Why Tax Land Value? Otherwise Property Owners Pay Twice!

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Center for the Study of Economics
& Central Research Group
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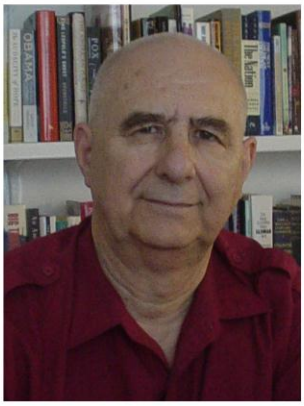


H. WILLIAM BATT is a political scientist who has been a university professor and a staff policy analyst (on tax policy) for the New York State Legislature. He now serves on the board of directors of the Center for the Study of Economics, the Robert Schalkenbach Foundation, and the International Union for Land Value Taxation. He was one of the first Peace Corps Volunteers (Thailand, 62-64), which led to his later interest in moral reasoning and social structures. He became committed to research and advocacy for approaches to economic justice of Henry George in 1993 after leaving service on the New York State legislative staff. His many articles can be found online, especially on websites connected with Georgist philosophy. Dr. Batt lives in Albany, New York.

Notes for each frame are in this place under the slide. They are important to understanding the graphic presentations. But it may be worthwhile to view it as a conventional slideshow a second time.

The Property Tax is Really Two Taxes

The Tax on the
Improvement Value
&
Land Value

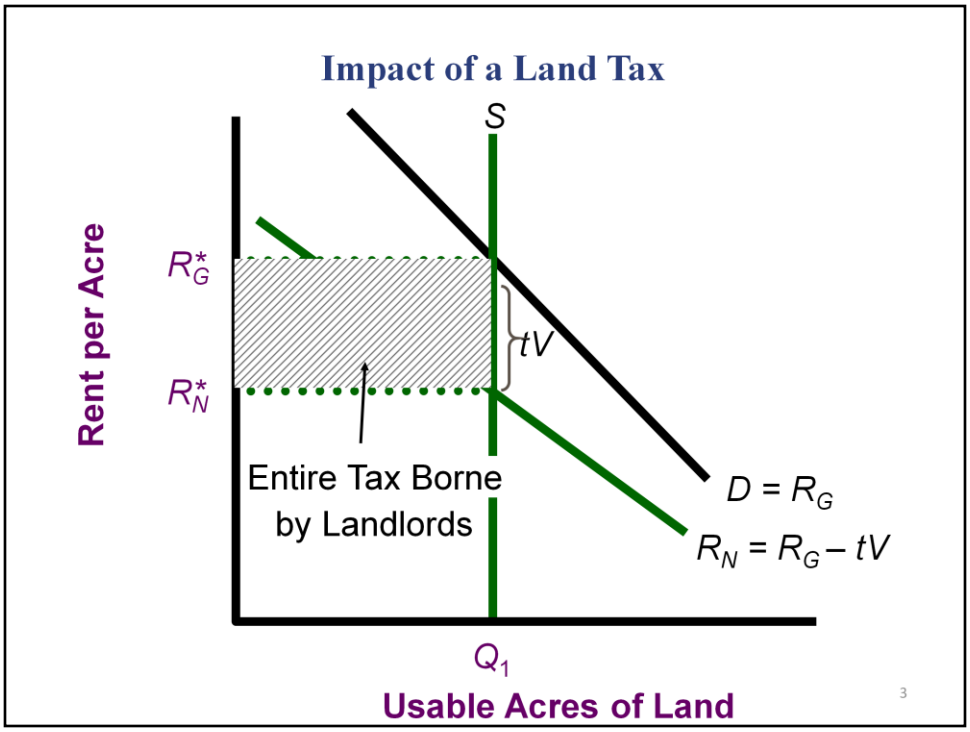
Each Tax has very Different Dynamics

Land has an inelastic supply, which means that any tax or other obligation imposed upon it must accommodate to the prevailing market prices, however it is paid. Whether by a tax, a zoning ordinance or other obligation, the total burden is the same.

The tax on land value cannot be shifted; the burden is fully "capitalized." Tenants don't bear a land tax at all. Only the building component is shifted.

Experience shows that a tax shift off buildings to land value lowers the burden for about two-thirds of homeowners, if the assessments are good. Larger urban buildings on a small footprint also pay less.

The extra burden is picked up by underused and vacant parcels -- their higher carrying costs encourage more productive use of sites, thereby growing the tax base.

