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REDUCING PROPERTY TAXES IN NORTH CAROLINA: AN ECONOMIC ANALYSIS

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ABSTRACT

This report summarizes the effect of three recent studies in North Carolina concerning the relationship between changes in real property taxes and property values. The studies analyzed the relationship between changes in the level of property taxes and property values for owner-occupied housing, rental housing, and farm real estate.

These studies indicate that much of any tax reduction on rental housing property in North Carolina will be passed on to tenants in the form of reduced rents but will have little effect on the value of owner-occupied homes. In the case of farm real estate, a reduction in property taxes is largely capitalized into higher property values. The conclusion in each case assumes an adjustment period sufficiently long such that full adjustments have been made to the change in the tax rate.

The results of these studies suggest the difficulties in predicting the effects of general reductions in property taxes. Such reductions are likely to have a quite different impact on owners of different classes of property. Given the level of local government budgets, property tax reductions mean an increase in other taxes. Hence, reductions in property taxes are likely to be tied to proposals to replace taxes lost by increases in sales taxes, income taxes, etc. The method of replacing lost revenue will also affect various groups of taxpayers quite differently. For these reasons, simple generalizations about the effects of reductions in local property taxes on particular classes of real property cannot be made.

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REDUCING PROPERTY TAXES IN NORTH CAROLINA: AN ECONOMIC ANALYSIS

INTRODUCTION

The local property tax has long been the mainstay of local government finance throughout the United States. However, property tax relief has become a key political issue of the 1970's. There appears to be a growing political consensus in North Carolina and throughout the United States to decrease the traditional reliance on the property tax in financing local government services. Even so, there is no consensus concerning the potential losers and gainers associated with various proposals to reduce property taxes.

There are two problems in determining the effects of reducing property taxes. First, the effect of reducing property taxes depends upon the specific form of reduction. Second, given the budget levels of local governments, a reduction in property taxes comes only at the expense of an increase in some other tax.

Proposals to reduce property taxes are quite varied in nature. Federal legislation has been proposed which would induce localities to lower their effective tax rates on residential property. How would a general reduction in property taxes of this kind affect homeowners versus renters? The local property tax has been challenged as the major source of financing local schools in a number of states. About one-half of the states in the United States, including North Carolina,

have passed legislation taxing qualifying agricultural real estate on the basis of its present use value. What is the effect of this legislation likely to be in North Carolina?

The effect of a reduction in the level of property taxes on any form of real estate depends on the extent to which the tax reduction is capitalized into higher property values. The extent (if any) to which property values will be increased when property taxes are reduced on real property depends upon supply and demand conditions in the particular real estate market. Sources, uses and the administration of property taxes in North Carolina are briefly described before presenting the objectives of this report.

Current Property Tax Situation in North Carolina

About 40 percent of all property taxes levied by local jurisdictions in North Carolina in 1971-72 were levied for public schools (N. C. Department of Tax Research, 1972, p. 289). This figure is low relative to most other states since North Carolina is one of the few states in the United States in which the state assumes the primary responsibility for the operation of public schools. About two-thirds (66.8 percent) of current operating expenses of the public school system in North Carolina were state financed during the 1971-72 school year (N. C. State Board of Education, 1973).

Property taxes in North Carolina when compared with most of the other states are low both in absolute terms and as a percentage of total state and local taxes. During the 1970-71 fiscal year, per capita property tax receipts were less than one-half the U. S. average (Table 1). Property taxes throughout the United States comprised almost 40 percent of all state and local taxes, while in North Carolina, property taxes constituted only 25.2 percent of total state and local taxes. The property tax throughout the United States is mainly a local tax with an average of only 3 percent of all property tax revenue raised by state levies.

While local property taxes are not as important in North Carolina as in most other states, they remain the major source of locally derived revenue for the state's county and municipal governments. In the 1971-72 fiscal year, N. C. local governments derived 82.5 percent of

Table 1. Amount and importance of property taxes in state and local government finances, per capita basis, 1971 fiscal year

State	Taxes per capita			Property tax as percent of all taxes per capita
	Total	Property[a]	Other	
		(dollars)		
United States Average	460.47	183.51	276.96	39.9
Median state	422.71	178.44	254.48	42.2
Alabama	275.72	40.87	234.84	14.8
Alaska	466.37	105.74	360.62	22.7
Arizona	462.46	178.44	284.02	38.6
Arkansas	268.98	68.78	200.20	25.6
California	603.22	296.27	306.95	49.1
Colorado	447.48	187.40	260.08	41.9
Connecticut	533.19	273.14	260.05	51.2
Delaware	499.49	87.74	411.74	17.6
Florida	374.63	126.83	247.80	33.9
Georgia	332.04	107.00	225.03	32.2
Hawaii	613.69	111.44	502.25	18.2
Idaho	398.79	140.41	258.37	35.2
Illinois	513.48	199.54	313.94	38.9
Indiana	401.70	203.89	197.81	50.8
Iowa	450.76	224.60	226.16	49.8
Kansas	416.34	209.67	206.66	50.4
Kentucky	316.30	70.35	245.95	22.2
Louisiana	379.38	71.95	307.42	19.0
Maine	411.07	185.69	225.38	45.2
Maryland	508.17	166.57	341.60	32.8
Massachusetts	548.54	286.08	262.45	52.2
Michigan	491.33	202.33	289.00	41.2
Minnesota	497.70	210.67	287.03	42.3
Mississippi	315.18	76.72	238.46	24.3
Missouri	360.61	146.74	213.86	40.7
Montana	422.71	235.04	187.67	55.6
Nebraska	431.71	221.15	210.56	51.2
Nevada	579.30	189.79	389.51	32.8
New Hampshire	375.20	221.93	153.27	59.1

