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Tobacco Control 2.0: Economic Pathways to Better Health Part 3 of 3

By Jeffrey Smith



By leveraging risk-proportionate taxation, revising regulatory processes, educating consumers about products' different risk profiles, and implementing risk-based product pricing, all stakeholders can be part of the transition to a smoke-free world.

Introduction

For decades, a primary U.S. tobacco control strategy has been reducing consumer access to tobacco products with pricing tools (such as taxation) that make it difficult for consumers to continue purchasing those products.¹ This strategy assumes that high consumption costs will dissuade individuals from using tobacco products. Unfortunately, although this construct may seem logical, the actual impact of inflating the cost of combustible tobacco products in isolation and without additional strategies has had little impact on tobacco use.² The reality is that tobacco use, especially combustible tobacco use, is a highly complex behavior, and modifying only one factor related to the behavior (in this case, the cost of the product) typically has very little impact on smoking.³

In the United States, local, state, and federal governing bodies have a long history of implementing pricing strategies with taxes and fees, which have significantly driven up the cost of cigarettes to levels that many see as burdensome. Despite this, individuals (especially those in low- or middle-income brackets) still regularly purchase these products and continue to use them at levels that will eventually lead to the development of disease and untimely death.⁴ Even more disturbing is that the tax revenue generated by these products has been incorporated into government budgets as if it were any other source of revenue.⁵ This means that if the increased cost model of tobacco were effective at curbing smoking rates, the resulting loss of funding would create problematic budget shortfalls.⁶ It also means that the government is relying on an ineffective behavioral-modification strategy that is not a true tax on the community, but rather a "sin" tax. This strategy not only creates a governmental conflict of interest, but also inflicts financial burdens inequitably, usually onto those with a lower capacity to bear the costs.

Today, alternative products are available that provide experiences similar to combustible products with lower health risks. As more and more of these products enter the marketplace, lawmakers have an opportunity to consider novel economic



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tools that could reduce combustible cigarette use without relying on punitive pricing. Specifically, it could be more effective to implement substitution pricing models, whereby two relatively equivalent products (one harmful, the other significantly less harmful) are priced in a manner that encourages movement toward the less harmful product.⁷

This analysis briefly explores scientific and real-world findings related to elasticity in smoking behavior (the concept that enables substation pricing models to be effective). It then delves into new ways that behavioral economics can guide policymakers, regulatory bodies, public health organizations, and manufacturers and retailers in refining their tobacco control strategies to encourage individuals who smoke to select products that will reduce the financial and health burdens of combustible tobacco.

[In]elasticity of Smoking Behavior

To fully appreciate how economic policies can influence tobacco consumption patterns, we must first understand the elasticity of smoking behavior in response to changes in product cost. Recent research has examined this relationship. One U.S. study estimated the elasticity of smoking behavior (measured by changes in smoking prevalence and per-smoker cigarette consumption) to be approximately 0.1 in response to short-term changes in healthcare expenditures associated with changes in smoking behavior.⁸ Other studies have found that the elasticity of demand for cigarettes is affected by context. For instance, one study calculated the price elasticity of cigarette demand to be around -0.45, indicating that a 10 percent increase in cigarette prices would lead to a 4.5 percent reduction in cigarette consumption among adults.⁹ These studies indicate that increased product cost may modestly decrease smoking behavior.

Real-world data also suggests that other undesirable outcomes may arise from higher product costs.¹⁰ For example, New York, Illinois, and California have the highest cigarette taxes in the nation.¹¹ Though sales of cigarettes have declined in those states, the rate of decline is similar to that seen in states with much lower excise taxes on combustible products.¹² Additionally, in New York, the high excise tax on cigarettes has created significant incentives for illicit trade.¹³ Low-income smokers often resort to purchasing less expensive cigarettes from the illegal market and Native American reservations, which are exempt from state taxes.¹⁴ The phenomenon of "loosies," or single cigarette purchases, has also emerged as a workaround for those unable to afford full packs.¹⁵

