

*This policy brief is based on a research study entitled ‘Crowding Out Effects of Tobacco Spending in Pakistan’ conducted by Social Policy and Development Centre (SPDC).*

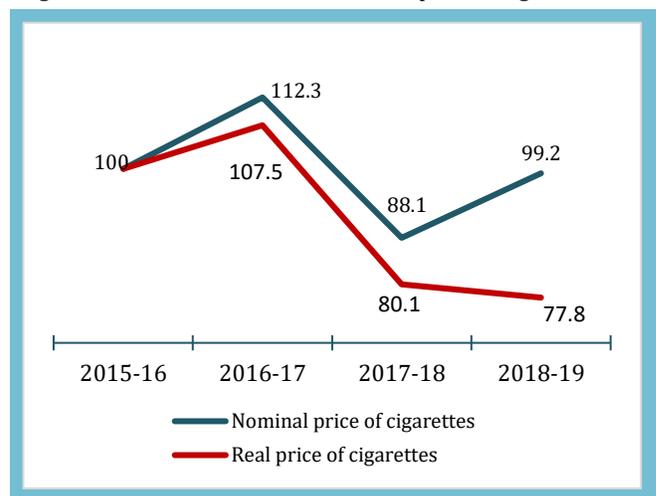
## Household Tobacco Spending and Consumption: Implications for Tax Policy

Pakistan is a high tobacco-burden country where more than 29 million adults currently use tobacco in any form. Estimates based on Pakistan’s Household Integrated Economic Survey (HIES) 2018-19 indicate that **tobacco is consumed in more than 45% of the households in the country**—the ratio is 49% and 38% in poor and rich households, respectively. Additionally, tobacco expenditure constitutes a sizable portion of the household budget and occurs at the cost of spending on necessities such as basic food, health, education, and housing. Therefore, policy measures for reducing tobacco use—such as tobacco taxation—are likely to have a significant impact on household welfare.

In 2017-18, the government reduced the excise tax on cigarettes, which is a major tobacco tax in Pakistan. Particularly, tax rate on low-priced brands was reduced by 48%, which led to a sharp decline in the cigarette prices. In this context, the research by SPDC, using HIES data of 2015-16 and 2018-19, examines whether there have been any changes in cigarette consumption and how tobacco use affected household expenditure patterns.

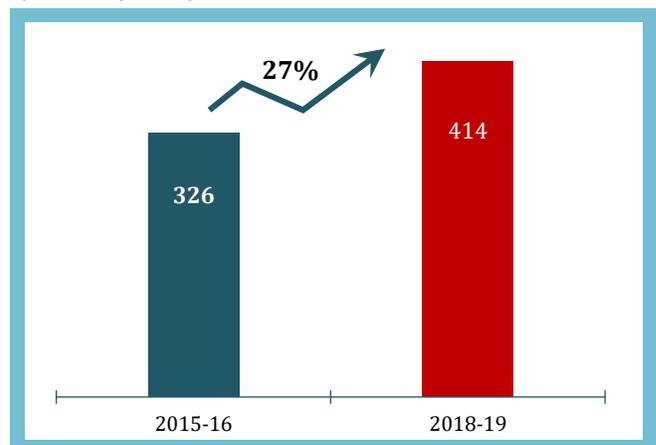
The data suggest that the real (inflation-adjusted) price of cigarettes declined by over 27% in 2017-18, making cigarettes more affordable. A comparison of the real price index of cigarettes between 2015-16 and 2018-19 shows a decline of 22% during this period. **Owing to the reduced prices, the overall consumption of cigarettes per household increased by 27% from 326 sticks to 414 sticks monthly.**

Figure 1: Index of the nominal and real price of cigarettes



Source: Monthly Bulletin of Statistics, PBS.

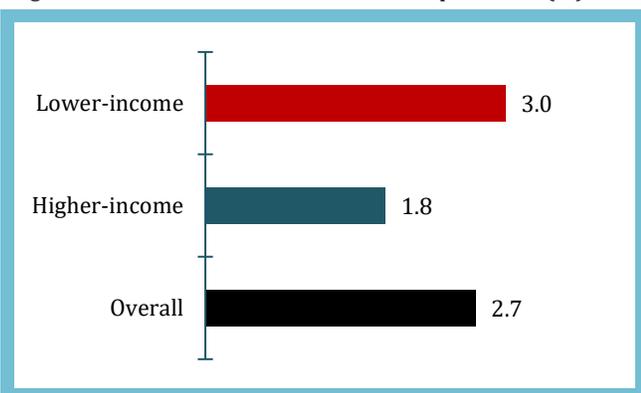
Figure 2: Monthly consumption of cigarettes per household (number of sticks)