Table 1 (continued)

State	Taxes per capita			Property tax as percent of all taxes per capita
	Total	Property[a]	Other	
	(dollars)			
New Jersey	498.55	272.64	225.91	54.7
New Mexico	391.17	87.78	303.38	22.4
New York	688.60	258.74	429.86	37.6
North Carolina	336.27	84.67	251.59	25.2
North Dakota	419.58	188.15	231.43	44.8
Ohio	363.87	171.92	191.94	47.2
Oklahoma	322.99	97.53	225.45	30.2
Oregon	416.13	203.58	212.54	48.9
Pennsylvania	444.37	131.05	313.32	29.5
Rhode Island	465.96	180.40	285.55	38.7
South Carolina	297.53	66.01	231.52	22.2
South Dakota	435.32	240.14	195.18	55.2
Tennessee	301.94	85.15	216.79	28.2
Texas	342.66	137.15	205.50	40.0
Utah	387.50	139.74	247.75	36.1
Vermont	495.10	184.60	310.50	27.3
Virginia	372.29	109.28	263.00	29.4
Washington	486.90	168.86	318.04	34.7
West Virginia	333.96	74.12	259.83	22.2
Wisconsin	534.90	231.42	303.47	43.3
Wyoming	482.83	228.35	254.48	47.3

[a]The property tax data include taxes levied on personal and intangible property.

Source: U. S. Bureau of the Census (1972b).

all local tax levies from the property tax (Table 2). Although local property taxes increased about 75 percent (on a per capita basis) from 1963-70, the significance of the local property tax in financing local services in North Carolina has decreased since the introduction of local option sales and use taxes in Mecklenburg County in 1968.[1] Prior to the 1968-69 fiscal year, the property tax had provided more than 90 percent of all local tax levies for a number of years.

The local property tax is levied both on real and personal property in North Carolina.[2] However, it is primarily a tax on real property with slightly less than one-third (31 percent) of all locally taxable property consisting of tangible personal property in 1971-72 (Table 3). The assessed value of locally taxable real property was about evenly divided between property located in municipalities (31 percent) and property outside municipalities (34 percent) in 1971-72 (Table 3).

The intangible property tax is a state shared tax in North Carolina. Receipts from the intangibles tax (net of costs) are allocated to counties on the basis of population. Intangible property constituted almost 40 percent of all property subject to taxation in North Carolina during the 1972 fiscal year (Table 3). However, intangible property is taxed at a rate much lower relative to real and personal property. The total county and municipal share of revenue from the intangibles tax in the 1972 fiscal year was only about 22.1 million dollars or 4 percent of total local tax levies (N. C. Department of Tax Research, 1972, p. 224).

In N. C. property tax law, "appraise" means to determine market value while "assess" means to fix the tax value. Prior to 1973 legislation, counties were permitted to assess property at some percentage of its appraised value. Official assessment ratios (ratio of assessed value to appraised value) ranged from a low of 30 percent

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[1] Seventy-nine of the 100 N. C. counties had imposed the 1-percent sales tax by July 1, 1972.

[2] The intangibles tax as explained below is levied by the state and the proceeds shared with counties and municipalities.

Table 2. Total tax levies of local governments in North Carolina by type of tax, 1972 fiscal year

Type tax by levying unit of government	Amount	Percent of total levies of all local governments
	(dollars)	
County levies		
General property tax	284,398,399	51.0
Poll, license, & dog tax	2,911,229	0.5
Excise stamp tax on conveyances	1,626,081	0.3
Sales tax	29,752,207	5.3
Intangibles & beverage taxes (county share)	17,851,935	3.2
Total county	336,539,851	60.3
Municipal levies		
General property tax	146,263,651	26.2
Poll & license taxes	5,027,681	0.9
Sales tax	13,749,665	2.5
Intangibles, beverage & utility taxes (municipal share)	26,485,084	4.7
Total municipal	191,526,081	34.3
District and township (general property only)	29,719,762	5.3
Total levies of all local governments	557,785,694	100.0

Source: N. C. Department of Tax Research (1972, p. 223).

Table 3. Total assessed value of specified classes of property subject to taxation in North Carolina, 1972 fiscal year

Property class	Amount	Percent of locally taxable property	Percent of total
	(dollars)		
Locally taxable property			
Real property outside municipalities	7,438,043,018	34.4	20.9
Real property in municipalities	6,786,955,030	31.3	19.1
Tangible personal property	6,616,187,021	30.6	18.6
Corporate excess of railway & public service companies	809,774,124	3.7	2.3
Total property subject to local tax rates	21,650,959,193	100.0	60.9
Classified intangible property	13,889,359,752	---	39.1
Total all property subject to taxation	35,540,318,945	---	100.0

Source: N. C. Department of Tax Research (1972, pp. 226-227).

to a high of 100 percent as of 1971 (N. C. Department of Tax Research, 1972, p. 225). 1973 legislation (effective January 1, 1974) requires all counties in North Carolina to assess all property at its appraised value. N. C. law requires that real property be reappraised at least every eight years.

