# 

The impact of using the retail price index in the tobacco duty escalator

## Introduction

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# The impact of using the RPI in the tobacco duty escalator

The reintroduction of the tobacco duty escalator (the policy of raising taxes above inflation) in 2010 has led to very large tax increases on tobacco products. Compounding the issue, the government has used an inflation measure – the retail price index (RPI) – that is known to be higher, in general, than the rate of inflation.

A review of price indices by Paul Johnson, director of the Institute for Fiscal Studies, found that the RPI is fundamentally flawed because it is "upwardly biased". It also argued that taxes should not be linked to the RPI inflation measure because of its flaws and that its continued use risks the integrity of the public finances.<sup>2</sup>

The tobacco duty escalator has therefore used an inflated (and discredited) inflation rate and has risen much faster than it would have if an accurate measure of inflation had been used. This has punished smokers by raising the cost of living. In particular it has hurt those on low incomes for whom tobacco duty is highly regressive. This in turn will have driven smokers to the illicit and cross border cigarette market that has grown as a percentage of total consumption since the reintroduction of the duty escalator.<sup>3</sup>

This research paper provides an estimate of the impact of using the RPI for the tobacco duty escalator as opposed to the consumer price index (CPI). It shows what the rates of specific duty would have been if CPI had been used. It provides an estimate of the additional amount of specific duty that has been paid because the escalator has been linked to an inaccurate measure of inflation, and it provides an apportionment of this additional amount to each UK region based on UK population share.

### Key findings:

The use of the RPI rather than a more accurate measure of inflation has cost smokers an additional £1.35 billion in tobacco duty since the reintroduction of the escalator. The amounts smokers have been overtaxed each year are:

2010/11 - £45,902,964

2011/12 - £100,335,606

2012/13 - £121,590,645

2013/14 - £140,574,774

2014/15 - £173,232,271

2015/16 - £209,377,453

2016/17 - £252,504,184

Forecast for 2017/18 - £309,868,691

- 1 Paul Johnson, 2015, UK Consumer Price Statistics: A Review, https://www.statisticsauthority.gov.uk/reports-and-correspondence/reviews/uk-consumer-price-statistics-a-review/
- 2 Specific quotes include: "the maintenance of the RPI on its current basis creates risks for the integrity of other inflation measures and/or for the public finances" and "the RPI is a flawed statistical measure of inflation which should not be used for new purposes and whose use should be discontinued for all purposes".
- 3 HMRC, 2016, Measuring Tax Gaps, Tobacco Tax Gap estimates 2015-16

If the government continues to use the RPI it is likely that the additional tax paid by smokers will continue to increase each year due to the RPI's upward bias.

The overcharged tax can be apportioned across the UK according to population UK share.

LONDON - £174,289,500

SOUTH EAST - £171,951,275

SOUTH WEST - £100,041,059

EAST OF ENGLAND - £115,187,218

EAST MIDLANDS - £99,247,337

WEST MIDLANDS - £116,559,210

YORKSHIRE AND THE HUMBER - £125,306,976

NORTH EAST - £59,177,480

NORTH WEST - £158,258,384

SCOTLAND - £124,821,036

WALES - £68,648,282

NORTHERN IRELAND - £43,977,762

### Methodology

This research calculates what the specific duty rate would have been had the CPI been used in the tobacco duty escalator rather than the RPI. This is then used to calculate how much specific duty would have been collected using this rate based on cigarette clearances. This is subtracted from the amount of tax that would have been taken with the specific duty rates that were in place due to the use of the RPI. This gives an estimate of the additional amount of tax that has been paid due to the use of an inappropriate measure of inflation.

All CPI figures are the September forecast for the relevant year (as is used when RPI is applied to the duty escalator) from the Office for Budget Responsibility's Economic and Fiscal Outlook, except for 2010/11 where the forecast could not be found.

Cigarette clearances are taken from HMRC's Tobacco Bulletin except for 2017/18. Cigarette clearances for 2017-18 are estimated by applying the compound annual growth rate between 2010/11 to 2016/17 to cigarette consumption in 2016/17.

The apportioning of overcharged tax to UK regions is based on population share from ONS mid-2016 population estimates and ONS smoking habits in the UK and its constituent countries in 2016.

**Table 1:** The amount cigarette smokers have been overtaxed due to the use of the retail price index (RPI) rather than the consumer price index (CPI)

