

Trends in Smoking Prevalence and Tobacco Consumption

Patrick Malone and Philip O’Connell

Key Point:

In recent decades Ireland has demonstrated a strong track record in tobacco control and the introduction of policy measures aimed at reducing smoking prevalence and tobacco consumption. From survey data provided by the National Tobacco Control Office (NTCO) on the prevalence of smoking among the population aged 15 years and over, it is estimated that smoking prevalence has fallen substantially, from 25% in 2003 to 17% in 2019. This equates to 117,000 fewer smokers in 2019 compared to 2003. In 2019, smoking prevalence was highest among adults in aged 25-34 years (22%), while those aged 15-17 years had the lowest smoking rate at 5.5%. In terms of gender, the differences in smoking rates has widened during these years with 19% of men and 15% of women reported as being smokers in 2019. We estimate that the number of cigarettes consumed fell by between 6% and 14% between 2013 and 2018, with the difference mainly depending on the data source used.

Policy Context: Changing Trends in Tobacco Consumption and Smoking Prevalence

According to the OECD (2018), tobacco consumption is the largest avoidable health risk in the European Union and the most significant cause of premature death, with over 300,000 deaths per year. Moreover, it is a major risk factor for at least two of the leading causes of mortality– circulatory diseases and cancer. In Ireland, almost 6,000 people die annually from smoking related diseases (HSE, 2020a). Ireland has demonstrated a strong track record in tobacco control and aims to reduce smoking prevalence to 5% by the year 2025 (HSE, 2015). Table 1 summarises some of the key initiatives to reduce smoking.

Table 1: Key Developments in Tobacco Control in Ireland

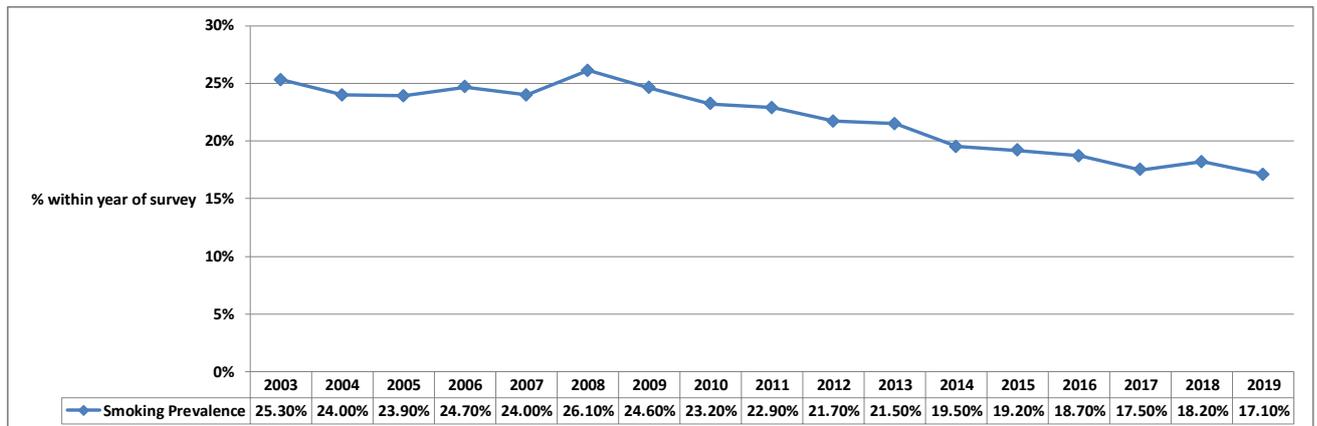
Year	Policy Change
1988	Smoking Banned in Public Buildings
2002	Office of Tobacco Control Established - Prohibition on Advertising and Sponsorship
2004	Workplace Smoking Ban Introduced
2009	Restriction on sale (number and mode of sale) removal of point of sale tobacco displays
2013	Graphic Warnings on Packaging
2014	EU Tobacco Products Directive
2016	Smoking Restrictions in Private Vehicles - law introduced making it an offence to smoke in any car carrying children
2017	Plain Packaging - tobacco products must remove all logos and feature plain packaging.

