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Follow the money: a closer look at US tobacco industry marketing expenditures

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ABSTRACT

Introduction While much of the concern with tobacco industry marketing has focused on direct media advertising, a less explored form of marketing strategy is to discount prices. Price discounting is important because it keeps the purchase price low and can undermine the impact of tax increases.

Methods We examine annual US marketing expenditures from 1975 to 2019 by the largest cigarette and smokeless tobacco companies as reported to the Federal Trade Commission. We consider three categories: direct advertising, promotional allowances and price discounting. In addition to considering trends in these expenditures, we examine how price discounting expenditures relate to changes in product prices and excise taxes.

Results US direct advertising expenditures for cigarettes fell from 80% of total industry marketing expenditures in 1975 to less than 3% in 2019, while falling from 39% in 1985 to 6% in 2019 for smokeless tobacco. Price discounting expenditures for cigarettes became prominent after the Master Settlement Agreement and related tax increases in 2002. By 2019, 87% of cigarette marketing expenditures were for price discounts and 7% for promotional allowances. Smokeless marketing expenditures were similar: 72% for price promotions and 13% for promotional allowances. Price discounting increased with prices and taxes until reaching their currently high levels.

Conclusions Between 1975 and 2019, direct advertising dramatically fell while price discounting and promotional expenditures increased. Local, state and federal policies are needed that apply non-tax mechanisms to increase tobacco prices and restrict industry contracts to offset industry marketing strategies. Further study is needed to better understand industry decisions about marketing expenditures.

INTRODUCTION

In the 1980s, famed American investor Warren Buffet said, 'I'll tell you why I like the cigarette business… It costs a penny to make. Sell it for a dollar. It's addictive. And there's fantastic brand loyalty.'[1] While the retail price of cigarettes has gone up, the relative magnitude between manufacturer's cost of production and marketing, tax burden and retail price has not markedly changed.[2]

The large profits achieved by cigarette companies are the result of decades of strategic marketing activities, designed to increase and maintain consumer demand for their products. Much of tobacco control policy and research has focused on direct advertising, commonly occurring through various media such as television, radio, magazines, billboards, point of sale and now social media.[3] Empirical studies of marketing restrictions often focus only on the impact of direct advertising.[3–8] However, indirect marketing expenditures, described in MPOWER documents as eliminating sponsorships, branding, price promotions and free samples,[9 10] may also play an important role.

A parallel literature focuses primarily on cigarette price promotions. Industry documents and studies[11–13] have identified five types of price discounting practices: (1) couponing, whereby a consumer is provided a voucher that may be used to directly reduce the price of a tobacco product, (2) free samples, (3) quantity discounts (eg, lower prices per pack when more than one pack is purchased), (4) reducing the price of brands used by more price-sensitive consumers (such as youth and those of low socioeconomic status (SES)), and (5) geographically targeting price-sensitive, less mobile customers in particular areas (eg, poorer neighbourhoods or near schools). A recent study found that, between 2011 and 2016, 11.3% of cigarettes, 3.4% of large cigars, 4.1% of little cigars and 3.9% of cigarillo sales were price discounted.[14] Among the top-selling cigarette brands, 9% of Marlboro (46% market share), 10% of Newport (11% market share) and 36% of Camel (9% market share) were discounted.[14] In a 2012 representative sample of US tobacco retailers, 75.1% advertised price promotions on tobacco products, and among the two major brands purchased, 31.7% of Marlboro and 14.7% of Newport packs included promotional offers.[15] In the USA, the Food and Drug Administration (FDA) has banned free samples and some states and localities restrict coupon redemption and/or establish minimum prices in an effort to minimise price reduction strategies.[16–18]