	2009/10	2010/11	2011/12	2012/13	2013/14
Escalator	NI/A	4	05*	F.O.	0.0
rate % CPI (September	N/A	1	25*	5.0	2.0
forecast) %		2.25	4.3	2.6	2.9
CPI plus					
escalator rate %		3.25	29.3	7.6	4.9
Actual Specific					
Duty rate £	114.31	119.03	154.95	167.41	176.22
Specific Duty if CPI was used £		110.00	150.61	164.00	170.05
CPI was used £		118.03	152.61	164.20	172.25
Cigarette clearan	ces	45,678,000,000	42,813,000,000	37,932,000,000	35,414,000,000
T. 10 D					
Total Specific Dur on RPI rate £	ty	5,437,052,340	6,633,874,350	6,350,196,120	6,240,655,080
Total Specific Du	ty	3,407,032,040	0,000,074,000	0,000,100,120	0,240,033,000
on CPI calculated					
rate £		5,391,149,376	6,533,538,744	6,228,605,475	6,100,080,306
Difference in					
specific duty:					
RPI vs CPI £		45,902,964	100,335,606	121,590,645	140,574,774
	2014/15	2015/16	2016/17	2017/18	
Escalator	2014/13	2013/10	2010/17	2017/10	
rate %	2.0	2.0	2.0	2.0	
CPI (September	1.0	0.0	0.6	2.6	
forecast) %	1.8 or	0.2	0.6	2.6	
		0.2	0.6	2.6	
forecast) % CPI plus escalatorate %	or				
forecast) % CPI plus escalatorate %  Actual Specific	or 3.8	2.2	2.6	4.6	
forecast) % CPI plus escalatorate %	or				
forecast) % CPI plus escalatorate %  Actual Specific Duty rate £	or 3.8	2.2	2.6	4.6	
forecast) % CPI plus escalatorate %  Actual Specific Duty rate £ Specific Duty if CPI was used £	3.8 184.10	2.2	2.6	4.6 207.99	
forecast) % CPI plus escalatorate %  Actual Specific Duty rate £ Specific Duty if CPI was used £  Cigarette	184.10 178.80	2.2 189.49 182.73	2.6 196.42 187.48	4.6 207.99 196.10	
forecast) % CPI plus escalatorate %  Actual Specific Duty rate £ Specific Duty if CPI was used £	3.8 184.10	2.2	2.6	4.6 207.99	
forecast) % CPI plus escalatorate %  Actual Specific Duty rate £ Specific Duty if CPI was used £  Cigarette clearances  Total Specific Duty	or 3.8 184.10 178.80 32,661,000,000	2.2 189.49 182.73 30,971,000,000	2.6 196.42 187.48 28,246,000,000	4.6 207.99 196.10 26,071,454,891	
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forecast) % CPI plus escalatorate %  Actual Specific Duty rate £ Specific Duty if CPI was used £  Cigarette clearances  Total Specific Duron RPI rate £ Total Specific Duron RPI rate £	3.8 184.10 178.80 32,661,000,000 ty 6,012,890,100 ty	2.2 189.49 182.73 30,971,000,000	2.6 196.42 187.48 28,246,000,000	4.6 207.99 196.10 26,071,454,891	
forecast) % CPI plus escalatorate %  Actual Specific Duty rate £ Specific Duty if CPI was used £  Cigarette clearances  Total Specific Duty on RPI rate £ Total Specific Duty on CPI calculated rate £	3.8 184.10 178.80 32,661,000,000 ty 6,012,890,100 ty	2.2 189.49 182.73 30,971,000,000 5,868,694,790	2.6 196.42 187.48 28,246,000,000 5,548,079,320	4.6 207.99 196.10 26,071,454,891 5,485,016,814	
forecast) % CPI plus escalatorate %  Actual Specific Duty rate £ Specific Duty if CPI was used £  Cigarette clearances  Total Specific Duron RPI rate £ Total Specific Duron CPI calculated rate £  Difference in	3.8 184.10 178.80 32,661,000,000 ty 6,012,890,100 ty	2.2 189.49 182.73 30,971,000,000 5,868,694,790	2.6 196.42 187.48 28,246,000,000 5,548,079,320	4.6 207.99 196.10 26,071,454,891 5,485,016,814	
forecast) % CPI plus escalatorate %  Actual Specific Duty rate £ Specific Duty if CPI was used £  Cigarette clearances  Total Specific Duty on RPI rate £ Total Specific Duty on CPI calculated rate £	3.8 184.10 178.80 32,661,000,000 ty 6,012,890,100 ty	2.2 189.49 182.73 30,971,000,000 5,868,694,790	2.6 196.42 187.48 28,246,000,000 5,548,079,320	4.6 207.99 196.10 26,071,454,891 5,485,016,814	

### TOTAL £1,353,386,589

<sup>\*</sup> In 2011/12 specific duty was raised 25% above RPI. However the ad valorem aspect of tobacco duty was reduced from 24% to 16.5%.

**Table 2:** Tobacco duty overcharged apportioned to UK regions and countries based on mid-2016 UK population share

Region	Population	Smoking rate	Geographical share £
UNITED KINGDOM	65,648,054	15.8%	1,353,386,589
LONDON	8,787,892	15.2%	174,289,500
SOUTH EAST	9,026,297	14.6%	171,951,275
SOUTH WEST	5,515,953	13.9%	100,041,059
EAST OF ENGLAND	6,130,542	14.4%	115,187,218
EAST MIDLANDS	4,724,437	16.1%	99,247,337
WEST MIDLANDS	5,800,734	15.4%	116,559,210
YORKSHIRE AND			
THE HUMBER	5,425,741	17.7%	125,306,976
NORTH EAST	2,636,848	17.2%	59,177,480
NORTH WEST	7,219,623	16.8%	158,258,384
SCOTLAND	5,404,700	17.7%	124,821,036
WALES	3,113,150	16.9%	68,648,282
NORTHERN IRELAND	1,862,137	18.1%	43,977,762

NB regional totals sum slightly higher than UK total due to rounding.