Source: HSE (2015) (2018)

Trends in Smoking Prevalence, 2003-2019

Trends in smoking prevalence between the years 2003-19 were analysed using survey data provided by the National Tobacco Control Office, Health Service Executive. In this survey of a sample of the population aged 15 years and over, smoking was defined as responding 'yes' to the question "Do you smoke one or more cigarettes each week, whether packaged or roll your own?" Figure one shows that overall smoking prevalence declined from 25% in 2003 to 17% in 2019. Based on CSO (2019) population figures, this equates to about 117,000 fewer smokers in 2019 compared to 2003. It should be noted that an alternative source in smoking prevalence provided by the Healthy Ireland Survey would suggest a greater decline in smoking rates over the shorter term from 23% in 2015 to 17% in 2019 (Department of Health, 2019).

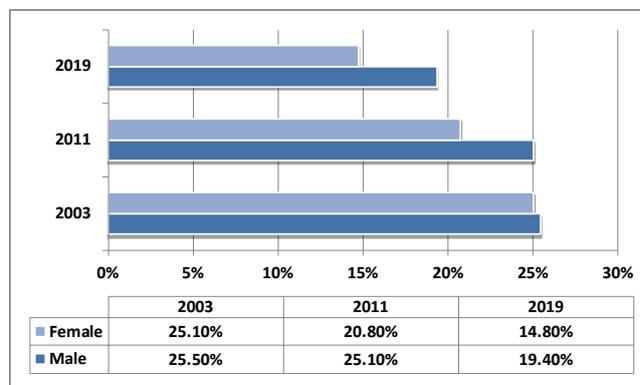
Figure 1: Overall trends in smoking prevalence, 2003-2019



Source: NTCO-HSE (2020)

Figure 2 shows the smoking prevalence of men and women between the years 2003 and 2019. In 2003, there was little difference in the smoking prevalence of women and men at 25% and 25.5% respectively. However, the difference in smoking rates increased in subsequent years, with 21% of women and 25% of men reported as being smokers in 2011. Eight years later, the gap in smoking prevalence remains, with a higher percentage of men (19%) reported being smokers compared to women (15%) in 2019.

Figure 2: Cigarette Smoking Prevalence by Gender, 2003-2019

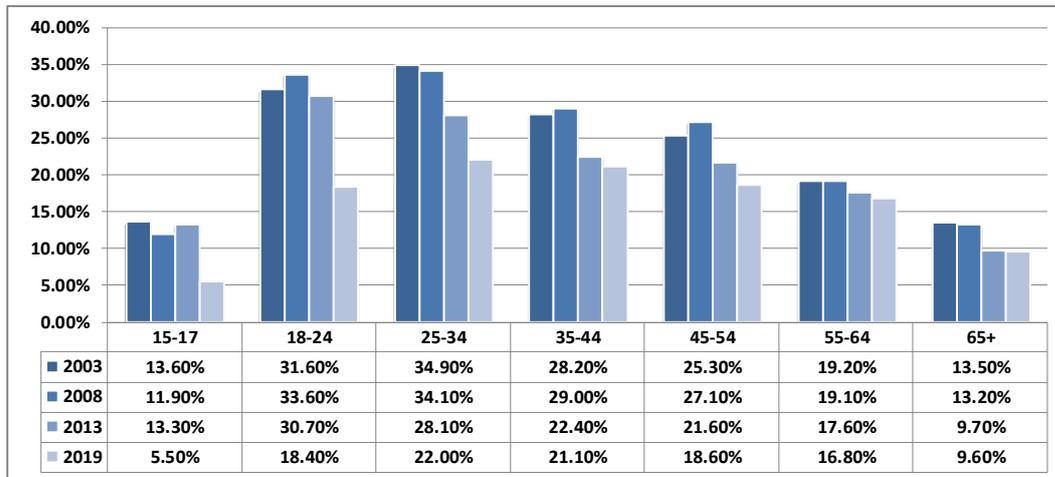


Source: NTCO-HSE (2020)

Figure 3 shows smoking prevalence by age between 2003 and 2019. Over time, there has been a decrease in smoking rates across all age groups. In particular smoking prevalence amongst the younger population fell substantially during these years. The greatest decline in smoking rates was among young adults aged 18-24 years: decreasing from 32% in 2003 to 18% in 2019 (-14 percentage points). There has also been a marked decrease amongst those aged 15-17 years (-8 percentage points) and 25-34 years (-13 percentage points).