Economic analysis shows that firms in an industry may price discriminate to increase overall consumer demand as well as profits.[19] Firms set lower prices to the most price-sensitive consumers, such as youth and those who are poor,[13 20–22] thereby increasing tobacco use and health disparities. At the same time, firms set higher prices to the less price-sensitive consumers,[23] thereby increasing profits from this group. Studies provide evidence consistent with this practice. A systematic review found that cigarettes sell for lower prices in areas with lower SES and younger populations.[24] Another study found lower Newport menthol prices in US neighbourhoods with the highest quartiles of youth, Black

residents and lower income households.[25] Studies also show the importance of couponing as another tool for price discrimination.[26–29] This literature finds that couponing has targeted young adults and those of low education,[29–32] and is associated with increased smoking initiation and reduced cessation.[29 30 32–36] Tobacco control researchers have called for a greater focus on retail settings and especially the role of price discrimination in tobacco marketing.[3 37–39]

While attention has been given to price discounting, the role of price discounting may take on added importance during periods of rapid tax or price increase. In particular, when taxes are increased, firms may price discriminate to blunt the intended impact of reduced smoking.[13 20 40–44] Since raising tobacco taxes is a particularly effective tobacco control strategy through its ability to increase prices,[45 46] price-reducing strategies may have critical implications by shifting less of the tax to those who are more price sensitive, thereby blunting the potential effect of the tax increases on reducing smoking initiation and increasing smoking cessation.

The purpose of this paper is to examine trends in the different types of tobacco industry marketing expenditures, including those for price discounting. We focus on the USA due to availability of data. We analyse annual marketing expenditure data that the Federal Trade Commission (FTC) compels the largest US cigarette and smokeless tobacco companies to report.[47 48] In addition to considering trends in marketing expenditures, we consider how industry price discounting expenditures are related to the Master Settlement Agreement (MSA) and consumer tobacco product prices and cigarette excise taxes.

METHODS

We collected marketing expenditure data from the 2019 FTC Cigarette and Smokeless Tobacco Reports.[47 48] The FTC compels major tobacco companies to report annual expenditures on US marketing, thus the data do not include foreign expenditures. In 2019, cigarette firms included Altria, ITG Holdings USA, Reynolds American and the Vector Group, and smokeless tobacco firms included Altria, North Atlantic Trading, Reynolds American, Swedish Match and Swisher. Other major companies (eg, Lorillard which was later acquired by Reynolds American) were included in earlier years. Marketing expenditure data are provided at the industry level from 1975 to 2019 for cigarettes and 1985–2019 for smokeless tobacco.

For both cigarettes and smokeless tobacco, we categorise marketing expenditures into three groups: direct advertising, promotional allowances and price discounts. Direct advertising includes traditional forms of advertising, such as television, radio, newspapers, billboards and (retail) point of sale, as well as direct mail, company website, internet, telephone, social media endorsements and other advertising and merchandising. Price discounting payments include coupons, sampling distribution (eg, free samples) and direct price discounts to cigarette retailers or wholesalers to reduce the price to consumers, including off-invoice discounts for selling a minimum quantity of a given product over a specified time period, buydowns (the dealer receives a per-unit payment for agreeing to sell certain units at a discounted price), voluntary price reductions and trade programmes. Promotional allowances include direct promotional allowances paid to retailers and wholesalers to facilitate the sale or placement of a brand, including volume rebates, incentive payments, promotional execution and satisfaction of reporting requirements, value-added services or incentives (including quantity promotions, such as 'buy two packs, get one free') and non-tobacco specialty products which may be bundled with purchased cigarettes. Many of these payments effectively reduce product prices (eg, by providing customers with multipack discounts, providing non-tobacco items or by creating incentives for targeted retailers to obtain volume rebates by reducing the price to increase sales).[49–51] More detailed definitions of each expenditure type are provided in online supplemental file 2.

We also compare price discounting expenditures to changes in tobacco product prices and taxes. For cigarettes, we obtained average yearly retail prices (including generics) and tax data from the Tax Burden on Tobacco,[2] which applies uniform practices and are available for the full period of this study. For smokeless tobacco, taxes take multiple forms and are more difficult to calculate, but price measures were developed using data from the FTC Smokeless Tobacco Report by summing the per-unit prices (sales/units) for each category of smokeless tobacco (chew, pouches, etc) weighted by each category's sales. To correct for price inflation, prices and taxes were inflated to 2019 dollars using the consumer price index.[52] To gauge the relative importance of the three categories of marketing expenditures as separate from the impact of expected sales, we compared prices and taxes to price discounting and promotional allowances as per cent of marketing expenditures.