California presents a unique scenario, as the state has historically implemented comprehensive tobacco control measures, including high excise taxes and stringent regulations on tobacco sales. However, these measures have inadvertently led to increased cross-border purchases from neighboring states with lower taxes as individuals who smoke seek to evade the financial burden imposed by California's policies.¹⁶ The Illinois Department of Revenue has likewise reported substantial losses in tax revenue due to similar activities, which undermines public health efforts aimed at reducing the state's smoking rates.¹⁷ Additionally, certain urban areas in the state, like Chicago, have been identified as hot spots for illicit cigarette sales, where organized crime networks exploit the high demand for lower-cost products.¹⁸

The reality is that, because smoking is affected by several different drivers of behavior, adjusting combustible cigarette prices through taxation—and no other strategies—may influence some individuals' smoking behavior but not others'.



Real-world data not only shows less of a correlation between increased price and reduced rates of smoking, but also suggests that other undesirable outcomes may arise from higher product costs.



Applying Behavioral Economics to Stakeholder Strategies

To better address the population-level health consequences of smoking and encourage more consumers to transition to lower-risk tobacco/nicotine products, stakeholders should implement a variety of economic strategies across different product types. Because products such as electronic nicotine delivery systems (ENDS) and other reduced-risk nicotine products have been shown to effectively deliver a similar "smoking" experience by replicating many of the characteristics of combustible cigarettes, reduced-risk options could be leveraged as a reasonable tool for behavioral substitutions.¹⁹ These substitutions would provide consumers with a logical and cost-effective off-ramp to less harmful alternatives.

In the sections that follow, we look at specific economic strategies that policymakers, regulatory bodies, public health groups, and manufacturers/retailers can implement to help consumers substitute combustible cigarettes with alternative products that would reduce the financial and health burdens of smoking.

Policymakers

When states experience decreased tax revenue because of declining cigarette sales, they often face challenges in maintaining fiscal stability and funding essential public services.²⁰ Governments grapple with addressing this loss of revenue, especially in the context of changing consumer behaviors and evolving market dynamics.²¹

One approach states have taken to recover some of this revenue is to combat illicit trade and cross-border purchases that contribute to revenue leakage. Studies have highlighted the significant impact of cigarette tax avoidance and evasion on state tax revenues, particularly in states where a substantial portion of smokers report purchasing cigarettes from sources like Native American reservations or online vendors to avoid higher taxes.²² Some states have also worked to adapt to shifting market trends and consumer preferences by considering cigarette taxes as a way to offset declining combustible cigarette tax revenue streams.²³

One strategy that has not yet been widely implemented but that could help states recover revenue while also offering additional behavioral and public health benefits is risk-proportionate taxation. In this model of taxation, the government imposes lower taxes on products with lower health risks and higher taxes on more harmful products. This strategy is worth considering, as research indicates that risk-proportionate tobacco taxation can significantly reduce consumption rates, particularly among youth and vulnerable populations.²⁴ For instance, one study highlighted that increasing taxes on combustible products while keeping taxes low on reduced-risk products generally leads to a decrease in cigarette affordability, thereby reducing consumption of the more harmful product.²⁵ Moreover, this strategy would not just replenish tax revenue lost to combustible cigarettes, but it would also provide a financial incentive for consumers to switch to a lower-risk product.

Sweden's Example of Risk-Proportionate Taxation

Sweden has effectively implemented strategic taxation to encourage its population to move away from combustible products and toward reduced-risk alternatives.²⁶ In early 2024, the country's tax on snus was lowered an additional 20 percent, and the tax on combustible products was increased. These changes are intended to continue to lower the number of those who smoke in the country, which already has one of the lowest rates of combustible product use globally.²⁷







