

**Philadelphia's Sugary Beverage Tax:
A CGE Analysis of Child Daycare and Labor Market Services**

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Starting in 2017, The City of Philadelphia imposed a tax upon distributors of sugar-sweetened beverages within its borders. Annually, it has averaged \$77 million in revenues, about a third of which has been used to fund 3,300 child daycare seats for the poor. To date most analyses of the tax have focused on consumers' reactions to the tax and what industries are suffering as a result of it. No prior studies have examined how subsidized daycare for low-income households affects the supply of labor—the rationale behind subsidizing child daycare. Based on a set of estimated regional input-output accounts (at the 404-industry level, we construct a 42-sector computable general equilibrium (CGE) model with detail for beverage distributors, beverage retailers, and child daycare as well as four household/labor groups by income level. We first examine the fiscal and economic cost/benefit of the program with no labor market considerations and find that with no accounting for nonpecuniary social benefits and stress affiliated with labor market churning that the program practically pays for itself. We then consider the lower- and upper-bounds of the count of parents who were able to join the labor market as a result of the daycare program. We find that our lower-bound estimate displays a clear favorable economic and fiscal balance, albeit small, given the size of the city's overall labor force. Still, beverage distributors and related logistics industries remain affected in a negative manner. But lower-income household become less dependent on government transfer payment and, as prime consumers of sugary beverages, appear to be improving their diets.