Source: HIES, 2015-16 and 2018-19

Regarding the composition of household expenditure, the HIES 2018-19 data reveal that tobacco-user households allocate significantly lower budget shares to most of the commodity groups except basic food. Lower spending is more pronounced in education and housing. Among tobacco-users, **poor households spend a greater share of their budget on tobacco compared to rich households.** On average, tobacco-user households spend 2.7% of their monthly budget on tobacco products, while the ratio for lower-income (bottom 60%) and higher-income (top 40%) households is 3.0% and 1.8%, respectively. **In the case of lower-income households, the budget share allocated to tobacco is even higher than education.**

Figure 3: Share of tobacco in household expenditure (%)



Source: SPDC estimates, based on Economic Survey of Pakistan 2019-20, and FBR Revenue Division Yearbook 2019-20

Figure 4: Monthly budget allocation of households (%)

	Tobacco non-user	Tobacco-user		
		Overall	Lower income	Higher income
Tobacco	-	2.7	3.0	1.8
Basic food	38.4	40.3	42.4	34.4
Other food	2.7	2.6	2.6	2.7
Clothing	7.9	7.5	7.7	7.1
Health	3.3	3.4	3.4	3.1
Education	3.8	2.6	1.8	4.7
Transport	6.6	5.8	5.4	7.0
Energy	9.0	8.9	9.2	8.0
Housing	14.1	12.3	11.5	14.4
Others	14.2	14.0	13.3	16.8
Total	100.0	100.0	100.0	100.0

Source: HIES, 2015-16

## Impact of tobacco use on intra-household budget allocation

The results show that in all commodity groups, except leisure, consumption decisions are significantly affected by tobacco expenditures. **The commodity groups that are negatively affected by tobacco spending include food (basic and other), health, education, housing, and household durables.** Therefore, a decrease in the amount of tobacco spending leads to an increase in the budget shares of these commodities.

The study conducted a simulation exercise to estimate what would happen if households spent 50% less on tobacco. The aggregated results show that the share of expenditure on food and housing is expected to increase substantially. The budget share of food (basic and others) increases by 3.8 percentage points, while that of housing rises by 1.2 percentage points. **The impact of tobacco expenditure on basic food is driven by lower-income households with an increase of 3.9 percentage points.**

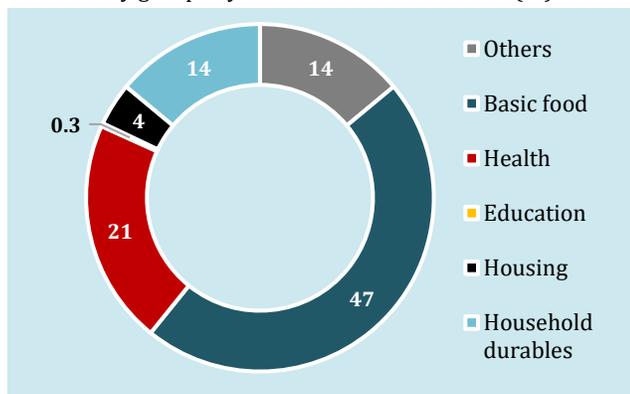
Figure 5: Increase in budget shares due to a 50 percent reduction in tobacco expenditure (percentage points)

Commodity group	Overall	Lower income	Higher income
Basic food	1.2	3.9	-
Other food	2.6	-	2.5
Health	0.9	1.3	2.5
Education	0.7	0.1	-
Housing	1.2	0.5	1.4
Household durables	0.7	0.9	4.2
Others	0.8	1.0	4.2

Source: HIES, 2018-19

In absolute rupee terms, a 50% reduction in tobacco spending will lead to an aggregate increase of 12% in expenditure on food, health, education, housing and durables. For lower-income households, the expected increase in total expenditure on these commodity groups is around 9%. As shown in Figure 6, the major share of the increased expenditure would be devoted to basic food (47%) and health (21%).

Figure 6: Share of increased expenditure devoted to commodity groups by lower-income households (%)



Source: HIES, 2018-19

## Conclusion

The study finds strong evidence of a crowding out effect, in which tobacco expenditure are incurred at the expense of spending on other goods and services including food, health, education, housing, and household durables, particularly in lower-income households. To enhance the economic well-being of the poor population, the government must adopt policies aimed at reducing the demand for tobacco products, particularly among the poor.

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