All classes of real property (residential, farm, business, etc.), prior to 1973 legislation, were legally required to be appraised at market value. Effective January 1, 1974, certain agricultural, horticultural, and forest lands following proper application and approval can be appraised and taxed on the basis of present use (instead of market) value. Forest land, prior to 1973 legislation, was required by law to be appraised on the same basis as other real

property, viz., its market value.[3] New legislation enacted in 1973 provides for the removal of all forest growth from the tax base effective at the time of each county's next revaluation (Institute of Government, 1973).

Objectives

How will reductions in property taxes affect property values and the people of North Carolina? The effects (as explained in the next section of this report) are likely to vary depending upon the kind of real estate and the form of property tax reduction. The major purpose of this report is to provide information about the potential effects of reductions in property taxes for residential and farm real estate in North Carolina.

Three N. C. studies analyzing the relationship between changes in property tax rates and real estate values for different classes of real estate have recently been completed. Hyman and Pasour analyzed the effect of changes in real property tax rates on housing values for owner-occupied residential housing in North Carolina (Hyman and Pasour, 1973a). In a companion study, the authors also analyzed the relationship between changes in real property tax rates and residential rental rates (Hyman and Pasour, 1973b). Pasour studied the relationship between N. C. real property taxes and farm real estate values (Pasour, 1973).

These three studies provide information about the relationship between changes in tax rates and property values for a major part of all real property in the state. The results of these studies can be used to predict the effect of reductions in property taxes for owners of residential and farm real estate in North Carolina. The objective of this report is to summarize the results of these three studies and to use the results in analyzing the effects of property tax reductions for owners of owner-occupied housing, rental housing and farm real estate in North Carolina.

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[3] A 10-year exemption has been provided for planted trees in artificially established tree plantations.

Procedure

The economic impact of property taxation in general is first discussed. This discussion shows why reductions in property taxes under some conditions are mainly capitalized into higher property values while tax reductions under other conditions are mainly passed on in the form of reduced rents. After the general economic impact of property taxes is discussed, results of studies are presented which show the impact of reductions in property taxes for owner-occupied housing, rental housing, and farm real estate in North Carolina. These results are used in analyzing specific forms of N. C. property tax reductions including 1973 legislation providing present use value taxation for certain agricultural, horticultural and forestry lands.

ECONOMIC IMPACT OF PROPERTY TAXATION

Property taxes can affect the willingness of citizens to save and influence ways in which they invest their wealth. Such taxes also influence the distribution of income within the state, thereby affecting the relative economic position of N. C. families.

Since the N. C. property tax is levied on three forms of wealth -- intangibles, personal property, and real estate -- a complete analysis of its effects would require an economic model of behavior in markets for securities, money, most commodities, land, residential and business properties. This is a formidable task requiring a great amount of data, much of which is not readily available.

Because of the difficulties involved in analyzing the full impact of the property tax, most studies of its economic effects have concentrated on the impact of certain components of the tax. The portion of the tax falling on farm and residential real estate has received the most attention. The results of empirical studies of these components of the property tax in North Carolina will be reported in a later section of this report. Although these components of the tax constitute a major portion of the revenue collected, it is important to indicate the factors influencing the economic effects of other portions of the tax as well. The purpose of this section, therefore, is to outline the conceptual problems involved in determining the economic impact of all components of the property tax in North Carolina.

Taxes on Real Property

The bulk of the revenue collected from property taxation, as shown in the previous section of this report, is from levies on real estate. Real property may be divided into four categories:

1. Commercial and industrial property
2. Agricultural property
3. Residential property (owner-occupied and rental)
4. Vacant land

Publicly owned land and buildings constitute a fifth category, but these are usually exempt from property taxation.

Taxes on real property may be reflected in rents, real estate prices, and the prices of goods and services. The actual effects depend on conditions prevailing in real estate, housing, and product markets. This implies that real estate taxes may be borne by landlords or shifted to tenants.[4] When the tax is borne by the landlord, it is "capitalized" into the value of the property, resulting in lower land prices. In cases where the tenant uses the property for production, any portion of the tax shifted to him may, in turn, be shifted to consumers of his product if he can raise prices to cover the costs of the tax.

Distribution of Tax Burden -- The Possibilities

Commercial and Industrial Property

Consider the possible economic effects of the portion of property taxes levied on commercial and industrial property. The tax reduces the return earned by the landlord on his property since a portion of his rent must be used to pay the tax. Over a short period of time the landlord will absorb the tax. However, over longer periods if the supply of commercial and industrial structures is responsive to the lower return earned on their construction as a result of the tax, there will be a decrease in the quantity of such structures supplied as builders use their funds for alternative investments and this will serve to increase rents, thereby, forcing business tenants to pay part of the tax. If rents increase, the business firms may be able to pass some of this increased cost (as a result of the tax) forward to consumers if they can reduce the quantity of output supplied and if the demand for their product is not very responsive to price increases. Depending on market conditions, this component of the property tax may be shared by landlords, businesses, and firms.

An assessment of how "equitable" this portion of the property tax is would require further data and computation to determine how much of

[4]See Hyman (1973, Chapter 8) for a discussion of the theory of tax shifting and incidence.

the tax is paid as a percent of income. This entails classifying those who pay the tax by income and calculating their tax bill as a percent of income. For example, if it is determined that much of the tax is passed on to consumers, a determination of the incidence of the tax requires data on how much of their income consumers of each income class spend on goods which include the property tax. If the amount spent on those goods falls as family income rises, the tax will be regressive.