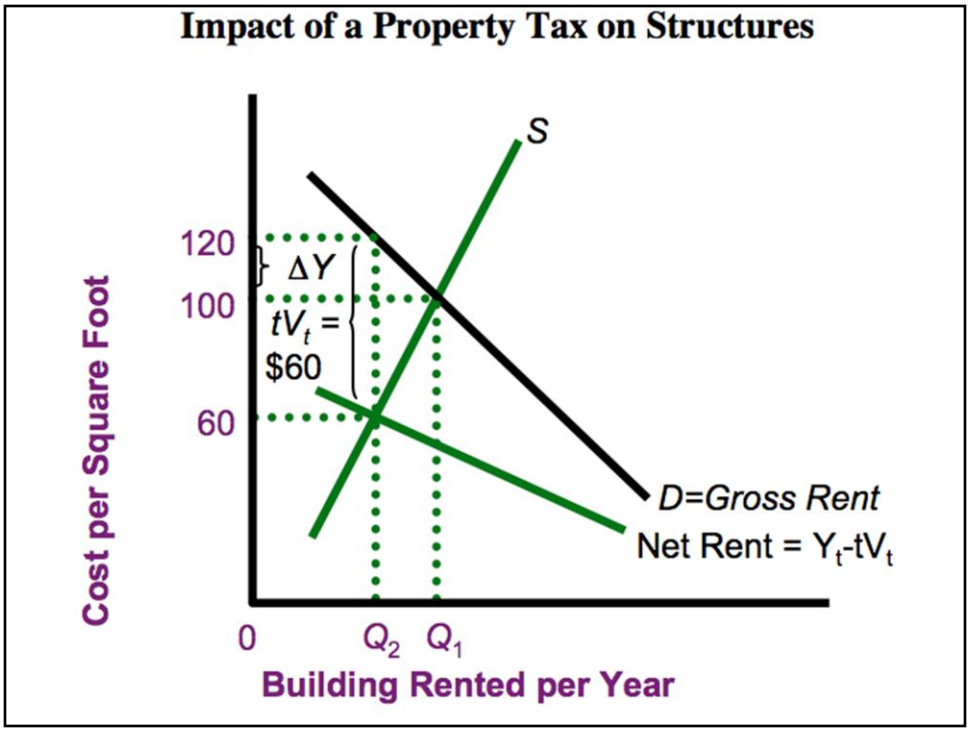


The conventional property tax in the US is really a tax on the assessed full value of land and improvements, and each work very differently. Land has a fixed (inelastic) supply, and any tax is therefore capitalized in its market price.

The market value of land is the capitalized flow of economic rent that comes from its location.

Taxing land sites fosters their most efficient (“highest and best”) use. It encourages urban development and reverses the centrifugal forces of sprawl. It forces otherwise speculators to build or sell to recover their carrying costs.

As will be clear, a tax on land value conforms ideally with all the textbook principles of sound tax theory.



The tax on improvements is shifted, either backward in part to the contractor/builder and forward to the tenant. This is because building supply is responsive to market demand and is therefore elastic, at least over the longer term. The result of taxing improvements is to reduce their supply and increase their market price.

The market value of improvements reflects the costs of their creation, replacement and depreciation.

Explaining Home Value Change

Explaining Home Value Change

The real property tax, from the standpoint of economics, is really two taxes, each with its own very different dynamics. The tax on structures penalizes maintenance or improvement, and has no beneficial purpose at all. Real estate improvements, like all capital goods, depreciate over time and typically constitute an ever smaller proportion of the holding's market value. It is the other component of the real property tax, the land site, that appreciates in value. Land values reflect the ambient worth of all sites in their vicinity. A land site's value is a function not of what any titleholder does to his property; it is due rather to the general market value placed on locations in a neighborhood, or region. Your land value depends on what your neighbors do.

When homeowners think of their property appreciating in market value, beyond from whatever inflation may cause, they need to understand that it is the land site that appreciates, even while the building declines in value. Over the course of its lifetime its value typically declines by half, and the land site comprises an ever larger proportion of the total property value. One Federal Reserve Board study calculated that houses depreciate at a rate of about 1.5 percent annually, and that land appreciates on average at about 4 percent. Real estate bubbles in select regions have been known to raise prices by as much as 20 percent annually for short periods. This rise is really land value, or the capitalized flow of land rent.

Building Value is a Stock; Land Rent Value is a Flow

- Examples of Stock Value
- Examples of Flow Value

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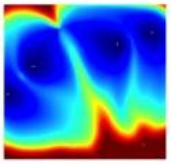


RADIATION

COMPUTER

WIND

REFRIGERATOR

RIVER CURRENT

Stock and Flow

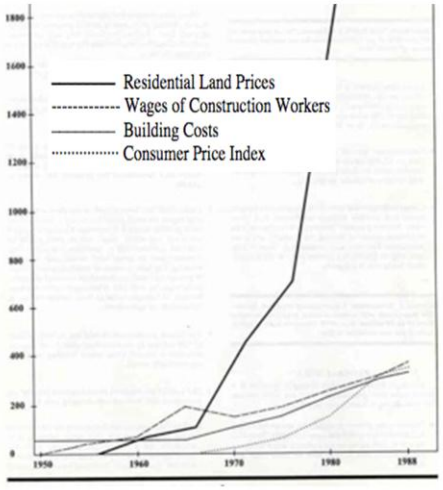
People often think of real property taxes as levied on things. But this is only partially true. Buildings, of course are things, or manufactured goods more precisely, and their values are a function of size, materials, age, and so on. Land, at least for purposes of taxation, is largely a function of its location, and its market prices are due to the local and even regional vitality of the economy.

Economically speaking, building value constitutes a stock; land value by contrast is a flow of what economists call rent. That rent can be calculated as a lump sum using its present value. There is a reciprocal relationship between the amount of value taxed from the flow of rent and the residual rent that can be capitalized. This is because land is fixed in its supply, or is inelastic.

The market price of a site is ultimately the same whether it is paid by taxation of its rent flow or as a lump sum when purchased. But payment for a site by tax remittance of the rent flow increases a community's financial liquidity and also the likelihood of efficient of land use. When payment for a site is made in lump sum, its market value is essentially frozen and the capitalized flow of rent through the economy is thereby stifled. The turnover of wealth in the community is then reduced. So taxing the economic rent as it flows from land sites enervates local markets and fosters the most optimal land use configurations.

When parcel sites are bought by lump sum payment, improved with buildings or not, the land is typically financed together with the improvements as part of the total property. The titleholder first pays for the parcel in a mortgage and is then taxed again for the enjoyment of public services through other additional taxes. If society captures the rent flow in taxes, property owners pay only once and have more disposable income for other things.

