

### Illicit cigarette consumption in Europe

Results for the calendar year 2023

09 September 2024

### Important notice

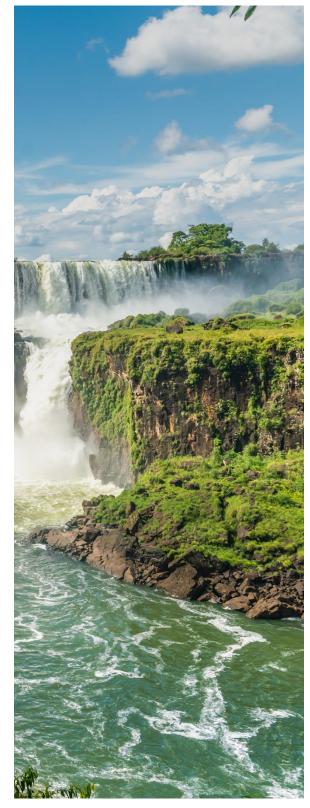
This report of key findings (the 'Report') has been prepared by KPMG LLP. The Report was commissioned by PMPSA (Philip Morris Products SA), described in this Important Notice and in this Report as the 'beneficiary', on the basis set out in a private contract agreed between the beneficiary and KPMG LLP dated 01 February 2024.

Information sources, the scope of our work, and scope and source limitations are set out in the footnotes and methodology contained within this Report. The scope of our work, information sources used, and any scope and source limitations were fixed by agreement with the beneficiary. We have satisfied ourselves, where possible, that the information presented in this Report is consistent with the information sources used, but we have not sought to establish the reliability of the information sources by reference to other evidence. We relied upon and assumed without independent verification, the accuracy and completeness of information available from public and third-party sources.

The findings contained in this Report are those of KPMG LLP. The Report does not include opinions of PMPSA.

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In particular, and without limiting the general statement above, although we have prepared this Report in agreement with the beneficiary, this Report has not been prepared for the benefit of any other manufacturer of tobacco products nor for any other person or entity who might have an interest in the matters discussed in this Report, including for example those who work in or monitor the tobacco or public health sectors or those who provide goods or services to those who operate in those sectors.





### Glossary

Average daily consumption	Daily average consumption by the population of the legal smoking age
BAT	British American Tobacco plc
Bn	Billion
~	Approximately
C&C	Counterfeit and Contraband, including Illicit Whites
CAGR	Compound Annual Growth Rate
Cigarette	Any factory-made product that contains tobacco and is intended to be burned under ordinary conditions of use
Consumption	Actual total consumption of cigarettes in a market, including Legal Domestic Consumption (LDC) and illicit products as well as those legally purchased overseas
Contraband (CB)	Genuine products that have been either bought in a lower-tax country and which exceed legal border limits or acquired without taxes for export purposes to be illegally re-sold (for financial profit) in a higher priced market
Counterfeit (CF)	Cigarettes that are illegally manufactured and sold by a party other than the original trademark owner. In this Report, counterfeit volumes are reported from the manufacturers (BAT, IB, JTI and PMI) participating in the empty pack surveys conducted by third party research agencies. No other counterfeit is included in the volumes reported due to lack of information
Country of origin	Country from which the packs collected are deemed to have originated. This is determined by either the tax stamp on the pack or in cases where the tax stamp is not shown, on the health warning and packaging characteristics
Duty Free	Cigarettes bought without payment of customs or excise duties. Consumers may buy Duty Free Cigarettes when travelling into or out of the EU27 (including Switzerland and Norway) by land, air or sea at legal Duty Free shops
EC	European Commission
EU/EU27	European Union
European Flows Calculation	The primary methodology for measuring consumption in a market. The methodology has been developed by KPMG LLP on a bespoke basis for the specific purpose of measuring inflows and outflows of cigarettes in the scope of this project
IB	Imperial Brands PLC
Illegal products labelled "For Duty Free Sale"	Products marked as Duty Free or for export, but sold illegally through domestic retail channels
Illicit Whites (IW)	Cigarettes that are usually manufactured legally in one country/market but which the evidence suggests have been smuggled across-borders during their transit to the destination market under review where they have limited or no legal distribution and are sold without payment of tax
Illicit Whites with no country- specific labelling	Packs of Illicit White Cigarettes which have "duty free" or no identifiable labelling on the packs
IMS	In Market Sales (the primary source of Legal Domestic Sales volumes)



### Glossary (cont.)

Inflows	Inflows of Non-Domestic product into a market. Refer to the methodology section for further details						
JTI	JT International SA						
KPMG LLP	KPMG Limited Liability Partnership, also abbreviated to KPMG						
LDC	Legal Domestic Consumption is defined as Legal Domestic Sales (LDS) net of outflows						
LDS	Legal Domestic Sales of genuine domestic product through legitimate, domestic channels based on In Market Sales (IMS) data						
m	Million						
ND	on-Domestic product – product that originates from a different market than the one which it is consumed						
ND(L)	Non-Domestic (Legal) – product that is brought into the market legally by consumers, such as during a cross-border trip						
OCG	Organised Crime Group						
OLAF	Office Européen de Lutte Antifraude also known as the European Anti-Fraud Office						
Outflows	Outflows of product from a market. For the purposes of the European Flows Calculation, outflows are to other markets in the study. Refer to the methodology section for further details						
PMI	Philip Morris International						
PMPSA	Philip Morris Products SA						
ppt	Percentage point						
Reporting period	The period covered by this Report (2019-2023)						
Smoking prevalence	The percentage of smokers in the total population of the legal smoking age						
Tobacco taxes	The sum of all types of taxes levied on tobacco products, including VAT. There are two basic methods of tobacco taxation: Normal or specific taxes are based on a set amount of tax per unit (e.g. cigarette); these taxes are differentiated according to the type of tobacco. Ad valorem taxes are assessed as a percentage mark up on a determined value, usually the retail selling price or a wholesale price and includes any value added tax						
Total measured consumption	Total cigarette consumption for those categories of consumption which are able to be measured. In Ukraine, pack swap research does not identify the origin markets of packs collected. Due to this limitation no estimate of ND(L) can be made.						
Unspecified	Unspecified market variant refers to cigarette packs which do not bear specific market labelling or Duty Free labelling						
UNWTO	United Nations World Tourism Organisation						
WAP	The weighted average price for cigarettes calculated by reference to the total value of all cigarettes released for consumption, based on the retail selling price including all taxes, divided by the total quantity of cigarettes released for consumption. The WAP is provided by the European Commission Excise Duty Tables						



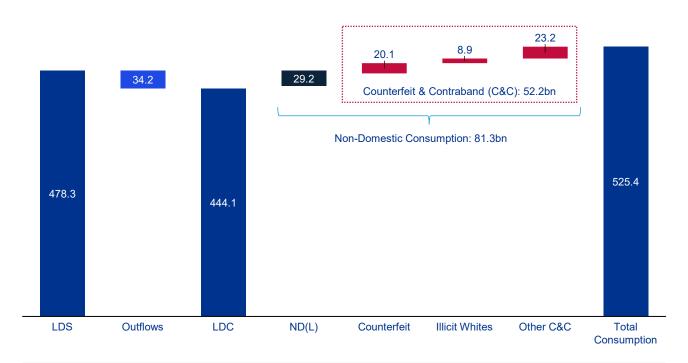
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# KPMG's European Flows Calculation: An approach to categorising cigarette consumption

Estimate of total cigarette consumption in 38 European markets, 2023 (bn cigarettes)<sup>(1)(a)(b)</sup>



- The chart above illustrates KPMG's core approach to estimating the size and scale of illicit cigarette consumption, known as Counterfeit & Contraband (C&C), which includes Illicit Whites.
- KPMG's approach, using empty pack surveys (from market research agencies commissioned by tobacco manufacturers) and Legal Domestic Sales (provided by manufacturers and third party market research agencies) allows us to split total cigarette consumption into its constituent parts.
- Legal Domestic Sales, available in every country, underpin the initial volume estimate, whilst empty pack surveys enable KPMG to estimate the additional 'Non-Domestic' component of consumption, which can be further analysed depending on the source and brand of each pack.
- KPMG's flows calculation ensures that the calculation of inflows and outflows around the 38 European markets are all balanced, so that the overall consumption in each country can be estimated.
- Definitions for each component of cigarette consumption are available in the Methodology section.

Note: (a) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report

(b) The 38 markets are the EU27, Moldova, Norway, Switzerland, Ukraine, the UK, Albania, Bosnia & Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia. Source: (1) KPMG European Flows Calculation 2023



### **About this Report**



This Report is the 2024 output from an annual study estimating the scale and development of the illicit cigarette market in 38 European markets. This Report was commissioned by Philip Morris Products SA for data covering the calendar year 2023. KPMG LLP was previously commissioned by Philip Morris Products SA to undertake this report for data covering the calendar years 2019 to 2022.

This study covers 38 European markets, which are the EU27, Moldova, Norway, Switzerland, Ukraine, the UK and, for the first time, Albania, Bosnia & Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia.

This study contains an overview of the 38 markets as well as a comparison of the EU27 markets vs the non-EU27 markets. There are also individual reports for each of the 38 markets. More information on the agreed scope of work can be seen in the appendices to this Report.

It should be noted that external issues such as the COVID-19 pandemic and the ongoing war in Ukraine have impacted the results since 2020 and 2022 respectively.

The methodology used to estimate the size of the illicit cigarette market in connection with the previous annual studies has continued to be applied consistently in this Report, with the underlying data-sources remaining the same. The methodology is underpinned by a combination of hard data, such as legal sales of cigarettes, travel data, publicly available data-points, such as smoking prevalence and average prices of cigarettes, and the empty pack surveys separately commissioned by a number of tobacco manufacturers and undertaken by independent market research agencies. KPMG's approach is to review these data-points to produce the relevant estimates. Details of the overall methodology is provided within this Report.

This Report refers to interviews with law enforcement, which took place as part of the research process for this study.





## 01 Executive summary





## Executive summary: 38 European markets

#### Total cigarette consumption in the 38 European markets continued its long-term declining trend

- Total cigarette consumption declined by 2.6%, mostly due to a 4.5% fall in Legal Domestic Consumption (LDC)<sup>(1)</sup>
- This decrease in LDC has been partially offset by increasing Non-Domestic consumption, with Non-Domestic volumes recovering to 2019/ pre-COVID levels in 2023
- However, while legal Non-Domestic volumes (ND(L)) are rebounding as cross-border travel continues to recover<sup>(2)(3)</sup> following the easing of COVID travel restrictions, illicit consumption volumes (C&C) have also continued to increase, and now account for 64% of all Non-Domestic consumption

#### Contraband & Counterfeit (C&C) grew, continuing the trend seen in recent years

- Illicit consumption in the 38 markets grew by 3.0% in 2023 to 52.2bn cigarettes; a faster rate than the 0.3% seen in 2022
- Had these cigarettes been legally purchased in the markets in which they were consumed, an additional ~€16.6bn in taxes would have been raised in the 38 markets<sup>(a)</sup>
- The increase in illicit consumption was predominantly due to Ukraine (+1.1bn cigarettes), the UK (+0.8bn) and Greece (+0.6bn). Despite the overall volume increase, the majority of markets (i.e. 21 of the 38) experienced stable or declining illicit consumption volumes in 2023
- A number of markets recorded the lowest volumes of C&C observed in the reporting period. These markets were Croatia, Germany, Italy, Latvia, Lithuania, Malta, Poland, Romania, Spain and Sweden

#### Illicit Whites, Counterfeit and Other C&C volumes increased

- Illicit Whites reversed the declining trend seen in previous years, increasing by 0.6% to 8.9bn cigarettes, representing 17.0% of illicit consumption across the 38 markets
- Counterfeit increased by 4.8% to 20.1bn cigarettes and accounted for 38.6% of illicit consumption in the 38 markets, the highest share recorded<sup>(b)</sup>. Whilst France remains the largest end market for Counterfeit, Counterfeit consumption in France declined by ~22% in 2023. Overall Counterfeit consumption growth was driven by other markets, mostly Ukraine, Greece, the UK, Italy and a number of smaller markets
- Other C&C, which excludes Counterfeit and Illicit Whites, remains the largest category of illicit consumption and increased by 2.4% to 23.2bn. It now represents 44.4% of illicit consumption in the 38 markets
- Illicit consumption formed a greater share of consumption across the 38 markets (9.9%) compared to the EU27 (8.3%) primarily due to the scale of illicit consumption in Ukraine and the UK<sup>(1)</sup>

#### Law enforcement interviews highlighted the nature of illicit cigarette consumption in Europe, and law enforcement efforts to tackle it, are evolving<sup>(3)</sup>

- EU27-based illicit cigarette production continued to move closer to higher-priced Western European target markets
- Organised crime groups (OCGs) are increasingly counterfeiting specific brands and products for targeted higher-priced end markets and regions
- OCGs appear to be specialising and professionalising their role in the supply chain of illicit cigarettes, with manufacture and distribution often undertaken by different groups
- In order to tackle these evolving trends, law enforcement agencies continue to evolve their approach, but with an ongoing focus on collaboration to share actionable intelligence across borders. There is also an emerging focus on their home markets as transit markets as well as production and consumption markets

### 52.2bn

Counterfeit & Contraband cigarettes consumed

	<b>+1.5bn</b> on 2022
Τ	<b>+3.0%</b> on 2022



Of total consumption was C&C





Estimated tax revenue lost<sup>(a)</sup>

PMG

+€1.3bn on 2022 +8.1% on 2022



Note: (a) Tax revenue lost represents estimated excise & VAT if C&C volumes had been consumed legally in the countries of study (b) Counterfeit can only be identified by manufacturers forensically examining their brands collected in empty pack surveys. As only BAT, IB, JTI and PMI participate in the empty pack surveys used in this Report, Counterfeit can only be identified from these manufacturers
 Sources: (1) 38 market/ EU27 level results are an aggregation of the European Flows Calculation results for the 38 market/ EU27, a detailed methodology and list of sources for each market is available in the methodology section of this Report (2) UNWTO and Euromonitor travel data (3) European law enforcement interviews



### Law enforcement trends

#### EU27-based illicit cigarette production continued to move closer to higherpriced Western European target markets

- Intra EU27 illicit production continued in 2023
  - Organised crime groups (or OCGs) are seeking to shorten and de-risk their supply chains to their most profitable markets.
  - Ongoing geopolitical drivers may also be playing a role, with continuing restrictions on the movements
    of people and goods across the Belarus border is reducing illicit flows from a major historical source
    market, and the ongoing war in Ukraine continuing to disrupt illicit cigarette flows to other European
    markets
  - As a result, OCGs are increasingly locating production facilities nearer to large end markets, with a number of markets discovering the first domestic illicit production sites in a number of years
- The brands and labelling of products seized suggests that raided factories were increasingly making products intended for export to other European markets

OCGs are increasingly tailoring their operations to produce products for specific target end-markets and regions

- Brands and labelling of products seized indicate that OCGs are increasingly manufacturing Counterfeit of selected legitimate cigarette brands for the specific higher-priced European markets and regions where these brands are most popular with consumers
- OCGs are also counterfeiting other popular tobacco and nicotine categories. These products are targeted at specific end-markets where these categories have high shares of consumption. Law enforcement agencies noted increased illicit production of water pipe tobacco, tobacco/nicotine pouches and rolling tobacco in 2023

OCGs appear to be specialising and professionalising in terms of their role in the supply chain of illicit cigarettes