In 2019, smoking prevalence was highest among adults in the 25-34 (22%) and 35-44 years (21%) age groups. Just over 5% of those aged 15-17 reported smoking in 2019.

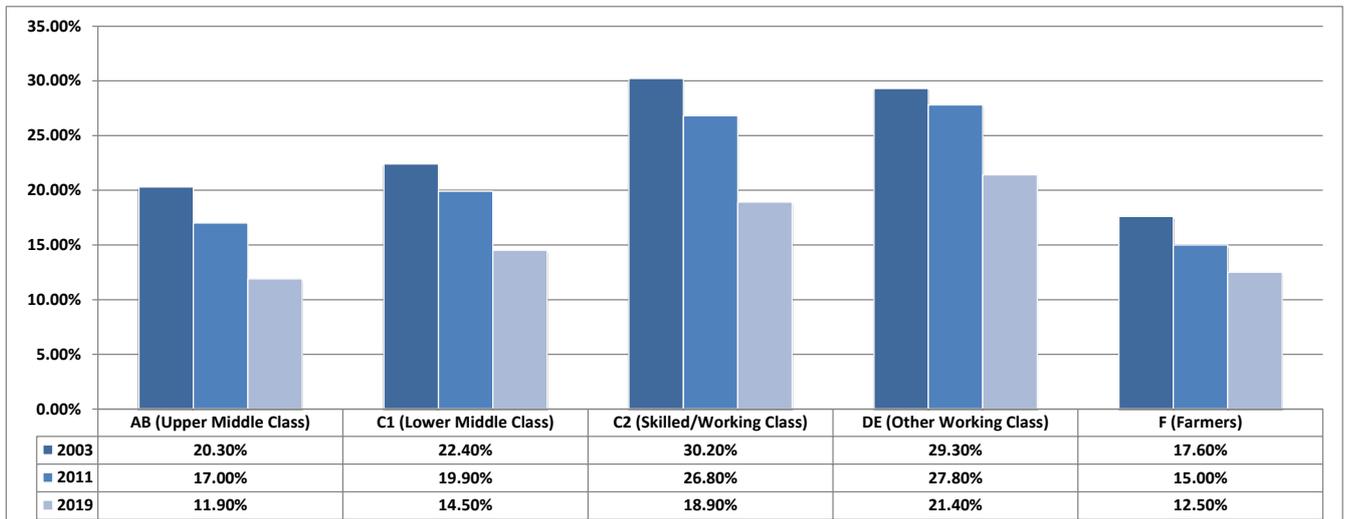
Figure 3: Cigarette Smoking Prevalence by Age, 2003-2019



Source: NTCO-HSE (2020)

Figure 4 shows the rate of smoking prevalence by socio-economic group between the years 2003 and 2019. In 2019, smoking prevalence was highest among those in the lower socio-economic groups, C2 (19%) and DE (21%). By contrast, higher socio-economic groups (AB) and Farmers (F) had the lowest smoking rates, at about 12%. In 2019. Notwithstanding, smoking prevalence has fallen across all socio-economic groups over time. The greatest decrease in smoking rates occurred among those in the lower socio-economic group, C2: decreasing from 30% in 2003 to 19% in 2019^a.

