

## Developments in Georgist Economics

### **Incentive Taxation: Neutrality and Superneutrality**

Advocates of land value taxation argue that LVT not only is neutral in its effect on efficient resource allocation, but even generates incentives which tend to correct certain types of market imperfections and to promote economic growth.

**Wealth and Portfolio Effects.** When land is considered solely as a factor of production, then (ignoring income effects) a tax on rent cannot be shifted. If land is considered as an asset in investors' portfolios, however, then the traditional conclusion is modified. As Feldstein and others have shown, wealth and portfolio effects may cause shifting of the tax onto capital. This consideration has implications for income distribution and economic growth.

In his analysis of production and wealth, Henry George contrasted "value from obligation" with "value from production." (George, 1879: 434) The former, which includes land and monopoly privileges, does not constitute wealth from a social viewpoint, since in the aggregate each credit is balanced by a debit. George believed that when ownership of these assets substitutes for ownership of true wealth, production and capital formation suffer.

Today, a variety of models confirm that the existence of private property in land diverts savings away from investment in productive capital. Land value taxation reduces the private equity and increases the public equity in land. Capital is substituted for land in investor portfolios, promoting

capital formation and economic growth. Also, wealth and portfolio effects may shift some part of the burden of a land value tax to owners of produced capital (not only capital invested in real estate, but all capital). Significantly, wages may increase as a consequence. (Dwyer, 1982: 369; Nichols, 1970; Skouras, 1977; Feldstein, 1977)

Wealth effects may occur because LVT reduces the stock of private assets. Depending on savings motives and on the disposition of the tax revenue, this may induce households to attempt to buy more of all assets in order to return to their desired level of savings. If the taxing region is large enough, this bids up the prices of both land and capital. More land cannot be produced, but more capital can be, and is. In the long run, therefore, the marginal productivity (and rate of return) of capital falls, while the marginal productivity of land rises; there is some shifting of the land tax onto capital. (The decline in the interest rate raises the capitalized value of land.) There may also be an increase in wages, as the increase of capital raises the marginal productivity of labor. (Nichols, 1970; Feldstein, 1977: 350-353)

Since land and other assets are not necessarily equally risky investments, LVT may be shifted through portfolio effects as well. The tax reduces the ratio of land to capital in private portfolios. If land and capital are not perfect substitutes, investors try to buy land and sell capital in order to return to their desired asset ratio. In the short run, this merely drives up the price of land, again resulting in a shifting of the tax. (Feldstein, 1977: 354-358)

It is important to emphasize that tax shifting through income, wealth, and portfolio effects does not compromise the efficiency of LVT. It reflects no tax "wedge" sending distorted price signals to market participants. Instead, Georgists emphasize that by rerouting savings toward productive investment, the wealth effect of LVT promotes capital formation and economic growth efficiently and even-handedly, without recourse to government spending programs, subsidies, or price manipulation. The argument carries special force in many land-rich, capital-starved developing countries. (Skouras, 1977; Nichols, 1970) Land value taxation is urged as a valuable tool with which to accumulate capital while improving the distribution of wealth.

**Land Taxation and Land Speculation.** Several “superneutrality” arguments for LVT indicate that the tax actually improves productive efficiency. (Dwyer, 1981) One such argument begins by pointing out that capital markets are inherently imperfect, since they rely on estimates of future values which cannot be known with certainty. Investors face different discount rates. In financial markets, funds are allocated, not necessarily to those who will use them most productively, but to those who have collateral and can borrow at low interest rates. As Mason Gaffney (1973 and elsewhere) has shown, a (small) firm can sometimes be outbid in the land market by a (large) buyer who discounts future returns at a lower rate, even if the low bidder can employ the land more productively. The marginal condition for efficient factor employment is violated. This distortion is greatest for land which is appreciating in value.

