Pennsylvania Farmers and the Split Rate Tax

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Introduction

Pennsylvania has been experimenting with a new approach to local tax reform which offers an entirely different angle from other current reform proposals which consist attempt to reduce the use of property taxes while introducing sales or income taxes. This approach, known as the "split rate" or "two tier" tax, reforms the property tax itself in a way that appears beneficial on a number of indicators.

The property tax is actually two types of taxes - one upon building values, and the other upon land values. This distinction is an important one, as these taxes have significantly different impacts on incentive motives, development results, and economic consequences.

Because buildings must be constructed and maintained in order to have value, a tax on building values is a cost of production. Such a tax results in lower production and/or higher prices.

The other part of the property tax one on the value of land. Land is most certainly not a product of human labor but a gift of Nature. A tax on land cannot be avoided by producing less land, or by moving land from one jurisdiction to another. Unlike capital items, a tax on land values is not a cost of production per se but function as a type of user fee which has the added advantages of encouraging efficient land use while curbing land speculation.

Furthermore, since land value is enhanced by public expenditures for roads and other improvements of the infrastructure, the taxation of land values recaptures this publicly created value and places government on a firmer footing without burdening private enterprise.[2]

Pennsylvania's pioneering use of the split-rate tax makes this important distinction between land and building values. The tax is decreased on buildings, thereby giving property owners the incentive to maintain and improve their properties while the levy on land values is increased, thus encouraging good site utilization.

When considering this land value taxation policy approach, it should be kept clearly in mind that it is not proposed as an additional tax burden, but rather to be implemented in tandem with significant tax reductions on productive labor and capital.

The split-rate tax, now in place in varying degrees in 16 cities in Pennsylvania, encourages improvements and renovations, promotes a more efficient use of urban infrastructure (such as roads and sewers), and discourages land speculation and urban sprawl.3 The split-rate tax reform provides a strong incentive for infill development as indicated by increased building permits in cities using it compared to those with the traditional property tax. This approach fosters more downtown jobs and improvements in residential and commercial buildings.

By correctly harnessing market forces and private incentives at the same time providing a solid source of financing for the public sector, the split-rate tax reform also assures a broader spread of the benefits of development to the community as a whole. Legislative efforts are now underway which would extend the split-rate tax option to the boroughs, school districts, and townships of Pennsylvania.

The possibility of extending the split-rate tax to jurisdictions which include agricultural lands raises this important question: What might be the impact of the split-rate property tax on the farmers of Pennsylvania?

To answer this question we will summarize recent research on the overall impact of property taxes on agriculture and also report on the effect that land value based taxes have had on farmers in places where similar split-rate or pure land value tax policies have been in force. Knowledge as to the precise impact of this policy approach on farmland in any particular county, township or region however, requires research and analysis as applied to that particular area.

Property Taxes in Agriculture

On average in the United States, sixty percent of the private land in the forty-eight contiguous states is in farms and ranches.4

Although farming and ranching cover a lot of territory, agricultural real estate represents only five percent of all real estate value in the U.S., according to the National Realty Committee. The Federal Reserve Bulletin estimates the 1994 farm business real estate at $772 billion which is six percent of U.S. real estate value. Farm business land alone was estimated at $593 billion which is 14% of U.S. land value. The $5 billion of agricultural real property taxes is only about three percent of total real property taxes in the U.S.5

As currently applied, agriculture pays a relatively small part of America's total real property taxes and thus the property tax on farmlands is not critical fiscal policy. The real property tax is more important at the local level, where such taxes constitute 76% of the tax revenue, 48% of "own revenue" and 30% of all local government revenue.6

The research of Gene Wunderlich[7] of the USDA Economic Research Service revealed that as currently administered, the real property tax appears to be regressive in terms of the value of holdings. Landowners whose value of farmland was $5 million or more paid one third the rate of landowners with farmland holdings valued at less than $70 thousand. The owners whose estimated market value of farmland holdings was less than $70 thousand paid $1.45 per $100 and owners of $5 million or more paid $0.47 per $100. Holdings between these extremes graded regressively.[8]

Property tax policy, with all its partial exemptions, preferential assessments, and levels of rates and classifications, may be excessively complex, Wunderlich says. His findings lead him to recommend that before the real property tax can become an effective instrument of land policy, some of its administrative shortcomings must be addressed. Exemptions, partial and total, based on features of the owners distort the incidence of the tax. Multiple classes and rates further complicate the legal structure and administration. Reform of the real property tax to effectively support land use policy requires changes in law and management. Wunderlich's extensive research led him to the following conclusion:

Exercised differently and more vigorously than at present, the real property tax might complement other land use policies or become a strong policy instrument in its own right, but without the concerns about "takings" under eminent domain or regulation. Its influence would be reflected in land values and land prices. The value of land, therefore, is the key ingredient in tax policy pertaining to resource use.[9]

Rising Inequality and Falling Property Tax Rates

A meticulous study conducted by Dr. Mason Gaffney entitled "Rising Inequality and Falling Property Tax Rates"[10] refutes the common belief that property tax relief would be good for farmers. This research showed that property tax relief for agricultural land increases the likelihood that it will attract those looking primarily for tax shelters and speculative investments. Such nonproductive incentives ultimately inflate land values overall, making it increasingly difficult for working farmers to access and maintain acreage for viable agricultural enterprise.

Lower farm property taxes were also found to be associated with lower ratios of capital to land, and labor to land, both over time and among states. States with lower property taxes also had larger mean farm size and less equal distribution of farm sizes along with underuse and underimprovement of land.

Conversely, a positive relationship was found between higher property tax rates and more intensive use of farmland, which in turn is associated with its more equal distribution.

Gaffney's research made a clear distinction between building values and land values in agricultural holdings. This aspect of the study permits comparison with property taxes levied on buildings and land combined or separately with lower tax rates placed on buildings and higher rates on land values, as would be the case with the two-rate property tax on Pennsylvania agricultural lands.

The study showed that smaller farmers had a higher building-to-land ratio than bigger farmers. Property taxes on buildings therefore penalize the former and work to suppress improvements. The findings indicated that a property tax on land values promoted a more intensive and efficient use of agricultural land, thus supporting the overall viability of smaller farming operations.

