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Reply to Brent (1998)

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Brent (1998) has made an important contribution in the development of the nonresidential expanded tax base (ETB) approach to school finance. As Brent indicates, the nonresidential ETB may cut the Gordian knot of achieving both local control and also student equity under property tax funding of local education. He showed that the nonresidential ETB approach can achieve somewhat greater equity in school finance. And his inclusion of a district-level behavioral response model, in particular, is an improvement over previous studies. But the paper seriously understates the potential equity gains from a carefully designed nonresidential ETB. The formula for redistribution of ETB revenues is a critical component of the system. Brent fails to examine the kind of equity-generating formulae already in use in some states to distribute general state aid to education. Had Brent examined such formulae, he would have concluded that virtually any equity objective can be achieved by a nonresidential ETB system. When the nonresidential ETB is complemented by similar equity-generating distribution of state aid for education from general revenues, the conclusion is even stronger.

To argue that Brent's modest equity gains understate the potential of a nonresidential ETB might seem to quibble. But there are very significant implementation problems in a nonresidential ETB, which present practical and political hurdles to its adoption. Fighting to overcome these hurdles may not make sense if the gains are modest.

Serious difficulties arise in defining "residential" versus "nonresidential" property. How are second/seasonal homes to be treated? If they are nonresidential, then problems will arise in differentiating second homes from primary residences. Residences that occupy large lots, especially those lots with development potential, also create classification difficulties. Other problems include apartment buildings and buildings with both residential and retail or commercial space. Farms are a special case of this last category. Waterfront property is a large factor in differences in the property tax base (often second in importance only to utility plants and large industrial facilities). If waterfront property is largely residential property, the ability to equalize educational spending under a nonresidential ETB may be significantly reduced.

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This classification issue presents opportunities for political manipulation to enact definitions that favor one community over others in the size of the local residential property tax base. And administrative manipulation will continue once the definitions are set in statute. It is important not only that the redistribution formula generate significant equity benefits, but also that the redistribution formula offset such manipulation of the system. A distribution system that guarantees that every district raising a target mill rate will spend at the state average can accomplish both objectives. The following algebraic implementation of a redistribution system will accomplish this goal. (This formula is a simplification of the formula in Maine's School Finance Act of 1985.) Because this implementation sets the same target mill rate for residential and nonresidential property, the incentives for owners to have property classified as residential or nonresidential are reduced.

Define:

SPEND = the target spending per pupil.

MILL = target mill rate for support of education, to be assessed on both residential and nonresidential property. The goal is to equalize this mill rate across communities at the target level of per-pupil spending.

TOTRES = sum of assessed value of residential property in area covered by ETB.

TOTNONRES = sum of assessed value of nonresidential property in area covered by ETB.

N = total number of students in area covered by ETB.

RES_i = assessed value of residential property in community i.

N_i = number of students in community i.[1]

[1] N and N_i could also be "weighted students."

$LOCALSHARE_i$ = per pupil amount raised locally for education in town *i*.

$SUBSIDY_i$ = the equalizing subsidy per $pupil_i$ in town *i*.

Compute:

$$MILL = [SPEND * N]/[TOTRES + TOTNONRES]$$

$$LOCALSHARE_i = (MILL * RES_i)/N_i$$

Then:

$$SUBSIDY_i = SPEND - LOCALSHARE_i$$

There is one technical detail that this formula must address. If some districts have sufficiently large residential property tax bases per pupil, SUBSIDY could be negative. The spirit of the nonresidential ETB would not permit redistribution of the taxes on residential property (which is what a negative SUBSIDY represents). In this case, the SUBSIDY would be set to zero. This would require that MILL be raised slightly so that the sum of the subsidies equals the amount raised. This may be accomplished by iteratively increasing MILL until the budget constraint is satisfied.

It is possible to develop more complicated formulae. In particular, formulae that adjust for broad differences in costs may make sense. Urban districts may face higher costs both because of higher wages and also because of a more demanding set of problems within the school-age population. As many states have found, there are some difficult problems in measuring local costs, but even imperfect measures of cost differences may be preferable to a uniform statewide cost-per-pupil objective.

It is also possible to build into the formula a penalty for districts that fail to raise a local mill rate at least equal to the target rate (MILL). This penalty could be a dollar-for-dollar reduction in the subsidy or a proportionate reduction in the subsidy. This would prevent large receiving districts from 'free-riding' on the subsidy.

The redistribution formula is an inherent part of the nonresidential ETB system. Carefully designing an ETB tax collection system and then using arbitrary redistribution formulae makes no sense. A nonresidential ETB system needs to start by stating the equity objective to be satisfied. And the existing redistribution of general state aid should be considered in the definition of this objective. It is then possible to design a redistribution formula that achieves that goal (or comes as close as ETB-raised revenues will allow). The algebra of the distribution formula is then only a detail for policy. As always, policy goals need to drive policy design, rather than vice versa.

Reference

Brent, B. O. (1998). Expanding nonresidential property tax bases for school finance in New York state: Implications for student equity. *Journal of Research in Rural Education, 14*, 172-182.