RESULTS

Cigarette marketing expenditures

Figure 1 shows the time trend of cigarette marketing expenditures in constant (inflation-adjusted) 2019 dollars, with select key years provided in table 1. Overall marketing expenditures increased until 2003 and then began to decline, while the composition of these expenditures has dramatically changed. In 1975, 78.4% of marketing expenditures were for direct advertising, with about 16.7% for promotional allowances and 4.9% for price discounting. Direct advertising constituted the largest percentage of expenditures until 1991, but fell to 2.9% of expenditures by 2019. Retail value added and promotions increased until 2002, and especially after 1998, when the MSA restricted many forms of direct advertising and eliminated cigarette-branded merchandise.[53] However, these expenditures began tapering off in 2002, and retail value added was no longer traced separately from other spending by 2009. In 2003, 75.6% of annual marketing expenditures were for price discounting and 18.9% for promotions, appearing to replace the waning retail value-added expenditures. Promotional allowances further declined in importance. By 2019, promotional allowances were 7.4% of expenditures, as price discounting expenditures, including free samples and couponing, increased to about 89.8% of expenditures by 2019. The FDA prohibited free samples in 2017, but some states passed such restrictions before the federal regulation.

In 2019, the major cigarette manufacturers spent $7.6 billion on cigarette marketing. Of this, $6.6 billion was allocated to price discounting (86.7% of total marketing expenditures, of which 74.7% went to retailers and 12.0% to wholesalers). Coupons constituted an additional 2.9% of total expenditures. Spending on promotional allowances in 2019 was 7.4% of marketing expenditures. When combined with price discounts, these indirect marketing efforts accounted for 97.2% of all marketing expenditures. The remaining 2.9% of expenditures in 2019 were for direct advertising, but $266 million was still allocated for direct advertising. These included 0.8% for point of sale, 0.1% for magazines, 0.3% for direct mail, 0.6% for adult-only public entertainment, 0.2% for company websites and 0.9% for 'other'.