LVT improves the efficiency of land allocation by reducing dependence on credit markets. Since it is capitalized into lower land prices, LVT simply substitutes an annual (tax) payment for a lump-sum (land price) payment of equal present value. This replaces the interest cost of landholding with an impartial tax cost, neutralizing the effect of credit discrimination. The result is a tendency for land, especially appreciating land at the fringes of growing cities, to be transferred from speculators to users, and therefore to be used with increased intensity as well as efficiency. (Gaffney, 1973)

LVT systematically discourages inefficient land speculation and underutilization in other ways, as well. While the tax cost is an explicit charge, the interest cost of holding land is borne only implicitly if owners are unencumbered by mortgages. The annual tax may make landowners more keenly aware of the opportunity cost of land. It creates a cash flow problem for owners who irrationally or unknowingly waste opportunities to earn an income from their land. LVT prods them to action, pressing them either to put the land to its best use or to sell it to someone who will.

Suppose a speculator buys land merely to hold, in anticipation of a rise in its value. Figuring that the appreciation rate will be sufficient to at least cover the interest cost of the investment, he deliberately chooses to forego the rents which could be earned in the interim. True, he fails to maximize his gain. Such inefficient land speculation nevertheless occurs for a variety of reasons, among them gambling, inertia, and indecision. Perhaps the speculator has no special expertise at land development, and prefers to

invest any available funds in more land, rather than in buildings. Transaction costs may preclude his temporarily leasing the land to a tenant, even if there exist worthwhile interim uses which potentially could earn enough to amortize sunk capital before the land “ripens” to some higher use. (Brown, 1927; Gaffney, 1961)

LVT increases the penalty for inefficient speculation of this sort. The tax is capitalized in land value, which leaves total holding costs for the speculator—interest plus taxes—unchanged. But the higher is the LVT rate, the smaller is the capital gain for which those constant holding costs are incurred. The tax pressures owners to put land to its best use. (Brown, 1927)

Land hoarding can reflect ordinary monopoly power as well as speculation or capital market imperfections. As Henry George observed, since no more land can be produced, its exclusive ownership creates a primary condition of monopoly: the existence of barriers to entry. (Gaffney, 1967; Dwyer, 1981: 65-75) The immobility of land is another source of monopoly power. The idea of location as a barrier to entry—spatial monopoly—has recently received some attention from economists. (Dwyer, 1981: 325) Sufficiently heavy taxation of rents or land values, it is argued, erases the incentive to accumulate land with intent to monopolize.

Georgists have only begun to build the case for George’s view that land speculation not only misallocates land, but also contributes to regional macroeconomic instability. (Harrison, 1983) A widespread collapse of speculative land prices often precedes a general economic contraction, as it did in 1928, and as it did recently, for example, in the United States (the “S&L crisis”) and in Japan. Georgists claim that general reliance on land value taxation will dampen speculative booms and busts.

### **Location Value**

**The Henry George Theorem.** The allegedly “unpriced” benefits of local public goods are not unpriced at all. They are not sold, however, by the governments which produce them. They are sold to users by the owners of the lands serviced. They are sold as package deals; to buy or rent a location is to purchase scarce access to all the services accessible from that land parcel, whether you avail yourself of them or not. This is simply to say that competitive land rents reflect, in part, the demand for access to those

benefits. This means that if local government expenditure provides services which people want, then with a sufficiently high tax on land rent, those services can be self-financing.

A family of models developed by urban economists indicates that, under certain rather general conditions, a tax on land rent is (not merely nondistortionary but) necessary for full efficiency in a competitive system of cities. Furthermore, the rent increases generated by the optimal level of public expenditure, supplemented where appropriate by efficient marginal-cost user charges, is exactly sufficient to finance the optimal expenditure. This result has been named the "Henry George Theorem," recalling George's conviction that a single tax on land rent would always be adequate to cover the legitimate expenses of government. (Stiglitz, 1974; Vickrey, 1977)

While all the formal conditions of the Henry George Theorem cannot be assumed to be satisfied in the real world, these models nevertheless carry an important lesson. People "buy" local public services when they buy land. They pay more for land in a district with good schools or good roads than for land in a district with poor schools or poor roads, other things equal. For that matter, they also "buy" a package of privately-created externalities. They pay more to live where crime rates are low than they do to live where they are high, other things equal. When land is privately owned, these benefits are captured by landowners. Rent taxation returns this socially-created value to the public. From this perspective, LVT is not a true tax but, as one writer has put it, a "super user charge." (Rybeck, 1983)