Figure 4: Cigarette Smoking Prevalence by Socio-Economic Group, 2003-2019

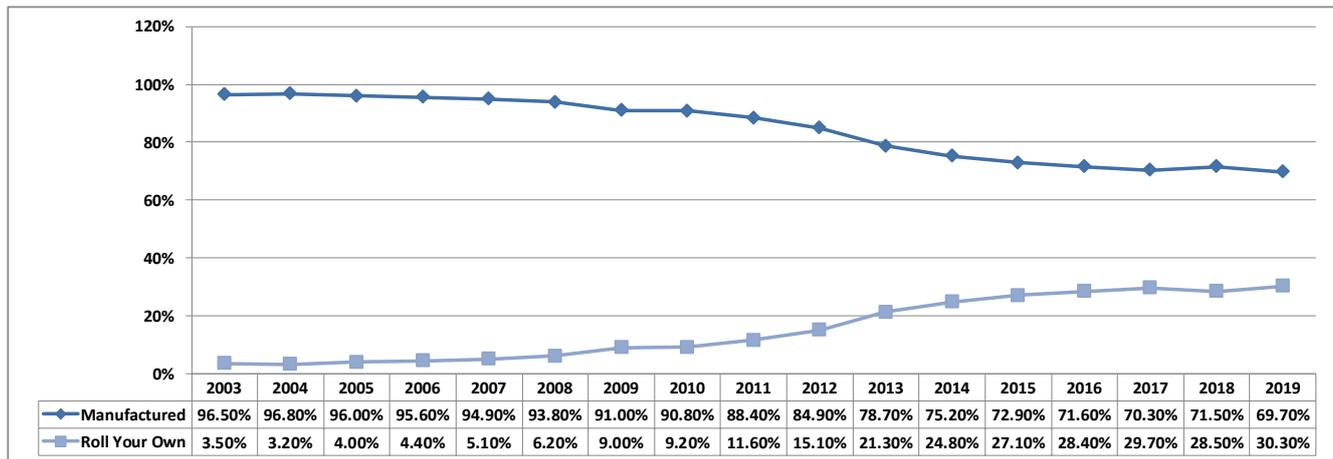


Source: NTCO-HSE (2020)

Figure 5 shows the rate of smoking prevalence by cigarette type (Manufactured or Roll Your Own) between the years 2003 and 2019. While the proportion of the smoking population consuming manufactured cigarettes has fallen overtime, there has been an increase in the consumption of RYO cigarettes. In 2019, the percentage of smokers

consuming manufactured cigarettes decreased from 94.5% in 2003 to almost 70% in 2019. By comparison, the proportion of smokers consuming RYO cigarettes has risen over time, from 3.5% in 2003 to over 30% in 2019. Moreover, the smoking of RYO cigarettes was greatest among young smokers aged 18-24 years at almost 45%, compared to those in the 65+ years' age group at 15% in 2019.

Figure 5: Smoking Prevalence by Manufactured and/or Roll Your Own Cigarettes, 2003-2019



Source: NTCO-HSE (2020)

Table 2 estimates cigarette consumption among the Irish population aged 15 years and over between the years 2013 and 2018. From CSO population estimates and survey data on smoking prevalence, the data suggests that there has been a decrease in the number of smokers in the Irish population. The proportion of the population aged 15 years and over who smoke has fallen from 778,000 in 2013 to 693,000 in 2018: representing a decrease of 86,000 or -11% on 2013. While the average number of cigarettes smoked has been relatively flat during these years (13-14 cigarettes), the consumption of cigarettes has decreased overtime. The quantity of cigarettes consumed decreased from over 3.7bn in 2013 to 3.5bn in 2018: a decline of 200m or -6% on 2013.

Table 2: Estimate of Cigarette Consumption (population aged 15 Years and over), 2013-18