Agricultural Property

As in the case of commercial property, taxes levied on agricultural real estate may be borne by landlords, farmers, consumers of agricultural products or some combination of these three. There are, however, strong reasons for believing that the bulk of taxes levied on agricultural property are borne by the landlords (or in the case of farmers who own their land, the farmers themselves). In agriculture, land is dominant in the value of real estate relative to structures (compared to other activities). The total amount of land available for all uses is fixed and, therefore, the total amount of land supplied is unresponsive to changes in its price. Since property taxes are levied on all land, it follows that the inability of landlords as a whole to adjust quantity supplied (and, therefore, land prices) implies that the taxes on land cannot readily be shifted and are, therefore, borne by landlords. The fact that agriculture is more land intensive than other activities implies that much of the tax will be borne by landlords. This, in turn, indicates that the tax will be capitalized into lower property values for farms.

It is doubtful that farmers can shift the property tax to consumers. This is because farmers sell their output in highly competitive national markets and their sales are highly responsive to any price increases. Attempts by individual farmers to raise prices so as to cover the tax will result in a sharp loss in sales rather than more revenue. This can be contrasted with property taxes on businesses which sell their goods and services primarily in local markets (such as housing, retailing, and personal or professional services) and therefore face demands less responsive to price changes

because there are fewer alternative sources of supply for consumers. In those businesses, tax-induced cutbacks in amounts supplied do result in higher prices and shift some of the tax burden to consumers. Taxes on farming are therefore likely to be borne by owners of agricultural property.

Residential Property

Residential property may either be owner-occupied or rented. Homeowners cannot directly shift the tax since they are both landlords and tenants, but the property tax may adversely affect the value of their home. In the case of rental units, the tax may be shifted from landlord to tenant. In this case, as in the others above, the actual economic effect of the property tax on rents and housing values depends on market conditions.

Owner-Occupied Housing. If it is assumed that the demand for housing is similar in terms of its responsiveness to price in most communities, then the effect of property taxes on home values depends chiefly on the responsiveness of the quantity of homes supplied to price. If there is little response of home construction to price changes, then one would expect the tax to result in lower home prices (other things being equal). This is because the tax lowers the implicit rent earned by homeowners, and when they sell their home, they must do so at a decrease in price reflecting the burden of annual tax payments over the economic life of the home. This is called "tax capitalization."[5] It results from the fact that investors may put their funds in alternative assets other than housing. If some of these assets are not subject to the property tax or are taxed at lower rates, the price of housing must fall until its return (implicit rent) rises enough to yield as much as that available on alternative investments.

[5]For a discussion of tax capitalization, see Hyman (1973, pp. 262-268).

If, however, the quantity of new homes constructed is very responsive over time to changes in rents, then the depressing effects of the tax capitalization on housing values can be (at least partially) offset by the price increasing effects of a reduction in the quantity of homes supplied. Of course, the community will suffer a reduction in the rate of growth of the housing stock in this case. But homeowners will be able to sell their homes for higher prices than would prevail in the case of an unresponsive housing supply.

Rental Housing. The property tax levied on rental housing may be borne either by tenants or landlords. As in previous cases, the distribution of tax burden depends on market conditions. The tax acts as a force reducing rent payments collected by the landlord and this initially acts to reduce the value of his property through the capitalization process described above. If, however, over the long run the quantity of rental housing units constructed is responsive to this lower earning rate, it is possible that at least some of the tax can be borne by tenants. This is because the reduced availability of rental housing acts as a force to increase rents, thus, offsetting the depressing effects of the tax on the landlord's rent collections.

The extent to which the tax levied on rental housing is shifted is a crucial bit of information for determining the distribution of the property tax burden. If landlords constitute an upper-income group in the community while tenants are largely middle and lower-income households, then the effect the tax has on income distribution clearly depends, in part, on whether landlords or tenants bear the bulk of the tax. A following section of this report presents empirical evidence on the distribution of the tax burden between tenants and landlords in North Carolina.

Vacant Lots

There are strong economic reasons for believing that the portion of the property tax levied on undeveloped parcels of land is borne by landlords. Since the total amount of land supplied for all uses is fixed, it follows that landlords cannot adjust the amount of land so

as to increase the price and cover part of the tax. As a result, the tax will be capitalized, thereby serving as a force to reduce the value of vacant lots. If holders of vacant land are members of upper-income groups, this portion of the tax will serve to redistribute income away from the relatively rich.

Taxes on Personal Property

Taxes on personal property are levied by counties and municipalities on tangible possessions other than real estate of individuals and corporations. These include automobiles, household furnishings, machinery, agricultural livestock and feed, jewelry, business inventories and other tangible personal wealth. Since prices for most of these goods are determined in national markets while the tax is levied locally, there is little likelihood that quantities supplied and/or demanded can adjust significantly in response to the tax to allow shifting. It might, therefore, appear reasonable to presume that this tax is borne by individuals in proportion to their holdings of personal property. However, the personal property tax levied on businesses is a cost of production and may be shifted forward to consumers if market conditions allow.

The foregoing assumes that all individuals accurately report their holdings. Unfortunately, this may not be the case. Personal property taxes are notoriously difficult to administer and enforce. Holdings of personal property by upper-income groups are usually quite diverse and difficult to trace. Personal underassessment of the value of possessions is quite common. The costs of assessment by public authorities are usually prohibitive. Although the value of personal property possessed undoubtedly increases with income, problems involved in equitably administering the personal property tax are such as to make it uncertain whether the tax burden increases with income. There have been no empirical studies of the distribution of burden for the personal property taxes because of the difficulties in obtaining the required data.

