the campaign for
SUSTAINABLE Rx PRICING

CSRxP Analysis:

Direct-to-Consumer (DTC) Pharmaceutical Advertising Spending, Tax Implications and Impact on Prescription Drug Costs in the U.S.

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Direct-To-Consumer Advertising Report
Introduction

Key Takeaway

The Congressional Budget Office (CBO) estimates that limiting pharmaceutical advertising would lower prescription drug spending. However, savings estimates would be greater taking federal tax revenues into account.

We estimate that taxing or prohibiting pharmaceutical advertising could increase federal tax revenues by $1.5 to $1.7 billion annually from 10 of the largest pharmaceutical companies operating in the U.S.

Introduction

Medical marketing can shape treatment decisions, with significant health and healthcare spending impacts. To increase market share and size, pharmaceutical companies often employ various marketing and promotion strategies, including physician detailing, free samples, sponsorship of continuing medical education programs and payments to key opinion leaders (such as medical and scientific professionals) and social media influencers. Among these promotional activities, advertising campaigns targeting physicians and consumers are most visible to the public. Pharmaceutical advertising is intended to influence physician decision making and prompt patients to seek medical care and request the advertised product, increasing prescribing of that product. Between 1997, when the Food and Drug Administration (FDA) officially permitted pharmaceutical direct-to-consumer (DTC) advertising, and 2016, annual spending on medical marketing increased from $17.7 billion to $29.9 billion, with the largest increase from direct-to-consumer (DTC) advertising ($2.1 billion to $9.6 billion).

DTC advertising drives increases in drug spending. CBO estimates that a 10% increase in DTC advertising is associated with a 1 to 2.3% increase in drug spending. Another study found that a 10% increase in DTC spending resulted in a 5.4% increase in product revenue.

[1] Other estimates include $6.4 billion (Kantar, 2017)

Promotional activities can encourage disease awareness and promote understanding of treatment options. However, evidence about the benefits of current marketing practices is mixed. Drugs with lower clinical effectiveness have been linked to higher spending on DTC advertising. Evidence also suggests that consumer ads are misleading, may downplay treatment risks, and are frequently non-compliant with FDA requirements. Critics argue that advertising, particularly DTC advertising, encourages inappropriate prescribing, contributes to rising healthcare expenditures, weakens doctor-patient relationships, and can keep patients from making fully informed decisions. These concerns have prompted numerous proposals to end pharmaceutical companies' ability to deduct marketing and promotional expenses from federal taxes.

To date, the effect of these proposals on federal spending and tax revenues hasn't been sized. In a recent paper, the CBO described its approach to estimating the effect of banning DTC advertising on prescription drug spending and new drug development. However, CBO's analysis did not include the effect of such a ban on federal taxes, nor the effect of including all promotional spending targeting patients and physicians.

Case Study: DTC Advertising for Migraine Treatments

As pharmaceutical promotion continues to evolve, marketing and advertising efforts have increasingly expanded into the digital and online realm with help from big name celebrities. In 2020, Nurtec ODT (a migraine medication manufactured by Biohaven/Pfizer) and Khloe Kardashian launched a social media advertising campaign to promote the drug's benefits to consumers. Kardashian, who has over 306 million Instagram followers, amassed more than 1.9 million likes across four posts promoting Nurtec ODT. Lady Gaga also starred in television and online advertisements for Nurtec ODT at the same time. One of her Instagram posts garnered over 330 thousand likes, comparable to posts by Kardashian.

In the four years since Nurtec ODT's launch in 2020, it generated $2.3 billion in global sales and is forecasted to reach $2.1 billion annually by 2029 (from 2024 to 2030, financial forecasts estimate $12.2 billion in cumulative sales).

Competitor Ubrelvy (manufactured by AbbVie) also launched in 2020 and partnered with Serena Williams.

From 2020 to 2023, Ubrelvy generated $2.2 billion and is expected to earn $1.4 billion annually by 2029 ($8.6 billion cumulatively from 2024 to 2030).

However, AbbVie pulled certain advertisements featuring Williams because of misleading claims. Financial terms to Kardashian and Williams have not been disclosed, but reports for 2024 indicate that Kardashian earns an average of $1.87 million per Instagram post.

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Methods

We estimated the additional federal taxes pharmaceutical manufacturers would pay if advertising expenditures were not deductible. Our analysis included data from the ten largest pharmaceutical companies by U.S. revenues that also reported information about their advertising and promotional (A&P) spending in Securities Exchange Commissioner (SEC) 10-K and 20-F filings, or investor reports. Companies were excluded from the analysis if they did not disclose U.S. revenue, tax expense, or advertising activities. Advertising and promotional spending is not typically broken down by country or channel (i.e., DTC vs. targeting physicians).