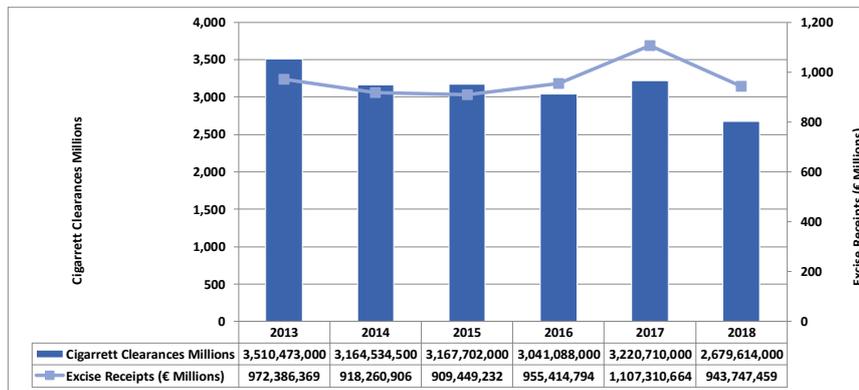
	2013	2014	2015	2016	2017	2018	Numerical change 2013-18	% Change 2013-18
Population - 15 Years and Over (millions)	3,620.8	3,647.9	3,686.1	3,734.1	3,785.5	3,848.3	227.5	6.3
Proportion of 15 Years and Over who smoke	0.22	0.20	0.19	0.19	0.18	0.18	-	-
Total Population - 15 Years and Over who smoke (Thousands)	778.5	711.3	707.7	698.3	662.5	692.7	85.8	-11
Average Number of cigarettes smoked	13.16	12.71	13.46	13.29	13.8	13.95	-	-
Total Number of Cigarettes Consumed Per Year (millions)	3,739.3	3,300.0	3,477.0	3,387.2	3,336.8	3,527.0	212.3	-5.6

Source: CSO (2019); NTCO-HSE (2020)

Consumption and Excise Receipts – Taxed Manufactured and Roll Your Own Cigarettes

The Office of the Revenue Commissioners provides an alternative source of data on the consumption of tobacco (Manufactured and RYO) – tax paid cigarette sales and excise receipts, combined with survey data on tobacco purchased on the illicit market. Figure 6 estimates the clearances and excise receipts of Irish tax paid cigarettes between the years 2013 and 2018. Clearance data provides an estimate of tax paid cigarette/tobacco sales and associated levels of consumption. The quantity of Irish tax based cigarettes consumed has decreased from 3.5bn in 2013 to almost 2.7bn in 2018: representing a decrease of 212m or 6% on 2013. During these years, excise receipts have also fallen from over €972m in 2013 to €944m in 2018: representing a decrease of over €28m or 3% on 2013.

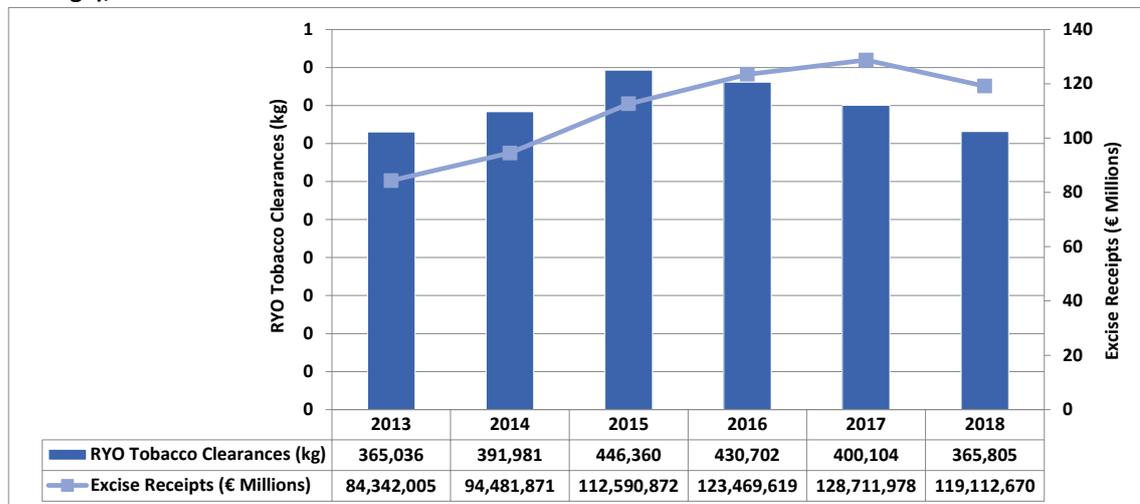
Figure 6: Estimated Cigarette Clearances and Excise Receipts (based on 2-year moving average), 2013-18



Source: Revenue (2020). Note: the figures presented in this graph are estimated on a 2 year moving average. The Cigarette clearances in 2017 were higher than normal due to the stockpiling of cigarettes with branded packs before the cut-off date for the introduction of plain packaging for cigarettes. The higher clearances in 2017 resulted in reduced clearances in 2018.

