Income and the school funding formula: A contrary view

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The Committee to Study Organizational and Tax Issues in Public Schools, which was chaired by Dr. Jack Rosser, recommended some sweeping changes in how Maine's primary and secondary education should be organized and financed. Despite the best intentions of the Rosser Commission, its suggestions for funding reform have overshadowed all other parts of the report. And, of the funding changes proposed, the suggestion to include income and a cost index in the funding formula has received the greatest attention. Although perhaps a little unfair to the members of the Rosser Commission, the general reaction to the Commission's ideas for including income seems to be: "They're heading in the right direction, but their method is not quite right." That is, there seems to be a general sense that income belongs in the funding formula, but that the perfect formula still needs to be found.

It is my purpose here to disagree with this conventional wisdom. There are a number of very good reasons to believe that any attempt to add income to the funding formula will create more problems than it solves. There are both practical and conceptual difficulties in measuring income. Incorporating income into the funding formula has the unintended effect of lowering property taxes for industrial and recreational property in many towns. The real inequities of the property tax—primarily the impact upon families on fixed incomes—can be addressed much more effectively by the targeted relief of circuit-breakers or homestead tax credits. And finally, there is a real risk that this effort at greater taxpayer relief will have a negative impact upon Maine's goal of student equity.

Problems measuring income

The newspaper is filled with data on average income for this or that area. The average citizen might think that income is easy to measure. Unfortunately, that is simply not the case.

There are now only two consistent sources of income data at the town level: Census data and income in jobs covered by unemployment. The Census data is collected every ten years. While income often changes slowly, areas with rapid growth (like southern Maine in the 1980s) or areas that lose major employers (like Limestone in the 1990s) will not be adequately represented by Census data.

"Covered employment" refers to jobs that are covered by unemployment insurance. Self-employed individuals and those who work "under-the-table" are excluded. In rural areas, this undercounting can be very significant. For example, Washington County is often in the top two or three counties for average wages in covered employment! This is because a very large share of
the covered employment in Washington County is in the paper mill in Woodland. All the self-employed fishers, clam diggers, and wood cutters are left out of covered employment. Moreover, covered employment earnings leave out income from sources other than employment, such as pensions and dividends.

Presumably, Maine's income tax data could be used to construct average income data. Like covered employment data, income tax data leaves out "under-the-table" income, which can be significant in some communities. It also leaves out some important sources of unearned income, such as Social Security payments.

All measures of local income are based upon the income of residents. However, property is also owned by non-residents, including some wealthy non-residents. Valuations may indeed by very high for shore-front property, but that property may largely be owned by financially-secure non-residents. There is simply no way that Maine will force these non-residents to reveal accurately their income.

An important statistical question is whether to use per capita income or family income as the measure of income. (Recognizing this problem, the tax code makes adjustments in deductions and exemptions among different family structures.) In urban areas with apartment complexes, many "families" will be one person or two unrelated individuals. In rural areas, "families" are likely to be larger, simply because of the type of housing that is available. In general, we would expect "family" income to be relatively higher in rural areas with larger families, and per capita income to be relatively higher in urban areas where there are more single, employed individuals. Any effort to define "average income" must confront this difficult definitional issue.

When measuring income, there is the very important question of how to measure government transfer payments and subsidies. For example, housing subsidies can be a very large part of income. Moreover, these housing subsidies are generally stated to cap the percent of income paid for housing. An individual who lives in such subsidized housing is completely insulated from all changes in rent, including those due to property taxes. As subsidized housing is more frequently located in urban areas, the average or median income of urban areas may be made lower by the presence of a relatively large number of individuals who are insulated from the property tax.

The traditional measures of income also do not measure "unaccrued" income. Consider, for example, a stock that is purchased at $100 in 1993 and which increases to $120 in 1994. If that stock is not sold, it has unaccrued earnings of $20. This income will not be included in measured income until the stock is sold. Obviously, a large source of unaccrued income is the increase in land values. Thus, someone who decides to invest in long-term assets, like land and stocks, increases her or his wealth but without necessarily increasing current income.

I would not argue that these problems are completely insurmountable. By careful use of multiple data sources and by matching the data to the task at hand, meaningful income comparisons can almost certainly be constructed. But the task is clearly not as simple as turning to the Census tables for median income data. Very careful analysis of the technical questions is essential if a meaningful income adjustment is to be developed.
Wealth is related to income

The conventional wisdom has long been that the property tax is a very regressive and inequitable tax. The usual argument was that real estate wealth was not necessarily related to income. My profession, economics, was largely responsible for that conventional wisdom. Unfortunately, it has gone largely unnoticed in the political sector that economists have re-examined the evidence and found that the property tax is much less regressive than studies originally indicated. The property tax does impose a special burden on individuals on fixed incomes who own residential property, and especially on the elderly. This is a serious problem, and one that drives much of the concern about excessive reliance upon property taxes. However, it may be better to address that inequity directly, rather than to change the overall administration of the tax.