Some specific data from Gaffney's research would be in order here. The national average of farm property tax rates peaked in 1930 at 1.32%. It fell to 0.77% in 1945, and stabilized at about that level in 1987 (0.85%). Mean acres per farm had remained fairly constant for 65 years (1870-1935) at about 155 acres. After 1935 the mean took off and had tripled to 462 acres by 1987. Real wage rates have not risen as fast as real land prices since 1955, and not at all since about 1975. This situation coupled with rising acres per farm meant that the labor-price of a farm roughly tripled, from about six years' wages (before payroll deductions) in 1954 to about 17 years' wages in 1987. Consequently, farms became unaffordable to the average person while concentration in their holdings proceeded.

In 1900 the Census Bureau began publishing farm data ranked by acres per farm. Using those data, the Gini Ratio (GR) was calculated for several decades. The GR is a measure of unequal distribution. A rise in GR means that the big got bigger and/or the small got smaller. It ranges from .00 (complete equality) to 1.00 (complete inequality).

The GR was .58 in 1900, rose only slowly, to .63 in 1930, climbed faster, to .70 by 1950, plateaued there for 15 years, then increase again to .76 by 1987. The acclerated rise since 1930 coincided with the rise of mean acres per farm; both followed the fall of property tax rates.

The GR deals only with concentration among existing farms and normally does not reflect their loss. In his research Gaffney modified the GR to combine both effects by adding the 4.5 million farms that died out between 1935 and 1988 to the lowest bracket, as farms with zero acres in 1988. Calculating the GR this way gives one a better sense of how concentration shot up after 1930-35. This increases the GR for 1988 from .76 to .92, a radical rise of inequality since 1930 (.63). "In the Great Depression (1930-41), millions of small farms provided a refuge for the jobless and homeless," states Gaffney. "Today, that refuge is closed, with explosive social consequences in urban slums."[11]

Additionally, Gaffney found that the concentration of the value of farm real estate has been growing faster than that of farm acres during most of this century, and that the Land Share of Real Estate Value (LSREV) in the top bracket (1,000 acres and over) appears to have risen faster than the building values. Higher LSREV means a higher farm price to cash flow (P/C) ratio which is another barrier to farm entry. A high P/C ratio shows a higher share of land value ($L) in farm wealth.

The common belief that high Capital Costs of Machinery and Equipment ($M&E) are the main obstacle to farm entry is therefore erroneous. At the time of this study, capital costs

were only about 10% of all farm assets, much smaller than the costs of land and buildings.

To sum up these key points from this Land Ownership and Taxation in American Agriculture study:

1. Rising acreages mean there are fewer farms overall.
2. Rising labor prices per farm mean aspiring farmers who lack prior wealth can no longer afford to acquire farms.
3. Acreage is less equally shared among a given number of farms
4. The higher quality of land is moving into bigger farms

The combination of the above factors means that "the agricultural ladder has been pulled up. Entry is nearly impossible for farmers lacking outside finance."12 Smaller farms are being forced to sell out as larger farms increase their holdings. These changes accompanied and followed a 40% drop in farm property tax rates.

This study also showed that as the concentration in both acreage and real estate value of agricultural lands proceeds, there is an increasing separation of land from capital. Large farms are for the most part lands without buildings while buildings cluster on smaller farms, many without enough land. Furthermore, the biggest landlord holdings, in dollar value, were found to be 99% pure land.13

Lack of buildings reveals a dearth of family labor, because so many farm buildings are operator dwellings. In 1988 operators' dwellings were 48% of farm real estate assets in the smallest acreage bracket, 16.4% for all farms, and falling steadily to 4.4% on farms 2,000 acres and over. For family-held corporate farms (of all sizes) the share is 6.3%; for other corporate farms, 3.2%.

These data support the common impression that smaller and unincorporated farms are better supplied with operator family labor. Additional statistical analysis in the Gaffney study clearly indicate that farm land values are much more concentrated than farm building values.

Such statistics suggest at least three points. First, building wealth is more equally distributed than land wealth. Second, the property tax would be more progressive if changed to a pure land tax, exempting buildings. Third, many large farms are not being used to their potential while capital on some small farms is undercomplemented with land.

Yet another component of the Gaffney study bears mentioning since it concerns how the split-rate property tax might effect the farmers of Pennsylvania. It suggests that "the effect of urban land speculation is toward higher concentration of landholdings...observable today around growing cities."14

Evidence was obtained which further supports the understanding that higher property taxes are actually to the benefit of smaller, more capital and labor intensive farming operations. Wisconsin had the highest Building Share of Real Estate Value (BSREV) in 1988, while Florida had the lowest (.47 for WI vs. .15 for FL); yet Wisconsin's farm Property Tax Rate (PTR) exceeded Florida's 4 to 1. Wisconsin, the high tax state, led Florida 3 to 1 in farm output per dollar of farmland value, 5 to 1 in farm buildings per dollar of farmland value and 7 to 3 in machinery/livestock.

The agricultural landholdings in Florida, the low tax state, were twice as concentrated as Wisconsin according to the GR, had 5.5 more land value per farm, had more acres per farm (3 to 2), more land value per acre (4 to 1), and led in total assets (11 to 8).

Extending Gaffney's data to the eight low property tax states below Florida and to the eight above Wisconsin, he found that the differences persisted and accumulated consistently. The lower property tax states were Florida, Arizona, New Mexico, Hawaii, Montana, North Dakota, Wyoming, California and Texas. The higher property tax states were Wisconsin, Delaware, Maine, Pennsylvania, New York, New Hampshire, North Carolina, Oklahoma, and Ohio.

