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Robert P. Inman

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Finance, Economics, and Public Policy

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Members, Senate Committee on Local Government
State of Pennsylvania

Dear Members,

It is my understanding that the Committee will be holding hearings on Tuesday, October 17 to hear testimony as to the efficacy of the City of Philadelphia's Beverage Tax for the financing of pre-K education and improvements in neighborhood infrastructure. I am writing to share my views as a professional economist with expertise in public finance as to the likely impact of taxation on the city's economy and the benefits of spending tax revenues for pre-K education for the children of Philadelphia. I have attached an editorial comment written in support of the tax as the best option for financing pre-K education.

As an economist my concern is to ensure that new public expenditures are financed as efficiently as possible and that the additional revenues from the tax are allocated to a public service that provides benefits in excess of the cost of the tax. This is certainly the case for the Beverage Tax and the allocation of its revenues to pre-K education. There is no perfect tax. Any tax will have potentially adverse consequences for the taxed activity and more generally for related activities in the taxing jurisdiction. In this case, the City considered four possible taxing options: the Beverage tax, an increase in the City's and School District's property tax, an increase in the City's resident and non-resident wage tax, or an increase in the City's gross receipts tax. I have studied in detail the consequences of the property tax, wage tax, and gross receipts tax for the City's economy, and my research concludes that an increase in each tax will have a significant adverse effect on the City's economy. The property tax reduces home values. The wage tax discourages new job creation and encourages firms to leave the City for the suburbs or even the region as a whole. The gross receipts tax discourages firm sales and again encourages firms to do business outside the city. The attached commentary uses results from my research to estimate the impact of these three taxes on the economy, assuming each tax raises the same revenue as originally estimated from the Beverage Tax. I estimate a revenue equivalent increase in the combined City and School District property tax would

reduce average city home values by 1.7 percent, equal to the next two years of estimated (by Zillow) appreciation in Philadelphia home values. A revenue equivalent increase in wage tax rates would reduce city employment by approximately 8,750 jobs. A revenue equivalent increase in the gross receipts tax rate would reduce sales within the city by about \$3.5 billion or by about 5 percent of aggregate business activity in the city. We do not yet have a precise estimate of the likely impact of a Beverage Tax on the City's economy, but I am doubtful that the final costs to the economy will approach any of these estimated costs. For example, the beverage industry's own estimates place the job loss from the Beverage Tax at 2,000 jobs. Even granting that this a good estimate, the use of any of the City's other taxes will impose, in my opinion, far greater economic damage. Economists understand that the economic cost of a tax – in lower property values, lost jobs, or less economic activity – grows exponentially with the tax rate. This is the concept of the Laffer curve or revenue hill. To minimize economic damage, it is always better to use a new tax at a low rate, than to raise additional revenues from an existing tax with already high rates. This is the case for the property, wage, and gross receipts taxes. In my professional opinion, the City made absolutely the right decision in using the Beverage Tax as a new tax for funding their planned expenditures on pre-K education. I should add that my analysis of alternative taxes ignores the added health benefits of the Beverage Tax. These extra benefits are estimated to be significant and only strengthen the case for the use of the Beverage Tax over the alternatives.

Whichever tax is used, we want to be sure that revenues raised return more in citizen benefits than the cost of the tax. There is no better investment for cities today than to spend money on pre-K programs whose benefit to cost ratio is 12:1, as estimated by Nobel Prize winner Professor James Heckman of the University of Chicago.

From the perspectives of the least costly tax and the best allocation for the tax's revenues, the decision by the City to use a Beverage Tax to fund pre-K education is a prudent and wise use of citizen resources.

I apologize that my teaching obligations will not allow me to attend the hearings, but I hope these comments are helpful.

Sincerely,

A handwritten signature in black ink that reads "R. Inman". The signature is written in a cursive style with a long horizontal flourish extending to the right.

The research estimating the costs of Philadelphia's taxes on the city's economy is summarized in Andrew Haughwout, Robert Inman, Steven Craig, and Thomas Luce, "Local Revenue Hills: Evidence from Four US Cities," *Review of Economics and Statistics*, May 2004. I have updated the Philadelphia analysis on a regular basis. I would be pleased to share this research if the Committee wishes.