Because individuals with more income tend to own more expensive homes, the property tax does have some relation to income. Consider two taxpayers who each face a 10 mil property tax. Someone in southern Maine who earns $60,000 and owns a $150,000 home will pay $1500 in property tax, or 2.5 percent of income. Someone in rural Maine who earns $25,000 and owns a $50,000 house will pay $500 in taxes, or 2 percent of income. This particular comparison would yield a conclusion that the property tax could be progressive. Obviously, other examples could be constructed, and the property tax undoubtedly has both regressive and progressive effects on various taxpayers. But if, as seems likely, house value is roughly proportional to income for most Maine middle-class families, then the property tax is probably a roughly proportional tax for the middle class.

But the effect of the tax also depends upon who directly or indirectly owns commercial and industrial property. The stockholders in companies that own commercial and industrial property are overwhelming wealthy individuals. The wealthiest five percent of households own over ninety percent of the stock and a very similar share of other property. Consequently, the property tax on commercial and industrial property is basically a tax on the wealthy.

The property tax in fact taxes one form of income that income taxes do not: Unaccrued earnings from real estate. Income that otherwise might go untaxed for several decades is partially taxed by the property tax system, because assessed value should reflect increases in market value. While this may be bad news for those who invest in real estate because they want to avoid income taxes, this is good news from the broader view of tax equity. Again, because most of this unaccrued income is earned by wealthier individuals, this effect of the property tax tends to be progressive.

If the real goal is to tax only on the basis of income, then the solution is to fund all education from the state income tax. Some critics of the property tax, including some of my fellow economists, have proposed just that. But more economists are coming to the conclusion that several small taxes are better than a single large tax. When any single tax rate gets large, people spend more and more to avoid taxes. This tax avoidance reduces the income from the tax, and it also wastes society's resources on accountants and lawyers. A number of small taxes are both harder to avoid and also less worth spending effort to avoid.

The one, undisputed regressive feature of the property tax is the effect on retired individuals who still own a home. But a state can address this problem very directly, through a circuit-breaker
and/or a homestead tax credit (see below). In fact, a property tax with a generous homestead tax credit and a well-designed circuit-breaker would probably be a progressive tax.

**Treatment of non-residential property and second homes**

Some of the discussion about adding income to the education funding formula has been a bit superficial. It tends to assume that the only property being taxed is primary residences. In fact, industrial, commercial, recreational, and seasonal properties are an important part of the property tax base. If the formula is amended so that towns with lower income receive larger school subsidies, then the tax break goes not only to poor home-owners, but also to businesses and to non-resident property owners in those towns.

Consider the extreme case of a town with $18 million in commercial property and $2 million in residential property. Assume that it has a mil rate of 10 mils, so $180,000 is raised from commercial property and $20,000 from residential property. Assume that we wanted to provide a 10 percent reduction in property taxes for residential property owners. To accomplish this 10 percent reduction, the funding formula would have to provide an additional $20,000 to that town, an amount equal to the entire amount of taxes paid by residential property owners!

It might seem reasonable to treat different classes of property differently, so that the taxes levied on businesses and on recreational and seasonal properties would not be affected by the state subsidy. However, this option is essentially not available because of constitutional provisions against discrimination in the administration of taxes. That is why residential property tax relief is a state, rather than a local, function.

**Tax burden versus average income**

The reason for adding income to the school funding formula is to reduce the burden of the property taxes on homeowners. But to measure the burden of the tax on homeowners, we need to look at the ratio of property taxes to income, rather than simply average or median income. A town might have relatively low incomes, but also have very low property taxes. This almost certainly occurs, for example, in some rural towns with very large commercial or industrial facilities. On the other hand, in a town with little commercial or industrial property, relatively affluent families might have very high tax bills even in relation to their income.

At the very least, we ought to look at the distribution of tax burdens before and after any proposed income adjustment is added to the school funding formula. We certainly do not want to cause greater disparity in tax burdens in the name of equalizing the burden.

**Alternate property tax relief**

The property tax has an inequitable effect upon retired individuals who still own residential property. One of the major forces for property tax relief has been, and continues to be, this issue. But this particular inequity can be directly addressed by a circuit-breaker mechanism. Under a circuit-breaker mechanism, a rebate is provided for property tax payments that exceed some percent of income (such as 5 percent). The circuit-breaker could be available to all taxpayers or only to taxpayers over some age.
The political problem with a circuit-breaker is that the relief goes to local taxpayer, while the cost of the program is borne by the state. Consequently, Maine's efforts at circuit-breakers have consistently been underfunded. They are simply not a priority in the state budget. Yet, a circuit-breaker is clearly the most effective way to eliminate the regressive effects of the property tax.

