jay Nock, *Our Enemy The State* (Caldwell, ID: Caxton Printers, 1935, 1959), page 105.
- 52 Frank Chodorov, *Out of Step: The Autobiography of an Individualist* (New York, The Devin-Adair Co., 1952), p. 52, cited in Oscar B. Johannsen, "Frank Chodorov: Individualist Extraordinary" in *An Anthology of Single Land Tax Thought*, ed. Kenneth C. Wenzer (Rochester: University of Rochester Press, 1997), pages 440-1.
- 53 Frank Chodorov, "Socialism Via Taxation," in *Fugitive Essays* (Indianapolis: Liberty Press, 1980), page 280.
- 54 *Ibid.*, page 278.
- 55 Richard A. Musgrave and Peggy B. Musgrave, *Public Finance in Theory and Practice* (New York: McGraw-Hill, 1989), page 319.

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