This policy brief is based on a research study entitled 'Economic implications of cigarette taxation in Pakistan: An exploration through a CGE model' conducted by Social Policy and Development Centre (SPDC).

Higher tobacco taxes will not hurt Pakistan's economy

The prevalence of tobacco use continues to remain one of the critical development challenges in Pakistan as about 30 million adults—19.1 percent of the adult population—currently use tobacco in any form.¹ Tobacco use is estimated to be associated with premature deaths of over 160,000 people in Pakistan in 2017.² Cigarette taxation is an essential element of tobacco control policy in the country, which serves a dual objective of public health promotion and revenue generation. However, the excise tax rates on cigarettes are well below the widely-accepted benchmark of 70 percent of retail price.

One of the reasons may be associated with the perceived macroeconomic benefits of tobacco, such as visible tax revenues and the contribution of the tobacco sector to employment and economic output. The lack of empirical evidence often leads to an inflated perception of the size and contribution of the tobacco industry to the economy. The industry claims that higher taxes on cigarettes would lead to a higher unemployment level and hurt the agriculture sector by reducing the demand for raw tobacco. On the other hand, previous research³ has found that a decrease in cigarette consumption would have a relatively small impact on the economy regarding job losses, income levels, and output. In this context, this study estimates the impact of tax increases on tax revenues, consumption of tobacco products, raw tobacco production. cigarette manufacturing, employment, and the overall economy using a methodology based computable general equilibrium (CGE) modeling.

The economic data analysis reveals that despite being one of the largest tobacco-growing countries, the tobacco sector is not a significant contributor to Pakistan's economy. For instance, in terms of value, raw tobacco production accounts for less than 0.4 percent of the crop value-added. The share of cigarettes in the value-added of large-scale manufacturing and GDP is 3.2 percent and 0.3 percent, respectively. Similarly, the contribution of the cigarette industry in employment is minimal, that is 0.2 percent of the industrial labor force.

Figure 1: Contribution of the tobacco sector to Pakistan's economy, 2019-20*

% share of:	
Tobacco in crops value-added	0.37
Cigarettes in large-scale manufacturing value-added	3.20
Cigarettes in GDP	0.30
Cigarette industry in industrial employment	0.20

* At 2005-06 prices

The Federal Excise Duty (FED) is the major and specific tobacco tax in Pakistan, which accounts for almost 80 percent of the revenue from the sector. The FED rate is applied on the basis of two price tiers: low-priced and high-priced. Currently, as per the statutory rates, the FED share of retail price on low-priced and high-priced cigarettes is 41 percent and 57.8 percent, respectively.⁴ The effective or average FED rate is estimated to be 46.4 percent (Rs 1.48 per cigarettes).

Impact of increase in FED on cigarettes on the economy

The study conducted a simulation to raise the effective excise tax on cigarettes to 70 percent, which would require a tax increase of 285 percent, leading to a 155

percent increase in the price of cigarettes. The results suggest that due to the proposed increase in the tax rate:

- Consumption of cigarettes would decline by 32.5 percent. However, due to the increase in cigarette prices, household consumption expenditure on cigarettes would increase by 73.3 percent. The overall household spending is expected to increase by 0.7 percent.
- Despite the decline in cigarette consumption, the tax revenue from cigarettes would increase by 102 percent due to higher cigarette prices, while overall indirect tax revenue from all sources would increase by 6 percent.
- The reduction in tobacco demand would cause a decrease in raw tobacco output by 7.8 percent.
- The output of the cigarette industry would decline by 32.4 percent, which would lead to a 41.5 percent decline in employment income in the cigarette industry. However, the overall employment income in the economy would increase by 0.5 percent. In absolute rupee term, the decline in employment income in the tobacco sector (including tobacco growing and the cigarettes industry) is Rs 0.83 billion compared to an increase of 67.4 billion in employment income in other sectors. Thus, there would be an overall net gain of Rs 66.6 billion in the employment income. Similarly, there would be a reduction of 13,150 jobs in the tobacco sector while 321,700 jobs will be created in the other sectors, leading to a net increase of 308,550 jobs in the economy.
- An increase in tax revenues would result in higher public savings, which in turn would lead to increased investment in the economy. As a result, the output of the other sectors would increase, leading to an increase in the value-added and the household

income from factors of production employed in these sectors. The overall household income, gross value added, and output would increase by 0.13 percent, 0.12 percent, and 0.03 percent, respectively.

Figure 2: Impact of achieving the widely-accepted benchmark of 70 percent excise tax share on Pakistan's economy

% change	
Consumption of cigarettes	-32,5
Consumption expenditure on cigarettes	73.3
Overall household consumption	0.7
Raw tobacco output	-7.8
Cigarette industry output	-32,4
Employment in the cigarette industry	-41.5
Employment in tobacco growing	-7.5
Overall employment in other sectors	0.5
Overall employment in the economy	0.5
Household income	0.12
Value-added	0.13
Tax revenue from cigarettes	101.9
• GDP	0.03

Source: Authors' estimates from CGE model

Policy recommendations

- A substantial increase in the FED is needed to reach the widely-accepted benchmark of an excise tax share of 70 percent of the retail price. This would make cigarettes less affordable and discourage demand for cigarettes and would also result in other macroeconomic gains.
- A large gap exists between tax rates applied to lowpriced and high-priced brands. It is recommended to move towards a uniform FED rate for all cigarette brands. This would help in reaping the benefit of the price in line with the results of the study.

Notes:

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 $^{^{\}rm 1}$ SPDC estimates based on GATS 2014 and population projection for 2021.

² Institute of Health Metrics and Evaluation. Global Burden of Disease, GBD Compare. University of Washington, 2019.

³ SPDC. (2018). Macroeconomic impacts of tobacco use in Pakistan. Research report. Social Policy and Development Centre (SPDC). Available at < https://spdc.org.pk/publications/macroeconomic-impacts-of-tobacco-use-in-pakistan>.

⁴ The second-largest revenue source is the General Sales Tax (GST) on the production of cigarettes, applied at the rate of 17 percent of the price that includes producer's or ex-factory price and FED.