Another option for elderly homeowners is a "reverse mortgage" arrangement. Instead of requiring payment of the property tax, the town accepts a mortgage against the property for the amount of the tax due. Essentially, the town loans the taxpayer the amount of unpaid taxes and that loan is secured by a mortgage. There is no risk of foreclosure or eviction; the mortgage cannot be called as long as the individual remains in the home, regardless of how large the mortgage grows. When the home is sold, the town receives both the principal and any accrued interest on the loan that was provided to pay property taxes.

A number of states have a "homestead tax credit." Under a homestead tax credit, each family that resides in the state receives a payment that offsets the property tax payment on some part of the value of a home. Usually, the homestead tax credit is administered as part of the state income tax. A homestead tax credit is often a fixed payment (for example $500) that is designed to offset the first $500 of property tax payments. Many homestead tax credits also permit renters to receive benefits. A homestead tax credit could be designed so that the local property tax on the first $30,000 (for example) of assessed value is rebated. The effect of a homestead tax credit is generally to shift the burden of the property tax so that primary residences are less heavily taxed than industrial, commercial, or recreational property.

Some states also have preferential treatment for farmland that, like the homestead tax credit, has the effect of reducing the effective property tax on producing farms. Generally, such programs restrict the ability of the farmland to be developed after it has qualified for preferential property taxes.

It is absolutely clear that direct tax relief through a circuit-breaker and/or a homestead tax credit is the only way to generate significant improvements in the equity of the property tax. Every dollar reduction in property taxes due to a circuit-breaker is targeted at the specific problem. Under a funding formula change, only a small proportion of the tax reductions in any given town ends up in the hands of low income individuals.

**Cost-of-education indices**

The Rosser Commission proposed a rather crude effort to adjust the school subsidy formula for differences in the cost of running schools. (At least one member of the Commission has since publicly backed away from this aspect of the report.) Despite the real limitations of the Rosser Commission approach, it may be that differences in the costs of running schools across the state should be reflected in the funding formula.

But it is not obvious that costs are lower in northern Maine than in southern Maine. Rural northern Maine faces higher transportation costs and higher energy costs. Smaller school districts have some problems achieving lower costs because schools are smaller and fixed costs are a larger share of the budget. Labor costs, such as electricians and custodians, are probably lower in northern Maine. But differences in teacher compensation, the largest component in costs, may
reflect the financial ability of wealthier towns to bid better teachers away from poorer districts or a tendency by larger districts to hire more specialized professionals for special education and similar functions.

The real question is two-fold: First, are there large enough differences in the cost of running schools to justify the annual expense of creating a meaningful school cost index? Second, if there are significant differences, how do we measure them? To answer these questions requires not arm-chair theorizing, but rather a rigorous study by economists who understand the construction and interpretation of cost indices. If the Legislature wants the answer, then it should authorize a detailed study of cost differences and then return to this issue in the next session armed with firm facts. I suspect that such a study would find some small differences in costs, probably with lower costs away from southern Maine. But I also suspect that such a study would identify variations among districts in special education and similar costs at least as important in explaining differences as labor or material rates. Again, simplistic use of some aggregated government price index will not adequately measure the real forces driving cost differences.

**Keeping student equity**

Any reform of Maine's school funding formula must be consistent with the central goals of the state education assistance. Maine passed its path-breaking 1985 School Finance Act in order to guarantee that every Maine student would have access to an adequate education. As a result of that legislation, the disparities in spending between Maine's poorest districts and Maine's richest districts fell to among the lowest in the country. Except for a few very high-cost islands, most districts spend between $3500 and $7000 per pupil. Because of this law, Maine does not have districts with classroom sizes of 35 or 40. Virtually all Maine high schools now offer a curriculum that is at least minimally adequate. The strong performance of Maine students on national tests reflects this commitment. Despite some of the rhetoric to the contrary, Maine can be proud of its efforts to educate all of its students. By any measure of pupil equity, the 1985 School Finance Act has been extremely successful.

I would not argue that the current funding statute is either perfect or sacred. The statute can be improved; adjustments to improve taxpayer equity can almost certainly be crafted. But improvements will be found in careful analysis and not in overly simplistic solutions. The quest for simple solutions in the current environment of universal anxiety over tight school budgets is quite understandable. But we cannot permit this anxiety to drive changes that reverse the fundamental commitment to pupil equity in the School Finance Act. A poorly designed income adjustment factor could have the perverse effect of increasing the disparities in spending between the lowest-spending and highest-spending districts in the state. A funding mechanism that tries to achieve greater taxpayer equity at the cost of substantially greater student inequity would be a very poor bargain for Maine in the long run.