Land Prices Increase Faster than Other Housing Costs



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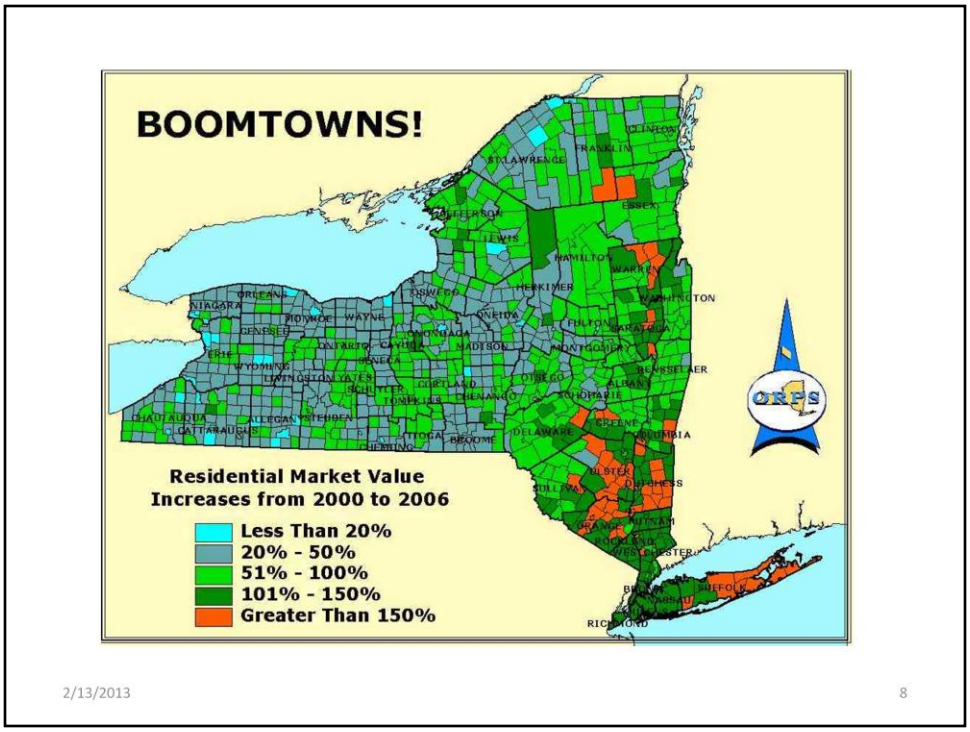
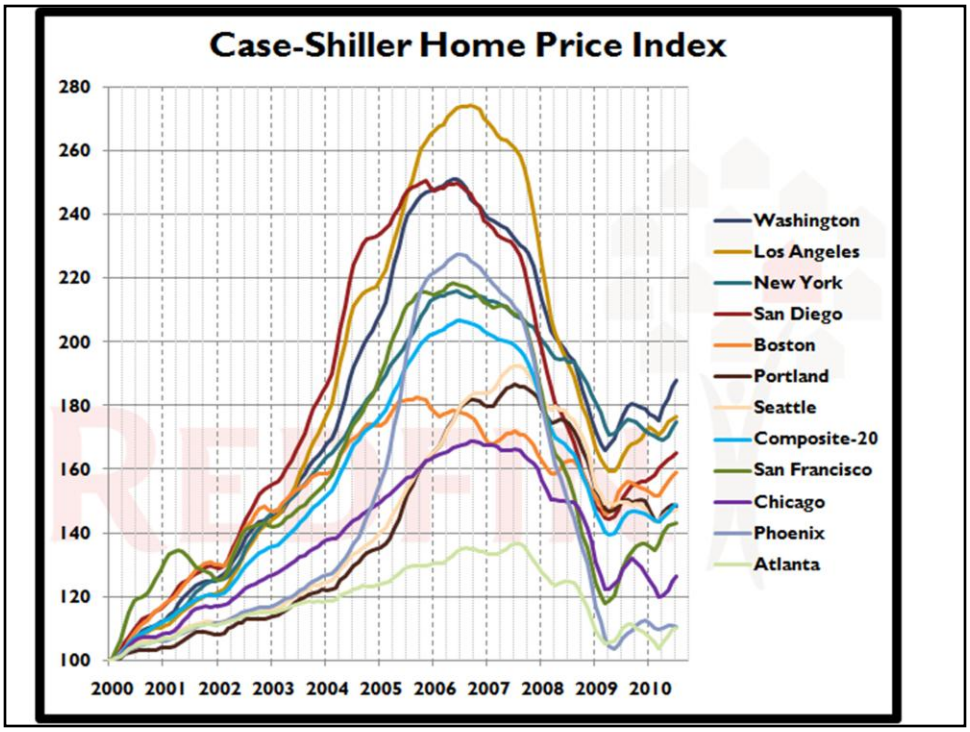
All the surplus value that doesn't go to capital ends up attaching to land sites as capitalized rent. Rent flows through the economy reflective of the enterprise of productive locations. Even if subject to booms and busts, land values typically increase far faster than the cost of housing, the price of labor, or other consumer costs. This graphic shows the decades from 1950 to 1990. Speculators love to put their money in land. As Will Rogers noted, repeating Mark Twain, "Buy land; they ain't making it anymore."