- In a number of markets, raids and seizures indicated that the manufacture and supply of illicit cigarettes was increasingly undertaken by different groups
  - Technically skilled OCGs are increasingly focusing on illicit cigarette manufacture at ever professionalising production facilities
  - Distribution of the Counterfeit produced could subsequently be undertaken by different OCGs with an
    established presence in the end markets, often leveraging closed social networks or major transit hubs
    to reach consumers

#### The focus of law enforcement agencies is evolving in a number of markets

- Linked to OCG's ongoing shift in manufacturing location, specific market targeting and professionalisation noted above, the nature of law enforcement agencies' role in combatting illicit cigarette trade is evolving
  - A number of major historical consumption markets for illicit cigarettes were increasingly becoming transit markets, with law enforcement activities shifting towards the prevention of transport of illicit cigarettes to other European markets
  - Given this change in focus, collaboration to create and share actionable intelligence across European law enforcement agencies is increasingly important

Source: (1) Interviews with eight EU27 law enforcement agencies, and two European law enforcement agencies

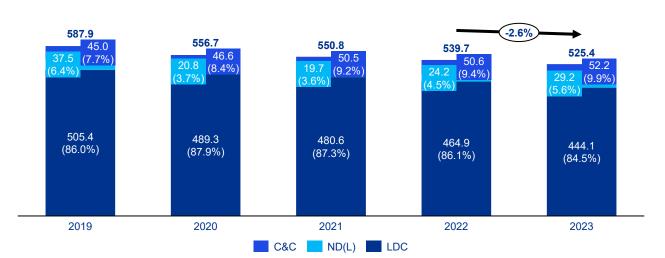


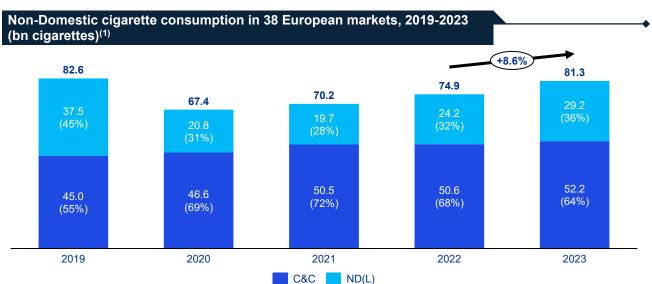


### **Cigarette consumption trends**

- Total cigarette consumption continued to decline in 2023, reducing by 2.6%
- Total cigarette consumption has declined by 10.6% since 2019, driven by a 12.2% decline in Legal Domestic Consumption (LDC)
- This decrease in LDC has been partially offset by increasing Non-Domestic consumption since 2020, with Non-Domestic volumes recovering to 2019/ pre-COVID levels in 2023
- However, while legal Non-Domestic volumes (ND(L)) are rebounding as cross-border travel continues to recover<sup>(2)(3)</sup> following the easing of COVID travel restrictions, illicit consumption volumes (C&C) have continued to increase, and now account for 64% of all Non-Domestic consumption (vs 55% in 2019)

#### Total manufactured cigarette consumption in 38 European markets, 2019-2023 (bn cigarettes)<sup>(1)</sup>





Notes: Sources:

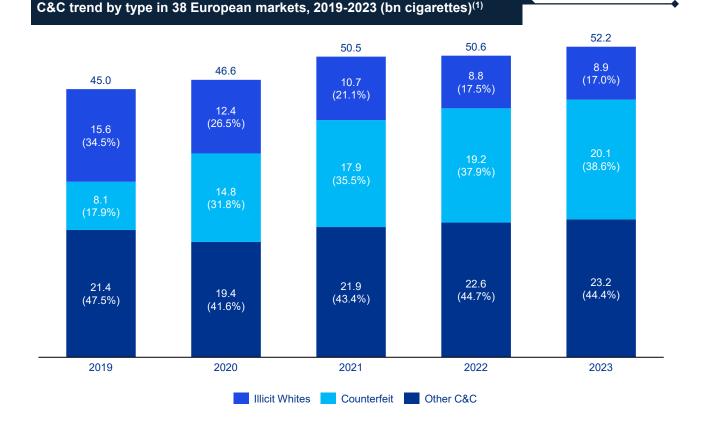
(a) Due to rounding, the difference between 2022 and 2023 totals shown in the chart or commentary may vary from the actuals (1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report; (2) UNWTO; (3) Euromonitor





### **C&C trends by type**

- Total C&C volumes increased by 1.5bn to 52.2bn cigarettes in 2023, the highest level recorded in the period covered by this report
- All components of C&C; Counterfeit, Illicit Whites and Other C&C, increased in volume terms in 2023
- Counterfeit volumes displayed the fastest growth, increasing by 4.8%
- Other C&C volumes increased by 2.4%
- Illicit Whites volumes increased by 0.6%, the first increase seen in the period covered by this report



Notes: (a) Due to rounding, the difference between 2022 and 2023 totals shown in the chart or commentary may vary from the actuals

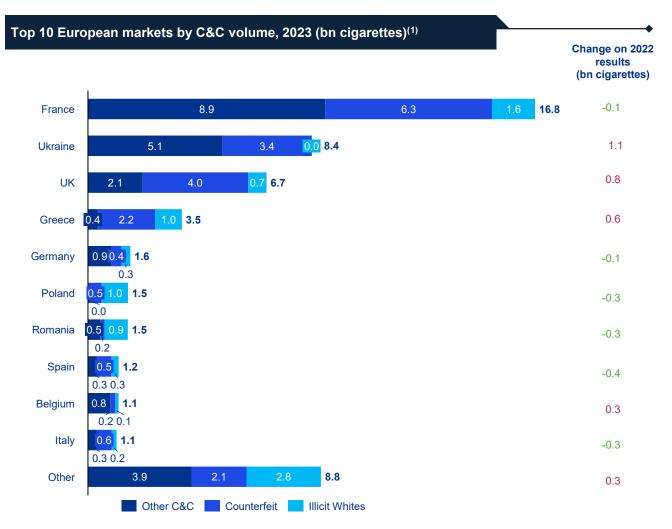
Source: (1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report





### **C&C key markets**

- Increased illicit cigarette consumption in 2023 was primarily driven by an increase in C&C in Ukraine, the UK and Greece
- France continues to remain the largest market for illicit cigarettes across the 38 markets in the study with overall C&C volumes remaining stable vs 2022. Despite this stability there was an underlying mix change, with Counterfeit inflows declining by ~22% and being offset by increased inflows of Illicit Whites and Other C&C. Other C&C (8.9bn cigarettes) and Counterfeit (6.3bn cigarettes) accounted for the majority of illicit consumption in France in 2023
- Ukraine's C&C volumes increased by 1.1bn in 2023 (+14% vs 2022), driven by a 0.91bn (37%) increase in Counterfeit and a 0.15bn (3%) increase in Other C&C
- The UK's C&C volumes increased by 0.8bn in 2023, driven by a 0.35bn increase in Counterfeit, a 0.25bn cigarette increase in Other C&C, and a 0.19bn increase in Illicit Whites
- Greece's C&C volumes increased by 0.6bn in 2023, driven by a 0.43bn cigarette increase in Counterfeit
- Spain saw the largest declines in C&C volumes in 2023, declining by 0.4bn cigarettes



Notes: Source

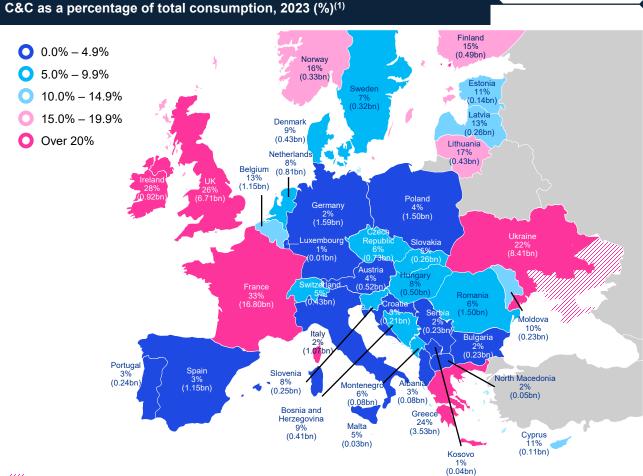
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### **C&C consumption trend**

- 26 of the 38 European markets had illicit consumption shares of total consumption of less than 10%
- The highest illicit consumption shares were in France, Ireland, the UK, Greece and Ukraine
- A number of markets recorded the lowest share of C&C in the reporting period in 2023, these markets were Germany, Spain, Portugal, Poland, Luxembourg, Czech Republic and Austria



#### Pack collections were not able to be conducted in these regions

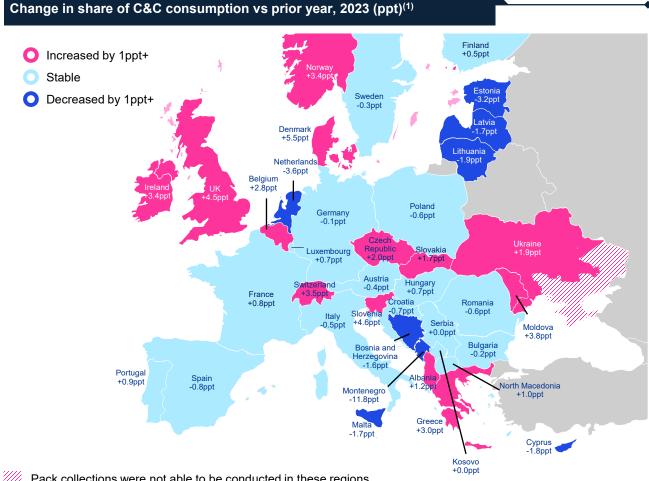
Source: (1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report





### **C&C** consumption trend (cont.)

- 25 out of the 38 markets experienced a stable or declining consumption share of Illicit cigarettes in 2023 •
- Denmark and Slovenia had the largest increase in the share of C&C in 2023, with C&C share increasing by 5.5ppt in Denmark and 4.6ppt in the UK
- Montenegro, the Netherlands and Estonia had the largest decrease in share of C&C, with C&C share • decreasing by 11.8ppt in Montenegro, 3.6ppt in the Netherlands and 3.2ppt in Estonia



Pack collections were not able to be conducted in these regions

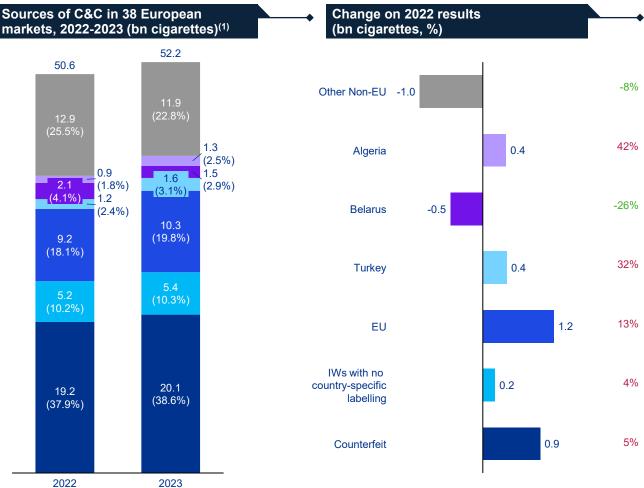
<sup>(1) 38</sup> market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market Source: is available in the methodology section of this Report





### **C&C sources**

- A 1.5bn cigarette increase in overall C&C consumption was driven by a number of movements at a source market level
- Counterfeit consumption increased by 0.9bn in 2023, accounting for 38.6% of all illicit cigarette consumption (vs 37.9% in 2022)
- Illicit cigarettes that can be identified as flowing from one EU27 country to another increased by 1.2bn, reversing the declining trend observed in 2022 (0.2bn decrease), and accounted for 19.7% of illicit consumption (vs 18.1% in 2022)
- Illicit Whites with no country-specific labelling increased by 0.2bn in 2023 accounting for 10.3% of illicit cigarette consumption (vs 10.2% in 2022)
- C&C inflows from Turkey increased by 0.4bn in 2023 to the highest level seen in the reporting period, with the majority of these volumes observed in France, the UK and Belgium
- Against a backdrop of ongoing Belarus border and crossing point restrictions beginning in July 2021, Belarusian C&C inflows continued to decline by 0.5bn (vs a 0.3bn decrease in 2022)<sup>(2)</sup>
- C&C Inflows from Algeria increased by 0.4bn in 2023
- Illicit cigarettes from other non-EU27 markets declined by 1.0bn cigarettes (vs a 0.2bn increase in 2022)



Notes:

(a) Due to rounding, the difference between 2022 and 2023 totals shown in the chart or commentary may vary from the actuals

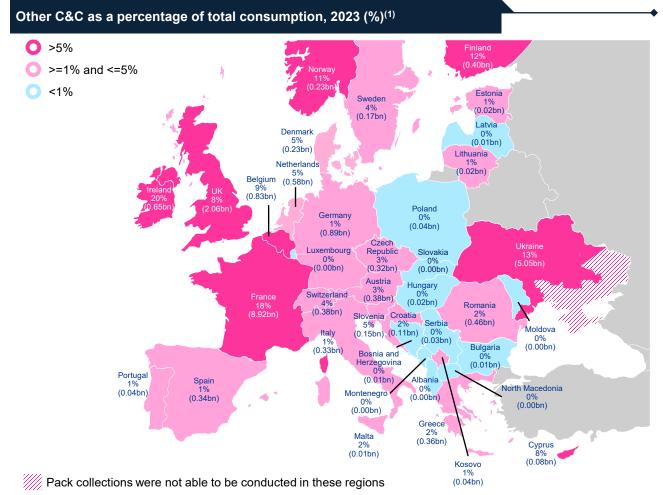
Source: (1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report (2) Context of the ongoing Belarus-EU migration crisis, Office of the United Nations High Commissioner for Human Rights





### Focus on Other C&C

- Other C&C volumes increased by 0.53bn to 23.16bn cigarettes in 2023, or 4.4% of total cigarette consumption in the 38 markets in this study (4.2% in 2022)
- At a market level, the highest Other C&C shares were observed in Ireland, France and Ukraine
- France is the largest consumer of Other C&C in the study, accounting for ~38.5% of all Other C&C consumed in the 38 markets
- Ukrainian Other C&C was primarily comprised of products marked as Duty Free or for export, but sold illegally through domestic retail channels
- The lowest Other C&C shares were observed in Eastern European markets



Source: (1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report

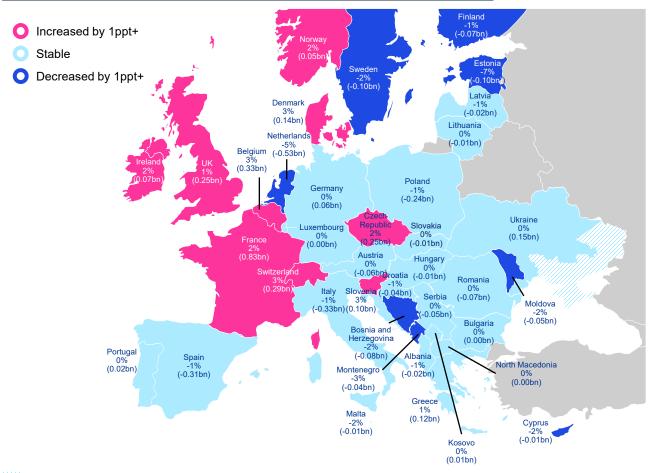




### Focus on Other C&C (cont.)

- The largest increases in share of Other C&C were observed in Belgium, Slovenia, Denmark and Switzerland
- · In volume terms the largest increases were in France, Belgium and Switzerland
- The largest declines in Other C&C share were observed in Estonia, Netherlands and Montenegro
- · In volume terms the largest declines were in the Netherlands, Italy and Spain