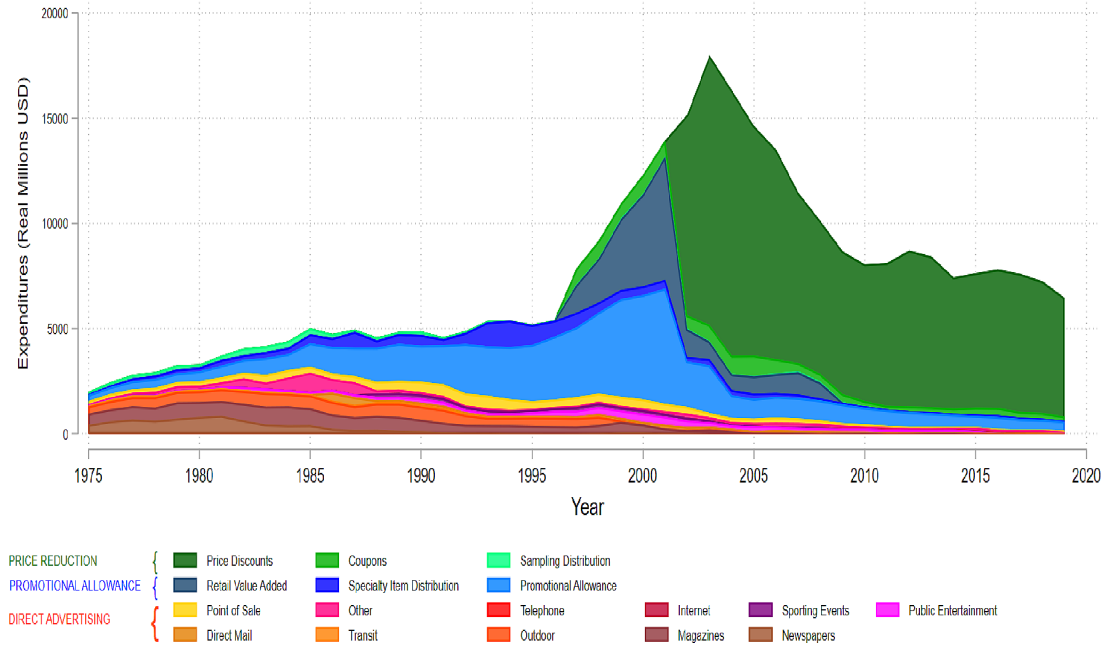

Figure 1 Component shares of real US cigarette marketing expenditures (Federal Trade Commission, 1975–2019).

Cigarette marketing expenditures in relationship to taxes and price

Figure 2 shows that the per cent of marketing expenditures towoards price discounting and promotional allowances began increasing in about 1980, although mostly due to increased promotional allowances. Larger percentage increases in these expenditures occurred after 1997, when the MSA was implemented and cigarette tax increases became more prevalent. Figure 2 also shows a similar, but more direct relationship of these expenditures to cigarette prices until 2003. The per cent of price discounting and promotional expenditures increased only slightly in 2009 when there was a large federal tax increase and prices continued to increase. However, at this point, price discounting and promotional expenditures had reached more than 94% of total marketing expenses and showed minimal increase with prices or taxes going forward.

Smokeless tobacco marketing expenditures

As shown in table 1, smokeless tobacco total marketing expenditures in 2019 dollars peaked in 2016, and then fell. In 1986, direct advertising promotions (mostly magazines, point of sale and outdoors after 1986) were 71.4% of expenditures and have since steadily declined to 12.6% in 2019. Starting in 1998, expenditures began shifting rapidly to promotions and retail value added. Coupons and sampling were important in 1998, but sampling began declining in 2006 and couponing has fluctuated between 6% and 14% of expenditures since 1998. In 2002, price discounting became a separate and important component (58.3%) of overall marketing expenditures, with the largest increases in 2006 and 2013. Promotional allowances have been at least 14% of marketing expenditures since 2009.

In 2019, the major smokeless tobacco manufacturers spent $576 million on marketing expenditures, dropping from $659 million in 2018. The companies reported 72.3% of total marketing expenditures to price discounting, with 0.1% for sampling and 6.9% for coupons. Manufacturer spending on promotional allowances was 15.1%. Direct advertising was 12.6% of total marketing expenditures, mostly point of sale (3.4%), magazines (1.1%), direct mail (0.6%), company websites

Table 1 Per cent of direct advertising, promotional and price discounting, and total cigarette and smokeless tobacco, marketing expenditures, select years*

Categories	Cigarettes						Smokeless tobacco				
Years	1975	1986	1998	2003	2009	2019	1986	1998	2002	2016	2019
Direct advertising (%)†	78.4	60.6	20.8	5.5	5.8	2.9	71.4	62.5	26.9	14.8	12.6
Promotional allowances (%)‡	16.7	35.3	69.8	18.9	11.3	7.4	10.7	18.0	14.7	15.2	15.1
Price discounting (%)‡§	4.9	4.1	9.4	75.6	82.8	89.8	17.9	19.5	58.3	70.0	72.3
Total marketing expenditures (in million 2019 dollars)	$2334	$5558	$10 758	$21 088	$10 167	$7624	$178	$236	$336	$684	$576

Source of data: FDA Cigarette Report, FDA Smokeless Tobacco Report.
*Select years were chosen based on representative years and major turning points in marketing allocations.
†Direct advertising includes newspapers, magazines, outdoor, direct mail, point of sale, sponsorship endorsements, company website, internet, telephone, audiovisual, social media and other advertising and merchandising.
‡Promotional allowances include allowances paid to wholesalers or retailers to facilitate the sale or placement, including payments for volume rebates, incentive payments, value-added services, promotional execution, and satisfaction of reporting requirements (also called retail value added), provision of branded and non-branded specialty items and promotional allowances (eg, buy two packs, get one free).
§Price discounts include payments paid to retailers or wholesalers to reduce the price of cigarettes to consumers, including off-invoice discounts, buydowns, voluntary price reductions and trade programmes, as well as coupons and free samples.
FDA, Food and Drug Administration.

