



## Fiscal and Public Health Impact of a Change in Tobacco Excise Taxes in Ghana

Summary of ATAP Working Paper 20 by Ama Pokuaa Fenny, Aba Obrumah Crentsil, Christian Kwaku Osei and Felix Ankomah Asante

Cigarettes have generally become less affordable over time in developed economies, with increased taxes and low income growth, but more affordable in developing countries, where there have been minimal changes in taxes (Chaloupka et al. 2019). Studies by the WHO suggest that 80% of the world's smokers live in low- and middle-income countries (LMICs), and that by 2030 more than 80% of those dying from tobacco-related diseases will be from those countries (Ho et. al. 2018). In Ghana, more than 5,000 people are killed by tobacco-caused diseases every year (Tobacco Atlas 2018). Recent estimates show that more than 5,000 children (10-14 years old) and 804,000 adults (15+ years old) in Ghana use tobacco every day (Tobacco Atlas 2018).

### Making the case for the use of taxes

The effectiveness of increases in excise tax as a tool for reducing tobacco use depends on how the tax increase impacts the retail price of the product (IARC 2011; Linegar and Walbeek, 2018; Van Walbeek 2010). Global tobacco consumption and taxation policies have been strongly influenced by the WHO Framework Convention on Tobacco Control. Specifically, Article 6 of the WHO framework recognises price and tax measures as effective mechanisms to decrease demand for tobacco. In addition, the guidelines for implementation of Article 6 encourage the use of taxation in comprehensive strategies for tobacco control. However, tobacco tax rates in many LMICs are currently low, and demand for tobacco products is relatively inelastic (Kostova et al. 2013).

### Tobacco taxes in Ghana – too low?

Prior to 2007, Ghana imposed a flat ad valorem rate of 140% (of the CIF value) on all tobacco products. The taxation structure was changed to a differentiated specific excise tax for cigarettes in 2007 – the rate varied depending on the type of cigarette imported. However, two years after

this tax structure was imposed there was a decrease in total tax revenue from non-petroleum excisable products, mainly driven by a decrease in revenue from alcoholic beverages – revenue from tobacco taxes actually increased. Unfortunately, with the reduction in total revenue, coupled with the prevailing tax administrative approach, the government reverted to the previous tax regime in 2010. This was a flat ad valorem rate of 140% of the CIF value, which increased to 150% in 2014, and to its current rate of 175% in 2015.

The current CIF value is, however, very low compared to the retail price. Although the ad valorem rate is higher in sub-Saharan Africa, and above the ECOWAS minimum ad valorem benchmark of 50%, when converted Ghana's excise tax as a percentage of cigarette prices is comparatively low in Africa (ECOWAS Protocol 2017; Parliament of Ghana 2015). It is estimated that the excise tax as a percentage of the retail price of the most sold brand of cigarettes is about 16%, while total tax (excise + import duty + VAT + other levies) is 31.3% of the retail price (MoH and GHS 2010; Parliament of Ghana 2015; Tobacco Atlas 2018; WHO 2019). Ghana's excise tax rate on tobacco products, currently 16%, is also below the WHO recommended minimum threshold of 70% (NCI and WHO 2017; Tobacco Atlas 2018).

### Simulating the effect of a tax policy change

Given the current tax administration policy, this paper simulates various mixed tax structure systems for Ghana that can be used as a basis for further policy intervention. Though the current ad valorem tax structure preserves the real value of the excise as prices increase, it is typically susceptible to undervaluation, encourages price reductions, disincentivises costly 'quality' improvements due to the multiplier effect, and encourages 'trading down' in favour of cheaper tobacco products, thereby reducing the health benefits (WHO 2010). On the other hand, imposition of specific excises tends to increase consumer prices relatively

more than ad valorem excises, and leads to relatively higher reductions in consumption. Data for the modelling came from a primary field survey of tobacco prices, as well as data from national and international sources.

### Scenario 1: Introducing a GH₵2 specific tax with the current 175% ad valorem

If the government introduces a uniform specific tax of GH₵2 per pack, equivalent to the ECOWAS directive of US\$0.40 per pack, the retail price will increase by 64% – this would translate to an average retail price of about GH₵11 per pack. Cigarette consumption will reduce by 17% (10.9 million packs), while excise tax revenue is expected to increase by 357% (GH₵132 million).

### Scenario 2: Introducing a GH₵4 specific tax with the current 175% ad valorem

Should the specific tax be doubled to GH₵4.00 per pack, the retail price of cigarettes is expected to increase by 128% to an average price of about GH₵15.50 per pack. Cigarette consumption is estimated to decrease by 27% – 373.1 million fewer cigarette sticks compared with the baseline (2020). The tobacco excise tax revenue will increase by approximately GH₵181.6 million (626%).