#### Change in share of Other C&C consumption vs prior year, 2023 (ppt and absolute)



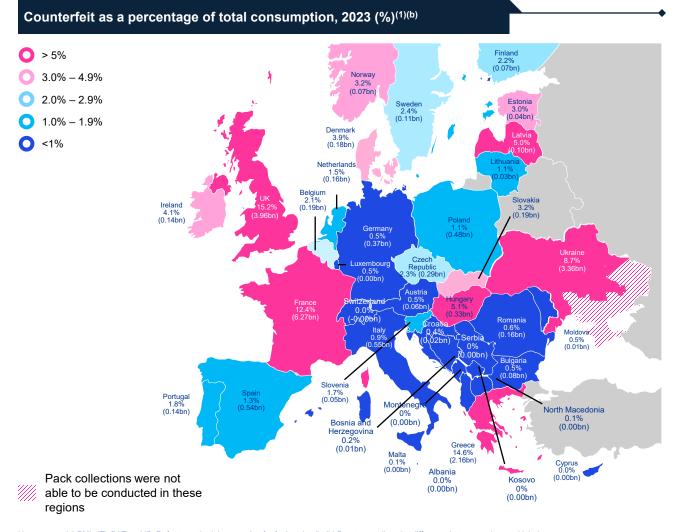
#### Pack collections were not able to be conducted in these regions

Source: (1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report



### Focus on Counterfeit: Share of consumption

- Counterfeit volumes continued to increase in 2023 (+0.9 bn cigarettes), albeit at a lower rate than seen between 2021 and 2022 (+1.3bn)
- Counterfeit now represents 3.8% of total cigarette consumption in the 38 markets in the study; up from 3.6% in 2022 and 1.4% in 2019
- · Counterfeit consumption was highest in France, the UK, Ukraine and Greece
- Interviews with law enforcement<sup>(2)</sup> indicate that significant volumes of the Counterfeit detected in this study could be manufactured in illegal factories within the 38 markets in this study. Furthermore, as only participating manufacturers<sup>(a)</sup> forensically examine the packs collected in the empty pack survey to identify Counterfeit, actual Counterfeit volumes in the 38 markets in this study may be even higher than shown in this Report



Note: Source: (a) PMI, JTI, BAT and IB. Refer to methodology section for further details (b) Due to rounding, the difference between colour and label may vary (1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report; (2) Law enforcement interviews, refer to page 10 for further details

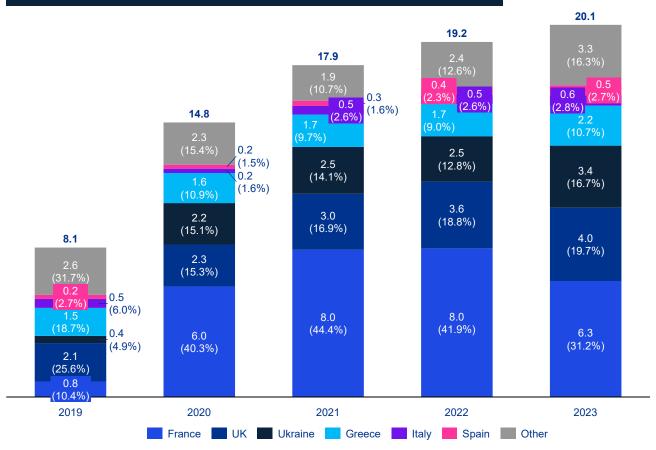




### Focus on Counterfeit: Key markets

Counterfeit volumes in 38 European markets, 2019-2023 (bn cigarettes)<sup>(1)(a)(b)</sup>

- In 2023, and continuing the trend observed in 2022, Counterfeit consumption growth across the 38 markets in the study was driven by markets other than France
- Increased Counterfeit volumes in Ukraine (0.9bn), Greece (0.4bn), the UK (0.4bn) and smaller markets grouped together under the 'Other' category (0.9bn) were the primary drivers of increased Counterfeit consumption, offsetting the declining volumes observed in France
- Despite a 1.8bn decline in Counterfeit volumes in France, the first decline in the reporting period, France continues to be the largest Counterfeit consumption market, accounting for 31% of all Counterfeit consumption across the 38 European markets (42% in 2022) and 49% of all Counterfeit consumption in the EU27 (61% in 2022)



Source:

(1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report

Note: (a) Counterfeit can only be identified by manufacturers forensically examining their brands collected via empty pack surveys. As only BAT, IB, JTI and PMI participate in the empty pack surveys used in this Report, Counterfeit can only be identified from these manufacturers (b) Due to rounding, the difference between 2022 and 2023 totals shown in the chart or commentary may vary from the actuals

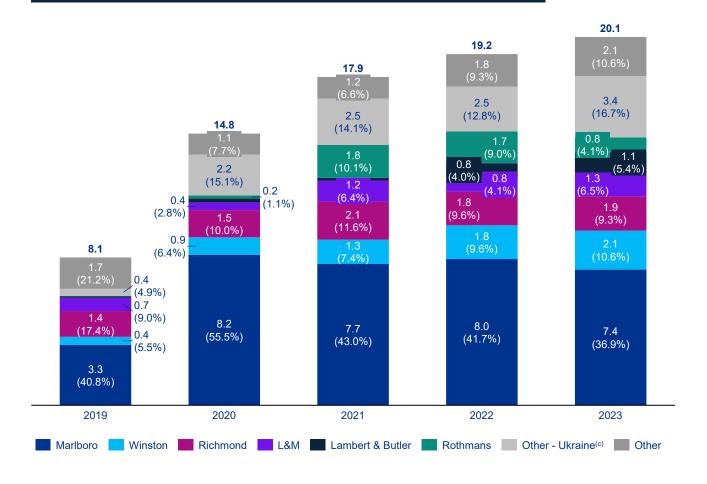




### Focus on Counterfeit: Key brands

- The top three most commonly counterfeited brands; Marlboro, Winston and Richmond accounted for over half (57%)<sup>(c)</sup> of all Counterfeit consumption across the 38 markets in 2023
- There is an ongoing mix change in Counterfeit brands in 2023, with Counterfeit Marlboro, Richmond and Rothmans reducing share, and Counterfeit Winston, L&M, Lambert & Butler and Counterfeit of smaller brands grouped within "Other" increasing share

#### Counterfeit brands in 38 European markets, 2019-2023 (bn cigarettes)<sup>(1)(a)(b)</sup>



Note:

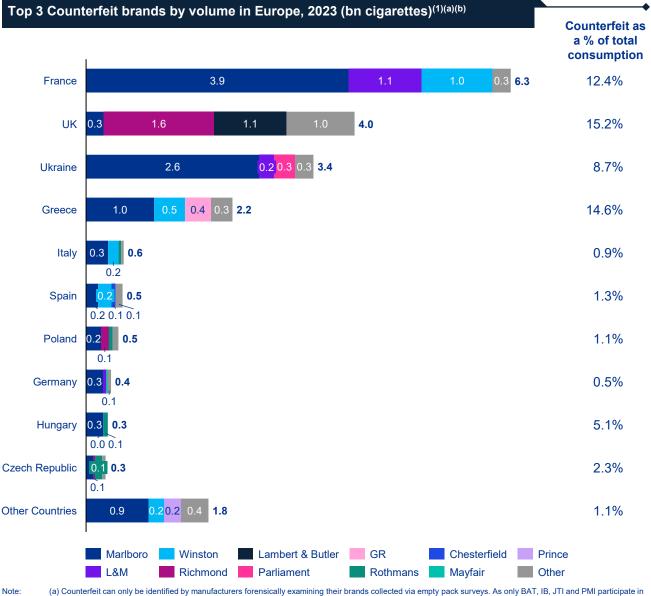
a) Counterfeit can only be identified by manufacturers forensically examining their brands collected via empty pack surveys. As only BAT, IB, JTI and PMI participate in the empty pack surveys used in this Report, Counterfeit can only be identified from these manufacturers (b) Due to rounding, the difference between totals shown in the chart or commentary may vary from the actuals (c) Figures and charts exclude brand details for Counterfeit identified in Ukraine. For 2019 to 2022 a breakdown of Counterfeit consumed in Ukraine by brand was not available. Therefore Ukrainian Counterfeit consumption is included within the 'Other- Ukraine' segment. To allow like for like comparison, 2023 Counterfeit brand details for Ukraine are also included in "Other- Ukraine"

Source: (1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report



### Focus on Counterfeit: Key brands by market

- Whilst Marlboro was the most consumed Counterfeit brand, markets do highlight differences in consumption when it comes to the second and third largest brands
- The UK is the most distinct market with counterfeited Richmond being the most consumed Counterfeit brand, followed by counterfeited Lambert & Butler
- Other markets where specific counterfeited brands were concentrated include Greece (GR), Ukraine (Parliament) and Denmark and Norway (Prince)



: (a) Counterfeit can only be identified by manufacturers forensically examining their brands collected via empty pack surveys. As only BAT, IB, JTI and PMI participate in the empty pack surveys used in this Report, Counterfeit can only be identified from these manufacturers (b) These markets represent the top 10 Counterfeit consumption markets by volume in 2023. Counterfeit volumes by brand for the remaining markets are grouped together in 'Other'

Source:

(1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report

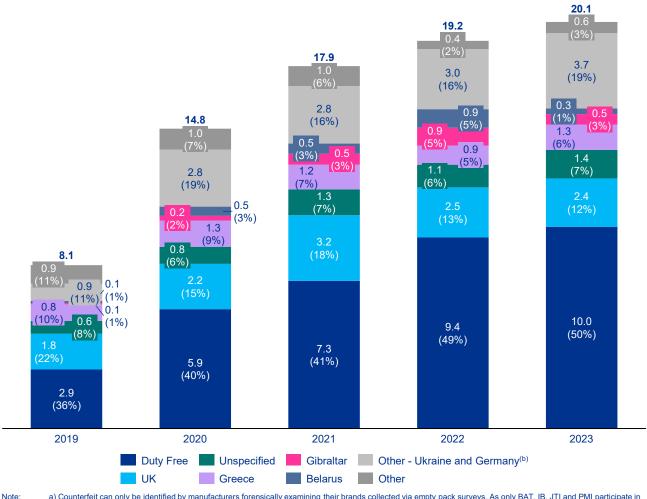




### Focus on Counterfeit: Pack labelling

- Counterfeit packs identified bore the labelling of more than 49 different markets in 2023
- Counterfeit is increasingly bearing Duty Free labelling, with half<sup>(c)</sup> of Counterfeit packs labelled as Duty Free in 2023
- Where Counterfeit packs bore market specific labelling, the largest volumes were identified to be intended for consumption in the UK, Greece, Gibraltar and Belarus

#### Counterfeit by pack labelling in 38 European markets, 2019-2023 (bn cigarettes)<sup>(1)(a)(b)</sup>



Source:

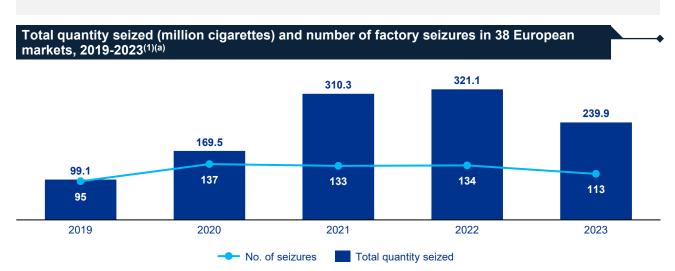
a) Counterfeit can only be identified by manufacturers forensically examining their brands collected via empty pack surveys. As only BAT, IB, JTI and PMI participate in the empty pack surveys used in this Report, Counterfeit can only be identified from these manufacturers (b) Figures and charts exclude labelling details for Counterfeit identified in Germany and Ukraine. Counterfeit pack labelling was not available for Ukraine in 2023, and for Germany in 2020-2022, therefore to allow like for like comparison, Counterfeit volumes identified in these markets have been included in 'Other- Ukraine and Germany' across all years
 (1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report



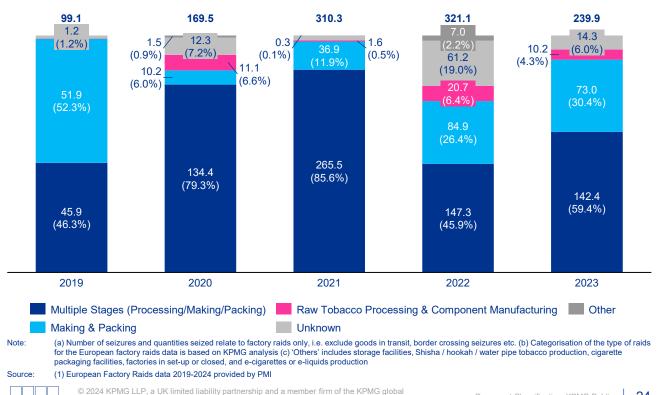


### Focus on Counterfeit: Factory seizures

- Illegal factory seizures and the quantity of cigarettes seized across the 38 markets declined in 2023
- The majority of cigarettes seized are from illegal factories engaged in multiple stages of the illicit cigarette value chain, i.e. primary processing of tobacco and the making and packing of cigarettes into boxes ('Multiple Stages'), or only the making and packing element of the process ('Making & Packing')

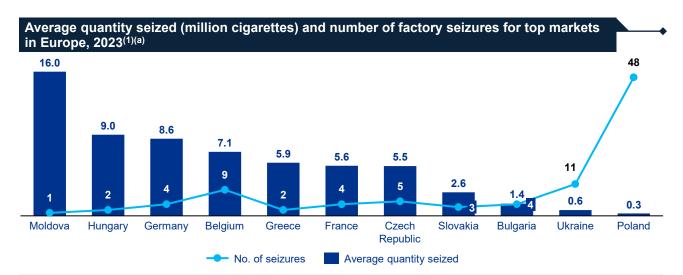


#### Quantity seized (million cigarettes) by factory type in 38 European markets (% of total seizures), 2019-2023<sup>(1)(b)(c)</sup>



крмд

### Focus on Counterfeit: Factory seizures (cont.)



- In 2023, the average quantity of cigarettes seized per seizure event differed widely by market. This may be indicative of varying levels of illegal cigarette factory sophistication
- In 2023, the largest seizure volumes were in Belgium, Germany and the Czech Republic, with the majority of these seizures occurring in factories undertaking multiple stages of the cigarette manufacturing value chain (i.e. Multiple Stages or Making & Packing)
- Despite having the largest number of seizures in 2023, seizure volumes in Poland were relatively low, with most cigarettes seized from smaller scale factories focused on raw tobacco processing or component manufacturing (e.g. filters, cigarette paper, packaging etc.)

