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House Bill 19-1132 "School Incentives to Use Colorado Food and Producers" proposes the allocation of money from the state budget to create a grant program incentivizing eligible providers of school food to source their products from Colorado growers, producers and processors. The bill lays out three sets of criteria each resulting in their own monetary incentive

attempts to increase local food consumption in large increments instead of depending on individual consumers to respond to incentives gradually.

Locally produced food is more expensive because it forgoes the monetary advantages of specialization and economies of scale available to national food producers, or, as one economist puts it, "expansion in the scale of production combined with input mix adaptations, as well as output diversification, is most likely to enhance competitiveness." (Morrison and Nehring 2) These economies of scale are especially prevalent in farming "where the costs of production depend on natural resource endowments, such as temperature, rainfall, and sunlight, as well as soil quality, pest infestations, and land costs." (Sexton 1)

Therefore, the argument supporting local food consumption lies in the other benefits it provides. These are called externalities and include its effect on local economies, the societal advantages associated with a healthier populace, assuming locally grown food increases health, and mitigated pollution from decreased transportation.

These factors may merit internalization through government intervention. However, the method proposed in HB19-1132 of internalizing these externalities is indirect and will therefore incur unnecessary costs. Using economic principles and prevailing research, this paper will argue that a tax and an adjustment in nutrition standards would better address these externalities.

require a subsidy. Furthermore, jobs and profits created by shifting to locally-sourced food simply reallocate those resources from other states where the corporate food producers operate. By subsidizing local food, Colorado is not only taking production from other states, but making it less efficient in the process.

This is because, although keeping money in the community can boost local economies in the short-term, it forgoes the comparative advantage other states have in growing food, leading to long-term inefficiency. One study explains, "that even if two countries (or regions) both produced similar items, it benefits producers and consumers in both countries to specialize on the products and services where they have a comparative (or relative) advantage... Local farmers, local firms and local markets can easily compete and sell high-priced local seasonal foods. But they should not force consumers to buy from them by making them feel guilty or disloyal to their communities for not patronizing them when it's not in their best interests to do so." (Dunham 4)

The remaining positive non-pecuniary externality associated with locally-sourced food in schools is student health. "Eating locally is correlated with improved nutrition, increased likelihood of making healthier food choices, obesity prevention, and reduced risk of diet-related chronic disease. This is mainly because the food is more nutritious, fresher, and less processed." (Brain 3) Another study describes the economic effects of obesity specifically. "There is consistent evidence regarding the economic consequences of obesity, which are lower wages and higher medical care costs that impose negative externalities through health insurance." (Cawley 6) Avoiding these health risks is an advantage, one that deserves consideration, but it is unclear that subsidizing locally-sourced food is the only way to do this.

An alternative method could be to simply raise the health standards of school-provided food, forcing national producers to adjust their products. Although this could raise prices for

schools and in turn, taxpayers, so would a government funded grant program incentivizing local food. Thus, student health alone should not be the sole reason to subsidize locally-sourced food in schools.

Industrial food production creates some adverse externalities which the subsidy also hopes to avoid. Primary among these are the negative environmental effects associated with mass corporate agriculture, namely, carbon emissions from transportation. This is commonly expressed in measurements of "food miles," the number of miles a box of produce travels in route to consumption. These "food miles" measurements strongly favor locally-sourced produce as one study explains, "it is obvious that the box system results in many more food km (on average 360 km per box in this study) than purchasing from a local farm shop." When using a per-unit mass measurement however, it found "that if a customer drives a round-trip distance of more than 7.4 km in order to purchase their organic vegetables, their carbon emissions are likely to be greater than the emissions from the system of cold storage, packing, transport to a regional

education. Either way, although a portion of the tax will be passed onto the consumer, at least some of the financial burden falls on the corporate food producer.

Finally, with regard to the final section of the bill which funds a grant program promoting locally-sourced food, this measure is economically unnecessary. As demonstrated above, local food has little positive economic impact on its community and therefore does not require a subsidy, at least until more evidence proves its positive effects. Local food producers have as much an opportunity to grow their business as other sectors and will undoubtedly benefit from the "buy-local" movement. It remains unclear that legitimate externalities or market failures exist in this market. Therefore, government intervention would distort true equilibrium, result in inefficiency. Because of this, a subsidy is unjustified.

Conclusion and Recommendations

Communities, and the laws governing them, should reflect where and the ways in which they want their food produced. The subsidy proposed by HB19-1132, however, takes an inefficient path to achieve this goal. The lone valid externality associated with local food production, increased student health, can be achieved without allocating taxpayer dollars toward a subsidy. On the other side, the negative externalities associated with corporate food production can therefore be internalized through a tax. Because a subsidy puts the financial burden of internalizing these externalities on the consumer, taxpayers, it is inefficient in comparison with a tax on corporate food producers, who should bear the burden for the environmental harm they cause. Considering these factors, I recommend HB19-1132 be amended to place the financial burden of externalities on corporate producers through a tax and, either through this bill or another, raise school lunch nutrition standards, which could also produce the intended effects of this bill.

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