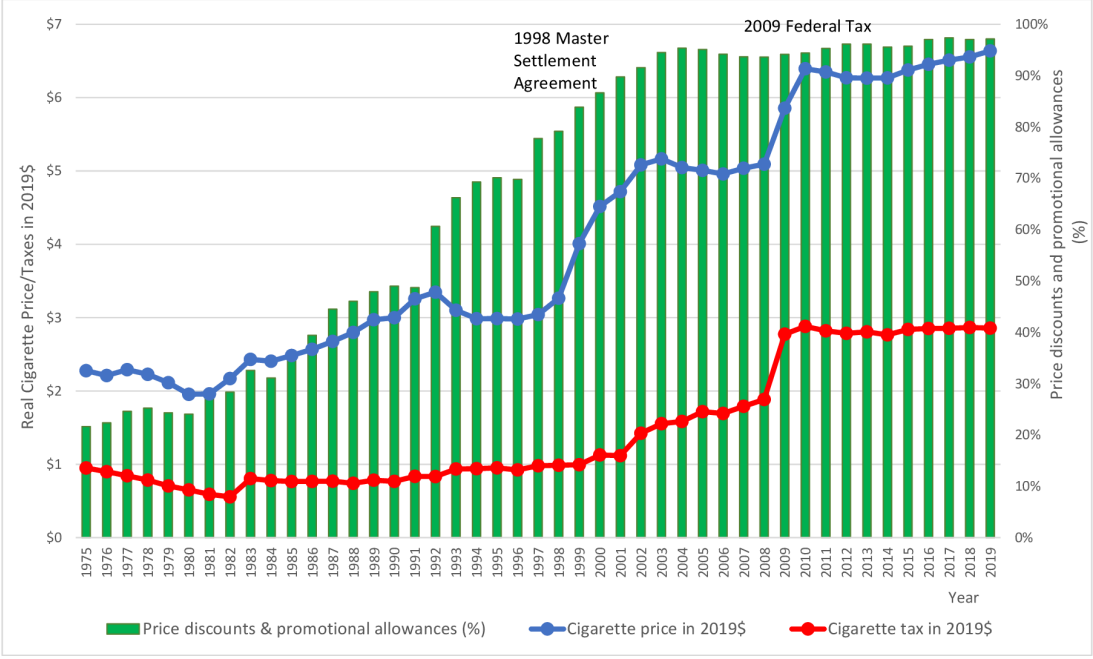

Figure 2 Discounts and promotional allowances as per cent of marketing expenditures and cigarette prices and excise taxes in 2019 dollars, 1975–2019.

(0.9%), non-branded specialty item distribution (2.4%) and consumer engagement in adult-only facilities (0.9%).

Smokeless tobacco marketing relative to price

Figure 3 shows that the per cent of price discounting and promotional expenditures increased slowly with inflation-adjusted smokeless tobacco prices mostly just before 1997, but then rapidly increased in 1998. After prices and expenditures fell between 2003 to 2008, prices and price discounting and promotional allowances both began increasing in 2008.

DISCUSSION

Our study considers the relative importance of various marketing strategies and changes over time. While direct advertising has been a major focus of tobacco control research, the majority of US marketing expenditures over the last 20 years were related to