#### Quantity seized (million cigarettes) for top markets by factory type in Europe, $2023^{(1)(b)}$

High	Medium Lo	w	No quantity seized	/alue in the grid represents Quantity seized for 2023
	Multiple Stages (Processing/ Making/ Packing)	Making & Packing	Raw Tobacco Processing 8 Component Manufacturing	Unknown
Belgium	50.0	10.0	0.01	
Germany	28.3	5.9		
Czech Republic	26.0			
Hungary	18.0			
Greece	11.8			
Slovakia	7.8			
Poland	0.4		10.0	0.7
France		22.2		
Moldova		16.0		
Ukraine		7.1		
Bulgaria		5.4		
Other Countries				9.8
Total	142.4	73.0	10.2	14.3

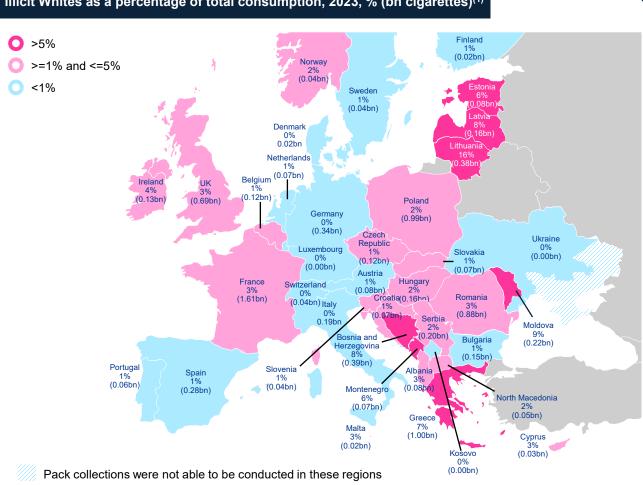
Note: Source (a) Number of seizures and quantities seized relate to factory raids only, i.e. exclude goods in transit, border crossing seizures etc.(b) Categorisation of the type of raids for the European factory raids data is based on KPMG analysis

#### (1) European Factory Raids data 2019-2024 provided by PMI



### **Focus on Illicit Whites**

- Those markets with the highest Illicit Whites shares of total consumption were located in the Eastern part of Europe, close to source markets such as Belarus, Moldova and Kosovo<sup>(a)</sup>
- The highest volume flows of Illicit Whites were measured in France, Greece, Poland, Romania and the UK, with these five markets accounting for more than half of the total Illicit Whites flows identified in the 38 markets in the study
- This largest Illicit Whites volume increases were observed in France (+0.8bn cigarettes), UK (+0.2bn cigarettes) and Moldova (+0.1bn cigarettes)
- This largest Illicit Whites volume declines were observed in Poland (-0.3bn cigarettes), Hungary (-0.2bn cigarettes) and Spain (-0.2bn cigarettes)



Illicit Whites as a percentage of total consumption, 2023, % (bn cigarettes)<sup>(1)</sup>

Note: Source: (a) Refer to following page for more details on sources of Illicit Whites

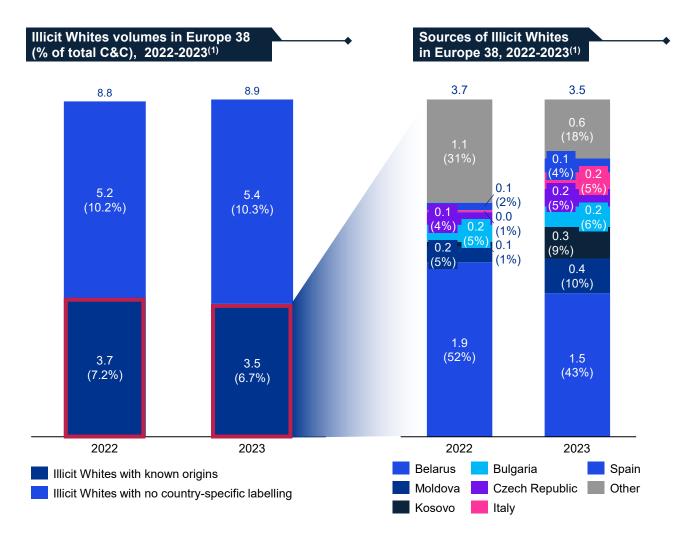
(1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report





### Focus on Illicit Whites (cont.)

- Illicit Whites volumes increased by 0.6% to 8.9bn cigarettes in 2023, the first increase seen in the period covered by this Report
- Illicit Whites with no country-specific labelling were the largest driver of the overall volume increase, increasing by 0.2bn (3.9%) to 5.4bn cigarettes in 2023, and representing 10.3% of total illicit consumption (10.2% in 2022). These Illicit Whites either have no health warnings or are labelled as Duty Free. This generic labelling makes identification of the source market difficult
- The volume of Illicit Whites with known origins declined by 0.2bn to 3.5bn cigarettes, representing 6.7% of total illicit consumption (vs 7.2% in 2022)
- Within these Illicit Whites with known origins, Belarus remains the largest source, albeit with declining volumes, with the decline offset primarily by increased flows from Moldova, Kosovo and Italy



Notes: Source: (a) Due to rounding, the difference between 2022 and 2023 totals shown in the chart or commentary may vary from the actuals (1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report

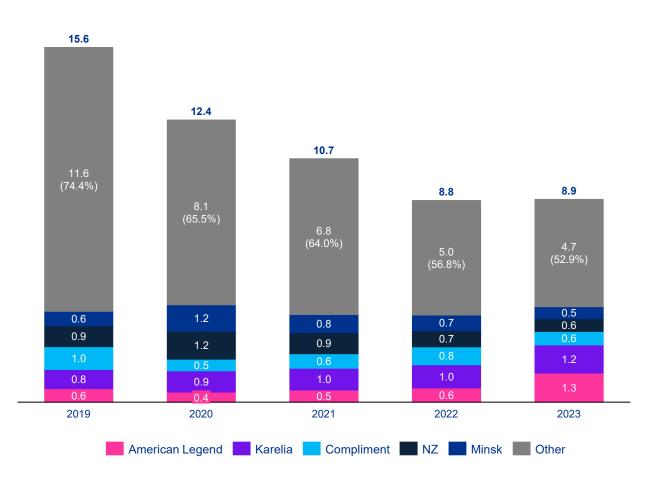




### Focus on Illicit Whites (cont.)

- The top 5 Illicit Whites brands accounted for approximately 47% of Illicit Whites consumption across the 38 markets in 2023, an increase from 26% in 2019, demonstrating that in volume terms Illicit Whites consumption is consolidating at a brand level
- Since our analysis cannot identify whether Illicit Whites are Counterfeit or not, it is possible that we may be overstating the Illicit Whites issue and understating the Counterfeit issue, especially given the growth seen in Counterfeit

#### Illicit Whites by brand in Europe 38, 2019-2023 (bn cigarettes)<sup>(1)</sup>



We cannot identify Counterfeit Illicit White volumes in this Report as the manufacturers do not participate in the empty pack surveys and therefore do not analyse if the packs collected are genuine

Source: (1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report

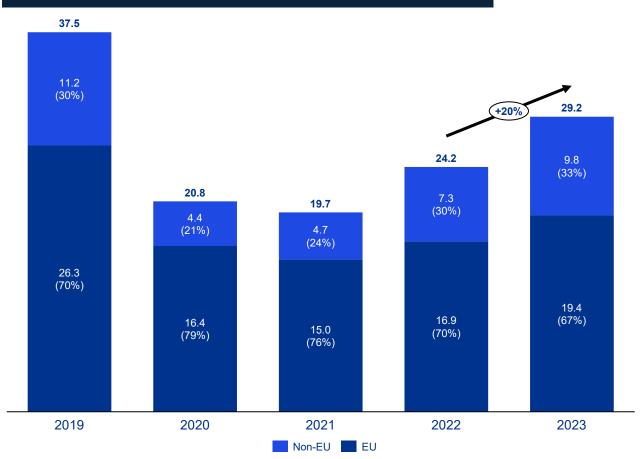


Note:



### Non-Domestic Legal trend (ND(L))

- Increased Non-Domestic Legal inflows came from both EU and Non-EU sources, continuing the trend seen in 2022 and reflecting the ongoing increase in travel and tourism volumes following the relaxation of travel restrictions and border controls put in place in 2020, 2021 and part of 2022 due to COVID19
- · However, ND(L) volumes still remain below pre-pandemic levels



#### Source of ND(L) in 38 European markets, 2019-2023 (bn cigarettes)<sup>(1)(a)</sup>

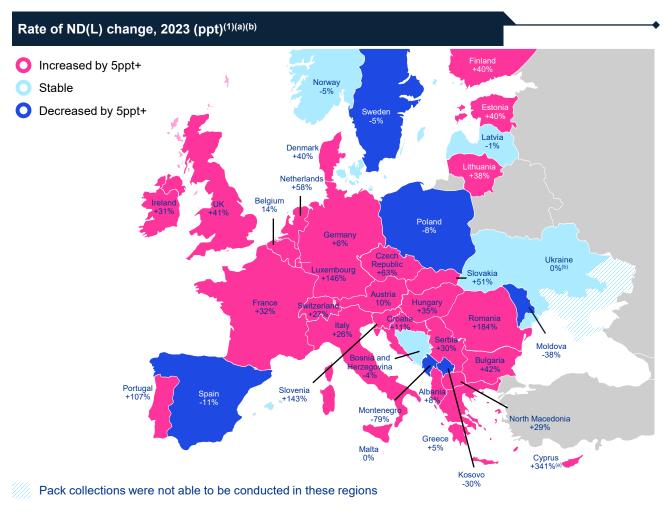
Notes: (a) Due to rounding, the difference between 2022 and 2023 totals shown in the chart may vary from the actuals

Source: (1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report



### Non-Domestic Legal trend (ND(L)) (cont.)

- Overall ND(L) volumes increased across the 38 markets in the study, with 28 of the 38 markets showing an increase. However, the rate of change varied across markets
- Only a handful of markets, Montenegro, Moldova, Sweden, Kosovo, Spain, Poland and Norway, showed ND(L) declines of greater than 5ppt



Source: (1) 38 market level results are an aggregation of the European Flows Calculation results for the 38 markets, a detailed methodology and list of sources for each market is available in the methodology section of this Report

(a) Cyprus ND(L) and C&C flows for 2023 are not comparable with historical figures. Refer to the Cyprus country pack for further details (b) Pack swap survey data for Ukraine does not contain information regarding the origin of packs collected. Therefore, inflows to Ukraine have not been broken down by origin and consequently ND(L) inflows cannot be estimated

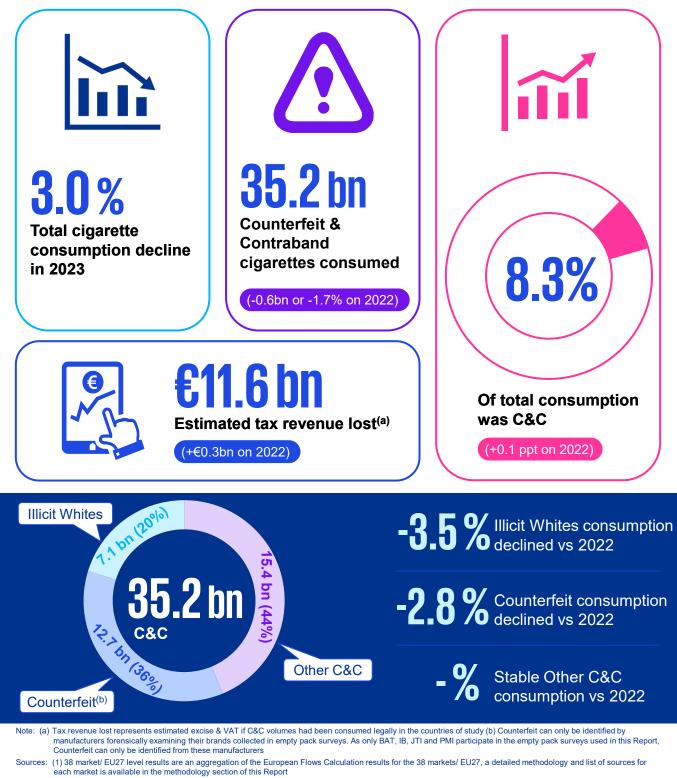


Note:



### EU27 key figures

 Illicit cigarette consumption volumes (C&C) declined in the EU27 in 2023 (-0.6bn to 35.2bn cigarettes) but grew in the 38 European markets (+1.5bn to 52.2bn), highlighting the growth in illicit consumption in non-EU27 markets, primarily due to the growth of illicit consumption in Ukraine and the UK in 2023<sup>(1)</sup>



KPMG

# 02 Gountry profiles



## Albania



Albania



### **2.9bn**

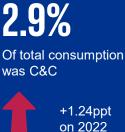
Cigarettes consumed



**0.1bn** C&C cigarettes

consumed

+0.04bn on 2022

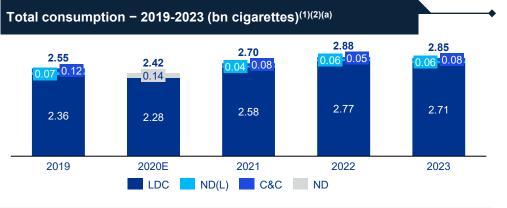




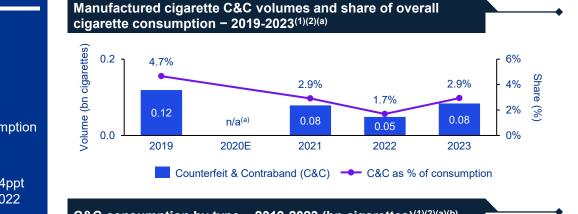
Total tax revenue lost from C&C in 2023<sup>(c)</sup>



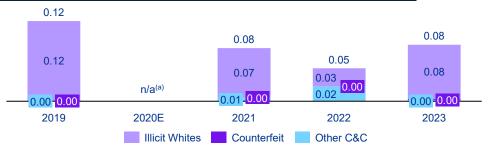
### **C&C cigarette consumption and** total consumption



 C&C as a share of total cigarette consumption followed a declining trend from 2019 to 2022, before increasing by 1.2ppts to 2.9% in 2023, driven by Illicit Whites inflows



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)(b)</sup>



Note: (a) ND(L) and C&C detail is only shown for years with empty pack surveys (b) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (c)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (d) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data;



#### Albania



## Manufactured cigarette consumption, inflows and outflows

Total manufactured cigarette co							
Total Albania Consumption							
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)	
Legal Domestic Sales (LDS)	2.55	2.45	2.71	2.96	2.95	(0%)	
Outflows	(0.19)	(0.17)	(0.12)	(0.19)	(0.24)	27%	
Legal Domestic Consumption (LDC)	2.36	2.28	2.58	2.77	2.71	(2%)	
Non-Domestic Legal (ND(L))	0.07		0.04	0.06	0.06	8%	
Counterfeit and Contraband (C&C)	0.12		0.08	0.05	0.08	72%	
Total Non-Domestic	0.19	0.14	0.12	0.11	0.15	37%	
Total Consumption	2.55	2.42	2.70	2.88	2.85	(1%)	

- Total cigarette consumption declined marginally in 2023

 Non-Domestic inflows followed a declining trend from 2019 to 2022, before increasing in 2023 driven by increased inflows of Duty Free and Illicit Whites with no country-specific labelling

After a period of outflows decline between 2019 and 2021, outflows have increased in 2022 and 2023, with the UK becoming the largest outflow market

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)(b)</sup>

Inflows to Albania						
Billion cigarettes	2019	2020	2021	2022	2023	
IWs with no country-specific labelling	0.12		0.07	0.02	0.04	
Duty Free Labelled	0.00		0.00	0.00	0.04	
Kosovo	0.01		0.01	0.03	0.02	
Greece	0.01		0.01	0.02	0.01	
Other	0.06		0.03	0.04	0.03	
Total Inflows	0.19	0.14	0.12	0.11	0.15	