Although most U.S. states seem to be adopting a revenue-generation strategy of taxing all tobacco/nicotine products, the tax rates imposed on reduced-risk products typically do not reflect their lower risk, and many states still lack comprehensive taxation policies for ENDS products altogether.²⁸ Policymakers should reconsider this strategy of blanket taxation because it fails to: (1) distinguish between the risk of combustible products and other reduced-risk products and (2) financially incentivize consumers to migrate from a deadly habit toward one that carries significantly lower health consequences. Although lowering or eliminating taxes on reduced-risk products will reduce tax revenue in the short-term, over time, as cigarette sales decrease, lower healthcare utilization costs and longer survival rates may offset lost revenue.²⁹

Regulatory Bodies

The U.S. Food and Drug Administration's (FDA's) Center for Tobacco Products (CTP) is the regulatory body that oversees adherence to the Family Smoking Prevention and Tobacco Control Act.³⁰ One of the CTP's primary responsibilities is reviewing premarket tobacco applications (PMTAs) for both combustible tobacco products and reduced-risk nicotine products.³¹ Unfortunately, the PMTA process is tedious, unclear, costly, and rarely successful.³² Moreover, reduced-risk products are subject to the same burdensome and costly approval process as the more harmful combustible products.³³

The high costs that stem from this overly burdensome regulatory environment have a significant impact on the tobacco and nicotine marketplace in the United States. They negatively affect market dynamics like innovation, competition, price, demand, and consumer preference, as well as product availability, diversity, and safety.³⁴ High regulatory compliance costs also create barriers to entry for smaller businesses, such as vape shops and independent manufacturers, which may face disproportionate challenges in meeting regulatory requirements compared to larger corporations with more resources.³⁵

In the second part of this Tobacco Control 2.0 series, we detailed the changes that need to happen at the CTP to improve the tobacco/nicotine product landscape to provide consumers with better access to a wider variety of reduced-risk options.³⁶ The most important of these changes from a pricing-strategy perspective is that the CTP must clarify and streamline the PMTA process to clearly indicate the data that is required for an acceptable application—ideally creating different processes and requirements for applications for higher-risk combustible tobacco products and reduced-risk nicotine products.³⁷ By taking this step, the costs associated with successfully navigating the PMTA process would significantly drop, new reduced-risk products would be able to enter the marketplace more easily, and more companies would be able to participate in the legal market. Together, these factors would create competition in the marketplace, thereby lowering the currently high product costs for consumers and providing a greater variety of affordable, reduced-risk options to transition more consumers from combustible to noncombustible products.³⁸

Public Health Groups

Currently, the United States' public health policies are designed to lower combustible smoking rates through traditional tobacco control initiatives like taxation and restrictions on the sale, marketing, and use of tobacco products.³⁹ These policies leverage traditional economic principles to influence consumer behavior, reduce tobacco use, and improve public health outcomes.⁴⁰









Not only is achieving these goals important to the health and well-being of the U.S. population, but it is also important from a government-spending perspective because of the extraordinarily high cost of smoking-related illness. Estimates suggest that smoking-related healthcare spending constitutes between 5 percent and 14 percent of total healthcare expenditures.⁴¹ A large proportion of these expenditures are paid for through the government's Medicare and Medicaid programs, as the economic consequences of smoking are particularly pronounced among individuals in lower socioeconomic populations. One study found that smoking-related healthcare costs for Medicare beneficiaries contributed approximately \$170 billion in annual healthcare costs.⁴² In addition, lower-income individuals tend to have less access to smoking cessation resources, which prolongs smoking habits and increases associated healthcare costs.⁴³

With such high levels of government funding at stake, it is imperative that public health organizations consider implementing novel strategies that go beyond traditional tobacco control measures. One such strategy would be to develop and deploy wellresearched, scientifically based educational initiatives that compare the risks and health impacts of combustible products with those of noncombustible, reduced-risk products. This strategy would provide consumers with trustworthy information to encourage their transition to reduced-risk products as well as provide a clear roadmap of evidence-based data upon which policymakers could develop price differentials for risk-proportionate taxation and health insurance industry leaders could develop riskproportionate premium differentials.

