

## What is the buffer function of FCT?

### London Economics' analysis for ESTA

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### What is the buffer function associated with Fine-Cut Tobacco?

In economic terms, the **buffer function** associated with fine-cut tobacco builds on the concept of the **cross price elasticity** of demand.

The **cross price elasticity of demand** is the responsiveness in the quantity demanded of one good following a given price change of another good. For example, in normal circumstances, domestic duty-paid FMC, cross-border purchased FMC, and illicit FMC are to some extent **substitutes** for each other. Therefore, one would expect an increase in the excise duty imposed on duty-paid FMC to *increase* demand for the cheaper cross-border and/or illicit FMC (assuming the prices for the latter to remain constant).

However, given the presence of domestic duty-paid FCT as an additional substitute to domestic duty-paid FMC, the maintenance of an excise duty differential between domestic FMC and FCT will encourage consumers of domestic duty-paid FMC faced with affordability constraints to switch to domestic FCT *rather* than purchasing cross-border FMC or illicit tobacco products. As such, FCT provides a **buffer function** between domestic duty-paid tobacco and cross-border or illicit tobacco products that generate no taxation revenue for the government. Given the responsiveness of duty-paid consumption to changes in price, maintaining a difference in excise duties between FMC and FCT acts to reduce the negative fiscal impact associated with raising duties on FMC, and hence protects the tobacco tax receipts that are accrued by the government.

### The prevalence of FCT and illicit trade

In order to validate the hypothesis in relation to the buffer function of FCT, we assessed the relationship between the market penetration of FCT and illicit consumption, as well as the relationship between FCT penetration and non-domestic paid consumption. In particular, using information from EC DG TAXUD<sup>1</sup> and KPMG Project Sun<sup>2</sup>, we estimated the weighted (Pearson) correlation between FCT penetration across Member States and the various measures of non-

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<sup>1</sup> EC DG TAXUD Releases for consumption of FCT and FMC (2012-2016), July 2017. Note that for Sweden, data from 2015 was used

<sup>2</sup> KPMG (2017), Project SUN: A study of the illicit cigarette market in the European Union, Norway and Switzerland 2016 results. Note that for Sweden, data from 2015 was used.

FCT penetration was calculated using the proportion (in %) of FCT in total (FCT+FMC) consumption. Illicit trade (only) was calculated using the proportion (in %) of counterfeit and contraband (C&C) volume in total cigarettes consumption (in volume). Non domestic consumption (including cross-border) was calculated using the proportion (in %) of non-domestic (in volume) in total cigarettes consumption (in volume).

domestic consumption. The rationale for estimating the weighted correlation was to ensure that the circumstances of more populous countries were adequately reflected. The weights adopted were the size of the adult population in 2017 (using Eurostat data).

*The tax gap is defined as the difference between the value of the tax that theoretically should be paid compared to the value of the tax and duties that is actually recovered.*

*The FCT tax gap in the UK declined from **£1.1 billion** in 2013-14 to **£0.7 billion** in 2016-17*

The analysis indicated that the weighted correlation between FCT prevalence and illicit consumption was - **0.23** suggesting that higher penetration of FCT consumption was associated with a lower incidence of illicit consumption. The weighted correlation between FCT penetration and the prevalence of duty paid cross border consumption was estimated to be **0.25** suggesting that there was a positive relationship between FCT penetration and cross border duty-paid consumption.

These estimates suggest the potential sensitivity of FCT consumers in respect of the price of FCT domestically, and the importance of the taxation decisions in neighbouring jurisdictions. However, potentially more importantly, the fact that higher FCT prevalence limits the extent of illicit consumption illustrates the buffer function of FCT and the role FCT has in supporting government tobacco taxation receipts.