# **CSEA POLICY BRIEF**



### Research Project

A Scoping Study of Nigeria's Tobacco Market



## Simulation of the Effect of Tax Increase

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#### INTRODUCTION

In June 2018, Nigeria introduced a new tax regime on tobacco products. In addition to the present 20% ad valorem excise duty charged on locally produced goods, tobacco products will now attract a specific duty of №20 per pack, which will rise to №40 and №58 in 2019 and 2020 respectively. Given government's decision to adopt tobacco taxation as part of broader tobacco control measures, we examine the potential impacts of this new policy as well as other recommended changes in the tobacco tax levels.

Specifically, we estimate the impact of changes in excise duty level on key measured outcomes: cigarette consumption, smoking prevalence, government revenue, gross sales value after tax, and duty burden. Based on the results of the simulations, we provide useful policy recommendations.

#### METHODOLOGY

For this study, we run simulations using the Tobacco Tax Simulation Model (TETSiM). TETSiM is an advanced spreadsheet-based simulation tool originally designed by the University of Cape Town's Economic of Tobacco Control Project and adapted to fit the Nigerian context by researchers at CSEA. Using TETSiM, we are able to calculate the impact of four policy interventions (or changes in excise duty level) on measured outcomes at a point-in-time and over a three-year period.

Our model consists of five market segments: domestically-produced cigarettes (premium, midpriced, and economy), imported cigarettes, illicit cigarettes segments.

The data used in this model were collected from multiple sources. Cigarettes price data were based on CSEA survey of randomly selected retail outlets in 2018 (January- February) in twelve states across the six geopolitical zones (2 states per zone) in Nigeria. Cigarette brands, taxes collected on domestic brands and production data were provided by the Nigeria Customs Service (NCS). Income, inflation, and population growth data were sourced from the National Bureau of Statistics (NBS). Other secondary data include: total quantity of cigarette consumed in the country – obtained from GlobalData Plc; smoking prevalence – GATS; price elasticity of demand, income elasticity of demand, illicit market share, and percentage increase in net-of-tax – obtained from the literature.

A higher specific excise tax on tobacco products will yield better public health and fiscal benefits

Table 1 presents the results of scenario 1 entailing no change in income growth and industry price/net-of-tax. Other scenarios are presented in the full report. Of particular interest is the first policy intervention (PI.1) which is the new government tax policy. Such an intervention would reduce consumption of cigarettes by 3.2% (29 million packs), raise excise tax revenues by 153% (№11.2 billion), and increase the average share of taxes in the retail price of cigarettes from 4% to 9.4%. However, the policy intervention in line with the WHO-recommendation tax policy (PI.4) yields more desirable impact: larger reductions in cigarette consumption (by 13.2%), higher excise tax revenue (by 793.7%), and higher average share of tax in the retail price of cigarettes (24.3%).

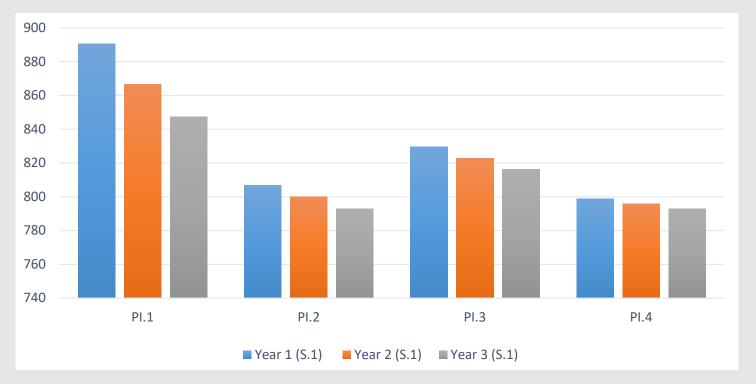
Table 1: Summary Results for Scenario 1

Measured Outcome	Year	Pre-June Excise Tax Structure: 20% ad valorem	PI.1 –New government policy:  20% ad valorem + ₩20 specific tax	PI.2 – Nigerian Public (mode): №129 specific tax	PI.3 – Nigerian Public (average): №96 specific tax	PI.4 – WHO- recommended: №139 specific tax
		40% Import levy	50% Import levy	50% Import levy	50% Import levy	50% Import levy
Cigarette consumption (million sticks)	2018		891	807	830	799
	2019	920	867	800	823	796
	2020		847	793	816	793
Smoking prevalence (%)	2018		5.51	5.26	5.32	5.23
	2019	5.60	5.44	5.23	5.30	5.22
	2020		5.38	5.21	5.28	5.21
Total excise tax revenue (₩ billion)	2018		18.5	60.7	48.2	65.4
	2019	7.3	28.3	65.0	52.0	68.5
	2020		36.8	69.5	56.0	71.9
Total government revenue (№ billion)	2018		36.3	79.3	66.5	84.0
	2019	23.7	47.7	83.7	70.5	87.3
	2020		54.8	88.2	74.5	90.8
Gross sales value after tax (** billion)	2018		151.8	135.5	140.1	120.4
	2019	157.0	146.9	134.1	138.8	119.7
	2020		141.9	127.2	133.4	95.0
Excise tax burden (% of retail price)	2018		9.4	22.8	19.8	23.7
	2019	4.0	13.4	24.0	20.8	24.4
	2020		16.4	24.5	21.8	25.0