#### Total outflows by destination – 2019-2023<sup>(1)(a)(b)</sup>

Outflows from Albania					
Billion cigarettes	2019	2020	2021	2022	2023
UK	(0.01)	(0.03)	(0.01)	(0.03)	(0.08)
Italy	(0.08)	(0.09)	(0.06)	(0.08)	(0.06)
Greece	(0.02)	(0.01)	(0.01)	(0.01)	(0.03)
Belgium	(0.01)	0.00	0.00	(0.01)	(0.02)
Germany	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)
Other	(0.06)	(0.03)	(0.05)	(0.06)	(0.05)
Total Outflows	(0.19)	(0.17)	(0.12)	(0.19)	(0.24)

Note: (a) Detailed breakdowns of ND(L), C&C, inflows and outflows are only shown for years with empty pack surveys. Total Non-Domestic, and inflows and outflows totals for years where empty pack surveys were not conducted are estimates only based on extrapolations of empty pack survey results from the prior and following years (b) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data

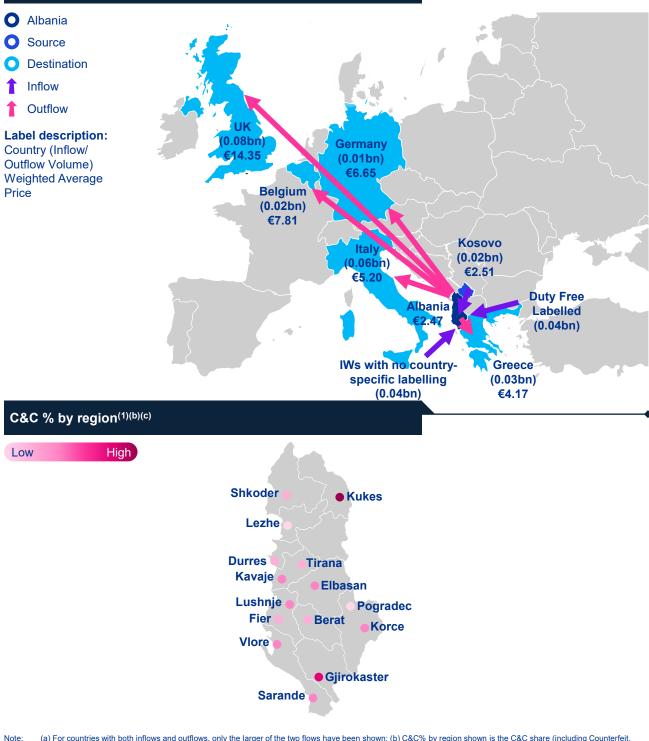


#### Albania



### Key flows and C&C consumption patterns



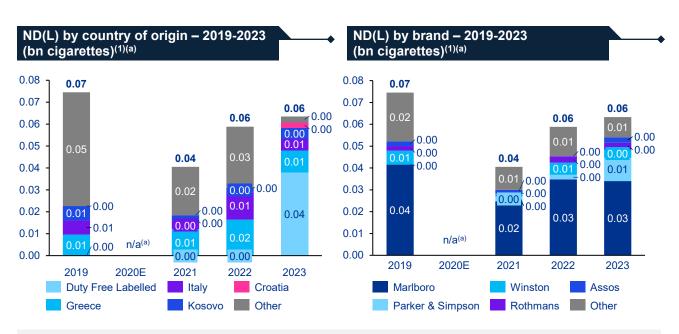


Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023

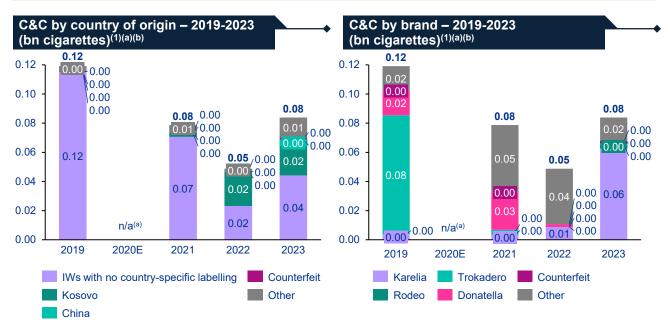




Albania



- Following a decline in legal inflows (ND(L)) in 2021, ND(L) inflows have subsequently recovered to similar levels as seen in 2019
- Duty Free labelled packs formed ~60% of ND(L) inflows in 2023
- Illicit Whites with no country-specific labelling have been the major source of illicit (C&C) inflows since 2019, albeit Kosovo C&C inflows have increased in 2022 and subsequently remained stable
- At a brand level Illicit consumption in Albania has been historically driven by Trokadero and more recently Karelia, with Trokadero's C&C volumes declining since 2019



Note: (a) ND(L) and C&C country / brand breakdowns are only shown for the years where an empty pack survey was undertaken (b) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys

Source: (1) KPMG European Flows Calculation, 2019-2023



# Austria



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Austria

**12.1**bn

-0.58bn

on 2022

-0.08bn

Cigarettes

consumed

**0.5bn** 

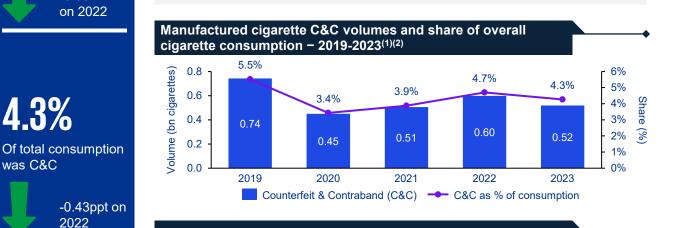
C&C cigarettes consumed

# **C&C cigarette consumption and total consumption**

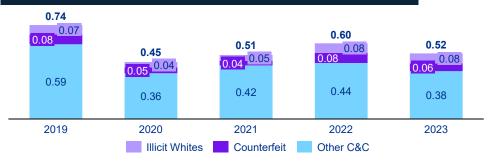
#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



 C&C as a share of total consumption decreased by 0.4ppts to 4.3% in 2023, primarily driven by a decline in Other C&C



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts
Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



€110m

Total tax revenue lost from C&C<sup>(b)</sup>

-€13m

on 2022

#### Austria



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Austria Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	11.73	12.23	12.12	11.72	11.29	(4%)
Outflows	(0.44)	(0.40)	(0.38)	(0.38)	(0.52)	36%
Legal Domestic Consumption (LDC)	11.29	11.83	11.74	11.34	10.77	(5%)
Non-Domestic Legal (ND(L))	1.44	0.86	0.80	0.78	0.86	10%
Counterfeit and Contraband (C&C)	0.74	0.45	0.51	0.60	0.52	(13%)
Total Non-Domestic	2.18	1.31	1.30	1.38	1.38	(0%)
Total Consumption	13.47	13.13	13.04	12.72	12.14	(5%)

 Total cigarette consumption decreased by 5% in 2023, driven by a decline in Legal Domestic Sales and an increase in outflows

- Non-Domestic inflows remained stable with an increase in ND(L) being offset by decline in C&C

 Outflows increased by 36%, primarily driven by increased outflows to the Czech Republic and smaller markets grouped together within 'Other'

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Austria					
Billion cigarettes	2019	2020	2021	2022	2023
Slovenia	0.20	0.11	0.24	0.20	0.19
Slovakia	0.28	0.15	0.13	0.12	0.11
Duty Free Labelled	0.12	0.08	0.07	0.10	0.11
Poland	0.06	0.08	0.08	0.13	0.10
Serbia	0.14	0.06	0.08	0.10	0.09
Other	1.37	0.83	0.70	0.74	0.77
Total Inflows	2.18	1.31	1.30	1.38	1.38

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Austria					
Billion cigarettes	2019	2020	2021	2022	2023
Germany	(0.25)	(0.27)	(0.25)	(0.24)	(0.26)
Czech Republic	(0.04)	(0.00)	(0.01)	(0.01)	(0.07)
France	(0.01)	(0.02)	(0.01)	(0.02)	(0.03)
Other	(0.14)	(0.11)	(0.12)	(0.12)	(0.17)
Total Outflows	(0.44)	(0.40)	(0.38)	(0.38)	(0.52)

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data;



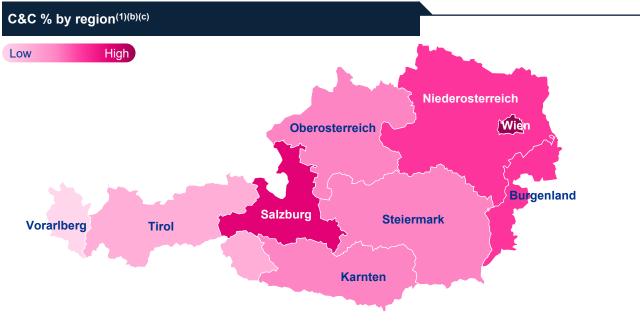
#### Austria



## Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>



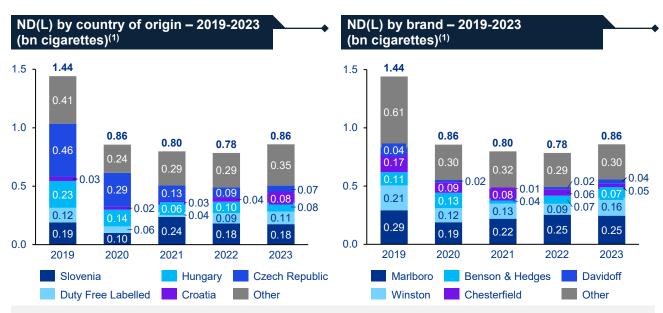


- Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
- Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023



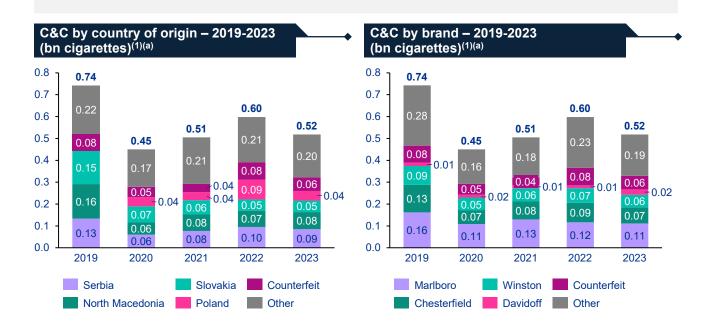


Austria



 Legal inflows (ND(L)) increased by 10%, primarily driven by increased legal inflows from smaller markets grouped together within 'Other'

Illicit inflows (C&C) declined by 13% with illicit inflows decreasing from all major sources, with the exception of Slovakia which remained stable



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023;



# Belgium



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Belgium

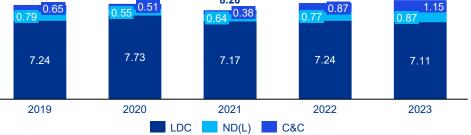
**9.1**bn

Cigarettes

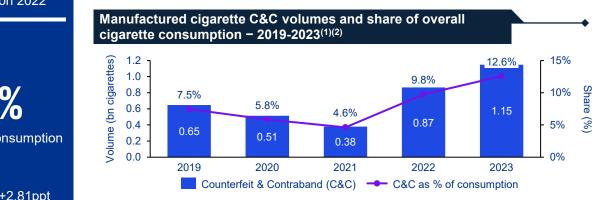
consumed

#### **Country profile C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup> 8.79 8.87 8.68 8.20 55 0.51 0.87 0.65



C&C as a share of total cigarette consumption increased by 2.8ppts to 12.6% in 2023, with an increase in Other C&C and Illicit Whites partly offset by a decrease in Counterfeit



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup> 1.15 0.12 0.87 0.19 0 09 0 66

0.65 0.04	0.51	0.38	0.27	
0.46	0.19	0.07 0.27	0.50	0.83
 2019	2020	2021	2022	2023
	Illicit Whites	Counterfeit	Other C&C	

Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



**1.1bn** 

+0.28bn on 2022

+0.26bn

on 2022



Of total consumption was C&C





Total tax revenue lost from C&C<sup>(b)</sup>





9.13

#### Belgium



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Belgium Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	9.47	9.23	8.91	8.62	8.05	(7%)
Outflows	(2.23)	(1.50)	(1.74)	(1.38)	(0.94)	(32%)
Legal Domestic Consumption (LDC)	7.24	7.73	7.17	7.24	7.11	(2%)
Non-Domestic Legal (ND(L))	0.79	0.55	0.64	0.77	0.87	14%
Counterfeit and Contraband (C&C)	0.65	0.51	0.38	0.87	1.15	33%
Total Non-Domestic	1.44	1.06	1.02	1.63	2.02	24%
Total Consumption	8.68	8.79	8.20	8.87	9.13	3%

 Total cigarette consumption increased by 3%, primarily driven by an increase in Non-Domestic inflows, partially offset by declining Legal Domestic Consumption

- Non-Domestic inflows have increased by 24%, with inflows from Bulgaria, Luxembourg and Turkey
  increasing to reach the highest level observed in the reporting period, offset, to some extent, by a
  decline in inflows of counterfeit volumes
- Outflows declined by 32%, driven by a decline in outflows to the Netherlands

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup> Inflows to Belgium

<b>3</b>					
Billion cigarettes	2019	2020	2021	2022	2023
Bulgaria	0.20	0.21	0.18	0.33	0.55
Luxembourg	0.18	0.26	0.43	0.43	0.46
Turkey	0.03	0.04	0.03	0.11	0.25
Counterfeit	0.15	0.19	0.07	0.27	0.19
France	0.13	0.07	0.03	0.07	0.12
Other	0.74	0.29	0.28	0.43	0.45
Total Inflows	1.44	1.06	1.02	1.63	2.02
Total Inflows	1.44	1.06	1.02	1.63	

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Belgium					
Billion cigarettes	2019	2020	2021	2022	2023
France	(1.89)	(1.05)	(0.70)	(0.60)	(0.73)
Netherlands	(0.21)	(0.34)	(0.91)	(0.73)	(0.15)
Luxembourg	(0.02)	(0.03)	(0.01)	(0.00)	(0.01)
Other	(0.12)	(0.10)	(0.13)	(0.05)	(0.06)
Total Outflows	(2.23)	(1.50)	(1.74)	(1.38)	(0.94)

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data;



#### **Belgium**

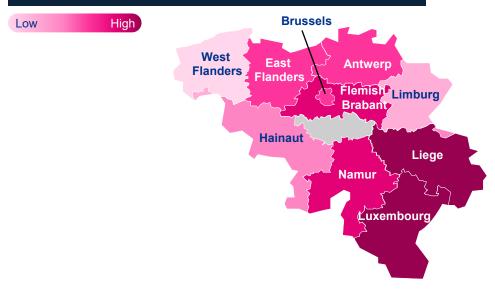


## Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>



#### C&C % by region<sup>(1)(b)(c)</sup>

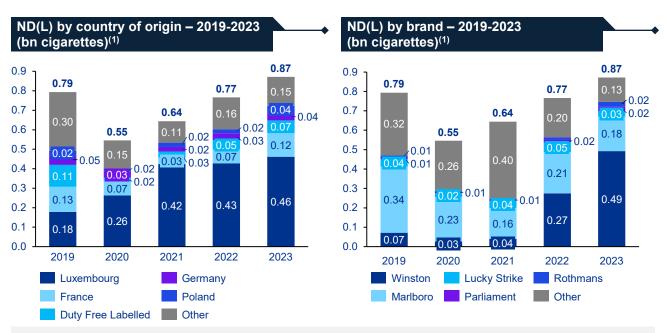


Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
(1) KPMC European Elaws Collevition 2023; (c) Prices Park of 20 cigarettee