Figure 7 estimates the clearances and excise receipts of Irish tax paid RYO tobacco between the years 2003 and 2018 (based on 2 year moving average). During these years, the quantity of fine cut/RYO tobacco increased slightly from just over 365,000kg to 446,000kg in 2015, but then declined again to 366,000kg in 2018. On the assumption that a 30gm pack of RYO tobacco contains approximately 50 cigarettes^b, the equivalent number of RYO cigarettes has increased from 608.4m in 2013 to 609.7m in 2018 (+1.3m). Excise receipts for fine cut/RYO tobacco have also increased during these years from almost €84m in 2013 to over €119m in 2018.

Figure 7: Estimated RYO Tobacco Clearances and Excise Receipts (based on 2-year moving average), 2013-18

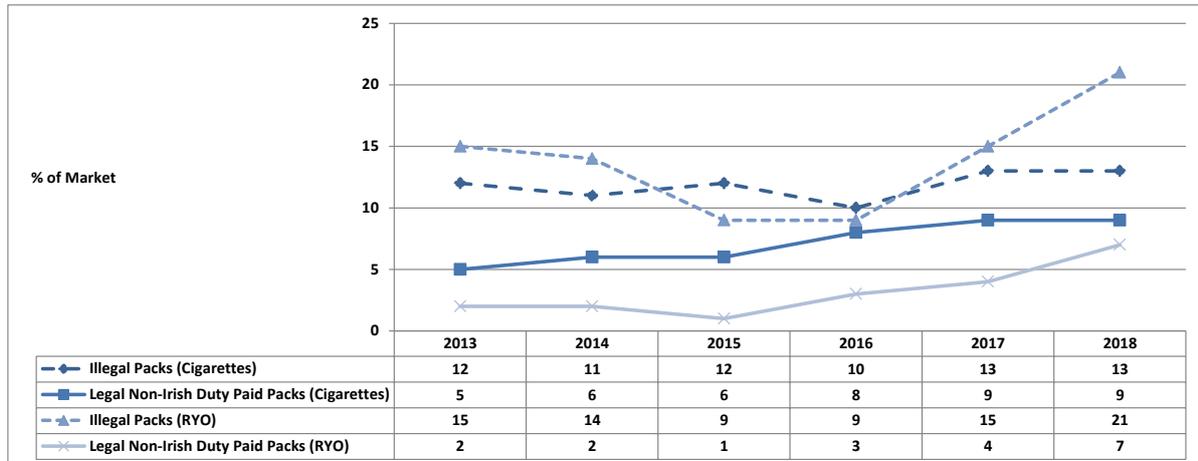


Source: Revenue (2020). Note: the figures presented in this graph are estimated on a 2 year moving average

Illicit Market: *share of manufactured and Roll Your Own Cigarettes*

Estimates of the scale of the duty-free and illicit market in cigarettes and tobacco are based on both cigarette seizures and survey data (Revenue, 2015). Between the years 2008-18, the total number of cigarettes seized by revenue amounted to over 1bn at a value of almost €474m. The quantity of ‘Other Tobacco’ products, which include RYO tobacco, amounted to 55,000kg at a value of €21.5m (Revenue, 2020). Figure 8 shows estimates of cross border purchases and illicit trade between the years 2013 and 2018. From this survey data collected by Revenue on tobacco consumption, it is estimated that 13% of cigarette packs held by smokers surveyed in 2018 were classified as illicit, up from 12% in 2013^c. The proportion of legal non Irish Duty Paid packs increased from 5% in 2013 to 9% in 2018. There has also been a significant rise in the proportion of smokers consuming illicit packs of RYO tobacco: increasing from 15% in 2013 to 21% in 2018. Legal non-Irish duty paid packs also increased from 2% in 2013 to 7% in 2018.

Figure 8: Estimate of Cross Border Purchases and Illicit Trade, 2013-2018



Source: Revenue (2019)

Estimated Total Consumption of Manufactured and Roll Your Own Cigarettes

Table 3 shows estimates for the total consumption of Manufactured and RYO cigarettes between the years 2013 and 2018. Our estimates, which are based on the Revenue data on estimated tax paid cigarettes/tobacco and survey data on the consumption of non-duty paid tobacco, suggest that the number of cigarettes consumed per year fell from almost 5bn in 2013 to 4.3bn in 2018, a decrease of about 14%. The decline in manufactured cigarettes over this period was greater: 19%.