It was found that higher property tax rates were associated with higher building values, smaller farms (lower land values per farm and per acre) and lower GR values (which indicates a broader distribution of farm land ownership). Higher ratios of capital investment in machinery and equipment as compared to real estate, lower shared of leased land, and fuller land usage, as measured by sales per land value were also apparent. From these state comparisons, Gaffney contends that:

The egalitarian effects of a high property tax rate seem stronger than its negative incentive effects, even though buildings are part of the tax base. These egalitarian effects would be stronger if the tax base was limited to land value only, because the land share of real estate value rises steeply with size of farm. Untaxing buildings would also eliminate negative incentive effects.[15]

Gaffney firmly concludes that large farm units are less improved and less peopled than small and medium-sized farms. They get less output per land value and are possibly being held for long-term land speculation. Large farm units appear to be, in his words:

oversized stores of value, held first to park slack money and only secondly to produce food and fiber, and complement owner's workmanship.... If they are less efficient, heavier property tax rates will induce them to release surplus land for others.[16]

Preferential Assessments, Zoning and Other Farmland Protection Policies

Agricultural land receives some preferential treatment in assessment in all fifty states. The level and form vary among states, but generally, the preference is in the assessment

of value in current use, rather than at some higher-valued use rendered by the market. Under the pressure of residential development, for example, the assessed market value of a farmland tract might be multiples of the value for farming, but under preferential assessment law the tract would be taxed only for its value agricultural use. With some preferential assessment contracts penalities in the form of fees or taxes are charged for land use changes.17 In Pennsylvania, for instance, the corresponding statute states that:

Counties may covenant with owners of land in farm, forest, water supply, or open space use. Assessments reflect fair market value of land so restricted. Such agreements may be negotiated to conform with more recent provisions of preferential use assessment described below. (Title 16, Sections 11941, ff, and Title 72, Section 5490.10, Pennsylvania Statutes).

Upon application, qualifying agricultural land, agricultural reserve, and/or forest reserve may be given preferential use assessments. Requirements include ten-acre minimum size for agricultural land, an anticipated annual gross income of $2000, and qualification for compensation under a soil conservation program for at least three years. Rollback taxes may extend for up to seven previous tax years, and include six percent interest. (Title 72, Sections 5490.1, ff., Pennsylvania Statutes).

A USDA, Economic Research Service18 survey found that, as expected, higher taxes were levied on farmland without a preferential assessment than with a preferential assessment, but it was a very small difference. Although there is a relatively large change in taxes when a change in preferential status is made, the evidence suggests that preferential assessments, in aggregate, do not make much difference in tax rates.

For instance, in 1992, average tax per acre of agricultural land with an assessment preference was $5.12 and without assessment preference it was $5.93. In 1993, the figures were $5.39 with assessment preference and $5.94 without it.

While it is sometimes assumed that preferential assessments which lower property taxes on farmland can help keep land in agricultural use and protect it from more intensive development, a survey of the literature shows that the opposite may be true:

There is general consensus from extensive research over a twenty year period that the economic incentive offered by lower property taxes has had minimal effect in preventing conversion of farmland to more intensive uses. In urbanizing areas, the tax reductions have not matched the profits available from subdivision and development, and in some areas may have fueled land speculation.19

Since most agricultural land does not encounter competition from urbanization, preferential assessments have little overall effect on land use changes. In areas which are impacted by urban pressures and land speculation, the effect of the preference is so slight, compared to value increments for more intensive uses, that it is not an effective deterrent to development. Says Wunderlich:

Only where landowners and local government have a long term contract agreement, with severe penalties for breaking the contract, are tax preference programs likely to have some effect. A capture of all the increase in land value due to a change in land use likewise could be a deterrent to land use change.20

Preferential assessments based on agricultural use value can be highly lucrative for rural landowners and yet may not guarantee long-term retention of prime farmland. In general, the tax savings for maintaining agricultural uses are insufficient to outbid sale prices offered by developers. As a result, farmland owners often can simply take advantage of sizable tax savings while speculatively waiting for land values to appreciate. Where rollback requirements or transfer taxes are in effect, the farmland owner may simply enjoy the equivalent of a low-interest or interest-free loan while holding property for later conversion.21 Time is simply being bought through the use of an indirect subsidy but state differential taxation laws do not assure the continuation of prime farmland in perpetuity.

Another problem for agricultural, open space and forest land, is that preferential assessment usually applies only to land and not buildings and improvements. The preferential tax laws for agriculture thus favor land and penalize buildings which then must carry a larger share of the tax burden. With higher tax rates applied to capital investments such as buildings, the economic incentive is to construct and maintain them less. Yet erecting farm buildings and maintaining their value, by raising conversion costs may do more to discourage land conversion than subsidizing land values. Wunderlich concludes that "as a measure to preserve agricultural land use the real property tax is weak...the preferential assessment is shallow...and the taxes carry little or no penalty for land use change."22 He instead recommends a shift to property taxes that would fall primarily on land values as a better way to keep land in agricultural use.

Zoning can be a bigger determinant of value than land use. If, after investigating possibilities for implementing the split-rate tax in rural areas, the community would decide to award special protection to assure the viability of farming, this measure can be effected by zoning farmland for agricultural use only, and land prices would thus reflect agricultural use only. Since this tax would rise as the value of the land increased, or would fall as it decreased, there would be no basis for speculation in land. With a policy approach that kept taxes on agricultural lands appropriate to the profits that can be realized from farming, farmers might look favorably on zoning proposals.

Shifting taxes away from labor and capital and increasing taxes on land values would help keep farm costs affordable and farming viable. Finance which currently is invested in site costs, would be available for new technologies and practices which could improve agricultural efficiency or soil quality.

In areas with particularly high land values farmers could be granted assessment exemptions that would reduce their tax liability. For instance, they could be granted a land assessment exemption of $500 an acre, which would roughly compensate them for in-land improvements such as grading, ponding, fertilizing, or tree-breaking.

Improvements in assessment practices could also reduce farmers' tax liability under this reform. Assessors could exempt not only improvements on the land (buildings, fences, etc.) but also improvements in the land, such as grading, draining, ponding, irrigation, or fertilizing. The assessor could determine in each case how much such improvements increase the selling price of the land, and then, say, for ten years, deduct from the farmer's land tax bill one/tenth of the increase (plus interest on the unpaid balance). By thus recompensing him for his improvements which have become part of the taxable land value, the farmer would receive a legitimate reduction in his land value tax bill -- many farmers would be paying less taxes as the result of a shift to the split-rate tax.23

Yet another way to support and protect farmers for the risks of their occupation would be to make land value tax payments conditional on crop price and production, in which case they would be insured against occasional failure in the yield.24 Certain forms of tax abatements could be offered. For example, any tax increases resulting from the shift to the split-rate tax could be left unpaid, to accrue against the eventual transfer of the farm by either sale or death; when the transfer is made, then the government can collect its back taxes from the new owner. With these concessions to the farmer, any inconvenience caused by a more effective property tax system would seem to be very minor indeed.