Taxes on Intangible Personal Property

The intangibles property tax is administered by the state for local governments. The tax collected $27.2 million in fiscal year 1971-72 and all but 6 or 7 percent of this revenue was passed on to local governments (N. C. Department of Tax Research, 1972, p. 180).[6] The tax is levied on "paper assets" such as stocks, bonds, and bank deposits held by individuals and corporations. Over one-half of the revenues collected from the intangibles tax are collections from levies on shares of stock. As in the case of the personal property tax, it is reasonable to presume that the tax burden is borne by individuals and corporations in proportion to their holding of stocks, bonds, and other paper claims (provided that the tax is equitably administered). Prices of stocks and bonds are determined in national and international markets and it is doubtful that the tax on stocks and bonds in North Carolina can induce any response appreciable enough to affect the prices of these assets. This precludes any shifting.

The tax may, however, have some effect on economic development within the state. Since not all states have this tax, it could conceivably (other things being equal) deter individuals with large portfolios of stocks and bonds from locating their residence within the state. There is, however, no empirical evidence as to the existence of this effect or its magnitude.

Economic Effects of Local Property Taxes on the Allocation of Resources

Since the property tax is basically a local levy, there can be additional economic effects stemming from "tax competition" among communities. Households and corporations often "shop" for a community to locate their residence or business activities. Among other factors, local tax rates and public services may influence their choice of a site. Differentials in tax rates and public services

[6]The revenues from intangibles taxes returned to local county and municipal governments are received in the fiscal year following that for which such revenues are collected (N. C. Department of Tax Research, 1972, p. 183).

among communities may, therefore, give rise to responses by citizens which affect the level of welfare in a given community. For example, if all other factors are held constant, and the supply of housing is responsive to changes in rents, then it is possible that communities with relatively high tax rates given the level and quality of public services may suffer a reduction in the rate of growth of their housing stock.

Similar effects are possible for investment in a community by corporations. Relatively high tax rates may discourage corporations from building plants in particular communities if substitute communities exist where tax rates are lower and certain minimal amounts of public services exist. Such responses on the part of households and corporations can affect the size of the tax base in a community. High property tax rates may, therefore, make it more difficult for localities to raise revenue to support public services if tax differentials discourage households and firms from investing in the locality.

The following section presents empirical evidence on the economic effects of the portion of the N. C. property tax falling directly on residential and agricultural real estate. While this gives only a partial picture of the economic impact of property taxation on citizens in the state, it is useful because these two components are a major part of the tax base. The empirical results can be used to predict some of the long-run effects of property tax reductions.

EFFECTS OF REDUCING PROPERTY TAXES IN NORTH CAROLINA

This section summarizes the results of three empirical studies on the economic effects of that portion of the local property tax falling on real property in North Carolina. The studies are for taxes on residential and agricultural real estate. The results are useful in predicting the effects that reductions in N. C. property taxes may have on investment decisions and income shares of households and firms in the state. Specifically, the studies of residential property taxation can answer the question of whether tenants or landlords will be the principal beneficiaries of reductions in property taxes. They also indicate the possible effects such reductions might have on housing supplied to citizens of the state. The results of the study of farm real estate taxation are consistent with the hypothesis of the previous section that property taxes are largely capitalized into lower values of farm real estate. The effects of reductions in property taxes for both farm and nonfarm households are compared.

Residential Property

Two empirical studies (Hyman and Pasour, 1973a and 1973b) provide evidence that the supply of housing in North Carolina is highly responsive to changes in price. This implies that reductions in property taxes will benefit tenants through lower rents, but have little effect on the prices of owner-occupied homes.

In a study of the effect of property taxes on the median value of owner-occupied homes in incorporated towns having more than 2,500 inhabitants in 1970, it was shown that differentials in property tax rates among communities were not associated with differences in home value (Hyman and Pasour, 1973a). This indicates that appreciable tax capitalization does not occur in N. C. housing markets. Any reductions

in property tax rates for homeowners while lowering their annual tax bill will not appreciably increase the price they receive for their home when they sell it.

Statistical analysis of the effect which tax rate differentials among communities have on median rents in communities in North Carolina indicated that much of the tax is shifted from landlords to tenants (Hyman and Pasour, 1973b). The analysis included other variables which affected rents and explained over two-thirds of the variation in rents. A $0.10 differential in tax rates among communities was associated with about a $9.00 differential in the median annual rent per dwelling. For a rental unit valued at $15,000, a $0.10 tax differential will result in a $15 annual difference in the tax bill, $9.00 of which (or 60 percent) will be shifted to the tenant. This would seem to indicate that property tax reductions would benefit both landlords and tenants in North Carolina, but much of the benefit will eventually be passed on to tenants as reductions in rents.

In areas where the supply of housing is unresponsive to the profitability of production, the impact of reductions in property taxes will be quite different. Rents will not fall appreciably because the property tax was not previously reflected in rental rates. Here it will be landlords instead of tenants who benefit from tax decreases. The value of owner-occupied homes will rise, however, as the depressing effect of property tax capitalization is eliminated. Under these circumstances, it is the landlords and homeowners who benefit from the tax reduction. Insofar as these groups are comprised of upper-income households, reductions in property taxes will provide little tax relief to the poor. The situation of the poor may, indeed, be worsened if a reduction in the property tax is replaced with a regressive levy on consumption.