### Further reading

Chaloupka, F., Powell, L. and Warner, K. (2019) 'The Use of Excise Taxes to Reduce Tobacco, Alcohol, and Sugary Beverage Consumption', *Annual Review of Public Health* 40: 187-201

ECOWAS Protocol (2017) 'Directive on the Harmonization of Excise Duties on Tobacco Products in ECOWAS Member States', *Seventy Ninth Ordinary Session of the Council of Ministers, Abuja, 13 -14 December 2017*, <http://ecotipa.ecowas.int/wp-content/uploads/2018/05/3-DIRECTIVE-TOBACCO-2017-DEC-FOLDER.pdf>

Ho, L., Schafferer, C., Lee, J., Yeh, C. and Hsieh, C. (2018) 'Raising cigarette excise tax to reduce consumption in low-and middle-income countries of the Asia-Pacific region: a simulation of the anticipated health and taxation revenues impacts', *BMC Public Health* 18(1187)

IARC (2011) *Effectiveness of Tax and Price Policies for Tobacco Control. IARC Handbooks on Tobacco Control* (Vol. 14), <https://publications.iarc.fr/Book-And-Report-Series/Iarc-Handbooks-Of-Cancer-Prevention/Effectiveness-Of-Tax-And-Price-Policies-For-Tobacco-Control-2011>

Kostova, D., Tesche, J., Perucic, A., Yurekli, A. and Asma, S. (2013) 'Exploring the relationship between cigarette prices and smoking among adults: A cross-country study of low-and middle-income nations', *Nicotine and Tobacco Research* 16(SUPPLEMENT1) 10-15, <https://doi.org/10.1093/ntr/ntt170>

Linegar, D. and van Walbeek, C. (2018) *The effect of excise tax increases on cigarette prices in South Africa*. 65-71, <https://doi.org/10.1136/tobaccocontrol-2016-053340>

MoH and GHS (2010) *Needs Assessment for Implementation of the WHO Framework Convention on Tobacco Control in Ghana*, [https://www.ghanahealthservice.org/downloads/Needs\\_Assesment\\_for\\_Tobacco\\_Control\\_In\\_Ghana.pdf](https://www.ghanahealthservice.org/downloads/Needs_Assesment_for_Tobacco_Control_In_Ghana.pdf)

NCI and WHO (2017) *National Cancer Institute and World Health Organization. The Economics of Tobacco and Tobacco Control Beyond Taxation: Monograph Presentation*, <http://pubdocs.worldbank.org/en/856731488396350719/FJC-World-Bank-Monograph-Presentation-Feb-27-2017.pdf>

Parliament of Ghana (2015) *Excise Duty (Amendment) Act, 2015*

Tobacco Atlas (2018) *Tobacco Taxes. Country Profile: Ghana*, <https://tobaccoatlas.org/country/ghana/>

Van Walbeek, C. (2010) 'A simulation model to predict the fiscal and public health impact of a change in cigarette excise taxes', *Tobacco Control* (19): 31-36, <https://doi.org/10.1136/tc.2008.028779>

WHO (2019) *WHO report on the global tobacco epidemic, 2019. Country Profile, Ghana*, [https://doi.org/10.1163/9789004423817\\_043](https://doi.org/10.1163/9789004423817_043)

WHO (2010) *WHO Technical Manual on Tobacco Tax Administration*, [https://www.who.int/tobacco/publications/tax\\_administration/en/](https://www.who.int/tobacco/publications/tax_administration/en/)

### Scenario 3: Impose only specific tax of GH₵5 per pack

This policy intervention simulates a complete change from ad valorem to specific excise tax system in line with the minimum threshold of the WHO directive – at least 70% excise tax of the retail price of the most sold brand. This is equivalent to GH₵5 per pack in Ghana. With this, the average retail price is expected to increase by about 152%, with a decrease in cigarette consumption by 29.5%. The imposition of the uniform specific tax is expected to generate an excise tax revenue of about GH₵229.2 million.

### Looking forward

Tobacco taxation creates a win-win policy for governments across the world – creating the fiscal space to raise revenue to finance development programmes, and at the same time decreasing tobacco use as a means of improving public health. This study proposes a uniform mixed excise tax structure, with regular increases of the specific component in order to preserve the real value of the excise tax, as well as controlling for inflation and economic growth.

**Citation:** Fenny, A. P; Crentsil, A. O; Osei, C. K. and Asante, F. A. (2020) *Fiscal and Public Health Impact of a Change in Tobacco Excise Taxes in Ghana*, ATAP Working Paper 20, Brighton, IDS.

### Credits

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The ICTD is funded with UK aid from the UK Government and by the Bill & Melinda Gates Foundation; however, the views expressed herein do not necessarily reflect the UK Government's official policies, nor those of the Bill & Melinda Gates Foundation. Readers are encouraged to quote and reproduce material from the series. In return, ICTD requests due acknowledgment and quotes to be referenced as above.



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