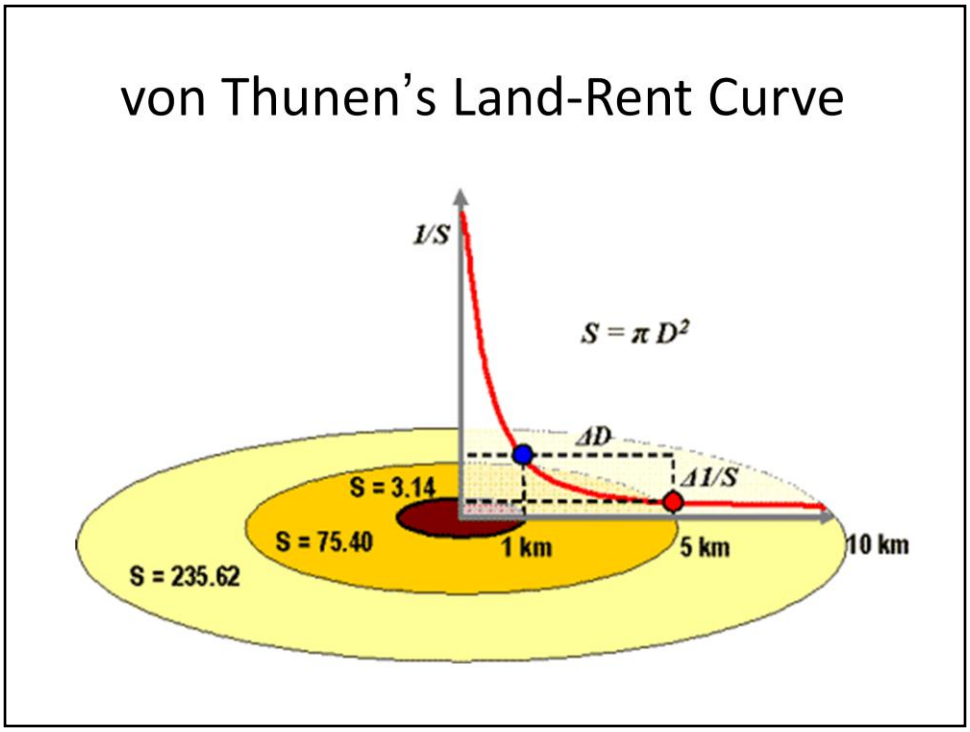
The increase in parcel values that we have witnessed in various regions is due to the land value, not the improvements. Buildings depreciate in value, usually at about 1.5 percent per year. Land values in some instances have increased over 20% per year! Taxing land rent flow stabilizes property prices. One should note that land booms differ from one region or locality to another, and have little relationship to the general rate of inflation. Capping any increase in the tax rate simply jacks the market price of land sites, thereby making real estate more expensive. Again, the total flow of land rent is fixed, and is ultimately paid either in market exchanges, taxes or other obligations and encumbrances.

Land value is community created wealth, not due to the efforts of any individual titleholder. Whatever value is not recaptured in taxes will be reflected in the higher price of site locations. What is called economic rent, or ground rent, flows through land parcels to be taken in taxes or capitalized in the market price of those sites.



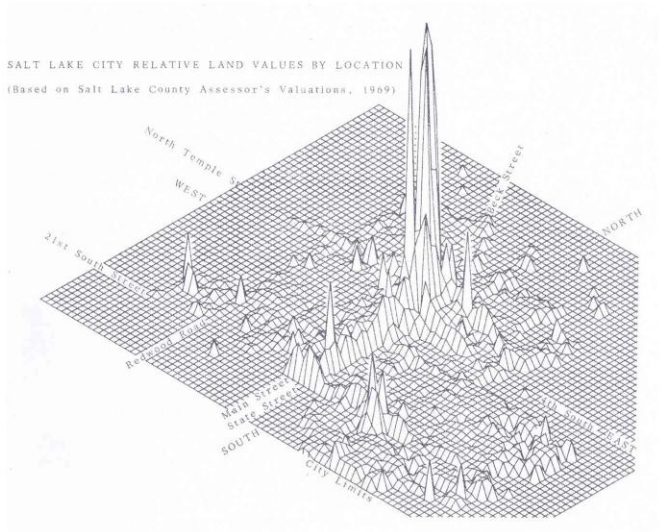
Professors Karl Case and Robert Shiller have developed an index which is the most widely used measure of how US housing prices change over time. It is misleading only to the extent that it is land values alone that explain the changes in market price, not the aggregate houses and lands together.

Moreover, the fluctuations in market price vary widely from one region of the nation to another, differing most of all in cities, and indeed mostly in the coastal areas. The inelasticity of land supply explains why it alone bears all the response to market demands. Much of the market demand is explained by speculative impulses as much as it is factors such as interest rates and economic cycles.



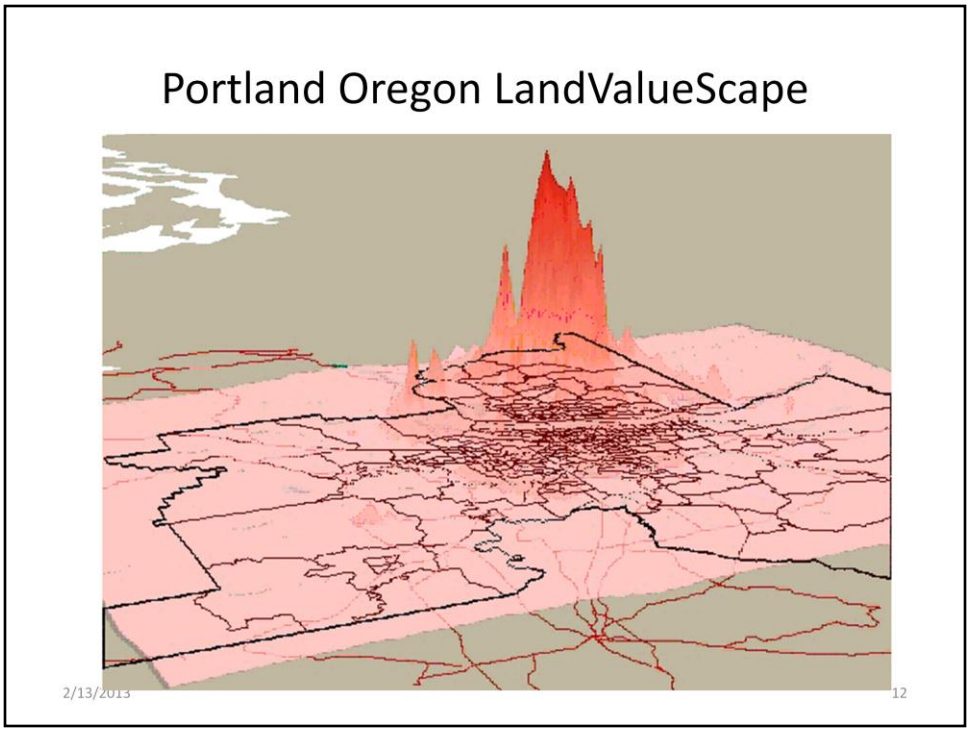
Heinrich von Thunen was an early 19th century German economic geographer that French historian Fernand Braudel ranks with Marx. He is responsible for calculations that showed the relationship between the urban and peripheral productivity of sites. He calculated the optimal use of land for agricultural use as it related to its transport to markets in urban cores. The value of that land is measured in what is known as ground rent or economic rent. The differential value of rent is seldom appreciated except through land value maps. The total costs of access are essentially the sum of transportation and access together: the higher the price of location, the lower the cost of transportation access.