Farm Real Estate

N. C. farm real estate taxes increased from $.51 per acre in 1950 to $1.91 per acre in 1971 (U. S. Department of Agriculture, 1973). Farm real estate taxes per acre as a proportion of the value per acre of farm real estate, however, remained almost constant during this

period. The average amount of taxes levied per $100 full value of farm real estate in North Carolina was $.52 in 1950 and $.54 in 1971. This indicates that, on the average, the rate of increase in property taxes was almost the same as the increase in farm real estate values during the period from 1950-71.

In recent years as farm real estate taxes have increased rapidly on a per acre basis, there has been a great deal of pressure throughout the United States to have farm real estate taxed on the basis of its use value in agriculture instead of its market value or its highest value use. The impetus for legislation to provide "present use value" taxation for farm real estate, especially around rapidly urbanizing areas where farm real estate values are increasing rapidly, has come from two sources.

First, owners of farm real estate hope to reduce their property tax burden in cases where the appraised value for tax purposes exceeds the use value of the land in agriculture. Tax relief to owners of farm real estate where the value is significantly affected by urban influences is the first, and perhaps most important, source of support for legislation to provide present use value taxation for farm real estate.

A second source of support for reducing property taxes levied on farm real estate comes from individuals concerned about the use of land especially in rapidly urbanizing areas. Some people feel that more open-space land should be preserved around urban areas and support present use value taxation of agricultural and other open lands as a way of achieving this objective.

There are two important issues at stake in analyzing present use value taxation. The first pertains to the relationship between property taxes and land use. Is a policy of present use value taxation for agricultural land likely to achieve the land use goal? Second, what is the effect of reducing the level of property taxes levied on farm real estate? A decrease in taxes levied on farm real estate might result from a present use value taxation policy, or it could result from action taken to decrease the property tax rate for all

real property in a given political jurisdiction. First, consider the effect of a general decrease in property taxes on farm real estate in North Carolina.

Reductions in Farm Real Estate Taxes

The impact of a reduction in ad valorem taxes levied on real property, as indicated in the previous section, depends mainly on supply conditions of the real estate market. The effect of a tax reduction is to increase property values where supply of real property does not change as taxes are reduced. This is the situation for unimproved agricultural land.

Farm real estate, however, includes improvements in the form of fertilizer, drainage, clearing, grading, buildings, and other reproducible capital inputs. The supply of capital inputs of these kinds does respond to price decreases.[7] Where the supply of real property is increased by a decrease in the tax rate, some of the decrease is reflected in the form of reduced rents. Thus, one cannot determine on a priori grounds the incidence of property taxes levied on farm real estate, i.e., how much of a reduction in property taxes will be reflected in increased property values.

A study to provide information concerning the relationship between the level of property taxes and the value of farm real estate in North Carolina was recently completed (Pasour, 1973). The average per acre value of N. C. farm real estate on a county basis (from the 1969 Census of Agriculture) was related to the county tax rate and other variables pertaining to agricultural productivity of the land, farm size, urban influence, and recreational demand.

The estimated relationship explained about three-fourths of the variation in farm real estate values between counties in North Carolina. The coefficient of the tax rate variable in the estimated relationship indicated that decreases in property taxes levied on N. C. farm real estate are largely capitalized into higher farm real estate values. A 10-percent decrease in the effective tax rate (for

[7]Buildings comprise about 30 percent of the total value of farm real estate in North Carolina (U. S. Department of Agriculture, 1972).

example, from $1.11 to $1.00 per $100 assessed value), with other factors constant, was associated with an increase of $7.40 per acre in the average value of farm real estate.

What is the significance of this result? A given reduction in the tax rate (say 10 percent) will increase property values. Thus, the decrease in taxes paid will be less than the reduction in the tax rate since the tax rate will then be applied to a higher assessed value.[8] Thus, the owner of farm real estate benefits in two ways from a reduction in the tax rate. The amount of taxes paid is reduced. In addition, the value of his property is enhanced (i.e., there is a capital gain) through the capitalization effect as a result of the decrease in the tax rate.

The effect of a reduction in the tax rate for farm real estate in North Carolina is quite different than that for residential housing, either owner-occupied or rental, as presented in a previous section. There it was shown that a given percentage decrease in the property tax rate will decrease the amount of property taxes paid by the same percentage. However, the effect of a change in the effective property tax rate for farmers relative to residents of owner-occupied or rental housing depends both on the extent to which property taxes are capitalized and on the assessed value of property being taxed.

The average market value of real property owned per N. C. farmer is considerably higher than the average value of real estate owned by the average nonfarmer.[9] The average size farm in the state at the time of the most recent agricultural census was 106.6 acres with an average value of land and buildings $333 per acre. Thus, the average value of farm real estate per farm was $35,550 (U. S. Department of Agriculture, 1972). The average value of owner-occupied housing in North Carolina at the time of the most recent census of housing was $12,500 (Hyman and Pasour, 1973b). When one considers both the capitalization effect and the amount of real estate owned, the net

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[8]This assumes an adjustment period long enough for the property to be revalued for tax purposes following the decrease in the tax rate.