When implementing zoning policies and other contracts between government and landowners, principles of justice and fairness must be uppermost. The "Agricultural Reserves" prevalent in areas of California, such as Orange County which went into bankruptcy a few years ago, have something to teach us in this regard. Many thousands of acres of this rich county were placed in such reserves, which means that it is only taxed for its use as farm land, although oil refining, food processing and vacant land were also approved as "agricultural uses." These agricultural preserve contracts between Orange County and a few gigantic landowners clearly benefited the few at the expense of the many.

The Impact of Urban Sprawl on Farmland Prices

Low-density, discontinuous land development, known as "sprawl," contributes to many of the ills that plague our society.25 Sprawl negates the positive purpose of cities, which is to let people live and work close together so as to utilize and enjoy the maximum efficiency of community facilities and enterprises.

Surburban sprawl results from owners holding out for high capital gains on acreage cheaply obtained years ago. Evidence suggests that the split-rate property tax reform can create economic incentives to reverse this trend, thereby conserving open space and decreasing the pressures of development which absorb agricultural land.

Sprawl inhibits the use of transit which thus necessitates auto travel, which in turn contributes to air pollution. Energy and time are wasted in traffic jams, reducing productivity and increasing stress. Health is endangered from pollution and automobile accidents. Per capita infrastructure costs are high because roads, sewers, and other public

must be extended through sparsely occupied areas. Pockets of undeveloped areas are often too small and too scattered to support meaningful conservation uses or agriculture.

Sprawl penalizes farmers who want to raise crops instead of speculate and it discourages farm improvements on fringe land around cities. Sprawl also drives up the price of land in rural areas. This fuels land speculation while making it increasingly difficult to secure access to affordable land for farming operations.

The economic incentives promoting sprawl can be partially explained by the second of two ways in which land owners earn money. Either a land owner can make money by developing a site and renting or selling it to someone who will use that development, or a landowner can wait for population increases, wage increases, or public infrastructure improvements to impart value to a site, which he can appropriate through a higher rent or sales price.

All too often, land near public infrastructure (like a subway station or major road intersection) remains vacant or grossly underutilized because a landowner is waiting for a price in excess of what space users will pay today. This phenomenon forces developers to seek cheaper sites which are farther away from public infrastructure.

Once this cheaper land is developed and inhabited, the occupants of this area create political pressure to extend the infrastructure to it. When this process occurs, land prices rise, choking off development there, (even though additional capacity exists) and again drives developers and users even farther into the hinterland.

Landowners who underutilize valuable land sites with speculative intent thus contribute to sprawl and the costly, inefficient use of infrastructure. Perhaps the most effective way to counteract the negative effects of sprawl is to implement policies which encourage the development of housing in close proximity to jobs, schools, recreation, and shopping.

A significant amount of vacant and underutilized land exists within most urban areas. By encouraging development within the existing urbanized areas the two-rate property tax counteracts sprawl and land speculation, thus decreasing development pressures and land price escalation on nearby farmlands and other rural areas.

Taking the above facts into consideration, to minimize any possible negative impact on efficiently managed farms located in the path of urban development, the two-rate tax should probably first be implemented within boroughs and cities which are near these farms before the tax is extended to the rural areas. With the resultant decrease in development and speculative pressures on rural lands, farmland prices should remain affordable for working farmers while their tax liabilities would in most cases be the same or less than is currently the case when the two-rate tax will be implemented rurally.

Once farmlands are no longer plagued by sprawl, land speculation and the resultant land price inflation would be minimized. The two-rate property tax reform could;´òn be

extended to townships and school districts which include farms without concern that it would have a negative impact on genuine farming operations.

Land Speculation and Land Tenure

A "Berry's World" cartoon shows a politician, in a suit and tie with a briefcase by his side, sitting in a barn alongside a dejected looking farmer. With his hand on the farmer's shoulder, the politician says "We in Washington see prosperity just around the corner for the family farm. All you have to do is survive until the suburbs reach you, and you'll make a fortune in real estate!"

The average value per acre (land and buildings) of Pennsylvania farmland was $373 in 1970 but and had risen to $2,339 by 1995. Rent per acre of cropland went from $15.30 to $38.80 and for pasture from $8.30 to $29.80.26 Rents and land costs are clearly rising faster than the return farmers receive for their labor.

Considering the well-being of society as a whole, is it better to reward farmers and other workers and working capitalists for their contributions in providing life's basic necessities or to permit speculation and profiteering in our land and resource base? A very high LVT rate might lower land prices, but that would benefit young entering farmers; the current property tax benefits land-speculating older farmers who are looking to leave farming. Do we want to encourage land speculation in our farmlands or new farming opportunities? Taxing farm buildings and farmers' income is quite literally a burden on the shoulders of those who labor. Removing such a burden would contribute to the overall well-being of farmers and their families.

Increasing the tax on land values would curb land speculation, thus maintaining land price affordability for viable farming operations. "Land hoarding, another deleterious consequence of land speculation, can be reduced by site value taxation."27 To the landowner, taxes are an expense. To the public through government, the tax is a return. Whatever the division between public and private portions of value, the quantity of land and the full value remains unchanged.

But the taxation of land values does have a significant effect on market price and the functioning of society as a whole. Lowering the tax on land values raises market price, which means the public gets less in taxes while the individual seeking access to land must pay more. Raising the tax on land values lowers the market price of land. The public thus gets more in tax revenue, and the individual seeking access to land finds that the market price is more affordable.28

Urban sprawl and land price escalation turns farmers into land speculators and creates arid belts around cities. Land value taxation instead "would restrain the urbanization of valuable and productive farmland, but would negatively affect those farmers who have more of an eye to land speculation than farming."29 Eliminating the non-productive drain of land speculation while allowing farmers to keep full profits from their labor would

establish the economic base on principles of market freedom and efficiency as well as fairness and equity.

There is yet another important reason to eliminate the scourge of land speculation and private profiteering in land price escalation. Widely dispersed private ownership of land and affordable land access is fundamental to a well-functioning democratic system of governance. When land becomes owned by a relatively few and unaffordable to the many, produced wealth itself becomes concentrated, the rich/poor gap increases, and the democratic process itself is eventually undermined.