Salt Lake City Land Value Map, 1969



This land value scape of Salt Lake City antedates all the current technology, and it would be interesting to find out how it was done. What is most striking about it is the proportion of land value at the urban core as opposed to that at the periphery of the city. This graphic presentation appears to have been made with very accurate land assessments, unlike most municipalities that tend to undervalue the parcel sites in the urban cores and overvalue sites elsewhere. Note how closely it follows the model of calculations that von Thunen would have us expect.

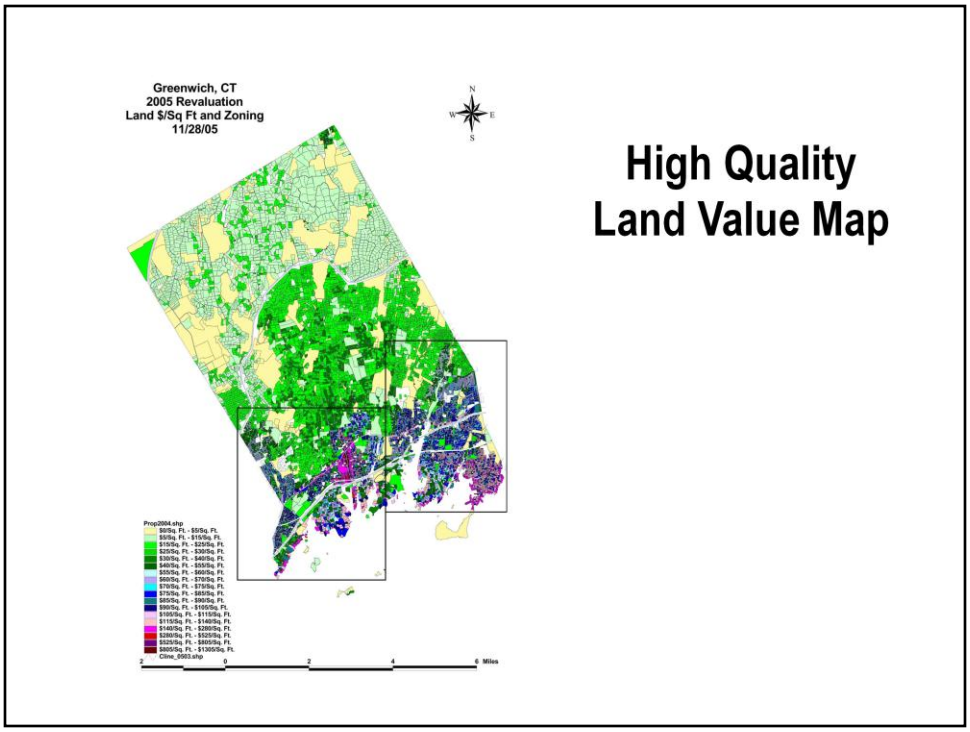
Look at almost any city skyline in the world, and it is easy to identify where the land values are highest. Typically the land constitutes about 40 percent of the aggregate value of all real property in an assessment district, although it is 55 percent in King County, Washington, 55 percent in Jackson, WY, and 71 percent in Greenwich, CT where economies are especially vibrant. One needs understand in assessing real property that buildings depreciate in value, just like cars or refrigerators. It is land that appreciates. This is why land tends to get undervalued unless valuations are carried out frequently.



The failure to collect economic rent from sites leads to their increase in market value. When sites are too expensive to prospective buyers, they choose second-best suboptimal locations. The City of Portland elected two decades ago to curb sprawl by imposing an urban growth boundary, beyond which development was prohibited. Putting such a girdle around the city created a huge differential between the value of land inside the UGB and those sites outside it. The wall was adjusted several times in the course of its history in response to political pressures. But ultimately, the economic pressure on the boundary became so strong that the wall burst – people rescinded the ordinance to allow development in what had heretofore been protected greenspace.

The people with land inside the boundary loved it, because the constrained development raised the value of their land sites. But those who could not afford to purchase sites within those limits felt that they were excluded from the game.

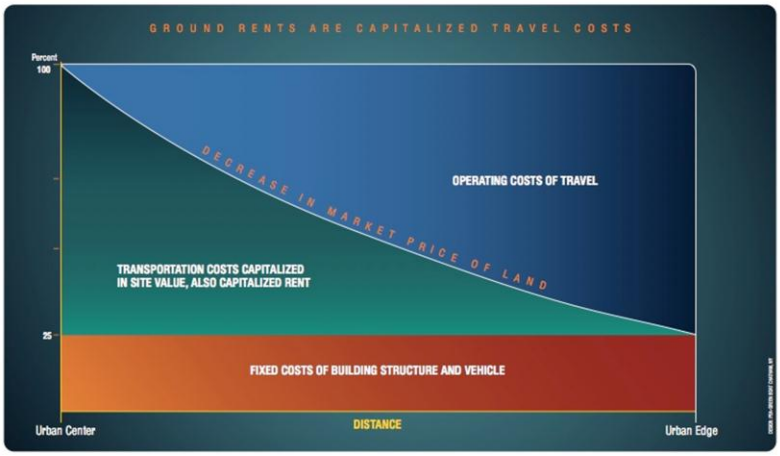
Here is a representation of site value using GIS technology. It is Johannesburg, South Africa. The sites with the greatest access, the ones where the most people tend to be, where the greatest volume or value of market exchanges is located, are the ones that will yield the highest land value. This is why just the land sites in Manhattan are worth as much as $500 million per acre. Two decades ago, there were land prices in Tokyo of $10,000 per square foot, or nearly half a trillion dollars an acre. Before the bubble burst, the land under the royal palace in Tokyo was worth more than all the real estate in California. Location, location, location.



