

## Smokers' response to price changes suggests enormous potential of taxation for discouraging smoking

Cigarette taxation is a crucial element of tobacco control policy in Pakistan, where about 17 million adults currently smoke cigarettes.<sup>1</sup> During the past few years, the government introduced several reforms in cigarette tax policy related to changes in the rate and structure of federal excise duty on cigarettes, which also caused changes in cigarette prices. However, the effects of such changes on the pattern of cigarette consumption remain under-researched. This policy brief summarizes the results of a nationally representative survey of more than 7,500 current and past smokers. The research objective was to study smokers' consumption behaviour in response to tax-induced price changes.

### Cigarette Brands and Smoking Practices

- The cigarette market is relatively concentrated, where 82.3 percent of current smokers consume the top six brands. Only two brands, Capstan and Gold Leaf, capture almost half of the market with their respective shares of 33.3 percent and 15.8 percent, respectively.
- Based on the brands used by smokers, major cigarette manufacturers were Pakistan Tobacco Company, Philip Morris International–Pakistan, and Khyber Tobacco Company, with market shares of 60.3 percent, 22.6 percent, and 4.9 percent, respectively. All other firms constituted 12.2 percent of the market.

### Smoking Practices

- The average number of smoking days in a month was 28. In contrast, the average smoking intensity was reportedly 13 cigarettes per day. No significant urban-rural differences were observed in both indicators.

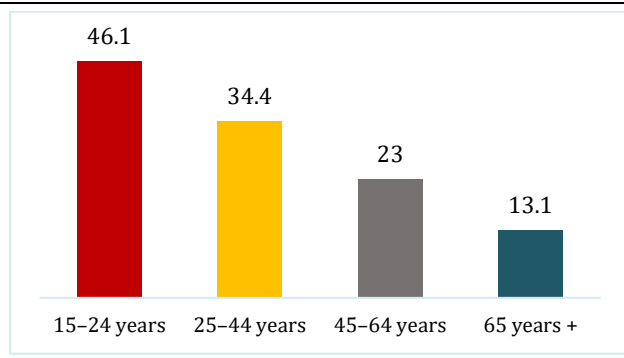
### Key Survey Findings

- The market is concentrated among six brands, consumed by over 80 percent of smokers.
- Only three firms represented about 88 percent of the market.
- Smokers consumed 13 cigarettes per day on average.
- Smokers spent about 6 percent of their expenditures on cigarettes.
- Though prohibited by law, 30 percent of smokers reported buying loose cigarettes.
- 17.5 percent of the brands were purchased below the minimum price prescribed by the government.
- 9.3 percent of smokers shifted to other brands during the last five years. Among them, 38 percent switched due to price concerns.
- Among the smokers who affirmed a price increase during the Covid-19 pandemic, 66 percent smoked fewer cigarettes.
- Due to an increase in cigarette prices in July 2019, 29 percent of smokers smoked fewer cigarettes, and 13 percent attempted quitting or seriously thought about quitting.
- On the contrary, after a decrease in cigarette prices in July 2017 due to reduced tax rates, over 17 percent of smokers consumed more cigarettes.
- In response to a hypothetical increase of 25-30 percent in cigarette prices, 53 percent of respondents stated that they would consume fewer cigarettes, while 40 percent would attempt quitting.
- Among the past smokers, 56 percent quit due to health concerns, while 36 percent due to family/friends pressure.

## Purchasing Habits and Prices Paid

- While the sale of loose cigarettes is prohibited by law in Pakistan, 30.2 percent of smokers reported buying loose cigarettes: the ratio is higher in urban localities (34.5 percent) compared to rural areas (27.5 percent).
- Purchase of loose cigarettes is most common among youth, as reported by 46.1 percent of smokers aged 15–24 years. This ratio declines with age (Figure 1).

Figure 1: Proportion of smokers who bought loose cigarettes (%)



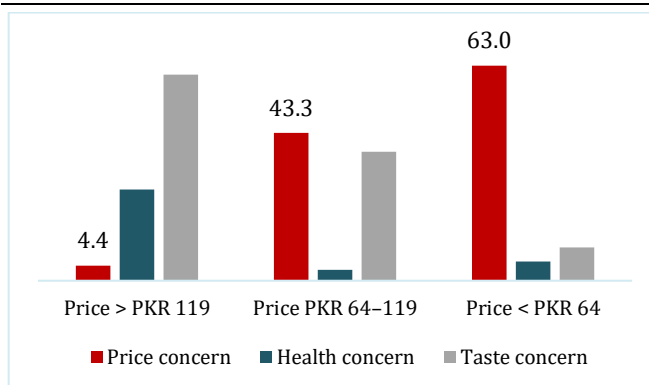
- The average prices per pack of premium brands were in the range of PKR 179–214. However, significant variation was observed in the economy brands, where the price per pack was reported from PKR 33 to PKR 94.
- The minimum price of a cigarette pack notified by the Federal Board of Revenue (FBR) at the time of the survey (December 2019 to March 2020) was PKR 63. The results reveal that 17.5 percent of the brands were purchased below the minimum price. The average price of the 6<sup>th</sup> most popular brand, Kissan, was PKR 35. It is important to note that the minimum rate of FED was PKR 33 per pack.
- Smokers spend an average of 5.7 percent of their total budget on cigarettes. The share of cigarette expenditure is higher (8.9 percent) in the low-income category.