There is some cause for alarm as regards landownership in the USA. Overall concentration of landownership is far more extensive than many realize.30 For example, 1.3 billion acres or about 58 per cent of the total land mass, is in private hands. The broadest distribution of landownership among individuals is residential but this accounts for only two per cent (26.3 million acres) of private land. Another three per cent of the U.S. population owns 55 per cent of all the land and 95 per cent of private land. Furthermore, 568 companies control 301.7 million acres of the USA or eleven per cent of the total land area or 23 per cent of all private land. These same companies control 2 billion acres worldwide - an area larger than that of Europe.31

Interestingly enough, forty per cent of all private farmland in the U.S. is owned by nonfarmers. Between 1945 and 1970 the amount of farmland remained almost constant but the number of farmers who owned their land decreased by 62 per cent.32 Working farmers who must rent land face an unfair disadvantage. In certain areas, landlord crop shares run 50% or more. Those who simply "own" land profit without labor. We as a society surely must reverse this alarming trend so that working farmers can afford direct access to land.

The land speculation and land tenure problems are part of the same picture and their impact on agriculture is profound. For example, between 1950 and 1970 New York State lost 5.8 million acres of farm land but its urban area grew by only about 600,000 acres.33 "The problem is a land shortage, not in the literal but in the economic sense, and its cause is primarily land speculation,"34 says Peddle.

From such a perspective it can be understood that fundamental reforms of our system of taxation is essential if we are to reward productive labor rather than land speculation and efficiencies of scale and careful stewardship rather than impersonal big farm consolidations.

Tax Loss Farming

A 1996 study found that annual farm losses New York State exceeded farm income. Statistics support the argument for eliminating the farm income item from the State income tax for "by exempting farm income, you automatically exempt farm losses, thereby raising tax revenue by about $10 million per year."35

How could eliminating farm income tax actually increase the tax base, one might ask? The answer is in a deeper analysis which distinguishes "real" farmers from "pseudo-farmers." Pseudo-farmers include those who lose more money farming than they earn over the long run. Such a list may include:

1. Losers: Bonefide farmers who intend to earn income by farming, but just happen to be failures and who will eventually be forced to stop farming,
2. Lifestyle Choice Farmers: Those who enjoy farming or living on a farm and are willing to pay for the privilege,
3. Tax Farmers: Those who own farms to reap an assortment of tax and other government benefits targeted to farmers,
4. Real Estate Farmers: Some of these include real estate speculators who receive special farm tax benefits while waiting to sell the land as building sites,
5. Political Farmers: Politicians who own farms to impress their farming constituents.

In 1993, there were about 35,000 taxpayers in New York who reported either positive or negative farm income as reported on federal Schedule-F forms. Of these, 14,000 had an income and 21,000 had a loss. Total farm income in New York was more than offset by the losses of farms owned by households with over $60,000 in non-farm income.

The data gives some indication of where the pseudo-farmers are located on the income distribution. Of households earning over $100,000 per year in non-farm income, 84% had farm losses. Of households earning $25,000 per year in non-farm income, only 30% had farm losses. Out of the 468 farm households which earned between $100,000 and $200,000 in non-farm income, every one reported a farm loss in 1993. By contrast, for farm households earning under $5,000 in non-farm income, only 1 in 5 reported a farm loss. While families with $50,000 and less of non-farm income generated more farm income than loss, families with over $50,000 in non-farm income had net losses of over $11 million.

The New York study further noted that despite their motivation for unprofitable farming, pseudo-farmers still competed with real farmers. The extra output might benefit consumers in the short run, by driving down prices of local produce, but there was concern that in the long run such tax-loss farming operations "may lead to scarcity as real farmers are driven out of business and pseudo-farmers sell off for land development." This study in New York concluded that:

"Real" farmers, i.e., those who have income exceeding losses over the long run, and who farm as their principle occupation, would benefit from the proposal to exempt farm income and loss from the calculation of adjusted gross income under the personal income tax. The provision would increase the financial rewards for farming, yet give the state a revenue gain because "pseudo" farmers could no longer use income losses from farming as a way to decrease their tax liabilities from other sources of income.[36]

Similar studies should be conducted in Pennsylvania and elsewhere as it is likely that the situation may resemble that in New York to some degree. If so, it would indicate that an increase in taxes on land values should be combined not only with a reduction or elimination of taxes on buildings and other capital improvements, but also with the exemption of farm income and loss from the calculation of adjusted gross income under the personal income tax. Such a policy approach would:

1. Encourage and support efficient, profitable farming operations.
2. Keep farmland prices at levels affordable for entry-level farmers.
3. Discourage the purchase of farms for real estate speculation and tax shelter opportunities.
4. Enhance the ability of the state and local tax base to provide necessary community services and infrastructure maintenance.

Considerations Concerning Subsidies

The number of U.S. farms decreased 45% from 1960 to 1989; average farm size increased 54% during the same period. In 1990, U.S. farmers received16% of their total income from direct federal payments; 62% of that money went to only 15% of the farmers - those whose sales exceeded $100,000 a year![37]

Since then farm subsidy programs have continued to benefit relatively few recipients. In 1994 the USDA spent $15 billion on farm programs, $10.3 billion of which covered subsidies, export and related programs, (An additional $37 billion was spent on non-farm food programs such as school lunches, food stamps, and child nutrition.) Nearly one-third of the $472 million funneled to Pennsylvanians from 1985 - 94 went to just 2% of the recipients.[38] Mike Mihalke, a spokesman for Senate Agriculture Committee member Rick Santorum, said that this data "is a resounding confirmation of our philosophy that the current farm system is actually working against small and mid-sized farmers in Pennsylvania and across the nation."[39]

In Pennsylvania's Franklin County farmers received $3,340,223 in federal farm subsidies from 1985-94. The top two percent of those recipients received 21.9% of the government money. The County's Consolidated Farm Service Agency handles four subsidy programs and paid $664,315 in 1994. That money went to about a quarter of the county's farms, a total of 336.

While some might argue that larger farms get more money because they have larger operations, other farmers believe subsidies keep inefficient farmers in business. For instance, John Stoner, one of six brothers who owns a 1,700 acre dairy farm with 500 milking cows in Franklin County, says that even though his farm has benefited from subsidies, he supports gradually cutting the programs. He said, "We ought to allow the chips to fall where they may."[40]

But compared to other commodities receiving federal support, such as wheat at $1,730.5 million and cotton at $1,539.5 million per annum, supports for other major Pennsylvania

agricultural commodies are considerably less with corn at $692.7 million and dairy at $158.1 million.