This land value scape of Greenwich, CT was made in 2005, and based solely on the assessor's land valuations. This city is the "gold coast" of Connecticut, and houses the homes and offices of some of the wealthiest people and corporations in the country. In later years, the land value maps were used to help refine the valuations by smoothing some of the slopes from one parcel site to others. The legend is too small to show well on this graphic, but one should note that the highest site values was $1,305 per square foot (in cinnamon), and was as low as $5 per square foot in the light green color.

The distance from the highest values facing the Long Island Shore to the farthermost points to the North is only five miles. It illustrates how much land value gradient differs from one place to another.

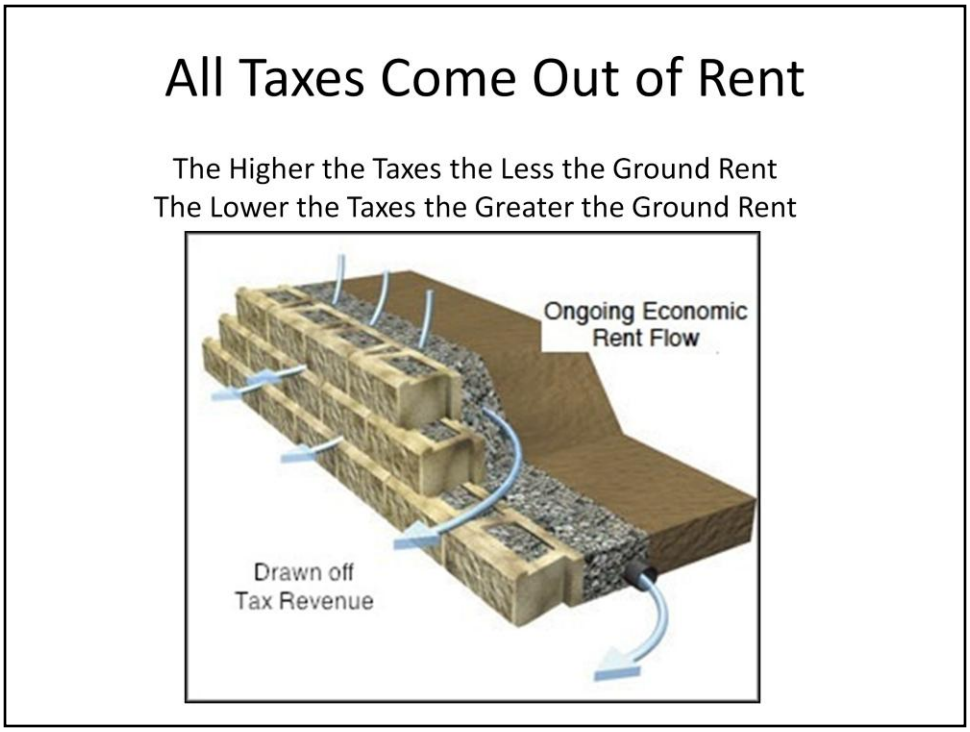
Ground Rents are Capitalized Travel Costs



Ground Rents are Capitalized Travel Costs

The market price of land sites shows pronounced differences according to their location, a factor easily understood and recognized by all people who take pains to explore this realm of study. Their range in value, measured per square foot, per acre, or by any other common unit, is a function essentially of where people most want to be, whatever sort of market exchanges they are engaged in. The first student of location to formalize ideas about how sites differ in value was German economic geographer, Heinrich von Thunen (1783-1850). He appreciated how the value of land in central markets and urban cores reflected the cost of farm goods and the cost of their transport. He was the first to articulate the thesis that what classical economists called land rent, or ground rent, was essentially capitalized transportation costs.

This fundamental tenet has wide applicability today, even though its truths are seldom applied in fostering efficient urban land use configurations. In any metropolitan area, it is easy to identify the land value gradients stretching from hinterlands to urban centers. The fixed costs involved either for buildings or for vehicles tend to balance out; it is the costs of travel and the costs of sites that tend to be reciprocal. This is often expressed in travel terms as the price of access and the price of mobility. Urban centers have high site rents but low access costs. Peripheral regions have low site rents but the costs of mobility are high. To be sure, for individual actors, the costs may not balance out because some may be borne collectively and others privately. But if travel costs are added together and site rents are similarly combined, one finds that they are typically commensurate.

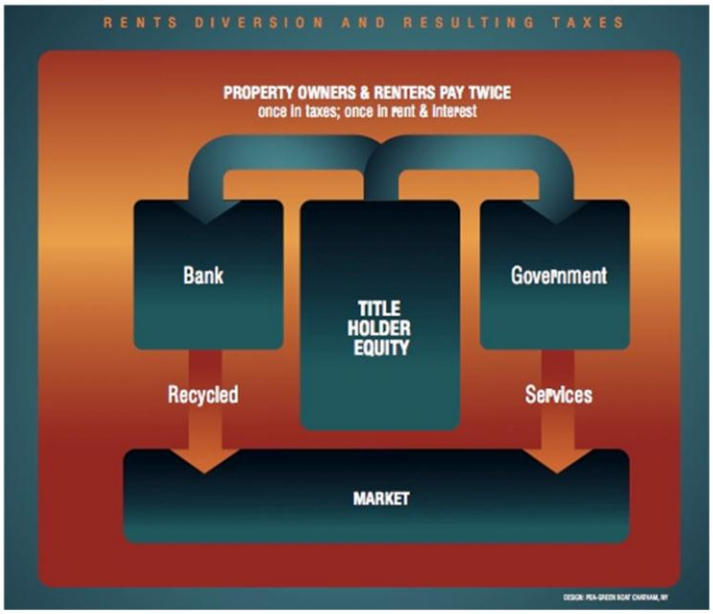


Economic Rent, also known as ground rent or Ricardian rent, is the flow of value that explains the market price of all resources of nature. Their value is a function of the demand people place on them, certainly not due to the investment of labor that is made in them. Many natural resources besides land (really locations) yield rents: water, air, the electromagnetic spectrum, airport time slots, fossil fuel and mineral wealth are the most readily understood. But so are DNA and all the biota of the world, language, computer code and website domains. It is not hard to think of many parts of our market economy that command a price without any labor by human beings. These rents are a large portion of our common wealth – what was classically called "the commons."