Urban rapid transit systems, for example, require immense capital outlays. The costs rise still higher as cities sprawl and the density of land use declines; local governments have to scramble to provide the necessary subsidies. Raising fares diminishes ridership and forfeits the scale economies which are the rationale for mass transit in the first place. Yet we need more subways, not fewer. Mass transit reduces automobile congestion and pollution, reduces the area of valuable central land which must be devoted to streets and parking lots, and helps low-income central city residents get to jobs. If benefit-cost studies indicate that most mass transit systems do not pay, it may be because they fail to account for the benefits which are captured in land values. The lower are fares, the larger is the rise in land value which a transit system bestows on private owners. Land value

taxation intercepts publicly-created windfall gains to landowners, making them available to finance public expenditures without distortionary taxation. With 100 percent rent taxation, efficient marginal cost transit fares maximize government profit.

**Urban Problems and the Property Tax.** Heavy taxation of buildings coupled with undertaxation of land contributes to a staggering list of urban problems: sprawl, leapfrog development, rising costs of municipal services, urban congestion, vacant lots, abandoned buildings, decaying slums, stagnant central cities, and discriminatory zoning practices.

Cities exist because many kinds of economies can best be exploited when land is used at high densities. High density means low transportation costs, easy communication, and intensive utilization of collective consumption goods. High central land values are the key to private-sector urban renewal.

Building taxes are shifted partly or wholly to land, which dampens the incentive to salvage well-situated land by demolishing worn-out buildings. This perverse incentive is especially powerful because new buildings pay higher property taxes than old. Neighbourhood effects from deterioration of old buildings further exacerbate the depressing influence of building taxes, sometimes causing renewal to be delayed indefinitely. A property owner in a blighted area may simply abandon title rather than incur the expense of demolition to recover the site. Every additional abandonment further depresses land values in the neighbourhood.

As central cities are left to decay, people who can afford to get out scatter across the countryside. Urban sprawl multiplies the cost of municipal services, dissipates economies of density in commerce and industry, increases road mileage without lessening traffic congestion, worsens auto pollution, chews up valuable farmland, ruins open space, and pushes jobs to the suburbs, out of reach of the urban poor.

The prices of horizontal transportation are kept artificially low by the subsidies implicit in toll-free roads, cheap gas, and flat-rate pricing of municipal services. The traditional property tax exaggerates the bias against vertical transportation. While streets and sidewalks are provided at public expense, elevators are taxed. Here is another institutional cause of urban sprawl.

Since the burden of a tax on improvements is greatest where buildings are tallest, the largest declines in land value caused by the property tax are

in central cities. Accordingly, the “unshifting” which results from the removal of building taxes gives the largest land value increases to central locations. The urban rent function becomes steeper; the city grows more compact.

In short, the traditional property tax obstructs the operation of the synergistic forces which are the reason for being of cities. Conversion to LVT promises to stimulate development efficiently, even-handedly, and continually, without bureaucratic interference and at no cost to taxpayers. It automatically turns the vicious circle of urban decline into a virtuous circle of renewal, as each renovation and redevelopment enhances the values of neighbouring sites. (Gaffney, 1969; 1989)

### **Land and Environment**

**Tax Reform and the Environment.** The environmental consequences of heavier land value taxation, especially coupled with lighter taxation of improvements, are overwhelmingly favourable, particularly for the artificial environments of urban areas. As the tax bias against improvements is softened, structures will be built better, yet replaced sooner. A sea of downtown parking lots will give way to new offices, stores, restaurants—and a single parking garage. Valuable urban land will be used intensely, providing more indoor space per person. As urban sprawl is reversed, dependence on the automobile will lessen, reducing air pollution, traffic congestion, commuting times, and auto accidents.

Property tax reform carried out unilaterally by a single locality may, in principle, lead to excessive development there, especially if the resident population is highly mobile. If this were to occur, the obvious solution would be to reduce temporarily the land-to-building tax rate differential, while advertising the benefits of tax reform to neighbouring communities. I know of no evidence that overbuilding has ever occurred in two-rate tax regions; rate differentials could go much higher than they are. Unfortunately, our central cities have far to go before they need to worry about overdevelopment. Much of the concrete clutter in downtown areas today is yesterday’s trash, still uncleared. Beneath it, potentially valuable land awaits recovery.