To estimate advertising spending attributable to the U.S., we took two approaches:

Approach 1:
Assume all A&P spending was in the U.S.

Approach 2:
Assume that A&P spending in the U.S. was in proportion to revenues attributable to the U.S. vs. other countries.

To estimate federal taxes if A&P spending were taxed, we applied two different scenarios:

Tax Scenario 1:
Apply the observed 13.8% effective global tax for the top 10 pharmaceutical manufacturers to U.S. federal taxes; and

Tax Scenario 2:
Apply the 15.7% average U.S. tax rate estimated by Joint Committee on Taxation (JCT) for the pharmaceutical industry.

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Findings

The ten companies included in our analysis are Abbvie, Amgen, Biogen, Bristol Myers Squibb (BMS), Eli Lilly, Gilead Science, Glaxo Smith Kline (GSK), Johnson and Johnson (J&J), Merck, and Pfizer. All companies (except for GSK which is domiciled in the United Kingdom) are domiciled in the U.S. Average 2023 revenues were $40.4 billion worldwide (range: $9.8 to $58.5 billion) and $24.5 billion from the U.S. market (range: $5.4 to $41.9 billion). Global earnings before interest and taxes (EBIT) ranged from $1.1 to $15.1 billion, and the global effective tax rate from -105.4% to 80% across all operations, including animal health and medical devices[2]. The gross global effective tax rate was 13.8%.

Globally, companies spent an average of $1.4 billion (range: $71 million to $3.7 billion) on A&P. Pfizer reported the most spending, Biogen the least. Advertising and promotional spending ranged from 2.3% to 25.0% of selling, general, and administrative expenses (SG&A) and 0.7% to 6.3% of their respective worldwide revenues (Table 1).

Table 1: Topline financial data, 2023 (millions)

Company	WW Revenue	EBIT	Global Tax Paid	US Tax Paid	Effective Global Tax Rate	SG&A	A&P Spend	A&P as % of SG&A	A&P as a % of WW Revenue
Pfizer	$58,496	$1,058	-$1,115	-$1,605	-105.40%	$14,771	$3,700	25.00%	6.30%
J&J	$54,759	$15,062	$1,736	-$690	11.50%	$21,512	$500	21.90%	4.30%
AbbVie	$54,318	$6,250	$1,377	$948	22.00%	$12,872	$2,200	17.10%	4.10%
Merck	$53,583	$1,889	$1,512	-$690	80.00%	$10,504	$2,300	18.00%	3.10%
BMS	$45,006	$8,440	$400	$406	4.70%	$7,772	$1,400	15.10%	3.30%
GSK	$37,772	$7,543	$940	N/A[1]	12.50%	$11,673	$1,039	8.90%	2.80%
Eli Lilly	$34,124	$6,555	$1,314	$667	20.10%	$7,403	$1,120	13.60%	3.00%
Amgen	$28,190	$7,855	$1,138	$418	14.50%	$6,179	$647	10.50%	2.30%
Gilead	$27,116	$6,859	$1,247	$905	18.20%	$6,090	$826	2.30%	0.90%
Biogen	$9,835	$1,297	$135	-$207	10.40%	$2,549	$71	2.80%	0.70%
Total	**$403,199**	**$62,808**	**$8,684**	**$152**	**13.83%**	**$101,325**	**$13,803**	**13.62%**	**3.42%**

EBIT: Earnings before interest and taxes; A&P: Advertising and Promotion; SG&A: selling, general, and administrative expenses; WW: worldwide.

[1] As a United Kingdom domiciled country, GSK did not separately report US tax paid.

[2] Negative effective tax rates indicate a tax benefit or refund. An effective tax rate of 80% reflected charges for asset acquisitions (for which no tax benefits were recognized) as well as the charge for the Daiichi Sankyo collaboration.