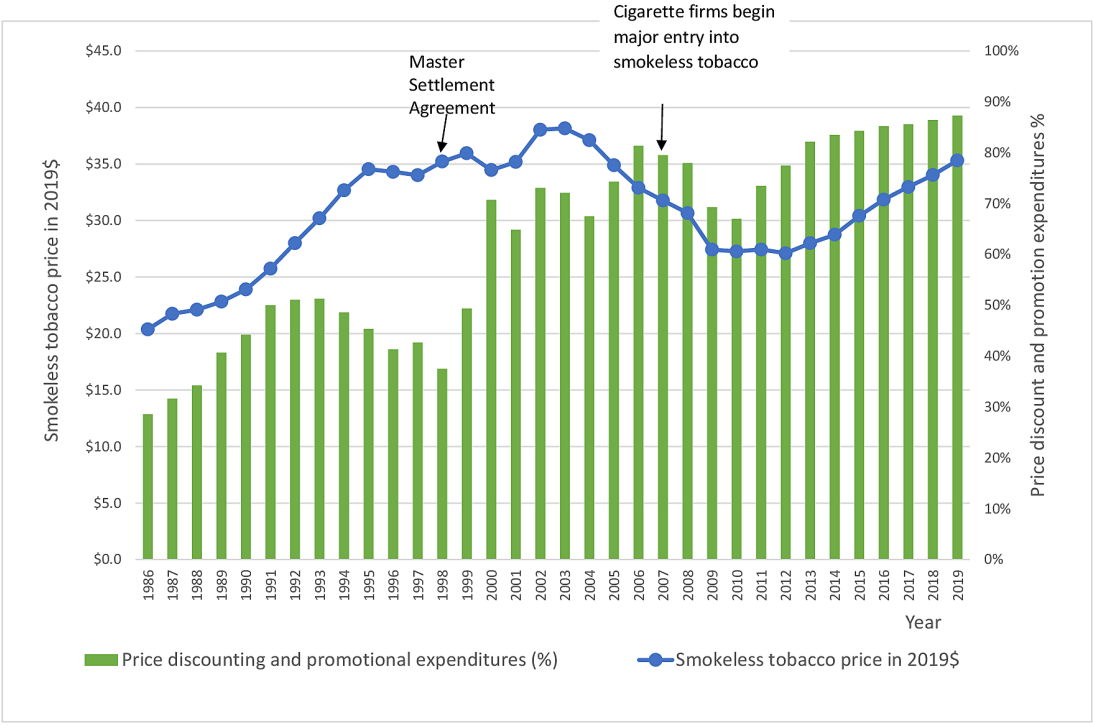

Figure 3 Price discounts and promotional allowances as per cent of marketing expenditures and smokeless tobacco prices in 2019 dollars, 1986–2019.

price discounting and related promotions. Annual expenditures on direct advertising for cigarettes fell from 78% of the industry's marketing expenditures in 1975 to 3% in 2019, while direct advertising for smokeless tobacco fell from 71% in 1985 to 13% in 2019. Meanwhile, price discounting promotion expenditures for cigarettes increased dramatically since 1997, accounting for 90% of outlays by 2019. Another 7% of 2019 cigarette marketing expenditures went towards promotional allowances, which also contributes to reduced prices. For smokeless tobacco, 72% of 2019 marketing expenditures were for price discounting with another 15% for promotional allowances in 2019.

The data indicate that discounting practices are related to retail prices and the MSA up until 2003. As found in previous studies,[54 55] the trend away from direct advertising and towards price discounting and promotional expenditures began accelerating after 1997 when the MSA restricted cartoons, transit advertising, most outdoor advertising, product placement in media, branded merchandise, free samples (except in adult-only facilities) and most sponsorships.[53] Around the same time, federal taxes increased from $0.24 to $0.34 per pack on 1 January 2000, and then to $0.39 per pack on 1 January 2002, and state taxes were also increasing.[56] In addition, other tobacco control policies (eg, smoke-free air laws and media campaigns) were ramping up in many states.[57 58] Cigarette price discounting expenditures increased to 78% by 2009 and 85% by 2013, with a $0.62 federal tax increase and the Family Smoking Prevention and Tobacco Control Act in 2009.[59] The per cent devoted to price discounting and promotional allowances, together, reached 93% of total marketing expenses in 2002 and then showed minimal increases over the next 17 years, peaking at 96.5% in 2019, perhaps suggesting that price discounting and promotional allowances had reached a saturation point as prices or taxes continued to increase.