The Commons, which is in the process of being grabbed up for private gain is the common birthright of all humanity. When its titles are seized by private individuals and corporations, the rents that flow from them constitute a "free lunch" to those fortunate elite. Most people earn their livelihood by the labor of their minds or muscle. Wealthy people mostly live off the rents that flow to natural resources due to the efforts of others. The proper and natural source of tax revenue is rent, which is easily enough to supplant present taxes imposed

on our labor and capital.

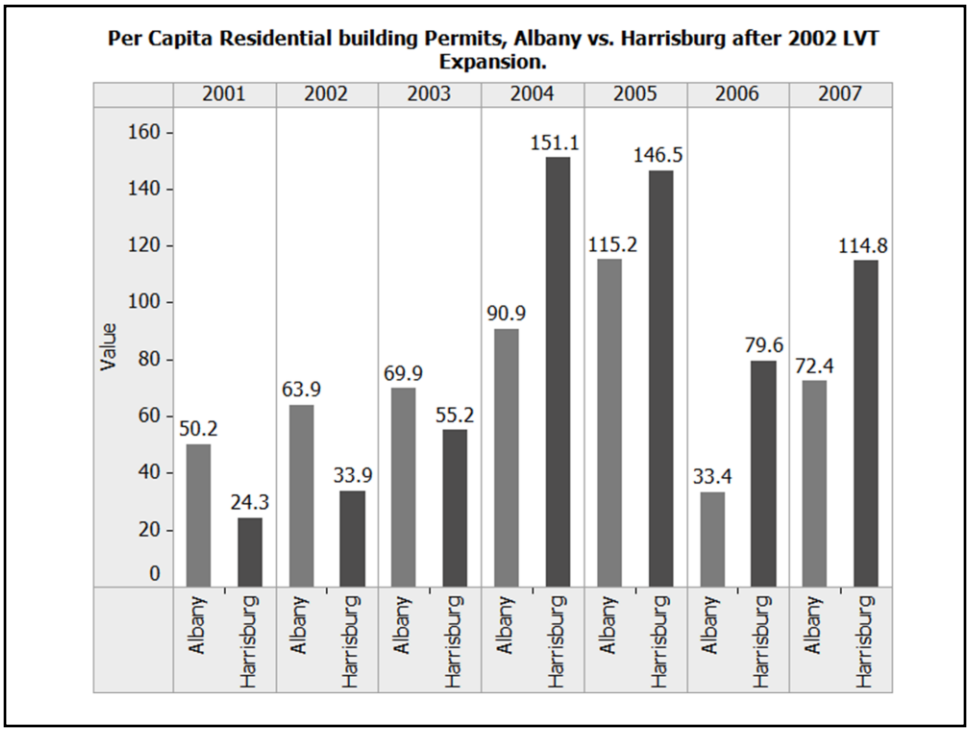
Property Owners and Renters Now Pay Twice



Property Owners and Renters Now Pay Twice

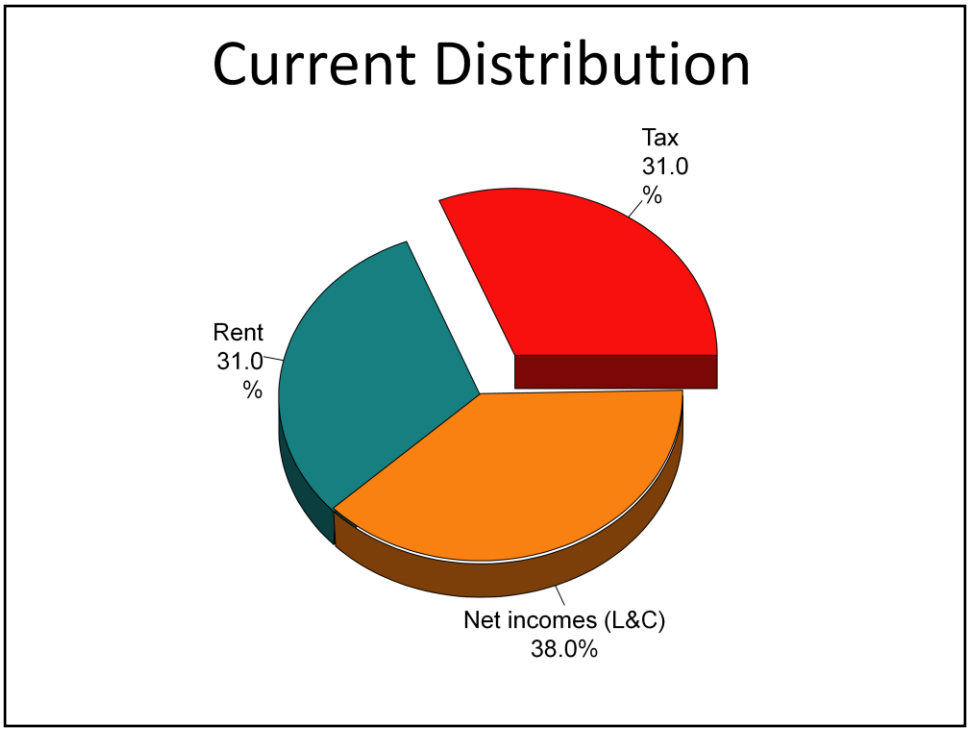
The conventional tax on real property burdens the economy in ways that not only imposes significant economic drag but also exploits and abuses certain parties at the expense of others. If land parcels were owned in usufruct and taxes paid to society for the privilege of their use, most homeowners would pay far less. This is because residential properties are largely at the periphery and business property in urban cores. A land tax regime shifts the burden off most households, with about two thirds usually paying less. The underused and vacant parcels, usually in higher value areas, would mostly pick up the difference. Moreover, real property then becomes more affordable because landsites are no longer an element of the financing arrangement; only the improvements then require a bank loan. Payment of the land rent to the community would be the source of support for public services, and other tax regimes could be scuttled.