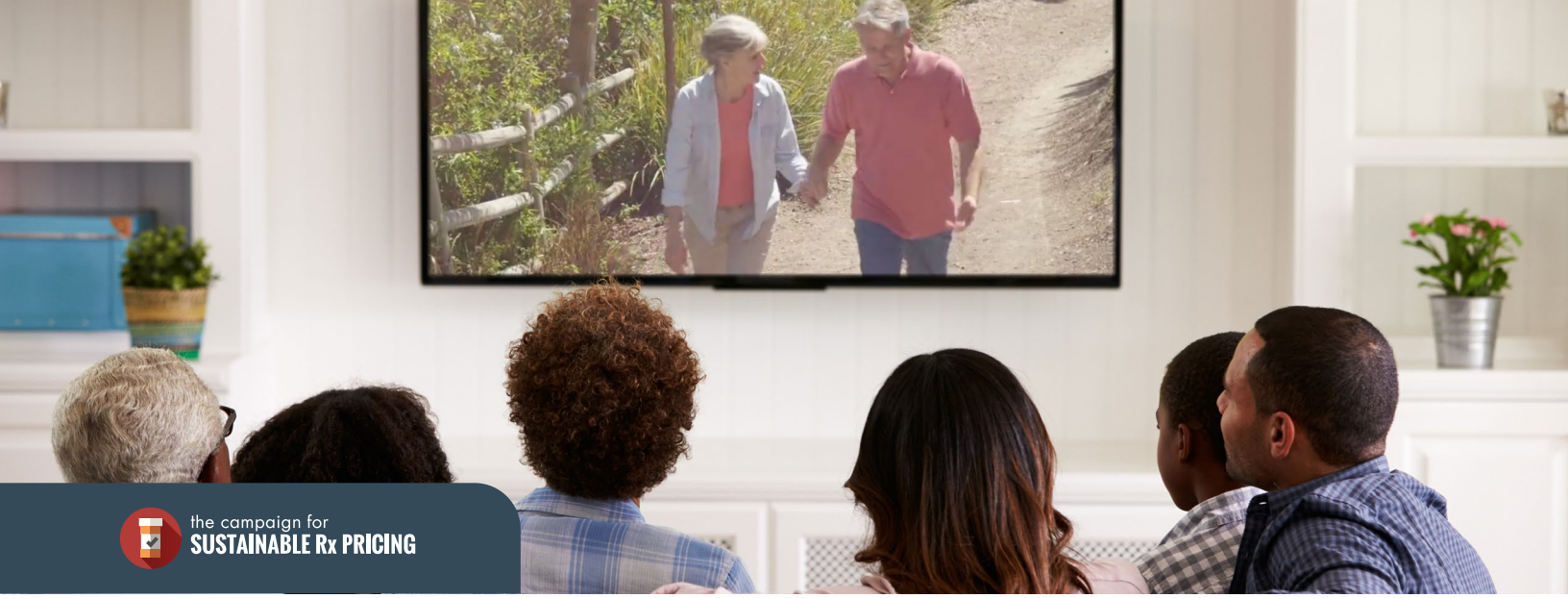
Approach 1: Assuming all reported A&P spending was for advertising in the U.S.

Assuming that all A&P spending was attributable to the U.S. results in a projected increase in federal taxes from $1.9 billion to $2.2 billion total across the 10 companies (Table 2). The different estimates are the result of applying the observed 13.8% global tax rate for the top 10 pharmaceutical manufacturers (scenario 1) or JCT industry specific tax rate (scenario 2).

Table 2. Income tax expense and foregone taxes under Approach 1 (millions)

		Income Tax Under:	
Company	**A&P**	**Tax Scenario 1**	**Tax Scenario 2**
Pfizer	$3,700	$512	$581
J&J	$500	$69	$79
AbbVie	$2,200	$304	$345
Merck	$2,300	$318	$361
BMS	$1,400	$194	$220
GSK	$1,039	$144	$163
Eli Lilly	$1,120	$155	$176
Amgen	$647	$89	$102
Gilead	$826	$114	$130
Biogen	$71	$10	$11
Total	**$13,803**	**$1,909**	**$2,167**

Approach 1: All reported A&P spending was for advertising in the U.S.; Tax scenario 1: applying 13.8% observed global tax rate for the top 10 pharmaceutical manufacturers. Tax scenario 2: applying 15.7% average pharmaceutical industry U.S. tax rate estimated by Joint Committee on Taxation



Approach 2: A&P spending in the U.S. was in proportion to revenues attributable to the U.S.

Under this approach, A&P spending was attributed to the U.S. based on the proportion of U.S. to global revenues. 8 of the 10 companies made more than half of their annual revenues from the U.S. (range: 46.3% to 77.1%). In total, $8.2 billion in A&P spending was allocated to the U.S. based on this approach (59.0% of global A&P). Total avoided taxation across the sample was $1.1 billion for scenario 1 and $1.3 billion for scenario 2 (Table 3).