For smokeless tobacco, price discounting expenditures showed substantial increases in about 1998 and then again in 2008, not long after Reynolds American acquired Conwood Smokeless Tobacco (2006) and introduced Camel Snus and shortly before Altria acquired the US Smokeless Tobacco (2009).[60 61] While we suggest how patterns of marketing expenditures are related to taxes and other tobacco control policies, further exploration of the timing of these changes is warranted.

Our analysis focuses on price-related expenditures as per cent of total marketing expenditures to better focus on the relative importance of price discounting in marketing. However, total marketing expenditure patterns have also changed over time. Cigarette marketing expenditures increased until 2003. Since 2003, total marketing expenditures fell less than proportionally to the reduction in pack sales to half their 2003 level (online supplemental figure 1),[62] while total price discounts and promotional allowance expenditures fell in proportion to pack sales (online supplemental figure 2). These reductions in marketing expenditures may reflect MSA restrictions, but may also reflect the generally declining cigarette sales resulting from stronger tobacco control policies, and shifts towards little cigars, smokeless tobacco and e-cigarettes.[63] In contrast, smokeless tobacco price discounting expenditures have risen sharply, particularly since the cigarette companies started dominating the industry in 2005 (online supplemental figure 3). The role of absolute versus per cent price discounting expenditures warrants further study.

While the role of promotion, commonly understood as direct advertising, and its impact on tobacco use is well documented, US tobacco companies have increasingly shifted their marketing emphasis to price. This focus has important implications since taxes are an important tobacco control policy and discounting offsets some of the effects of tax-related price increases.[45 46 63] Cigarette companies direct discounts to those who are more price sensitive, such as youth and young adults and to those of lower SES.[21 46 64–66] Thereby, discounts can encourage initiation among youth and discourage cessation among users who are young adults or economically disadvantaged. Studies also indicate that discounts tend to be received by high-intensity smokers, who are more price sensitive compared with lower intensity smokers.[33 65 67–69] Thereby, price discounting may also discourage cessation and increase the quantity smoked among those at highest health risk.[70] Further study of price discounting and the relationship of prices to taxes would improve understanding of the simultaneous overshifting and undershifting of taxes.

To gauge the potential importance of price discounting, we calculated the potential role of related expenditures relative to prices. Dividing price discounting and promotional expenditures ($7.35 billion) by the number of tax-paid packs sold,[62] we calculated that price discounting expenditures translate to about $0.73 per pack. With prices per pack estimated at $7.22 in 2021,[71] the average per-pack discount translates to an average price reduction of approximately 10%. With an overall smoking prevalence price elasticity of −0.3%,[45] a 10% price reduction uniformly applied to all customers would have kept smoking prevalence 3% higher than if not applied. However, these industry expenditures will likely to lead to much greater impact, since the discounts are applied to more price-sensitive customers (eg, youth, low income and more frequent users). Although slightly offset by price increases to less price-sensitive consumers, smoking prevalence would be effectively increased by much more than 3%. In addition, price discounts may be exacerbated if retail and wholesale firms reduce the price more than proportionately to marketing expenditures to meet volume and other incentive clauses.

Policies to regulate or eliminate price discounting have been adopted by some states and localities. US states that prohibited the distribution of below-cost coupons to consumers have higher cigarette prices, and thus lower expected cigarette consumption compared with states without a prohibition.[72] Recently, the states of New Jersey[73] and New York[74] implemented coupon redemption bans. However, couponing represents only a small portion of price discounting. Minimum price laws have also been advanced as a potential remedy for discounting practices.[75 76] These policies set either minimum unit sale prices or minimum wholesale/retail mark-ups.[72] Almost half of US states have adopted a minimum price law for one or more tobacco products,[17] but compliance appears to be limited.[77 78] Two recent studies found that better enforced minimum price laws can have a major impact,[38 79] but may also require regulations for pack size and other product attributes.[70]