Instead of wasted subsidies, it might make more sense and be more equitable if the federal or state government could make low-cost loans available to farmers to provide them with the necessary capital to develop their farms properly and to tax exempt all farm improvements.

Pennsylvania Studies

While research on the potential effect of the split-rate tax on farmers in Pennsylvania has not been extensive, the studies that have been conducted indicate that a shift to land value based property taxes would not have a negative impact on most farmers. Since boroughs may soon receive permission by the state to use the split-rate tax, let us first explore the possible effect on farms within boroughs.

A 1995 study of Dauphin County41 shows that the actual impact of a two-rate property tax on agriculturally assessed property is small when the percentage share of assessed value in a borough is analyzed.

In Dauphin County there are 16 boroughs. The presence of agricultural activity, while strong county-wide, is rare or absent in boroughs. Analysis of the 16 boroughs showed that eight had no Assessed Agricultural Value (AAV). Of the eight that had farms only two had an AAV over five percent of the total borough assessment. Of these eight boroughs, four had an AAV of less than one percent of the total borough assessment.

The study concludes that farmland exists, as a general rule, outside the limits of cities and boroughs. Since farmland already enjoys protections that do not exist for other types of property both in zoning and tax policy (see Farmland Protection Policies), unwarranted concern for farmland within boroughs would deny the many benefits of the two-rate property tax option to the vast majority of citizens. If citizens of a borough should want to preserve farmland within their jurisdiction, then voter referendums could establish special urban agriculture land assessment districts or tax rebates.

Dauphin County, which contains Pennsylvania's capitol of Harrisburg, a city which taxes land values four times more than buildings, has a mix of urban, suburban, and rural land. Another 1995 study prepared by the Center for the Study of Economics for the Dauphin County board of commissioners found that farmers and clearly-defined rural segments made up only 4.88% of the total taxable assessed value of the county. The average tax bill for a farm with buildings was $610 for that year. With the usual two-rate shift (tax on buildings 80% of current property tax rate) the farmer would pay $729, a difference of $119.42

Considering the overall benefits to society of this tax shift, and the fact that future farm improvements would be taxed at a lower rate while land speculation and thus land price inflation would be curbed, this small tax increase in rapidly developing Dauphin County

should not prove prohibitive to viable farming operations. There is a lot of dispersed urban value in rapidly developing counties like Dauphin. More purely rural counties would have much less land value per acre and thus the land value tax would be that much less.

With this study as well, we have to consider the boost in land values created by farm subsidies. Minus artificial price supports, combined with decreased speculative pressures, agricultural land values would be less and thus the land value tax would most likely be lighter on working farmers then this study indicates.

A 1973 study[43] of rural Indiana County which is located about 55 miles northeast of Pittsburgh with a population of 75,000 (The largest city is Indiana with a population of 13,000) showed that the impact of the split-rate tax would vary according to the level of development of the individual tract or parcel. The county has considerable coal mining and about 55% of the area was in woodland and 33% in crop and pasture. Dairying was the chief farm activity.

The researcher took a representative sample of 60 farms out of the approximately 1200 on the tax books. He determined how each of them would be affected by a 25 per cent reduction in the building tax rate and a corresponding increase in the land tax rate which would be necesary to yield the same revenue to the county's school districts as under the present uniform rate system. He also determined the possible affects if all improvements would be exempted.

The study found that only two properties would receive considerable tax changes. One farm, quite near to town and fronting a main highway, had had been developed to include a motel, rest home, apartments, and dairy store. This property would receive a reduction of $681.90 if its buildings were 25 percent tax exempt, or $2727.60 if they were totally untaxed.

The other property in Indiana County significantly impacted was a multi-million dollar corporation with an estimated value of holdings of $7 million. This corporation used some of its land for growing Christmas trees and landscaping shrubbery, but most of its land was waste, woodland or brush. With a 25 percent tax exemption for buildings, the tax increase under the split-rate system would be $2,988.40 and with buildings totally exempt it would increase to $11,953.60. While Christmas tree farms in Indiana County would tend to pay more taxes under this system , properties which would experience tax decreases would be the more highly developed ones; dairy farms tended to be in this group.

With 25 percent buildings tax exemption, half the sample of 60 farms would receive tax increases of less than $50 at the end of the first year, or $200 if improvements were completely exempted . Another quarter of the sample would receive tax increases or decreases within the $50-$100 range with the 25 percent improvements exemption, or $200-$400 range if improvements were altogether exempt. Tax changes of this magnitude would generally be considered quite moderate.

The researcher concludes that the majority of Indiana farms would not pay substantially higher taxes as a result of the shift to two-rate and would be benefited by improvements in the county's total economy which would likely be stimulated by the change.

The economic growth thus encouraged could create opportunities not only for the farmer himself, but could create jobs for his children who might otherwise have to migrate to distant cities in search for them, as an increasing number of farmers' children are forced to do these days. This might be of far greater importance to the farmer than small changes in his property tax.44

If particular properties have building-to-land ratios higher than the citywide average, then a split-rate property tax would impose a lower tax on them. In other words, with a revenue neutral shift to split-rate, they would save more compared to the usual one-rate property tax. If they have a lower ratio, they would pay more; if the same, then there is no change.

A 1988 survey of Altoona assessments found only a handful of agricultural properties on the books. These parcels would save because it was determined that their building-to-land assessment ratios (7.6467;1) were higher than the citywide average (6.8084:1)45 A similar study in Coatesville determined that the building:land ratio was 4.3:1, while the ratio for agricultural properties was 5.9:1 Thus it was shown that farmers most decidedly had saved.46

Other States

California passed the Wright Act in 1887 which allowed communities to vote to create irrigation districts for the building of dams and canals and to pay for them by taxing the increase in land value. Once irrigated, land was too valuable for grazing and too costly for hoarding. So cattlemen sold fields to farmers at prices the farmers could afford. In ten years the Central Valley was transformed into over 7,000 independent farms. Over the next few decades, vast tracts of treeless, semi-arid plains became the "bread basket of Amerca" and one of the most productive areas on earth. It is a prime example of how land value taxation can promote and enhance the viability of both an efficient and equitable agricultural base.