The Philadelphia Inquirer

COMMENTARY

Looking at revenue options, soda tax is the one to raise

By Robert P. Inman

City Council is holding hearings and gathering the views of Philadelphians on Mayor Kenney's proposal of pre-K education that would be paid for by a 3-cent-per-ounce tax on sodas. The estimated \$96 million raised from the tax annually would allow 6,500 additional children to receive a pre-K education each year.

James Heckman, the Nobel Prize-winning economist, has estimated the social benefits of pre-K in higher lifetime earnings and lower crime and welfare spending to be \$12 per dollar invested in each child. That is a benefit for Philadelphians of \$1.15 billion every year. Happily, there seems to be no disagreement that pre-K is a good idea.

The issue is: How to pay for it?

If not Kenney's soda tax, the only other options are to increase the rates of Philadelphia's other major taxes: the gross receipts tax, the wage tax, or the property tax. No tax is perfect, but from my research I conclude that the mayor's proposed soda tax is far and away the preferred alternative.

My estimates suggest that Kenney's tax would reduce soda consumption by \$150 million to \$188 million a year, about \$100 to \$125 per resident. Evidence from Mexico's recent experience with a comparable tax shows that consumers substitute bottled water for soda. The estimated impact on the beverage industry would be lost sales ranging from \$140 million to \$178 million a year.

What would happen if we raised the gross receipts tax rate by enough to fund the \$96 million needed for the pre-K program? This would require almost doubling that rate, returning it to where it was in

1999. I estimate that such an increase would mean a loss of sales across the city's whole economy of about \$3.5 billion, a fall in aggregate economic activity of about 5 percent. Why would the impact on sales from the gross receipts tax be so much worse than from the soda tax? Because it would double a tax rate on all business activity in the city.

Damage would also be much greater if we were to use the wage tax, either increasing current rates or (equally so) postponing the city's promised rate reductions, which are expected to add jobs. To raise the required pre-K funding, wage tax rates would need to rise from their current rates of 3.9 percent to 4.1 percent for residents and 3.4 to 3.6 percent for nonresidents. I estimate a loss of 8,750 city jobs from such an increase — or a loss of future jobs if we postpone all the rate reductions in the city's current five-year plan. The beverage industry has estimated a loss of 2,000 jobs from the proposed soda tax. Again, a tax increase on the city's entire economy would be far more damaging than the soda tax, even when compared with the beverage industry's own estimates.

The final option would be to raise property tax rates. To raise the same revenue as the soda tax, the property tax rate would have to increase from the current average of 1.4 percent to 1.5 percent, which I estimate would reduce city home values by \$2,100 per home, using Philadelphia's median home value of \$122,000. This would be a 1.7 percent drop in value, enough to wipe out the next two years of real (excluding inflation) appreciation in city home values as estimated by Zillow. The soda tax is likely to have no significant impact on city home values, since its burden is on consuming soda only, not on living in the city.

An additional concern frequently raised is that the soda tax would fall disproportionately on lower-income families and is therefore regressive. Evidence from Mexico shows that lower-income families move their budget away from soda to alternative drinks, while the rich do not. That softens the relative burden.

If we take Bernie Sanders' view that what matters most for citizen welfare is lifetime wealth and economic opportunity for all, then the soda tax has undeniable benefits. Because of reduced rates of adult obesity, health costs would be less, incomes higher, and lifetime functioning significantly improved. A Brookings Institute study has estimated that the lifetime benefits of reduced obesity are worth \$92,000 to each child whose health is improved. Assuming that the lost consumption benefits today from drinking less soda are two-thirds of the average resident's reduced spending of \$125 per year — a fair assumption given that less spending on soda can go to other things the family values — then this annual loss in consumer benefits of \$83 a year will never be more than \$2,800 over the resident's lifetime. All the tax need do is help one in 33 of our children attain a healthier lifestyle to turn the soda tax into "no tax at all" over a child's lifetime.

Whether from the point of view of economic efficiency for the city's whole economy or expected tax fairness over our children's lifetimes, the soda tax is clearly the best tax from the perspective of all Philadelphians. When coupled with \$12 in benefits for every dollar of dedicated revenues, it is a policy package City Council should embrace.

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