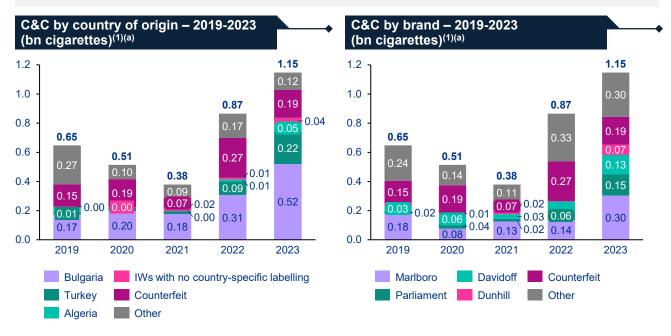
Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023







- Legal inflows (ND(L)) increased by 14% in 2023, driven by increase in legal flows from all major source markets, with only the smaller markets grouped within 'Other' showing a small decline
- C&C increased by 33% in 2023, driven by increase in illicit flows from Bulgaria and Turkey, partially
  offset by a decline in Counterfeit and 'Other' smaller markets



 Note:
 (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys

 Source:
 (1) KPMG European Flows Calculation, 2019-2023;



## Bosnia and Herzegovina



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#### Bosnia & Herzegovina



## **4.8bn**

Cigarettes consumed



**0.4**bn

C&C cigarettes consumed



8.6%

was C&C

€67m

Total tax revenue lost from C&C in

-€10m on

2022

Of total consumption

-1.56ppt on 2022

### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>

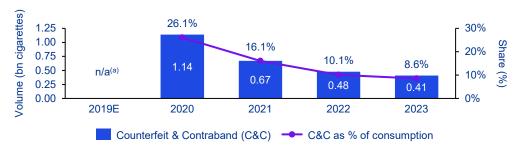


**C&C cigarette consumption and** 

total consumption

 C&C as a share of total consumption has followed a declining trend since 2020 and declined by 1.5ppt to 8.6% in 2023, and is largely comprised of Illicit Whites

#### Manufactured cigarette C&C volumes and share of overall cigarette consumption – 2019-2023<sup>(1)(2)(a)</sup>



#### C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)(b)</sup>

	<b>1.14</b> 0.00 0.06			
n/a <sup>(a)</sup>	1.08	0.67 0.00 0.05 0.62	<b>0.48</b> <b>0.00</b> 0.08 0.39	<b>0.41</b> 1 <mark>0.01</mark> 0.01 0.39
2019E	2020	2021	2022 Other C&C	2023

Note: (a) ND(L) and C&C detail is only shown for years with empty pack surveys (b) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (c)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (d) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



2023<sup>(c)</sup>

Country profile



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)(a)</sup>

Total Bosnia and Herzegovina Consumption									
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)			
Legal Domestic Sales (LDS)	4.40	3.48	3.78	4.46	4.59	3%			
Outflows	(0.58)	(0.29)	(0.31)	(0.31)	(0.30)	(3%)			
Legal Domestic Consumption (LDC)	3.82	3.19	3.47	4.14	4.28	3%			
Non-Domestic Legal (ND(L))		0.04	0.04	0.09	0.08	(4%)			
Counterfeit and Contraband (C&C)		1.14	0.67	0.48	0.41	(14%)			
Total Non-Domestic	1.03	1.18	0.71	0.56	0.49	(13%)			
Total Consumption	4.85	4.37	4.18	4.71	4.78	1%			

 Total cigarette consumption declined during the Covid pandemic and has returned to pre-Covid levels thereafter, driven by changes in Legal Domestic Sales

 Non-Domestic inflows are largely comprised of Illicit Whites with no country-specific labelling, with volumes decreasing between 2020 and 2022, before subsequently increasing in 2023

Outflows remained largely stable in 2023

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)(b)</sup>

Inflows to Bosnia And Herzegovina									
Billion cigarettes	2019	2020	2021	2022	2023				
Ws with no country-specific labelling		1.07	0.58	0.31	0.37				
Croatia		0.01	0.00	0.01	0.04				
Other		0.10	0.13	0.24	0.08				
Total Inflows	1.03	1.18	0.71	0.56	0.49				

#### Total outflows by destination – 2019-2023<sup>(1)(a)(b)</sup>

Outflows from Bosnia And Herzegovina									
Billion cigarettes	2019	2020	2021	2022	2023				
Croatia	(0.10)	(0.06)	(0.09)	(0.13)	(0.11)				
Slovenia	(0.12)	(0.03)	(0.05)	(0.02)	(0.06)				
Austria	(0.11)	(0.07)	(0.06)	(0.06)	(0.04)				
Germany	(0.15)	(0.09)	(0.05)	(0.05)	(0.04)				
Other	(0.10)	(0.05)	(0.07)	(0.06)	(0.05)				
Total Outflows	(0.58)	(0.29)	(0.31)	(0.31)	(0.30)				

Note: (a) Detailed breakdowns of ND(L), C&C, inflows and outflows are only shown for years with empty pack surveys. Total Non-Domestic, and inflows and outflows totals for years where empty pack surveys were not conducted are estimates only based on extrapolations of empty pack survey results from the prior and following years (b) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data

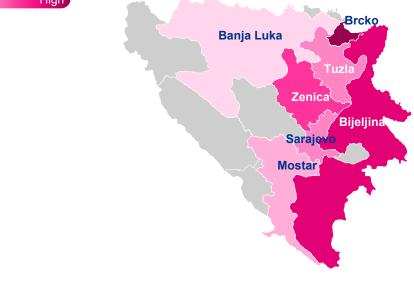


**Bosnia and Herzegovina** 

## Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>

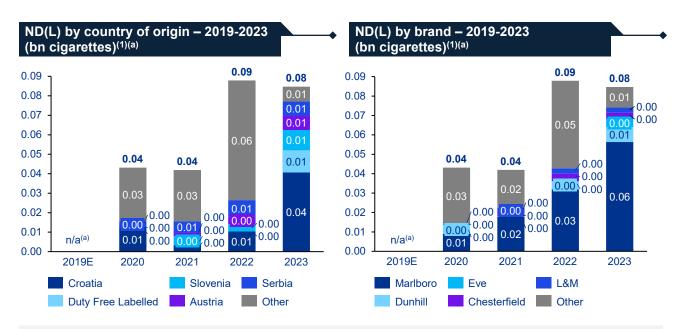




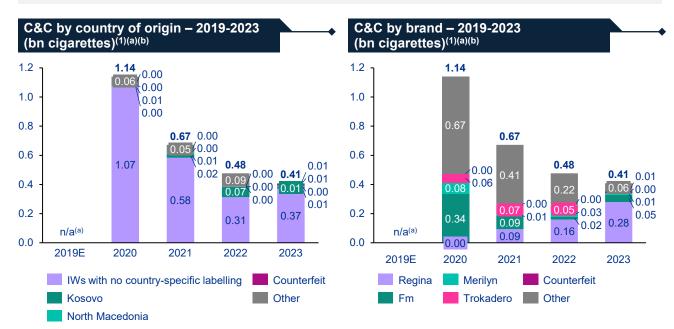
Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023







- Legal inflows (ND(L)) increased in 2022, with a marginal decline in 2023
- Croatia gained share of legal inflows in 2023
- Illicit Whites with no country-specific labelling have been a major source of C&C flows, albeit with declining volumes prior to 2023
- At a brand level, Regina accounted for ~68% of illicit consumption in 2023



Note: (a) ND(L) and C&C country / brand breakdowns are only shown for the years where an empty pack survey was undertaken (b) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys

Source: (1) KPMG European Flows Calculation, 2019-2023



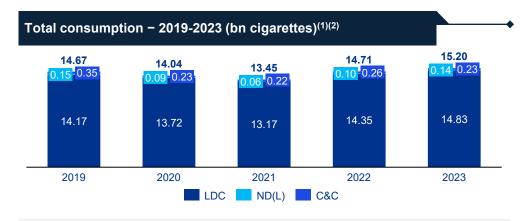
# Bulgaria



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Bulgaria

#### **Country profile C&C cigarette consumption and** total consumption

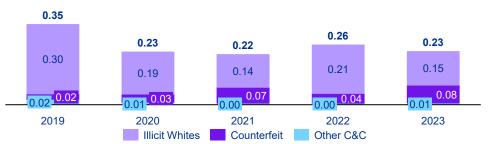


C&C as a share of total consumption decreased by 0.3ppts to 1.5% in 2023

This was driven by a decline in flows of Illicit Whites, partly offset by an increase in Counterfeit volumes

Manufactured cigarette C&C volumes and share of overall cigarette consumption - 2019-2023<sup>(1)(2)</sup> 2.4% 0.4 2.5% /olume (bn cigarettes) 1.8% 1.6% 1.6% 2.0% 1.5% 1.5% 1.5% hare 0.2 0.35 1.0% 0.26 0.23 0.23 0.22 0.5% 0.0% 0.0 2019 2020 2021 2022 2023 Counterfeit & Contraband (C&C) - C&C as % of consumption -0.24ppt on 2022

C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



(a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty Note: pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Bulgarian LDS has been calculated using customs data for 2021-22. For 2017-19, it was based on IMS data. In 2023, Bulgarian IMS was 16.813bn vs customs data of 16.83bn; (d) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data (3) EUR 1 = BGN 1.955, InforEuro, European Commission, December 2023



Cigarettes consumed



-0.03bn on 2022

0.2bn

C&C cigarettes consumed









#### Bulgaria



6%

29%

3%

42%

(11%)

4%

3%

### Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)(a)</sup> **Total Bulgaria Consumption Billion cigarettes** 2019 2020 2021 2022 2023 2022-23 (%) Legal Domestic Sales (LDS) 15.31 14.77 15.21 15.90 16.83 Outflows (1.14)(1.05)(2.04)(1.55)(2.00)Legal Domestic Consumption (LDC) 14.17 13.72 13.17 14.35 14.83 Non-Domestic Legal (ND(L)) 0.09 0.14 0.15 0.06 0.10 Counterfeit and Contraband (C&C) 0.35 0.23 0.22 0.26 0.23 **Total Non-Domestic** 0.50 0.32 0.28 0.36 0.37 **Total Consumption** 14.67 14.04 13.45 14.71 15.20

Total Consumption increased by 3% in 2023, driven by an increase in Legal Domestic Sales

- Non-Domestic inflows increased by 4%
- Inflows from Illicit Whites with no country-specific labelling remain the largest component of inflows, and declined by ~40% in 2023, with an increase in Counterfeit and flows from smaller source markets included within 'Other'
- Outflows increased by 29%, with the largest increases in outflows to Belgium and Romania

#### Total inflows by country of origin – 2019-2023<sup>(1)(b)</sup>

Inflows to Bulgaria									
Billion cigarettes	2019	2020	2021	2022	2023				
Ws with no country-specific labelling	0.26	0.17	0.14	0.21	0.13				
Counterfeit	0.02	0.03	0.07	0.04	0.08				
Duty Free Labelled	0.07	0.06	0.03	0.04	0.05				
Other	0.14	0.06	0.05	0.06	0.11				
Total Inflows	0.50	0.32	0.28	0.36	0.37				

#### Total outflows by destination – 2019-2023<sup>(1)(b)</sup>

Outflows from Bulgaria					
Billion cigarettes	2019	2020	2021	2022	2023
Belgium	(0.20)	(0.21)	(0.18)	(0.33)	(0.55)
Germany	(0.18)	(0.21)	(0.25)	(0.32)	(0.36)
France	(0.26)	(0.25)	(0.46)	(0.25)	(0.25)
Romania	(0.01)	(0.02)	(0.03)	(0.05)	(0.23)
Other	(0.48)	(0.36)	(1.11)	(0.59)	(0.62)
Total Outflows	(1.14)	(1.05)	(2.04)	(1.55)	(2.00)

Note:

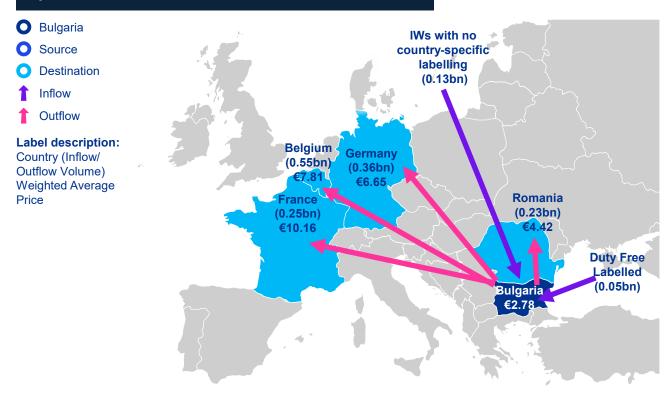
<sup>(</sup>a) Bulgarian LDS is based on IMS data in 2019, and figures reported by the Bulgarian Customs Authority in 2020 and subsequent years. In 2023, Bulgarian IMS was 16.81bn vs customs data of 16.83bn; (b) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data Source:



#### Bulgaria



#### Key inflows and outflows<sup>(1)(a)</sup>



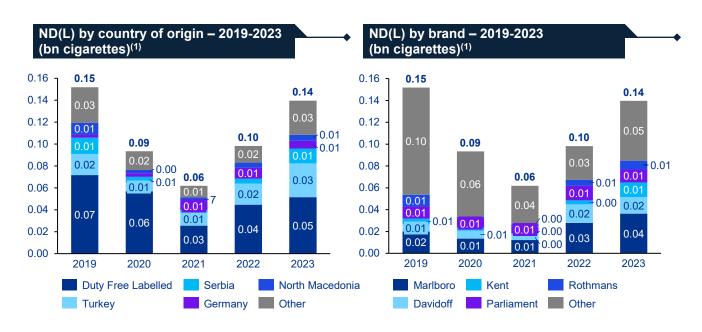
#### C&C % by region<sup>(1)(b)(c)</sup>



Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023

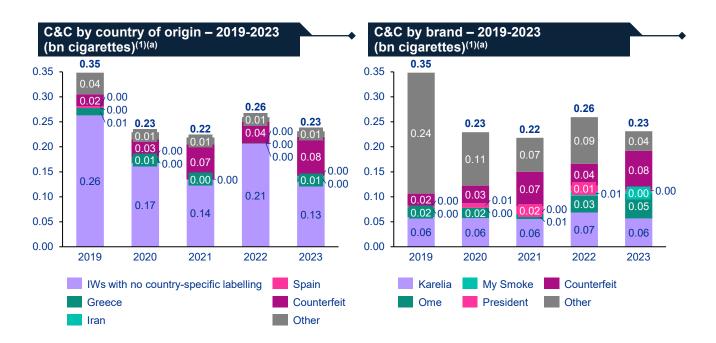






Legal inflows (ND(L)) in 2023 returned to similar levels as observed in 2019

 Illicit inflows (C&C) declined by 11%, primarily driven by lower inflows of Illicit Whites with no countryspecific labelling, but with an increase in Counterfeit



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023;