<sup>\*</sup>Baseline data: Pre-June 2018 (20% ad valorem excise tax ad 40% import levy)

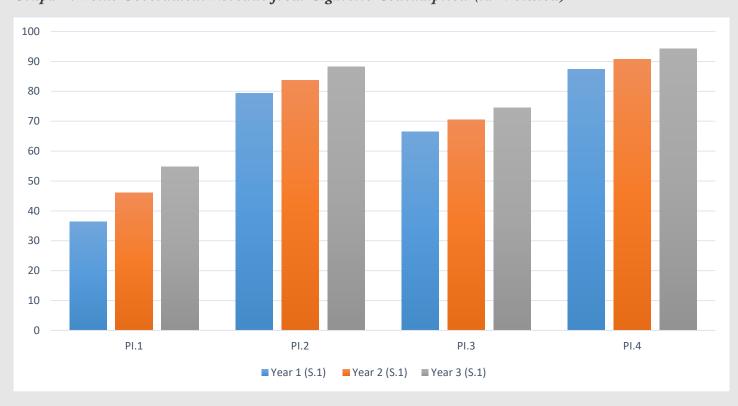
Graph 2 shows that the fourth policy intervention (PI.4) amounting to №139 specific tax (inline with WHO recommendation of an excise tax of 75% retail price) yield the more desirable decrease in cigarette consumption compared to the new government policy.

Graph 1: Cigarette Consumption (in million packs)



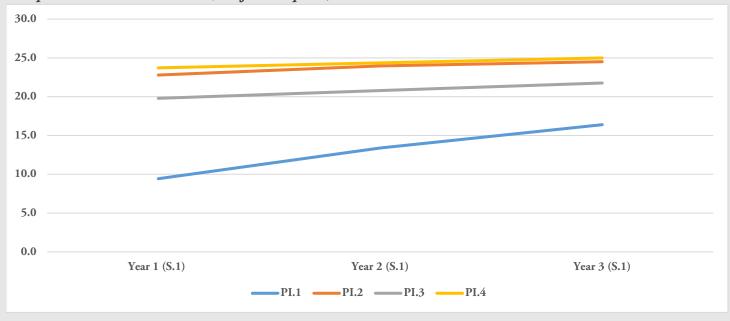
Graph 2 shows that the fourth policy intervention (PI.4) amounting to №139 specific tax (inline with WHO recommendation of an excise tax of 75% retail price) also yield a more desirable increase in cigarette consumption compared to the new government policy.

Graph 2: Total Government Revenue from Cigarette Consumption (in N billion)



At present, low taxes on tobacco products (with excise tax burden at 4%) have made cigarettes very affordable in Nigeria. There is need for higher excise tobacco taxes levied under specific tax structures in order to increase tax burden, reduce affordability, as well as reduce consumption of tobacco products in the country. Graph 3 shows that policy interventions two and four (PI.2 and PI.4) which impose higher specific taxes yield he most desirable outcome.

Graph 3: Excise Tax Burden (% of retail price)



#### Recommendations

The analysis clearly indicates that the new tobacco taxation policy of the government can meaningfully reduce cigarette consumption and increase fiscal revenues over the three years that the tax plan covers. However, excise tax burden will remain low and cigarette consumption will remain significant despite projected drop.

- ⇒ The government should not to recall the new tobacco tax policy given its projected impact on public health as well as revenue.
- ⇒ Going forward, the government will need to draft a follow-up tax plan that builds on the health and fiscal gains of the current one which will expire in 2020. T
- ⇒ The follow-up tax plan should push excise tax burden to the WHO-recommended standard (policy intervention 4) specifically ensuring a higher tax level levied as specific tax (of N139 specific tax).

The Campaign for Tobacco-Free Kids (CTFK) funded the Centre for the Study of the Economies of Africa to conduct a scoping study on the tobacco market. This policy brief presents one out of the three components of the study. The full report will be made available on CSEA website: www.cseaafrica.org

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