Presently home mortgages, and sometimes the financing for non-residential properties as well, include loan arrangements for the land component as well, which is typically about a third to a half of the total parcel worth. With only the structure requiring financing, bank loans would be significantly lower, and bank business would be a lower proportion of commerce. At the present time, property owners pay for their holdings first in mortgage arrangements and then again in other taxes to support public services. They pay twice, for a substantial advantage to financial institutions.



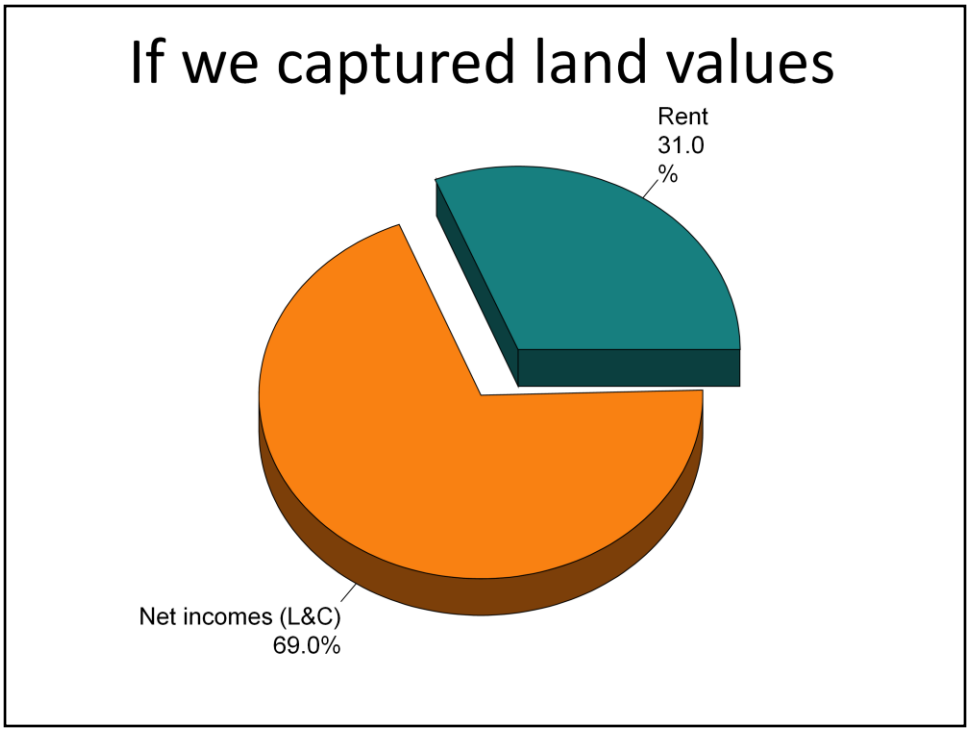
A revenue neutral tax shift off improvements and onto land sites does two things: it removes the penalty for a titleholder's investing to improve his parcel, and it motivates him by the increased carrying costs to make better use of the site's value by seeking a return (or a higher return) on his investment. This discourages land hoarding and speculation. Harrisburg, PA, has for almost thirty years been phasing in a higher tax rate on land value and lowering its tax on buildings. One can see that the rate of economic investment, as measured by the number of building permits per capita is far higher in Harrisburg.

Over an extended period, the resulting greater and more efficient development of higher valued properties means an economy with greater vitality. With greater property value in the circumscribed area, each property holder's tax burden becomes proportionately less.



In Australia, land rents have grown to about 31% of the economy, perhaps more. But here we hardly tax socially-created rents which then fall passively to land sites. Rather we mostly tax labor, which people earn by the sweat of their muscle and brow. Arguably people should resent taxes on wealth that they earn more than some others do windfall gains that arise from the flow of economic rent that falls to their land parcels they grabbed title to. Homeowners only the land under their homes, which is worth little; locations in downtown centers are worth many times as much. If they understood the idea of rent this could change. It's been eliminated from discussion in neoclassical economics.

This past December, 2010, Nobel Laureate Joseph Stiglitz wrote "One of the general principles of taxation is that one should tax factors that are inelastic in supply, since there are no adverse supply side effects. Land does not disappear when it is taxed. Henry George, a great progressive of the late nineteenth century, argued, partly on this basis, for a land tax. It is ironic that rather than following this dictum, the United States has been doing just the opposite through its preferential treatment of capital gains." In March, James K Galbraith (son of John K), testified before the US Senate that "as a general rule fixed assets -- notably land -- should be taxed more heavily than income. The tax on property is a good tax, provided it is designed to fall as heavily as possible on economic rents. This basic argument, going back to Ricardo, remains sensible, for it aims to not- interfere where there is, in fact, no public purpose to interfere with private decision-taking."



If we taxed rents, we could have just as much revenue to support the general purposes of government, and untax people's labor and capital. Not only would this be more just, it would also be more economically efficient. It is rent left to flow through parcel locations that figuratively "gums up the works" and reduces the efficiency of the market economy of land. Collecting the economic rent would make land use markets far more perfect, and provide for rational choices environmentally speaking.

Professor Galbraith went on to quote Mason Gaffney, from a paper he'd presented to the National Tax Association in 1978, saying "The key to making jobs is changing the use and form of capital we already have. Tax preferences for property income, in their present and proposed forms, bias investors against using capital to make jobs, doing more harm than good."