# Croatia



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Croatia



**6.1bn** 

Cigarettes

consumed

**0.2bn** 

C&C cigarettes consumed

+0.05bn

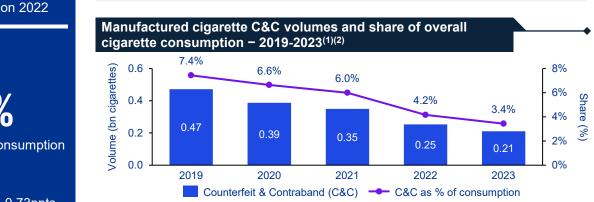
on 2022

-0.04bn

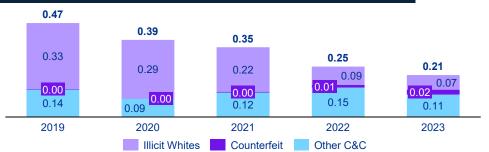
#### Country profile **C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup> 6.35 6.08 6.14 5 84 5.84 0.07 0.47 0.09 0.25 10 0.2<sup>-</sup> .06 0.35 03-0.39 5.83 5.81 5.74 5.42 5.44 2019 2020 2021 2022 2023 LDC ND(L) C&C

C&C share as a percentage of total consumption declined by 0.8ppts to 3.4% in 2023, primarily driven by a decline in Other C&C

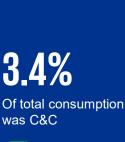


#### C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data; 3) EUR 1 = HRK 7.456, InforEuro, European Commission, December 2023







Total tax revenue lost from C&C<sup>(b)</sup> (HRK265m)<sup>(3)</sup>





#### Croatia



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Croatia Consumption								
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)		
Legal Domestic Sales (LDS)	6.22	5.69	5.74	6.03	6.37	6%		
Outflows	(0.40)	(0.26)	(0.30)	(0.29)	(0.54)	90%		
Legal Domestic Consumption (LDC)	5.81	5.42	5.44	5.74	5.83	1%		
Non-Domestic Legal (ND(L))	0.07	0.03	0.06	0.09	0.10	11%		
Counterfeit and Contraband (C&C)	0.47	0.39	0.35	0.25	0.21	(17%)		
Total Non-Domestic	0.54	0.42	0.41	0.34	0.31	(10%)		
Total Consumption	6.35	5.84	5.84	6.08	6.14	1%		

Total consumption increased marginally in 2023, with an increase in Legal Domestic Consumption partly
offset by a decline in Non-Domestic inflows

 Non-Domestic inflows reached the lowest level observed during the reporting period. Bosnia and Herzegovina remained the largest source of inflows

 Outflows increased by 90% (or 0.25bn). This is against a backdrop of Croatia's entry to the Schengen area on 1 January 2023 and increased tourism volumes

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Croatia									
Billion cigarettes	2019	2020	2021	2022	2023				
Bosnia and Herzegovina	0.10	0.06	0.09	0.13	0.11				
IWs with no country-specific labelling	0.32	0.29	0.20	0.07	0.04				
Other	0.12	0.07	0.11	0.14	0.16				
Total Inflows	0.54	0.42	0.41	0.34	0.31				

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Croatia								
Billion cigarettes	2019	2020	2021	2022	2023			
Germany	(0.18)	(0.16)	(0.13)	(0.14)	(0.16)			
Austria	(0.03)	(0.02)	(0.03)	(0.04)	(0.08)			
Netherlands	(0.02)	(0.01)	(0.01)	(0.00)	(0.07)			
Slovenia	(0.06)	(0.02)	(0.06)	(0.02)	(0.06)			
Other	(0.10)	(0.06)	(0.08)	(0.08)	(0.18)			
Total Outflows	(0.40)	(0.26)	(0.30)	(0.29)	(0.54)			

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

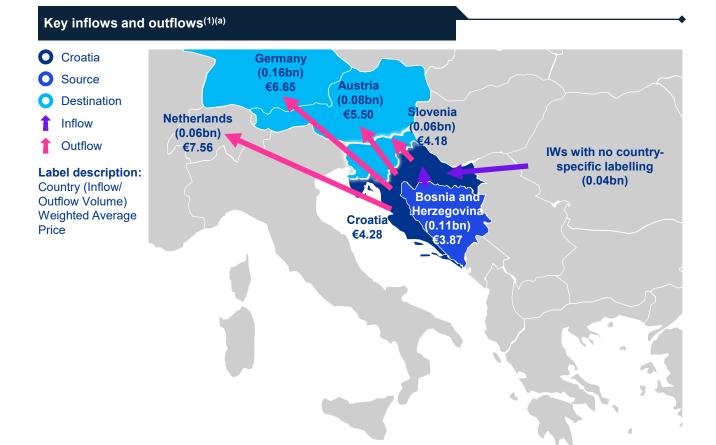
Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data;



Croatia

### **Key flows**



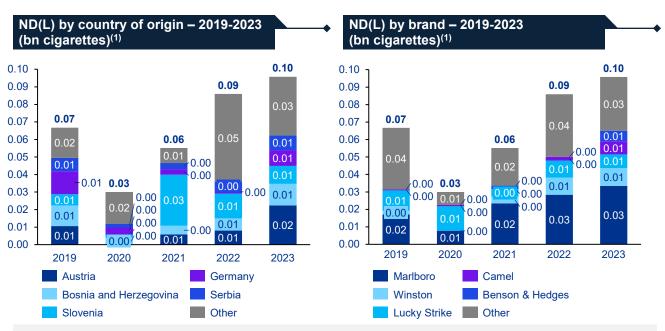


Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown

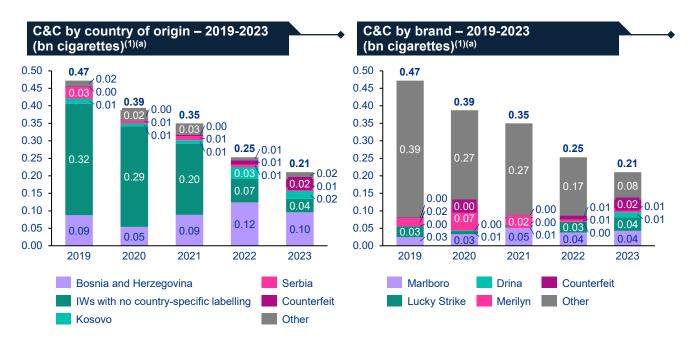
Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023







- Legal inflows (ND(L)) increased by 11% in 2023, with an increase in legal inflows from the main source markets with the exception of Slovenia
- Bosnia & Herzegovina remained the largest source of illicit inflows (C&C), albeit with declining volumes in 2023, accounting for almost half of total illicit inflows



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023



# Cyprus



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1.0hn

Cigarettes

consumed

**0.1bn** 

C&C cigarettes consumed

+0.04bn

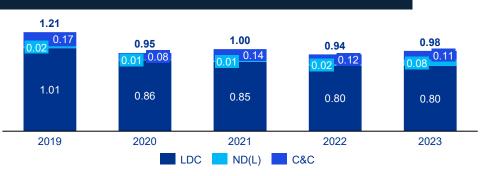
on 2022

-0.01bn

on 2022

### **C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>

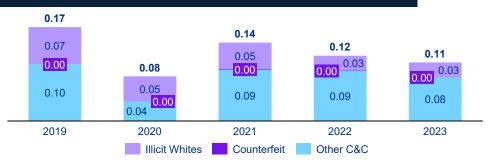


C&C as a share of total consumption declined by 1.8 ppts to 11.0%

This decline in C&C share was driven by a decrease in Other C&C

on 2022 Manufactured cigarette C&C volumes and share of overall cigarette consumption - 2019-2023<sup>(1)(2)</sup> 14.3% 14.4% /olume (bn cigarettes) 12.8% 0.2 15% • 11.0% 11.0% 8.6% Share 10% 0.17 0.14 5% 0.12 0.11 Of total consumption 0.08 was C&C 0.0 0% 2019 2020 2021 2022 2023 Counterfeit & Contraband (C&C) - C&C as % of consumption -1.84ppts

#### C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts
Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data;



€18m

Total tax revenue lost from C&C<sup>(b)</sup>

-€2m

on 2022

#### Cyprus



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)(a)</sup>

Total Cyprus Consumption								
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)		
Legal Domestic Sales (LDS)	1.06	0.91	0.86	0.86	0.86	(0%)		
Outflows	(0.04)	(0.04)	(0.02)	(0.06)	(0.06)	3%		
Legal Domestic Consumption (LDC)	1.01	0.86	0.85	0.80	0.80	(0%)		
Non-Domestic Legal (ND(L))	0.02	0.01	0.01	0.02	0.08	341%		
Counterfeit and Contraband (C&C)	0.17	0.08	0.14	0.12	0.11	(10%)		
Total Non-Domestic	0.20	0.09	0.16	0.14	0.18	34%		
Total Consumption	1.21	0.95	1.00	0.94	0.98	5%		

- Total consumption increased by 5% in 2023, driven by an increase in Non-Domestic inflows

- Non-Domestic inflows increased by 34%, primarily driven by inflows from the Northern Part of Cyprus

- In 2023, traveller data was made available to estimate legal inflows (ND(L)) from the Northern Part of Cyprus, leading to the large ND(L) increase seen in 2023. As such the ND(L) and C&C trend in 2023 is not comparable with prior years
- Outflows from Cyprus increased by 3%, with increased outflows to smaller destination markets partly
  offset by a decline in outflows to the UK

#### Total inflows by country of origin – 2019-2023<sup>(1)(b)</sup> Inflows to Cyprus **Billion cigarettes** 2019 2020 2021 2022 2023 Northern Part Of Cyprus 0.07 0.02 0.06 0.08 0.12 **Duty Free Labelled** 0.05 0.01 0.04 0.03 0.04 Other 0.08 0.05 0.06 0.03 0.03 **Total Inflows** 0.20 0.09 0.16 0.14 0.18

Total outflows by destination	on – 2019-2023 <sup>(1)(b)</sup>				•
Outflows from Cyprus					
Billion cigarettes	2019	2020	2021	2022	2023
UK	(0.03)	(0.03)	(0.00)	(0.04)	(0.03)
Other	(0.01)	(0.01)	(0.01)	(0.02)	(0.03)
Total Outflows	(0.04)	(0.04)	(0.02)	(0.06)	(0.06)

Note:

(a) ND(L) and C&C flows for 2023 are not comparable with historical figures. 2023 is the first year where traveller flows between Cyprus and the Northern Part of Cyprus have been available, with these traveller flows used to calculate an ND(L) vs C&C split for Non-Domestic inflows from the Northern Part of Cyprus (b) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data;

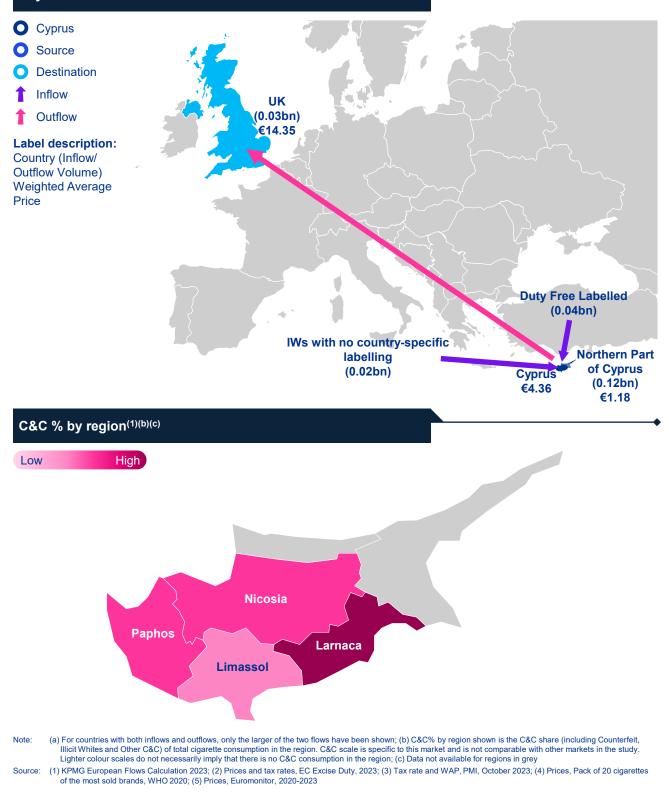


#### Cyprus



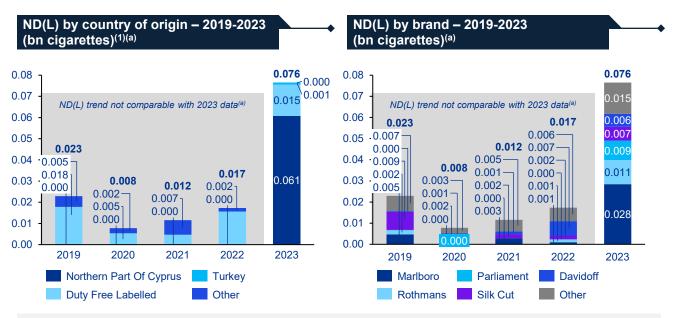
## Key flows and C&C consumption patterns



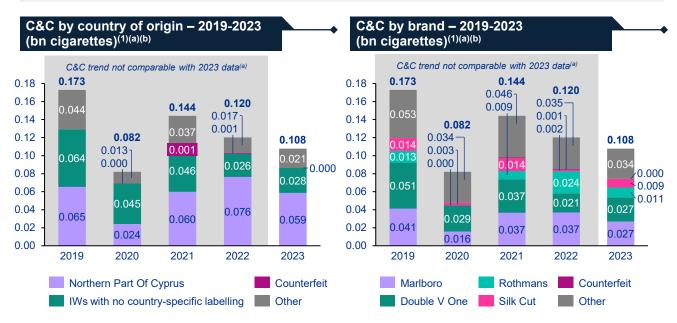








- Legal flows from the Northern Part of Cyprus constituted ~80% of total legal inflows to Cyprus in 2023<sup>(a)</sup>
- The Northern Part of Cyprus remained the largest source of C&C



Note: (a) ND(L) and C&C flows for 2023 are not comparable with historical figures. 2023 is the first year where traveller flows between Cyprus and the Northern Part of Cyprus have been available, with these traveller flows used to calculate an ND(L) vs C&C split for Non-Domestic inflows from the Northern Part of Cyprus (b) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys

Source: (1) KPMG European Flows Calculation, 2019-2023;



# Czech Republic



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### 12.8bn

Cigarettes consumed



**0.7bn** C&C cigarettes

consumed

+0.23bn on 2022







Total tax revenue lost from C&C<sup>(b)</sup>

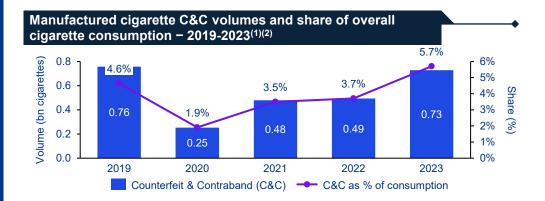


### **C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



 C&C as a share of total cigarette consumption increased by 2ppts to 5.7% driven by an increase in Other C&C and Counterfeit, partially offset by declining Illicit Whites



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup> 0.76 0.73 0.12 0.31 0.49 0.48 0.29 0.17 0.18 0.17 0.25 0.19 0.12 0.24 0.32 0.27 0.09 0.12 1040.07 2021 2022 2019 2020 2023 Illicit Whites Counterfeit Other C&C 

Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts
Source: (1) KPMG European Flows Calculation, 2018-2023; (2) In Market Sales data