In a 1987 study of farms in Ohio County in the northern panhandle of West Virginia researchers asked a farmland assessor to pick three average farms, three excellent farms, and three poor ones. The study clearly indicates that the best farms, (the ones with the highest value amount in buildings and improvements), benefited positively from this tax reform; average farms paid a somewhat higher percentage (but modest dollar amount) of taxes; while the biggest percentage changes (but still modest dollar amounts) fell on poorer farms.47 This policy approach is an incentive for good land use not only to urban but also to rural areas. On further consideration, the researchers also conclude that a broad application of the land value tax which would include non-farm properties and the much greater land values in urban areas would automatically affect a significant reduction of tax burdens throughout the entire farm sector.

While land value taxation would inhibit agricultural land speculation and promote more efficient and intensive use of farmland, it is not necessarily detrimental to large scale agricultural pursuits if carried out efficiently.

A 1995 report on property tax valuation in the State of Hawaii shows that 65% of the property tax revenue comes from land assessments. Since 1990 the island of Kauai has shifted its taxes more towards land. For example, in 1990 agricultural land was taxed at 1.05 times the improvement rate. In 1995 it was taxed at 1.87 times the improvement rate.48 For Kauai agricultural and conservation properties, assessment appeals were only 6.6% of the total number, but in Maui, which maintains the same property tax rate on buildings as on land values, they were 9.6%. Thus, it would seem that a two-rate property taxe reduces, not increases, assessment appeals.49

Other Countries

Farmers have been a prime force behind the use of the split-rate tax in Australia, New Zealand, and Denmark, indicating that they benefit from it financially. In the Canadian province of British Columbia farm buildings and dwellings in rural areas are completely exempt for general purposes. Farmers' dwellings are taxable for school purposes while other buildings and structures are taxable only on aggregate assessed value over $50,000.

Historically, "site rating," as land value taxation is called in Australia, was applied first to farming districts. This policy was extended to towns and cities only after its suitability for, and acceptance by farmers had been demonstrated. Site rating was first applied to the shires of Queensland in 1887 specifically to ease the position of genuine farmers, who were finding that under the system of the time they were paying more than their own share of municipal costs to make up for the token payments from other owners of vast, undeveloped property. The situation was the same in New South Wales, where site rating was also applied first to the shires, then later on to urban areas.

In Western Australia, site rating was first used in the rural districts in 1902. Only in 1948 were the 21 urban councils given optional powers to use it. Site rating has since developed to become the dominant system in Australia where it is used in approximately two-thirds of all local government councils. The councils using site value comprise more than 92% of the municipalized area of Australia. The fact that the remaining eight percent have not changed shows site rating's appeal has been primarily to farmers. The rural parts of Victoria which still tax buildings and farm improvements, are among the eight percent. Significantly, there is no public demand in other states to change back to what they now regard as an outdated system of taxing buildings.

The states of Queensland, New South Wales, and Western Australia apply site rating universally to farming properties. In South Australia, Victoria, and Tasmania, its application is not universal. Historically, in comparisons of development between these two groups of states, it has been shown that farmers generally have been in a sounder position in the ones that have taxed potential land value, rather than the actual development itself.

In the depression years of 1930 to 1939, total acreage farmed in the site-rated states increased by 21%. Those not rating site value, decreased by eight percent. Similarly, in the post war years, 1947 to 1959, acreage cultivated in the site-rated areas increased by 35%. Other areas not site rated decreased by one percent.

Two historical examples can help display what "genuine farmers" think of site rating. The term "genuine farmer" is important. The term "farmer" is often used loosely to describe anyone who owns rural property. It is important however, to distinguish between the genuine farmer, who lives and works on the farm, and the owner who holds rural property under developed as an investment. The effects upon the two, as far as rating is concerned, is not the same. It is the interests of resident farmers that are more important for the development of Australian agriculture. Australian farmers pay less with LVT in comparison to other tax systems. For example, 81% in Keilor Shire paid less, 77% in Eltham Shire, and 55% in Frankston and Hastings Shires (all in Victoria.)

The rural shires of Rosedale and Yea have used site rating since 1921. Reversion polls were taken in 1953 and 1959 to determine whether farmers wanted to retain site value or go back to taxing improvements. The vote left no doubt that farmers prefer site value after experiencing both systems. In Rosedale Shire 84% of the registered voters voted for site rating in 1953. In Yea Shire 68% voted in favor of site rating. While the voters in the town areas of Rosedale and Yea strongly favored site rating, the farmers did so even more.

Resident farmers benefit by lower rates under site value in the majority of cases, just as householders similarly do in the towns. Such was found to be the case for farmers in the old Keilor Shire, Eltham Shire, and Frankston and Mulgrave Shires. These areas are now mostly suburban but changed to site rating when the shires were once regarded as rural. This principle still holds for today's farming districts closest to Melbourne.

It is in the interests of all Victorians to ensure farmers that they have every incentive to produce - rating land value does exactly that. Genuine farmers understand this, and have always chosen site rating as their preference once given the opportunity. Genuine farmers have recognized the better balance of development for rural areas that site rating brings: more opportunities for their children in industry, building, transport, and trade. Site rating enabled better educational facilities and a whole host of other amenities to help stop, at least to some extent, the drift to the city.

The Danes, by old tradition, believe that the land belongs to the people.50 The rapid industrialization and land enclosures of the 18th and 19th centuries saw this tradition come under growing attacks. Farmers in Denmark were hard-pressed in the second half of the 19th century. Many of them found support in the ideas contained in a newly released book Progress and Poverty, by Henry George. As the economic situation became even tougher for small farmers the Henry George Union was founded in 1902 and cooperated with other philosophic groups and public leaders to work for land value taxation as the basis for government expenses, instead of levying taxes on income and capital.

Eventually the Justice Party was formed on this platform. Their economic policy was simple - to collect the economic rent of land and abolish all taxes on labor and capital. For a new political party, their results were astonishing. Progress was quick and in 1952, they won 12 seats out of a possible 179. They were instrumental in the creation of a government commission for ground rent in Denmark, which wrote its report clearly advocating the benefits of site revenue. In 1957 the Justice Party, together with other political groups formed what was to become the most prosperous Danish Government based on the principles of ground rent collection (land value taxation), liberalization of trade, and a tax freeze.

