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Applied Economic Analysis

**Should Feminine Hygiene Products Be Exempt from Sales Tax?**

The Colorado State House proposes Bill HB17-1127 ("The Bill") exempting feminine hygiene products from state sales tax. The Bill also grants local statutory taxing jurisdictions authority to lift the tax as well. The purpose of the bill is to provide women affordable access to medically essential products.

Feminine hygiene products are defined as: tampons, menstrual pads and sanitary napkins, pantiliners, menstrual sponges, and menstrual cups. The Bill classifies feminine hygiene products as medically necessary, and proposes they be added to the existing list of tax exempt medical devices. This analysis finds sales tax on feminine hygiene products regressive and favors The Bill.

The sales tax exemption of feminine hygiene products addresses an issue of redistribution. Lower-income women are disproportionately affected because sales taxes are regressive, and feminine hygiene products are inelastic goods. This paper will explain how the inelastic price elasticity of demand for feminine hygiene products makes taxing these products particularly regressive; as such, we ought to minimize the sales tax of medically essential items.

Sales tax is an *ad valorem* tax, meaning that the tax is charged as fixed percentage of a good's selling price. Colorado's state sales tax is 2.9%; and local tax jurisdictions, such as the city of Boulder, have additional sales tax ranging from .25%- 6% (Colorado Department of Revenue[1]).

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[1] https://www.colorado.gov/pacific/tax/sales-and-use-tax-rates-lookup

Sales tax are a regressive tax because they account for a larger portion of lower-income individual's total income than higher-income individuals. For instance, in Colorado sales tax accounts for 5.3% of total income for people lowest income bracket (Institute on Taxation and Economic Policy[2]). Comparably, sales tax accounts for 3.6% of total income for people in middle income bracket, and only 0.7% of earners in the top 1%. One explanation for the disparity is that Colorado sales tax is applied more heavily to the bundle of goods and services low-income earners purchase than the bundle middle- and upper-income earners purchase.

Sales taxes on feminine hygiene products are particularly regressive because these products have a low income elasticity of demand. A low income elasticity means demand for a good barely increases with an increase in income. Evidently, low-, middle-, and high-income women all demand the same quantity of feminine hygiene products because menstruating woman, regardless of income level, need to purchase feminine products monthly. As such, the sales tax puts a greater burden on low-income women because it accounts for a larger portion of their disposable income. Moreover, a "greater portion of [their] income is absorbed on the consumption of these goods in comparison to a wealthy individual who may consume equal quantities of theses goods" (Kaplan, 2002)[3]. So, lower-income individuals are disproportionately affected by the tax.

Adding to the regressive nature of the sales tax, the price elasticity of demand of feminine hygiene products is inelastic. The following graph represents the relative tax burden for consumers

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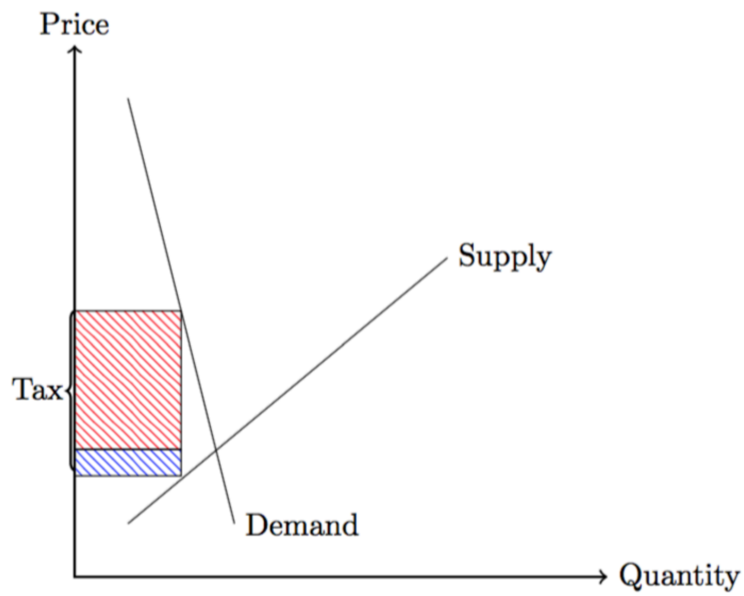
[2] http://www.itep.org/whopays/states/colorado.php

[3] http://spot.colorado.edu/~kaplan/econ2010/section4/section4-main.html

and producers when an *ad valorem* tax, such as a sales tax, is levied on market with inelastic demand and elastic supply.




The area shaded red depicts the burden of the tax that consumers face, and the area shaded blue shows the burden of the tax that producers face. The relative tax burden consumers and producers face is referred to as tax incidence. Tax incidence depends on the relative price elasticities of supply and demand, and tends towards the price inelastic side. For example, consider a product where demand is highly price inelastic. This implies consumers have a strong need for the product and are willing to pay a lot for it. As such, an increase in price will have a negligible effect on quantity demanded. Moreover, consumers are unlikely to leave the market if a tax is levied and so the tax incidence falls more heavily on the consumer side.

The price elasticity of demand for feminine hygiene products is highly inelastic because these products are medical necessities. The inelastic price elasticity of demand means women do not alter their consumption in response to price change. Conversely, supply for feminine hygiene products is relatively elastic, because suppliers face a nearly perfect competitive market, readily available inputs, and easy product storage. As such, the tax incidence of the sales tax on feminine hygiene products falls most heavily consumers.

The U.S. Food & Drug Administration (FDA) considers feminine hygiene products, such as tampons and sanitary pads, medical devices[4]. As such, the issue of sales tax on feminine hygiene products is analogous to other tax exempt medical supplies and devices not requiring a prescription. Under State tax law, Colorado exempts the following non-prescription medical supplies from sales tax: pregnancy tests, corrective eyeglasses, insulin, and hearing aids. The exemption of sales tax on these items shows that State legislature already has a preference for making medical devices and supplies more affordable. Considering the medical necessity of feminine hygiene products, they should be included in the tax exempt medical supplies.

Thus far, this analysis has focused on the benefits The Bill will provide to low income women. However, the benefits will be shared by women in all income brackets. Consequently, a portion of the lost sales tax revenue from feminine hygiene products will come from women capable of paying the current tax. An alternative policy, such as providing women with demonstrability low income vouchers for feminine hygiene products, would produce more direct means tested benefits. However, the administrative costs of implementing means testing for feminine hygiene products would likely outweigh the portion of lost revenue from high-income

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4 http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm071781.htm#7a

females. Thus, it is unlikely that an alternative means testing policy would be a cost-effective way of providing feminine hygiene products to low income females.

In addition, participation rates in means testing programs are, historically, relatively low. For instance, estimates show that only 65% of eligible families participate in the Food Stamp Program, which electronically delivers monthly food vouchers to low-income individuals and families[5]. As such, it is highly unlikely that every low-income woman would benefit from a means testing program, like feminine hygiene product vouchers. Conversely, The Bill would reduce the price of feminine hygiene products for all low-income women.

Sales tax on Feminine hygiene products puts an inequitable burden on low-income individuals. This is because sales taxes are generally regressive in nature, and since feminine hygiene products are price inelastic, consumers are forced to pay the entirety of the sales tax. Additionally, we ought to include feminine hygiene products in the existing group of tax exempt medical devices, especially considering the tax on these products is most harmful for low-income females. In conclusion, this analysis favors The Bill exempting sales tax on feminine hygiene products.

[5] https://www.brookings.edu/wp-content/uploads/2016/06/03_food_stamp_isaacs.pdf