Table 3. Tax expense attributing A&P in proportion to U.S. revenue (millions)

		Income Tax Expense Under:	
Company	**A&P**	**Tax Scenario 1**	**Tax Scenario 2**
Pfizer	$1,139	$158	$179
J&J	$285	$39	$45
AbbVie	$1,696	$235	$266
Merck	$1,713	$237	$269
BMS	$982	$136	$154
GSK	$533	$74	$84
Eli Lilly	$715	$99	$112
Amgen	$455	$63	$71
Gilead	$592	$82	$93
Biogen	$39	$5	$6
Total	**$8,149**	**$1,127**	**$1,279**

Approach 2: Assumes all reported A&P spending in the U.S. was in proportion to revenues attributable to the U.S vs. other countries; Tax scenario 1: applying 13.8% observed global tax rate; Tax scenario 2: applying 15.7% average pharmaceutical industry U.S. tax rate estimated by Joint Committee on Taxation

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Discussion

CBO estimates that a 10% reduction in DTC advertising spending would decrease prescription drug spending by 1 to 2.3%. Another study found that a 10% increase in DTC spending resulted in a 5.4% increase in product revenue. Our analysis, which also includes promotional spending targeting physicians and other professionals, suggests that savings would be even greater because federal tax revenues would increase. Taking the midpoint of the two approaches to attributing promotional spending suggests that **banning pharmaceutical advertising or broadly considering advertising spending taxable income would increase U.S. taxes paid by $1.5 to $1.7 billion annually from the 10 pharmaceutical companies.**

The simplifying assumption that all A&P spending is attributable to advertising in the U.S. produces the highest estimates in our analysis and is unlikely to be fully realized. This assumption allocates the $13.8 billion reported by the 10 companies in our sample entirely to the promotion of drugs directed at U.S. consumers and physicians. For comparison, the U.S. Government Accountability Office (GAO) estimates that, from 2016 to 2018, the industry spent approximately $6 billion per year on U.S. DTC advertising. Other estimates suggest industry spending on promotional activities included $6 billion for DTC advertising and $5 billion for physician detailing in 2016.

By contrast, estimates attributing advertising expenses in proportion to U.S. revenue relative to other countries are more conservative and likely to underestimate increases in federal taxes. The U.S. represents the largest market for pharmaceutical products and is one of only two to permit DTC advertising. **In 2023, the top 10 promotional campaigns by expenditure saw 12 different manufacturers spend $2.9 billion on DTC advertising.** Among those manufacturers, three were in our sample (AbbVie, Pfizer, and Bristol-Myers Squibb). Notably, AbbVie spent $1.2 billion across three drugs in 2023, over half of their total reported A&P spending.

Our estimates also show that this policy is highly sensitive to prevailing tax rates. We did not assume that pharmaceutical companies pay the nominal corporate tax rate of 21% because multinational companies can reduce their U.S. tax l iabilities throught profit offshoring. While the Joint Committee on Taxation estimates that pharmaceutical companies pay an effective U.S. tax rate of 15.7%, our sample companies had an effective rate of 13.8% in 2023.

Finally, policy specifics also have important implications. An outright ban on advertising to physicians and consumers could result in less taxable corporate revenue. This would mean lower federal taxes as compared to a policy that eliminated the tax deduction but did not prohibit advertising. Unless promotional activities were banned outright, we expect that manufacturers would continue some level of A&P activities to maximize revenue, moderating the net effect on taxable sales. Eliminating the tax deduction could also result in more variable manufacturer responses than an advertising ban. Among the companies in our sample, taxes varied significantly as some benefitted from tax refunds or applied credits, while others reported substantial tax expenses in 2023. Annual variations in tax liabilities could influence companies' advertising choices, with consequences for both prescription drug spending and tax savings.

These results suggest that disregarding the tax implications of limiting pharmaceutical advertising meaningfully underestimates the impact of such polices on federal spending.

About CSRxP

WHO WE ARE

The Campaign for Sustainable Rx Pricing (CSRxP) is a broad-based coalition of leaders – physicians, nurses, hospitals, consumers, health plans, PBMs, pharmacists and businesses – promoting bipartisan, market-based solutions to lower drug prices in America.

OUR MISSION

To make prescription drugs more affordable for all Americans. CSRxP advocates for bipartisan solutions that hold pharmaceutical companies accountable for out-of-control drug prices and provide more affordable choices for patients. We believe in market-based reforms that address the underlying causes of high drug prices in the U.S. through increased transparency, competition and value.

EXPERTS AVAILABLE TO YOU

Our CSRxP leadership team is always available to provide additional background or speak on the issue.

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WHERE YOU CAN LEARN MORE

To learn more about the Campaign for Sustainable Rx Pricing (CSRxP) and our proposals to change the drug pricing market, visit www.csrxp.org and www.csrxp.org/commitment.

Sign up to receive our weekly newsletter to learn about the biggest developments each week on the rising prescription drug crisis at www.csrxp.org/contact.