It was generally expected that after the formation of the government, some kind of land value taxation would be introduced, so land speculation ceased immediately. Legislation on taxation of increased land value was prepared, presented to parliament, and subsequently passed. The economic effects of the cessation of land speculation were astounding and aroused much attention. On October 2, 1960, the New York Times headlined, "Big Lesson from a Small Nation" and noted the many improvements in Denmark's economic situation.

Prior to the election of 1957, Denmark had a sizable deficit on her balance of payments, was considerably in debt abroad, and burdened with a relatively high interest rate, large unemployment figures, and an annual rate of inflation of approximately five percent. From 1957 to 1960, however, the following improvements took place:

1. The enormous deficit on the balance of payments was turned into surplus.
2. Denmark's total foreign debts of 1,600 million kr. were reduced to one quarter of this, about 400 million kr.
3. The rate of interest, and hence mortgage levels went down.
4. Unemployment was soon replaced by almost full employment, together with considerable increases in production and wages.
5. Inflation was brought to a standstill. All wage increases were real wage increases, the highest in Denmark's history. 6. The time was free of strikes, industrial production went up 32%, and investment rose 135%
6. Savings increased immensely, since it again became profitable to accumulate savings.

After three years with land value tax in force, Denmark had no foreign debt, no inflation, and an unemployment level of one percent, considered full employment. So why is this not continuing? A number of factors were at play, too complex to document for the purposes of this paper. Essentially, lack of broad-based public understanding concerning the basic principles of this policy approach led to its demise after 1964 and Denmark again experienced a number of social and economic problems to the detriment of most farmers, other workers, and business owners.

Reflections on the Potential Revival of Sustainable Agriculture for Pennsylvania

The high price of land means that the modern food and agriculture system provides no options for those who cannot find a paying job other than subsistence on charity or government supports. Those with minimum wage incomes are finding it increasingly difficult to afford decent housing. These social problems and pressures are bound to increase with the cut-off of welfare and other government subsidies to the poor.

In Pennsylvania in 1991, 6.9% of the children were living in severely distressed neighborhoods.51 The state ranked 23rd in a study of the fifty states (the national average is 6.2%). Lancaster County, known for its lush farmland, has some of the state's poorest areas. "When people think of Lancaster County...it's an idyllic scene," said Ron Sell, executive director of Pennsylvania Partnerships for Children. "The reality is there is the same poverty...and unemployment happening within the city of Lancaster as the city of Philadelphia."52

Now more than ever before there is the need to optimize the use of land resources to meet the food, fiber, and livelihood needs of people in an environmentally sustainable way.

The effects of the split-rate tax on future land use can only be conjectured, but it is likely that the selling price of currently marginal waste, wooded and brush land would fall noticeably because they would be taxed at a higher rate. These now more affordably priced rural lands could become magnets for land reclamation and new sustainable farming projects.

Intensively managed small farms producing a diverse range of food, fiber, livestock, and energy products for local markets are the order of the day. Bio-intensive farming methods depending on renewable energy sources - including animal power and bio-gas - can yield both social and environmental stability.53 The establishment of labor and bio-intensive small farming operations can be greatly furthered by land value tax policies which remove taxes on labor and productive capital while promoting affordable land access.

Conclusions

While determining the potential impact of a shift from the traditional property tax to the split-rate tax on Pennsylvania farmers is a complex subject, in summary, there is a basis, in both theory and practice, for the following conclusions:

1. Overall, as currently administered in most states, the property tax appears to be regressive since farm owners with larger amounts of land value pay disproportionately less in taxes than those with less valuable holdings.
2. The excessive complexity of the property tax is an administrative shortcoming and must be remedied before the real property tax can become an effective instrument of land use policy.
3. Smaller farms tend to have more buildings than larger ones but pay more because of these improvements under the current system.
4. Overtaxing buildings and undertaxing land favors large farming operations that are not necessarily the most efficient.

5. Lower property tax rates coincide with greater concentration of farm ownership and higher land costs which is a barrier to entry-level farmers.
6. The property tax would be more progressive if changed to a pure land tax which exempts buildings.
7. The greater the shift of property taxes from buildings and onto land values the more likely that the surplus land of larger, less efficient farms or speculative holdings would be released for affordable purchase by entry-level farmers.
8. While preferential assessments and farm subsidies may not be helpful in preserving farmland and, as currently administered, may be inequitable, zoning, tax abatements, and improvements in assessment practices could work in tandem with the split-rate tax shift, especially in urbanizing areas with high land values.
9. Urban sprawl and land speculation contribute to land price inflation which is a major barrier to entry-level farming. By encouraging infill-development and redevelopment within already urbanized areas the split-rate tax could decrease land cost pressures on farmers.
10. Concentration in farm ownership has proceeded at an alarming pace for the past several decades, making it essential to fundamentally reform our system of taxation - then we can reward productive labor rather than land speculation, efficiencies of scale and careful stewardship rather than impersonal big farm consolidations.
11. Most farmers in rural areas of the state and particularly those with proportionately higher building-to-land ratios will save with a shift to the split-rate tax.
12. Although some farms near urban areas may pay more with this tax reform, it may not be significantly more,`````` and the overall improvements in the economic climate of the locality which would result would be of benefit to the farming sector as well.
13. Substantially shifting taxes from buildings and productivity and onto land values could be a major stimulus for the revival of sustainable agriculture in Pennsylvania and thus could help to alleviate poverty and other social problems.
14. Land value based property taxes have been actively supported by farmers in other parts of the world.

Stated succinctly, the split-rate tax is likely to impact Pennsylvania farmers and farmland as follows:

1. Discourage speculation in land
2. Reduce the price of land to equate with its value for production
3. Enable new entrants to more easily obtain land
4. Limit farm sizes to those of the most productive units
5. Enable the reduction of taxation on earnings and capital
6. Reduce interest rates as land became more affordable
7. Prevent rural depopulation
8. Discourage urban sprawl on farm land
9. Encourage owner-occupation rather than absentee ownership
10. Promote more responsible use of land.

Our evidence thus suggests that the split-rate tax policy approach, especially with a heavy reduction of millage rate on building values, would significantly enhance incentives for the continuation and expansion of a viable, efficient, and sustainable agriculture in Pennsylvania and anywhere else if used.

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