INCOME ELASTICITY OF THE PROPERTY TAX: A POST-MORTEM NOTE

Author(s): DICK NETZER

Source: *National Tax Journal*, June 1964, Vol. 17, No. 2 (June 1964), pp. 205–207

Published by: National Tax Association

Stable URL: https://www.jstor.org/stable/41790991

JSTOR

INCOME ELASTICITY OF THE PROPERTY TAX: A POST-MORTEM NOTE

DICK NETZER *

SOME six years ago, expressions of shocked surprise greeted an assertion that the evidence of the postwar period supported what would appear to be two rather unsurprising propositions; that, in medium-long periods of say 10 to 15 years during which cyclical movements are mild, the market value of taxable property should rise roughly as fast as gross national product and that, since in such periods assessment ratios probably would not fall appreciably, the property tax base therefore should rise about as fast as GNP.[1] This was construed to be in conflict with the received doctrine, that assessed values and thus property tax revenues respond only slowly and modestly to sharp cyclical fluctuations in the short run. However unwarranted this construction, it had the positive result of stimulating some useful empiri-cal work, of a quality superior to that underlying the original assertion, by McLoone, Mushkin, Hogan, and Kurnow, among others.[2]

One had hoped that this mass of evidence had given the controversy a decent burial, but Professor Davies has exhumed the corpse in his note in the December 1963 issue of this *Journal*.[3] The context is his comment on Morgan's handling of the relative stability or income elasticity of sales and property taxes. Now, Davies is almost surely correct in his conclusion that, in general, sales taxes are likely to have a higher income elasticity coefficient than property taxes. But the outcome in particular comparisons depends a good deal on both the length and nature of the time period under consideration and the specific

* Graduate School of Public Administration, New York University.

[1] This assertion was unveiled in my paper, " The Outlook for Fiscal Needs and Resources of State and Local Governments," *American Economic Review*, May 1958, pp. 323-325, and subsequently amplified in " Financial Needs and Resources Over the Next Decade: State and Local Governments," in *Public Finances: Needs, Sources, and Utilization*, National Bureau of Economic Research (Princeton, 1961), pp. 30-36.

[2] Selma J. Mushkin in *Public Finances: Needs, Sources, and Utilization*, pp. 74-77; Eugene P. McLoone, Effects of Tax Elasticities on the Financial Support of Education, University of Illinois doctoral dissertation; John D. Hogan, " Revenue Productivity of the Property Tax," *NTA Proceedings, 1960*, pp. 71-77; Ernest Kurnow, " On the Elasticity of the Real Property Tax," *Journal of Finance*, March 1963, pp. 56-58.

[3] David G. Davies, " A Further Reappraisal of Sales Taxation," pp. 410-415.

205

coverage of the actual taxes being discussed.

In general, Davies is likely to be correct for long-run comparisons for rather obvious reasons. Over the long pull, capital-output ratios have declined, as indeed one would both expect and hope. This clearly shows up in the 1900-1958 data in the table, based on Goldsmith's national wealth data. Privately owned wealth components of the type typically covered by property taxes have risen far less rapidly than GNP in this century. On the other hand, the typical retail sales tax base—consumption expenditures on all goods sold at retail plus a diverse collection of intermediate and capital goods purchased by businesses—would be expected to grow very nearly as rapidly as GNP.

However, the Goldsmith data also suggest two complications. First, declining capital-output ratios do not necessarily hold over shorter periods; they increased significantly in the 1945-1958 period. My earlier use of unit elasticity as an assumption on which to base projections for 10 to 15 years represented an effort to discount the postwar experience, which, however, cannot be ignored. Second, the coverage of the property tax is relevant to elasticity estimates; a property tax which is confined to realty is likely to have a substantially lower coefficient than one which includes large chunks of personalty.

To get back to the fundamentals in the argument, the relevant measure of property tax stability/elasticity has a lot to do with the nature of the policy concern. If we are worried about the behavior of the property tax in periods in which large cyclical fluctuations are anticipated, then the short-term variability of the revenue is the proper focus of concern and changes in assessed values

of taxable property may be the relevant measure. That is, assessment ratios are likely to rise sharply in rapid and deep recessions, and fall sharply in a subsequent rapid upturn. This implies a good deal of (desirable) revenue stability in recessions and a good deal of (undesirable) lack of revenue growth in booms.[4]

INCOME ELASTICITY OF PRIVATELY OWNED
COMPONENTS OF NATIONAL WEALTH

(Per cent increase in wealth component
divided by per cent increase in
gross national product)

	1900–1958	1945–1958
Current dollars:		
(1) land and structures ...	0.56	1.64
(2) (1) + producers durables and inventories	0.60	1.75
(3) (2) + consumer durables	0.64	1.84
Constant dollars:		
(1) land and structures ...	0.32	1.38
(2) (1) + producers durables and inventories	0.38	1.76
(3) (2) + consumer durables	0.42	2.21

Note: Wealth data exclude holdings of nonprofit organizations.

Sources: Raymond W. Goldsmith, *The National Wealth of the United States in the Postwar Period* (Princeton, 1962), Tables A-50, A-52, A-53, and A-54; *Historical Statistics of the United States*, p. 139; *Survey of Current Business*, July 1963.

However, if we are concerned with a period in which only mild cycles are anticipated, short-term stability of the revenue is not much of a policy problem and assessment ratios are not likely to change very much cyclically. Here the policy problem is likely to be the responsiveness of the revenue to economic

---

[4] Incidentally, since the long-term trend is toward lower capital-output ratios, cyclical detrending of the data might be expected to *raise*, not *lower* the elasticity coefficient. Admittedly, this would not have been true for the data Davies cites (p. 415), but is the more general case.

growth and the relevant measure is the change in market value, with the cycle, not the trend, removed from the data. The really substantive issue then becomes, how will capital-output ratios, equating capital with taxable property, change in the forecast period?

The property tax elasticity argument has not been helped by distinctions between " actual " changes in yields, " cash at hand," and " potential " changes in yield. As we know, for most of the 80-odd thousand property-tax-levying jurisdictions, the nominal *rate* of the tax is essentially a residual, derived by determining the level of expenditures, subtracting state aid and other nonproperty tax revenues from budgeted outlays, and comparing the remainder with assessed values. No doubt there are jurisdictions in which the nominal tax rate is frozen for all practical purposes—for instance, where there are externally imposed tax rate limits and the jurisdiction is operating at or near the limit—in which cases the principal determinant of changes in yield is the change in assessed value. But there are many other cases in which the nominal tax rate varies: for example, the influence of income on the demand for local public expenditures may be so strong that the yield of the property tax then becomes a function of the level of personal income. The point is that assessed values are no more " actual " as determinants of property tax yield than are a number of other factors. And in the absence of tax rate limits which bind, assessed values may have little to do with " cash at hand."

Still, Professor Davies is right to object to a case against the sales tax based in part on the argument that it has a relatively low order of income elasticity. My own conclusion is that the case against the property tax, relative to almost any alternative including the sales tax, is a strong one, but relative income elasticity is not a significant element in the case. Alas, the sad truth is that additional property tax revenues seem all too easily had.