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Gender-Based Pricing in Consumer Packaged Goods: A Pink Tax?

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Price segmentation is a common strategy employed by firms to increase profits in markets with differences in demand between groups. Segmentation based on gender for consumer packaged goods (CPG) has recently come under fire for creating an alleged pink tax, whereby goods marketed toward women are more expensive than their counterparts marketed toward men. A pink tax is concerning because it would exacerbate well-documented gender inequality in the labor market. Investigative journalists and government agencies report that gender price differences in CPG occur most frequently for personal care categories, such as deodorant and razors, and peg price differences in this category at 13 percent. Policymakers are keen to address these perceived inequalities through legislation. For example, in 2019–2020, the New York State Legislature passed bill S2679, which bans pricing based on gender. Since 2015, Rep. Jackie Speier (D-CA) has introduced the Pink Tax Repeal Act in Congress four times, with the goal of implementing a similar ban nationwide. Unfortunately, there is a dearth of evidence on the pink tax to guide legislative action.

Our research seeks to provide evidence on gender-based targeting and pricing for personal care products. First, we find that gendering is ubiquitous; 80 percent of product volume is gender-targeted. We hypothesize that gender-based pricing operates differently in the market for personal care products compared with other markets where gender discrimination is studied, including the markets for labor, automotive vehicles and repairs, and real estate. These settings entail price negotiation so that a female customer may be unaware that she is quoted a higher price than male customers for the same product and/or she may be unable to secure a lower price because her gender is observable to the opposite party in the transaction.

In contrast, CPG such as personal care products are sold in posted price markets, where a woman can typically observe the shelf prices of products aimed at men, and there is no rule barring her from buying a men's product. So firms must

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differentiate products targeted at different genders in such a way that consumers select the product designed for their group. For example, a soap manufacturer might sell two versions of an otherwise identical soap, a low-priced blue bar and a high-priced pink bar. Price discrimination of this sort can be profitable for firms if men and women have different demand for soap based on its color. While color is one attribute that firms could segment on, differential demand for other product attributes could lead to product differentiation too. The soap manufacturer in the example above might choose to add shea butter, which has moisturizing properties, to the pink bar if women are willing to pay more for that ingredient. Gender-based price discrimination in CPG would therefore manifest as differences in price across products that target different genders rather than differences in the prices charged to men and women for the same product.

Accordingly, we find that differentiation is the rule rather than the exception among gendered personal care products, and this differentiation extends beyond product color and packaging. There is very limited overlap in the leading ingredients of men's and women's products in all six categories that we study: bar soap, body wash, deodorant, hair coloring, shampoo, and shaving cream. We view this product differentiation as integral to gender-based pricing in CPG. Our viewpoint is at odds with the way that proposed and adopted legislation conceives of the pink tax; legislation bans price differences only in instances where a manufacturer sells "substantially similar" products targeted at men and women. The Pink Tax Repeal Act, the principal piece of proposed federal pink tax legislation, specifically references the materials used in the product and the product's intended use as criteria for evaluating similarity. Focusing on these apples-to-apples comparisons is akin to searching for cases where there is no substantial difference in the features or performance of the men's and women's variants of a product.

We hypothesize that the market should not sustain different prices for men's and women's products that consumers truly perceive as substantially similar. We argue that if such price differences did exist, consumers would simply purchase the cheaper version, rendering the strategy unprofitable for firms. Of course, if consumers face difficulties in purchasing a product targeted at another gender, then a firm may be able to sell substantially similar products to men and women at dissimilar prices. For example, if consumers are uninformed or misinformed about product ingredients, they could mistake the differences between men's and women's products. We believe that this kind of widespread misperception is unlikely because information about ingredients is readily available on product packaging. Further, we find that married women buy most personal care products for their households, including products targeted at both men and women, which suggests that they have some knowledge about the assortment of men's products. For example, 45 percent of married women buy men's deodorant on shopping trips where their husband is not present. An alternative obstacle could be a social norm that pressures consumers to purchase and/or use products that align with their gender presentation. In such a case, a firm could segment consumers simply by adding gender labels or color cues to their products.

We provide evidence on the form and magnitude of gender-based price discrimination in personal care using data that encompass a wide array of products sold at thousands of retail outlets across the United States. We estimated the average price difference between men's and women's products produced by the same manufacturer. We term this measure the pink gap because it can reflect both differences in markups and costs between the products that a manufacturer targets at men and women. We find significant price differences within manufacturers that tend to cut against women. Unit prices (e.g., price/weight or price/count) for women's products are higher than those for men's products in four of the nine categories we study. The remaining five categories do not have significant unit price differences. Averaged across categories, the pink gap is 11 percent.

We next narrow the comparison to substantially similar products as per the Pink Tax Repeal Act, where we interpret "substantial similarity" as products made by the same manufacturer that contain the same leading ingredients. When we consider within-manufacturer comparisons of products with similar ingredients, price differences shrink and even reverse so that in several categories men's products are more expensive. To obtain an overall estimate of the pink tax as defined by regulators, we pool the apples-to-apples estimates across categories and find that unit prices for women's products are 0.05 percent lower than for men's products. Together, the results support our hypothesis that firms vary prices across differentiated products but not across substantially similar products. Our findings imply that the Pink Tax Repeal Act is unlikely to meaningfully change average prices in personal care; we show that men and women already face similar prices for similar products. Further, these similar products are relatively few, limiting the applicability of the Pink Tax Repeal Act.

NOTE

This research brief is based on Sarah Moshary, Anna Tuchman, and Natasha Bhatia, "Gender-Based Pricing in Consumer Packaged Goods: A Pink Tax?," Social Science Research Network, May 2022.