[9]This is the case both in terms of market value and in terms of appraised values for tax purposes.

effect of a given percentage reduction in property taxes is larger on the average for owners of farm real estate (Pasour, 1973).[10]

Many proposals to reduce local property taxes are tied to a proposal to increase state or local taxes to compensate for the reduction in tax revenue arising from the reduction in property taxes. The method of providing additional tax revenue to compensate for the reduction in property taxes such as sales taxes, income taxes, etc., is also likely to have a differential impact on farmers vis-a-vis other groups of taxpayers.

Present Use Value Taxation

A bill ratified by the 1973 N. C. Legislature (effective January 1, 1974) provides for the taxation of certain agricultural, horticultural and forestry land on the basis of present use value instead of market value. Several conditions must be met in order for land to be taxed on the basis of its present use value. Land must be owned by a natural person (or persons) and not by a corporation.[11] Land must be the owner's place of residence, or it must have been owned by the present owner (or his children or by one or both parents) for the seven years immediately preceding January 1 of the year for which application is made for taxation at present use value. Qualifying agricultural (or horticultural land) must consist of at least 10 acres and have a gross agricultural (or horticultural) income of $1,000 per year for each of the three years just prior to the year in which application is made for the land to be taxed on the basis of its present use value. Qualifying forest land must consist of 20 acres or more unless it is included in a qualifying tract of agricultural land. Qualifying lands must be engaged in commercial production "under a sound management program."

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[10] This conclusion appears to be correct even though (as explained below) residential property appears to be assessed higher relative to market value than is the case for farm real estate.

[11] Land includes land and land improvements but not buildings.

Application for present use value taxation must be filed during the regular listing period. Following proper application and approval by the tax supervisor, qualifying land is taxed on the basis of the value of the land in its present use.[12] The state Property Tax Commission is charged with preparing rules, regulations, and standards for use by county officials to insure reasonable uniformity among counties in making appraisals.

Taxes for qualifying lands (following application and approval) are computed on both the basis of present use value and market value appraisal of the land. Deferred taxes are computed as the difference between the two and are maintained in the records of the taxing unit.

If the owner loses eligibility (as by disposing of the property) in a particular year, taxes that year will be computed on the basis of market value. In addition, deferred taxes plus interest immediately become payable for the preceding five years.[13]

How will this legislation affect (a) land use, and (b) the amount of property taxes paid by N. C. farmers? First consider land use.

Land Use. In some states, a major objective of legislation providing present use value taxation has been the preservation of open

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[12] If the tax supervisor approves the application, he then appraises the property on the basis of its present use value. This appraisal "except for valuation changes made necessary by changes in the number of acres qualified for classification or by changes in the nature of the operations of a qualifying owner" then continues in effect until all property in the county is revalued (N. C. Senate, 1973, p. 4). At that time, qualifying property is reappraised at both its present use value and its market value.

[13] If only a part of a qualifying tract of land loses its eligibility, deferred taxes plus interest become due on that part of the land.

A property owner having land taxed on the basis of present use value must notify the tax supervisor following a change in use of the land. Failure to properly notify the tax supervisor in such cases will subject the property owner to a 10-percent penalty of the total amount of deferred taxes plus interest for each listing period in which there is a failure to report.

space around urban areas. This was not the major consideration in the recently enacted N. C. legislation since open land was not included unless it qualified in one of the designated categories of agricultural, horticultural, or forest lands.

The effect of present use value taxation in holding land in agricultural (including horticultural and forestry) uses around urban areas is likely to be small. Farmland near rapidly growing urban areas is often priced at five to ten times its value in uses qualifying for present use value taxation. Thus, other economic factors are likely to swamp property tax considerations in allocating such land to high value uses.

Tax Relief. What will be the effect of the 1973 legislation on the level of property taxes paid by N. C. farmers? Although data are not now available to answer the question conclusively, there are strong reasons to expect the effect of the legislation to be quite modest.

A large share of the farm real estate in North Carolina will be eligible for present use value taxation from the standpoint of meeting the ownership, residence, and size requirements. For property owners meeting these requirements, the key question from the standpoint of whether to apply for present use value taxation relates to the difference between the current appraised value for tax purposes and the present use value of the land for agricultural, horticultural, or forestry uses. Farmers owning land located in rural counties away from urban centers or influences will have little to gain from use value taxation since the market value of the land is already largely determined by its present value use.

Much of the agricultural land in North Carolina, however, is affected by urban influences. This is especially true in the Piedmont and mountain areas of the state. What will be the effect of the 1973 present use value legislation for qualifying farmland where the market value is considerably above present use (agricultural, horticultural, or forestry) value? The effect of the legislation is likely to be quite modest even for land of this type for reasons explained below.

When will a landowner having eligible land participate in the program? The key question for an individual landowner, as indicated above, is how much does the current appraised value of his land for tax purposes exceed the present use value? Unless the current appraised value for tax purposes exceeds the present use value, there is no reason to apply for use value taxation.

The relationship between the appraised value for tax purposes and present use value may be quite different from the relationship between market value and present use value. This will be the case if the appraised value for tax purposes is appreciably lower than market value. What is the current situation?

Although all classes of property in North Carolina, prior to the 1973 legislation, were legally required to be appraised at market value, data from the Census of Governments indicate that farm real estate may be appraised (and assessed) considerably below market value (and lower relative to other types of property).[14] Data are not available concerning the intra-area variation of assessments for farm real estate. However, it appears likely that the ratio of assessed value to market value of agricultural land near rapidly growing urban areas is lower than for agricultural land where the value is determined mainly by agricultural uses.