Our analysis also has implications for contractual arrangements implemented through retailers or wholesalers. Cigarettes and smokeless tobacco have been sold primarily through mainstream brick-and-mortar retail, especially convenience, drug and grocery stores, where tobacco companies provide slotting allowances to secure shelf space.[39 80 81] Part of the promotional allowance expenditures is for branded shelving, complementing the small portion (0.8%) devoted to retail advertising. By limiting available shelf space, these payments may deter competition, particularly from smaller firms and potential new entrants, thereby increasing prices and profits to the major cigarette companies.[21 82–84] Consequently, the space made available to potentially less harmful competing products, such as e-cigarettes from independent firms, may decrease. While a significant

portion of e-cigarette sales still occurs over the internet and through vape shops, mainstream retail has been gaining market share.[85] In addition to policies that restrict price discounting payments, policies may be needed to restrict the type of contracts that the tobacco industry can apply to retailers.

A limitation of this analysis is that it is based on mandated reporting of industry expenditures to the FTC, and thus the breakdowns by category may depend on accounting practices of individual firms. As such, the companies may have incentives to avoid classifying expenditures as advertising in response to the restrictions imposed by the MSA. Our distinction between price reducing, promotional allowances and direct advertising may depend on how we classify the component expenditures. For example, expenditures for non-branded items and two-for-one specials, although not included as price discounting expenditures, may be viewed as de facto reductions in consumer price if these items provide benefits to consumers. Further attention should be devoted to understanding the composition of the different types of expenditures.

Although the data only include major firms, these firms account for the vast majority of industry sales.[21 22] However, since these data are aggregated to the industry level, the marketing strategies by individual firms cannot be distinguished, for example, if one firm is a leader in marketing strategies while others follow to maintain market share. In addition, the analysis is for the USA, but similar tendencies might be expected in other countries. Price discounting has been observed in various countries[86–90] and in the UK before the government banned discounting.[20 23 91] The WHO Framework Convention on Tobacco Control includes 'Enforcing Bans On Tobacco Advertising, Promotion And Sponsorship'. However, when regulating tobacco marketing, most countries have focused on direct advertising rather than indirect marketing, such as price discounting. Another limitation of this study is that it uses US data summarised in aggregate for the entire country. More detailed marketing expenditures at the state level and on the degree of discounting distinguished by brands (especially flavoured brands such as menthol) would help researchers better understand industry strategies and the impact of previously implemented marketing restrictions on those strategies. Comparative data for marketing expenditures from other countries would also be informative.

Finally, the FTC reports marketing expenditures only for cigarette and smokeless tobacco, but price discounting has been documented for flavoured cigars[92] and is featured in cigar ads.[93–95] Discounts are also used by e-cigarette firms,[96] commonly featured in the tweets of commercial e-cigarette retailers[97 98] and discounts by vape shops.[99 100] Further attention should be paid to price discounting for all tobacco products.

CONCLUSIONS

While increasing attention has turned to price discounting behaviours[3 39 101] and the need to collect data at the retail level,[15] further research is needed to: (1) better understand industry marketing expenditures for tobacco products other than cigarettes and smokeless tobacco; and (2) evaluate the growing number of state and local policies that aim to increase tobacco prices through non-tax mechanisms. Like industry documents,[11] the data presented here show that the major cigarette and smokeless tobacco firms view tax increases as a major threat that incentivises them to discount prices. Such discounts weaken the impact of tax increases and the ability of other firms to gain retail shelf space. Price discounting as a marketing strategy warrants additional attention. Explicit attention especially needs to focus on how tobacco companies determine marketing allocations, so that policies can be more effectively directed at counteracting their adverse public health effects.

What this paper adds

⇒ While much of the concern with tobacco industry marketing has focused on direct media advertising, a less explored form of marketing strategy is to discount prices. Price discounting is important because it keeps the purchase price low and can undermine the impact of tax increases, contributing to tobacco initiation and exacerbating socioeconomic health disparities.

⇒ While cigarette and smokeless tobacco industry direct marketing expenditures have drastically fallen over time, price discounting expenditures have dramatically increased in line with increases in prices and taxes.

⇒ Local, state and federal policies are needed that restrict non-tax mechanisms to increase tobacco prices and restrict industry contracts to offset industry strategies.

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