Table 3: Estimated total taxed and non-duty paid cigarettes consumed, 2013-18

	2013	2014	2015	2016	2017	2018	Numerical Change, 2013-18	% Change, 2013-18
<i>Manufactured Cigarette clearances based on 2-Year moving average (million)</i>	3,510.5	3,164.5	3,167.7	3,041.1	3,220.7	2,679.6	-830.9	-23.7%
<i>% Non-duty paid (Revenue Survey Data)</i>	17	17	18	18	22	22	-	-
Estimated Total Manufactured Cigarettes (million)	4,229.5	3,812.7	3,863.0	3,708.6	4,129.1	3,435.4	-794.1	-18.8%
<i>RYO Tobacco clearances based on 2-Year moving average (million)</i>	608.4	653.3	743.9	717.8	666.8	609.7	1.3	0.2%
<i>% Non-duty paid (Revenue Survey Data)</i>	17	16	10	12	19	28	-	-
Estimated Total RYO Cigarette Equivalent (million)	733.0	777.7	826.6	815.7	823.2	846.8	113.8	15.5%
Total Manufactured and RYO Cigarette Clearances (million)	4,118.9	3,817.8	3,911.6	3,758.9	3,887.5	3,289.3	-829.6	-20.1%
Total Manufactured and RYO Cigarette Non-Duty Paid (million)	843.6	772.6	778.0	765.4	1,064.8	992.9	149.3	17.7%
Total Cigarettes Consumed (million)	4,962.5	4,590.4	4,689.6	4,524.4	4,952.4	4,282.2	-680.3	-13.7%

Source: Revenue (2019); (2020)

However, as we show in Table 2 the NTCO survey data suggest that the number of cigarettes consumed was much lower, 3.7bn in 2013 and 3.5bn in 2018, and that the decline in cigarettes consumed was just 6%. The lower levels of cigarette consumption suggested by the NTCO survey data may be due to a tendency for smokers to under-report the quantity of cigarettes that they smoke (Jackson et al., 2019). However, this would not explain the different rates of decline in cigarette consumption. Further research is needed to examine whether the substantially greater decline in cigarette consumption suggested by the Revenue data might be due to the sample of smokers which provides the basis for its estimates of the scale of the illicit and duty-free market.

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Appendix One: Socio-Economic Group Categorisations

Socio-Economic Groups	
A	Professional people, very senior managers in business and commerce, or top-level civil servants
B	Middle management executives in large organizations; Principal Officers in local government and civil service; top management or owners of small business concerns, education and service establishments
C1	Junior management, owners of small establishments and all others in non- manual positions
C2	All skilled manual workers and those manual workers with responsibility for other people
D	All semi-skilled and unskilled manual workers
E	All those entirely dependent on the state long-term; those unemployed for period exceeding 6 months
F	Farmers or farm managers

Source: (HSE, 2020b)

^a For more information on each socio-economic group category see Appendix One.

^b See Evans, O’Farrell and Hickey (2017) for more information on measuring fine cut/RYO tobacco-cigarette equivalent estimates.

^c Of the 13% of the packs found by the survey to be illegal: 78% are classified as contraband (i.e. normal commercial brands of cigarettes bought outside of the country and smuggled here); 21% are classified as ‘illicit whites’ (i.e. cigarettes manufactured for the sole purpose of being smuggled and sold illegally in another market); and 1% are classified as counterfeit packs (i.e. cigarettes manufactured without the authorisation of the rightful owners, with intent to deceive consumers and to avoid paying duty) (Revenue, 2019) The estimates in Figure 8 are based on data obtained from <https://revenue.ie/en/corporate/information-about-revenue/research/surveys/tobacco-consumption-survey/index.aspx>. There appears to be some discrepancies in estimates of the percentage breakdown of illegal packs (cigarettes) and legal non-Irish duty paid packs (cigarettes).