In addition to encouraging transitions to reduced-risk products, public health organizations should also consider supporting additional financial incentives to reduce rates of combustible product use, such as subsidies for smoking-cessation programs or nicotine-replacement therapies, as well as financial incentives for switching to reduced-risk products.⁴⁴ These organizations should also consider supporting economic disincentives like increased health insurance premiums for combustible cigarette smokers or surcharges on tobacco products to support healthier choices.⁴⁵

The United Kingdom's Novel Incentive Program

One of the most recent and innovative public health initiatives to reduce smoking rates is the United Kingdom's "Swap to Stop" program.⁴⁶ The objective of this program is to have 1 million U.K. smokers trade in their combustible cigarettes for an e-cigarette starter kit and smoking cessation support. Providing these starter kits for free allows all individuals, regardless of income, to access this reduced-risk pathway to a smoke-free life. Though the program is new, early data suggests that it is popular in the smoking community, with the government having already distributed nearly 25 percent of available kits.⁴⁷ If smoking rates drop significantly in the U.K. as the program continues, public health officials in the United States and other countries might consider replicating it.

Of note, public health initiatives often incorporate cost-effectiveness analyses to evaluate the impact of interventions and allocate resources efficiently. Economic evaluations of the novel tobacco control strategies discussed herein could offer additional value by helping policymakers and insurance agencies more effectively assess the return on investment of different strategies and prioritize interventions with the greatest public health impact.

Manufacturers and Retailers

Because tobacco and nicotine products are legal to use, there will always be sources (legal or not) that provide the products consumers desire. Still, given that all









stakeholders in the tobacco control space have a responsibility to help move consumers from combustible products to less-harmful noncombustibles, the tobacco industry itself must be part of the journey to a smoke-free world.⁴⁸

Tobacco product manufacturers can best contribute to this goal by modifying how they market and sell their products to consumers.⁴⁹ Currently, gas stations and convenience stores across the country abound with marketing materials and discounts designed to attract consumers to combustible products.⁵⁰ Although this practice makes sense to retain market share, manufacturers committed to accelerating the transition away from combustible products must shift their focus from maintaining combustible market share to instituting new pricing strategies that support consumer behavioral changes at the point of sale.⁵¹ This means eliminating discounts on combustible products and instead offering discounts on reduced-risk products, thereby increasing the financial advantages of the lower-risk options. In addition, manufacturers should ensure that packaging and marketing emphasize that reduced-risk products offer an equivalent or better experience to traditional products with lower health risks to further encourage behavioral change.

By being open to lowering the prices of reduced-risk products and eliminating combustible product discounting, the tobacco industry could employ specific pricing strategies informed by economic principles and public health considerations—to incentivize consumers to transition to reduced-risk products.⁵² One such approach is to implement a differential pricing strategy that leverages price signaling to reflect the harm potential of different products.⁵³ Another is offering specific discounts, promotions, or bundled pricing for reduced-risk products (instead of for combustibles).⁵⁴ Other innovative pricing strategies include targeting specific consumer segments and behaviors (e.g., volume discounts for regular users, targeted promotions for dual users of combustible and electronic cigarettes) to influence purchasing decisions and encourage behavioral changes.⁵⁵

Conclusion

U.S. policymakers, regulatory bodies, public health organizations, and manufacturers must focus on modernizing tobacco control strategies to move combustible consumers to reduced-risk products. Specifically, pricing reduced-risk products in a manner that makes them the more attractive alternative requires a strategic joint effort that considers economic factors, complex consumer behaviors, and public health goals. By leveraging risk-proportionate taxation, revising regulatory processes, educating consumers about the different risk profiles of different products, and implementing differential, risk-based product pricing, stakeholders can be part of the transition to a smoke-free world. Strategies such as these play a crucial role in promoting harm reduction, reducing smoking-related health risks, and shifting the tobacco marketplace toward safer product choices.

Looking ahead, it is vital to carefully consider how financial factors can influence consumer behavior and choices and leverage those factors to effect behavioral change. If this is done in a manner that also focuses on improving individual health as a path to revenue generation, the movement toward healthier lifestyles for those who smoke can be accelerated, and all players in the tobacco control space will win.



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