What is the implication of present use value taxation if farm real estate is already appraised below market value? The 1973 bill can only legitimize existing policy to the extent that qualifying lands are now appraised for tax purposes below market value. If qualifying

[14] In North Carolina, the percentage ratio of assessed value to sales price of sold properties in 1966 was 38.2 for all types of property but was only 24.7 for acreage and farm properties (U. S. Bureau of the Census, 1968, pp. 42-47). This classification includes property used for agricultural purposes, unimproved timber land, mineral land (in some states), waste land, and rural residential properties. If any parcel of real estate were appraised at its market value (as indicated by its sale price), then the ratio of assessed value to sales price would equal the assessment ratio (the ratio of assessed value to appraised value). The average assessment ratio (unweighed) of the counties in North Carolina for the same time period was 55 percent. The percentage ratio of assessed value to sales price of N. C. residential property in 1966 was 44.6 -- much closer to the average percentage assessment ratio of 55 than was the case for acreage and farm properties.

land is now appraised for tax purposes near its use value in agriculture, there is little incentive to apply for taxation under the provisions of the 1973 legislation.

A reduction in property taxes, whether by present use value taxation or by a de facto policy of assessment below market value, will affect land values. The effect of a given decrease in the appraised value of land was estimated with the use of the relationship between farm real estate values and property taxes described above. The average tax rate in the counties included in the study was $.79 per $100 assessed valuation. Thus, the annual tax bill would decrease by $.79 for each decrease of $100 in assessed value.[15]

Assume that 100 acres of qualifying land located on the urban fringe were currently appraised and taxed on the basis of its market value of $1,000 per acre, whereas the agricultural use value was only $300 per acre. The current tax bill would be reduced from $790 ($.79 x 100 x 10) to $237 ($.79 x 100 x 3) if there were no capitalization effect and current taxes would be reduced by $553 per year. If taxes are merely deferred, there would be no appreciable effect on the value of the land.

If the taxes are not deferred (but foregone), there would be a significant impact on land values.[16] A reduction in taxes from $790 to $237 is equivalent to a reduction from $.79 to $.24 in the tax rate. The relationship estimated above indicates that this reduction in the tax rate would increase property value by $88 per acre. Thus, if taxes are merely foregone, (instead of being deferred), the long-run effect of use value taxation in this case is to increase property values from $1,000 to $1,088 per acre. The effect of a decrease in the assessed value on land value will be much less in the case of the

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[15] This assumes that the effect on the tax base is negligible. In practice, a decrease in assessment values for one group of taxpayers will decrease the tax base and is likely to result in an increase in the tax rate for all taxpayers.

[16] A de facto policy of appraising land below its market value is an example of taxes being foregone.

1973 N. C. present use value legislation since a portion of the decrease in taxes is to be merely deferred until land use changes. A tax reduction will result in increase in land values through the capitalization effect, however, as long as any taxes are deferred.

The effect of the 1973 legislation to provide present use value taxation will vary widely from landowner to landowner depending upon the difference between the market value and present use value of land, the amount of qualifying land owned, and the length of time the land is held in a qualifying use.[17] If effective in providing tax relief to owners of qualifying land, the legislation will increase the tax burden for nonqualifying owners of agricultural (horticultural and forest) land and other property owners.

Some farmers are "land poor." That is, they have a liquidity problem with low current income but increasing wealth due to land appreciation. The legislation may enable some farmers having a liquidity problem to continue to farm. If reductions in taxes were merely deferred in such cases, there would be no significant tax break for holders of affected land.

In conclusion, the 1973 legislation providing present use value taxation is not likely to have a large impact in North Carolina. First, it is unlikely to have much effect on holding land in agriculture near rapidly urbanizing areas. Second, it is not likely to result in a large reduction in appraised values for owners of most qualifying land.

[17]The age or planning horizon of the owner is likely to affect the length of time land is held in a qualifying use. Young to middle-aged farmers are likely to have longer planning horizons than the 5-year roll back period and may have more to gain by deferred taxes than those farmers approaching retirement.

SUMMARY AND CONCLUSIONS

It is difficult to predict the effects of general property tax reductions. Results of the three studies summarized in this report indicate that a reduction in the level of property taxes is likely to have a quite different impact on owners of different classes of property. The effect of a decrease in the tax rate on property owners depends on the extent to which taxes are capitalized and on the amount of property being taxed. When both factors are considered, the net effect of a given decrease in property taxes appears larger, on the average, for owners of farm real estate relative to residential homeowners. However, many owners of above average value homes would benefit more than many owners of smaller than average size farms. The empirical studies also indicate that residential tenants are likely to obtain some benefits from property tax reductions in the form of lower rents over a period of time.

Given the level of local government budgets, property tax reductions come only at the expense of increases in other taxes. The method of replacing any lost revenue will also have a differential impact on various groups of taxpayers.

There are also problems in predicting the effects of property tax reductions for owners of specific kinds of property. The effects of present use value taxation for agricultural (horticultural and forestry) property, as indicated above, will vary widely from farmer-to-farmer even for those owning property qualifying for present use value tax treatment.

In conclusion, the effects of property tax reductions will vary widely both for owners of different classes of property and for owners of a similar class of property depending upon the form of property tax reduction. Simple generalizations about the effects of property tax reductions for owners of particular classes of real estate whether the reduction in taxes is general or for a specific class of real estate (e.g., agricultural) are not likely to be accurate.

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