Applied nationally, Georgist tax reform would not cause overbuilding, a concern of many critics (unless buildings were actually taxed *less* than

other capital). High density at urban centers means low density elsewhere. With speculation and sprawl curbed, fertile, conveniently situated farmland at the fringes of urban areas would be preserved. It would be easier to move around within the city, and easier for city residents to travel to rural areas. Also, insofar as high land taxes are capitalized into low land prices, tax reform makes it easier to acquire land for parks, playgrounds, landscaping, bicycle paths, and the like. Local governments will be rewarded for setting aside open space by the resulting increases in neighbourhood land values and, therefore, tax revenues. (Dwyer, 1981: 225) In principle, expenditure on parks should proceed to the point at which the marginal dollar of annual park expenditure (including the foregone rent of park land) generates just one dollar of increase in aggregate annual rent.

**LVT and Depletable Resources.** It has sometimes been argued that the non-shiftability of taxes on pure site rent does not extend directly to taxes on ownership of depletable resources; annual taxation of mines, for example, would encourage premature extraction. Gaffney has answered that mineral extraction or soil depletion amounts to “the liquidation or amortization of a fund, comparable to sale of title to part of the land itself.” (Gaffney, 1964-65: 540) Georgist principles call for a severance tax “equal to the discounted value of the most remote future liquidation receipt”; this amount “is part of land rent.” (556) In conjunction with an annual tax on the value remaining in the ground, such a charge is neutral with respect to the optimal rate of extraction. (Gaffney, 1967: 557).

**LVT and Nonexclusive Resources.** Effluent taxes charged to polluters are assessments for the rent of environmental resources. A system of tradeable emissions permits is rent taxation too, if the permits are sold by government in a competitive auction. Congestion tolls designed to improve the allocation of roadway space are also rent charges.

It is more difficult to set the optimal levels of such taxes compared to site value taxes, since the social costs of pollution (or congestion) are not readily measurable. This is because, insofar as air and water and roadway space (unlike farmland or building lots) are nonexclusive goods, users cannot easily be made to reveal their demand for them, though benefit-cost analysts have devised clever roundabout ways to measure benefits. Monitoring emissions often turns out to be just as problematic. Nevertheless, well-designed pollution fees or marketable permit systems are likely to



improve efficiency in many cases. At least, they achieve cost-effectiveness almost automatically, if they can be enforced. This is a compelling argument for using environmental charges as a source of government revenue, in preference to the usual taxes on production and exchange. Add to it the normative judgment that the public has the *right* to collect such rents, and it becomes a Georgist argument.

Nonexclusive, depletable resources such as the atmosphere and oceans are frequently referred to as “common property” resources. This phrase, however, is used in two distinct senses. Purely nonexclusive, free-access resources are common property in the sense of *res nullius* - correctly, “nobody’s property.” Common property resources in the sense of *res communis* are those to which access is regulated by public controls. (Randall, 1993: 146)

The growing scarcity of environmental resources has prompted a recent trend toward public oversight and regulation of formerly unowned resources. Pollution legislation is one reflection of this trend. Another is the pressure to end the systematic underpricing of our national forests, grazing lands, water supplies, and other government-owned resources.

Georgists emphasize that even immobile land is characterized by nonexclusion in an important sense. The quality of any individual site depends on activities that take place in neighbouring regions. Land uses are scarcely less interdependent than are the uses of a certain volume of ocean or air—and not merely because pollutants migrate in the wind, rain, and ground water. Externalities abound. Ideally, perhaps, everyone would pay for the specific external costs he created, and would be compensated for the external benefit he bestowed on others. (Vickrey, 1970) But this may not be possible for nonexclusive spatial externalities. Under LVT, however, each individual, in effect, pays society for the use of positive externalities, insofar as they are accessible only from particular lands which are scarce. Symmetrically, the landowner is compensated for negative externalities by a reduction in his assessment. As Henry George expressed it:

The tax upon land values falls upon those who receive from society a peculiar and valuable benefit, and upon them in proportion to the benefit they receive. It is the taking by the community, for the use of the community, of the value that is the creation of the community. It is the application of the common property to common uses. (George, 1879: 421)