## Brand Loyalty and Switching

- Overall, 9.3 percent of smokers reported having shifted to other brands during the last five years. Brand switching is more prominent in rural areas (10.9 percent).

- Among the smokers who switched their brands, price (37.6 percent) and taste concerns (36.5 percent) were the primary reasons for switching.

Figure 2: Reasons for switching brands (%)\*



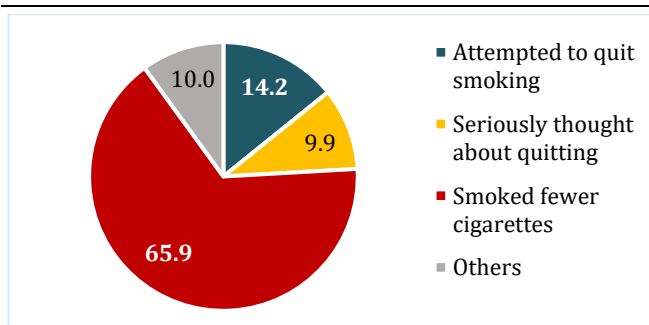
\* Percentage of respondents.

- Reasons for switching vary among the brand-price categories. Users of high-priced brands cited taste concern as the major reason (60.4 percent), followed by health concern (26.7 percent). On the other hand, price concern is the most cited reason among smokers using low-priced brands (Figure 2).

## Effects of Changes in Cigarette Prices on Smoking Practices

- Among the smokers who affirmed a price increase during Covid-19, about 66 percent said that they smoked fewer cigarettes. In comparison, 14 percent attempted quitting (Figure 3).

Figure 3: Response to price changes during the Covid-19 pandemic (%)\*



\* Percentage of respondents who affirmed price increase

- Similarly, due to an increase in cigarette prices in July 2019 (when the excise tax was increased), 29 percent of smokers smoked fewer cigarettes, and 13 percent attempted quitting or seriously thought about quitting.

## Responses of smokers against hypothetical changes in prices

- In response to a hypothetical increase of 25-30 percent in prices (relative to the price of the brand they use)<sup>2</sup>, 53.3 percent of respondents stated that they would consume fewer cigarettes, while 39.4 percent would attempt quitting. About 42 percent of respondents stated that they would seriously think about quitting.

## Past Smokers

- Among the past smokers, health concerns and family/peer pressure were the most cited reasons for quitting. Overall, 56 percent of past smokers had quit due to health concerns. In comparison, around 36 percent stated that they had quit because a family member or friend wanted them to stop smoking.

## Policy Implications

- This research provides valuable insights into cigarette consumers' behaviour in relation to the changes in cigarette prices. Policymakers can effectively use the analyses to reform cigarette tax

policy to reduce cigarette consumption in the country.

- A significant proportion of smokers reported reducing their consumption in response to a price increase in 2019 and during the pandemic. Therefore, the potential of cigarette taxation should be exploited to achieve Pakistan's tobacco control policy objectives. Currently, the average excise tax share in the retail price of cigarettes is around 41 percent, well below the widely-accepted share of 70 percent. There is a need to make substantial enhancements in the excise tax rates.
- A substantive gap exists between tax rates applied to low-priced and high-priced brands. Moving towards a uniform FED rate for all cigarette brands is recommended.
- Tax administration is another crucial area to focus on for enhancing tobacco control policies' effectiveness. The incidence of purchasing loose cigarettes (over 30 percent) is alarming. Strong coordination among federal and provincial governments can play an essential role in improving tax administration.

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<sup>1</sup> SPDC estimates based on Global Adults Tobacco Survey (GATS) 2014 and population projection for 2022. According to GATS 2014, prevalence rate of tobacco use and cigarette smoking was 19.1 percent and 10.5 percent, respectively.

<sup>2</sup> The question was asked about price changes in rupees. The amount of increase was relative to the price of brands they used. For instance, an increase of PKR 50 and PKR 100 was asked if the prices of packs were PKR 101-200 and above PKR 200, respectively.

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