#### **Czech Republic**



# Manufactured cigarette consumption, inflows and outflows

Total manufactured cigarette consumption – 2019-2023 <sup>(1)(2)</sup>									
Total Czech Republic Consumption									
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)			
Legal Domestic Sales (LDS)	19.74	16.97	15.20	14.45	12.77	(12%)			
Outflows	(4.81)	(4.15)	(2.56)	(2.34)	(1.89)	(20%)			
Legal Domestic Consumption (LDC)	14.93	12.82	12.64	12.11	10.89	(10%)			
Non-Domestic Legal (ND(L))	0.63	0.15	0.60	0.71	1.17	63%			
Counterfeit and Contraband (C&C)	0.76	0.25	0.48	0.49	0.73	47%			
Total Non-Domestic	1.39	0.40	1.08	1.21	1.89	57%			
Total Consumption	16.32	13.22	13.72	13.32	12.78	(4%)			

- Total cigarette consumption decreased by 4% in 2023, driven by a decline in Legal Domestic Sales

 Increased Non-Domestic inflows were primarily driven by inflows from Poland which reached the highest level observed during the reporting period. However, inflows increased from all major sources as well as smaller source markets grouped together under 'Other'

- Outflows continued their long-term declining trend. Germany continues to account for ~90% of outflows

Total inflows by country of origin – 2019-2023 <sup>(1)(a)</sup>								
Poland	0.20	0.02	0.21	0.47	0.95			
Counterfeit	0.17	0.09	0.19	0.24	0.29			
Slovakia	0.10	0.03	0.05	0.06	0.09			
Ukraine	0.17	0.05	0.06	0.05	0.08			
Duty Free Labelled	0.08	0.03	0.04	0.05	0.08			
Other	0.67	0.19	0.52	0.33	0.40			
Total Inflows	1.39	0.40	1.08	1.21	1.89			

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Czech Republic				-	
Billion cigarettes	2019	2020	2021	2022	2023
Germany	(4.09)	(3.68)	(2.31)	(2.15)	(1.69)
Other	(0.72)	(0.48)	(0.25)	(0.20)	(0.19)
Total Outflows	(4.81)	(4.15)	(2.56)	(2.34)	(1.89)

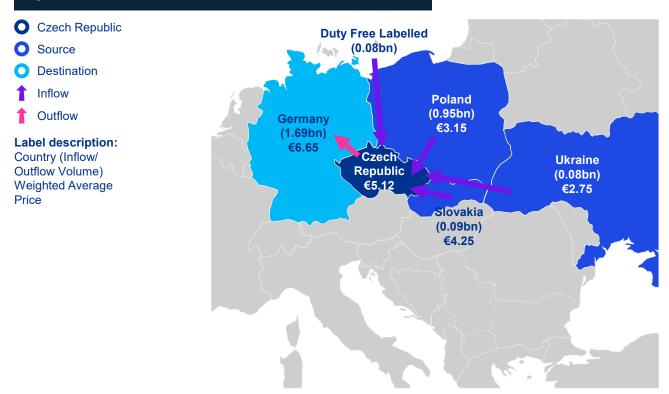
Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows Source: (1) KPMG European Flows Calculation, 2018-2023; (2) In Market Sales data;



#### **Czech Republic**

## Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>



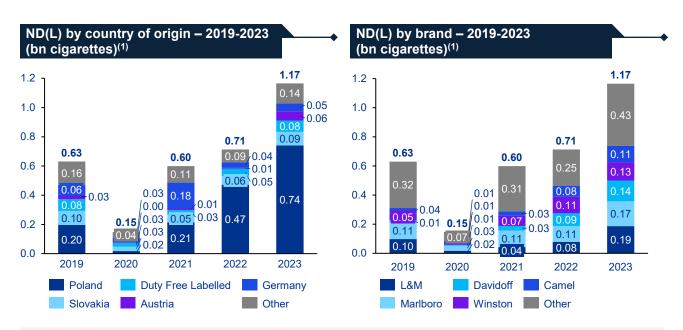
#### C&C % by region<sup>(1)(b)(c)</sup> Low High Liberecky Kraj Ustecky Kraj **Kralovehradecky** Karlovarsky Kraj Kraj **Praha** Pardubicky Moravskoslezsky Stredocesky Kraj **Plzensky** Olomoucky Kraj Kraj Kraj Kraj Vysocina Zlinsky **Jihocesky Kraj** Kraj Jihomoravsky Kraj

Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey

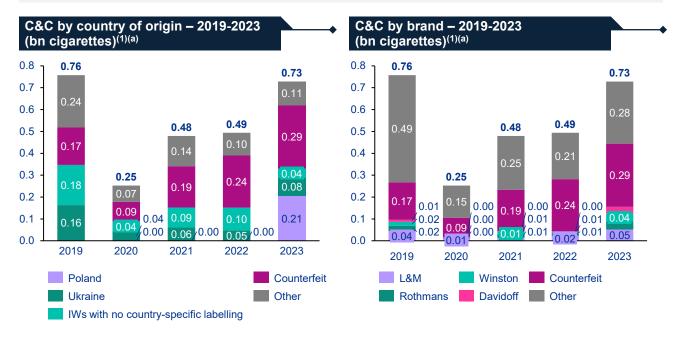
Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023







- Legal inflows (ND(L)) grew by 63% in 2023, primarily driven by increased Non-Domestic inflows from Poland, a large proportion of which are considered legal due to high cross border travel volumes
- Increased Illicit inflows from Poland were also the main driver of a 47% increase in illicit consumption (C&C), as not all of the increase in Polish Non-Domestic inflows in 2023 were supported by cross border travel and shopping



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2018-2023;



# Denmark



Denmark



## **4.6bn**

Cigarettes consumed

+0.11bn on 2022

#### **0.4bn** C&C cigarettes consumed

+0.26bn on 2022

#### **9.4%** Of total consumption was C&C

+5.5ppt on 2022



Total tax revenue lost from C&C<sup>(b)</sup> (DKK1,105m)<sup>(3)</sup>



**C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>

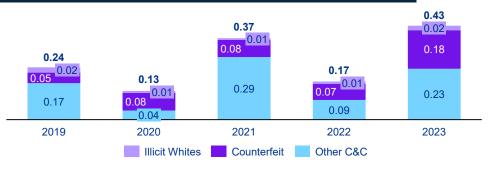


 C&C as a share of total consumption increased by 5.5ppts to 9.4% in 2023, primarily driven by increases in volumes of Counterfeit and Other C&C

#### Manufactured cigarette C&C volumes and share of overall cigarette consumption – 2019-2023<sup>(1)(2)</sup>



#### C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data; 3) EUR 1 = DKK 7.457, InforEuro, European Commission, December 2023



#### Denmark



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)(a)</sup>

Total Denmark Consumption	Fotal Denmark Consumption								
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)			
Legal Domestic Sales (LDS)	5.68	4.75	5.20	4.13	3.91	(5%)			
Outflows	(0.11)	(0.07)	(0.04)	(0.06)	(0.08)	29%			
Legal Domestic Consumption (LDC)	5.56	4.68	5.16	4.06	3.83	(6%)			
Non-Domestic Legal (ND(L))	0.39	0.12	0.19	0.22	0.30	40%			
Counterfeit and Contraband (C&C)	0.24	0.13	0.37	0.17	0.43	146%			
Total Non-Domestic	0.63	0.25	0.56	0.39	0.73	88%			
Total Consumption	6.20	4.93	5.72	4.45	4.56	2%			

Total consumption increased by 2% in 2023, driven by a relatively large increase in Non-Domestic consumption

 Increased Non-Domestic consumption was driven by an increase in inflows from all major sources, with Counterfeit becoming the largest source of inflows in 2023

 Outflows from Denmark remained relatively low, albeit increased primarily due to increased outflows to Germany

#### Total inflows by country of origin – 2019-2023<sup>(1)(b)</sup>

Inflows to Denmark					
Billion cigarettes	2019	2020	2021	2022	2023
Counterfeit	0.05	0.08	0.08	0.07	0.18
Poland	0.02	0.03	0.08	0.05	0.11
Sweden	0.08	0.03	0.07	0.05	0.10
Duty Free Labelled	0.16	0.04	0.06	0.04	0.07
Romania	0.03	0.01	0.03	0.02	0.05
Other	0.29	0.07	0.25	0.16	0.23
Total Inflows	0.63	0.25	0.56	0.39	0.73

#### Total outflows by destination – 2019-2023<sup>(1)(b)</sup>

Outflows from Denmark										
Billion cigarettes	2019	2020	2021	2022	2023					
Germany	(0.02)	(0.02)	(0.01)	(0.01)	(0.03)					
Sweden	(0.02)	(0.01)	(0.01)	(0.02)	(0.01)					
Netherlands	(0.02)	(0.01)	(0.00)	(0.01)	(0.01)					
Norway	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)					
Italy	(0.00)	(0.00)	0.00	0.00	(0.01)					
Other	(0.04)	(0.02)	(0.01)	(0.02)	(0.02)					
Total Outflows	(0.11)	(0.07)	(0.04)	(0.06)	(0.08)					

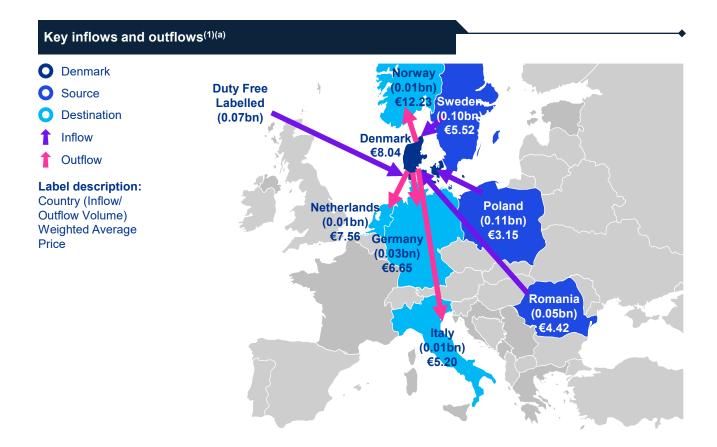
Note: (a) Due to large volumes of cigarette shipments in Q4 2021 ahead of a price rise in January 2022, LDS volumes in Q1 2022 were significantly lower than in previous periods. As a result we have adjusted 2022 LDS shown to account for this de-loading effect. Refer to the appendix for further details; (b) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data; (3) Nielsen sales data

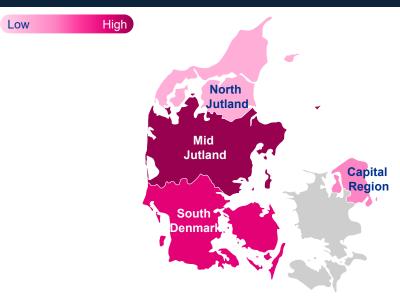


#### Denmark





#### C&C % by region<sup>(1)(b)(c)</sup>



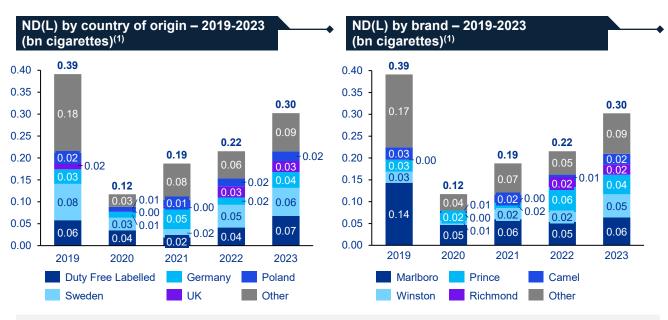
Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023



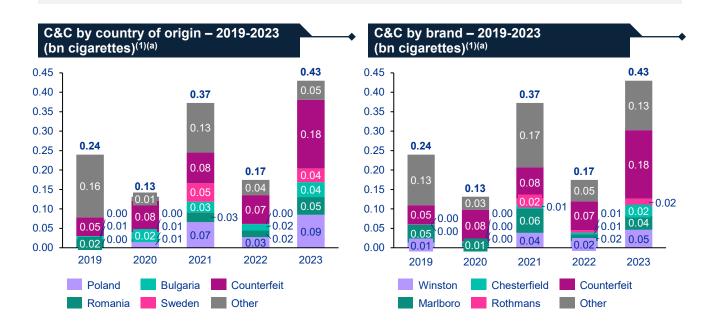


## ND(L) and C&C flows

Denmark



- Legal inflows (ND(L)) increased by 40% driven by an increase in legal flows from Duty Free, Sweden and Germany, as well as smaller sources grouped together within 'Other'
- Illicit inflows (C&C) increased to the highest level observed during the reporting period, primarily driven by Counterfeit which accounted for ~42% of illicit inflows in 2023



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023;



# Estonia



Estonia

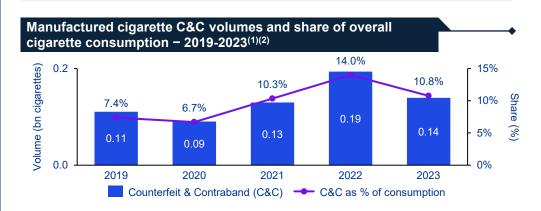
### **C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



C&C as a share of total consumption decreased by 3.2ppts in 2023 to 10.8%

 This decline was driven by a reduction in Other C&C, which was partially offset by an increase in Counterfeit and Illicit Whites



#### C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup> 0.19 0.06 0.14 0.13 0.11 0.02 0.09 0.08 0.07 0.04 0.04 0.01 0.01 0.11 0.01 0.04 0.06 0.05 0.04 0.02 2019 2021 2022 2023 2020 Illicit Whites Counterfeit Other C&C

Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts
Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data

### **1.3bn**

Cigarettes consumed



**O.1DN** C&C cigarettes consumed

-0.05bn on 2022

## 10.8%

Of total consumption was C&C





Total tax revenue lost from C&C<sup>(b)</sup>



KPMG



#### Estonia



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Estonia Consumption									
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)			
Legal Domestic Sales (LDS)	1.56	1.46	1.42	1.39	1.32	(5%)			
Outflows	(0.23)	(0.24)	(0.32)	(0.23)	(0.21)	(11%)			
Legal Domestic Consumption (LDC)	1.33	1.22	1.11	1.16	1.11	(4%)			
Non-Domestic Legal (ND(L))	0.06	0.04	0.02	0.03	0.05	40%			
Counterfeit and Contraband (C&C)	0.11	0.09	0.13	0.19	0.14	(28%)			
Total Non-Domestic	0.17	0.13	0.15	0.23	0.18	(18%)			
Total Consumption	1.50	1.35	1.25	1.38	1.29	(7%)			

 Total consumption decreased by 7% in 2023, driven by a decline in both Legal Domestic Sales and Non-Domestic inflows

- Non-Domestic inflows decreased by 18% in 2023, driven by a decline C&C consumption

- Finland remained the largest destination for outflows of cigarettes from Estonia

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Estonia				Inflows to Estonia								
Billion cigarettes	2019	2020	2021	2022	2023							
Belarus	0.03	0.02	0.06	0.05	0.08							
Counterfeit	0.01	0.01	0.01	0.02	0.04							
Duty Free Labelled	0.03	0.03	0.01	0.03	0.03							
Turkey	0.00	0.00	0.00	0.00	0.01							
Other	0.09	0.06	0.06	0.13	0.03							
Total Inflows	0.17	0.13	0.15	0.23	0.18							

Total outflows by destinat	ion – 2019-2023 <sup>(1)(a)</sup>				•
Outflows from Estonia				_	
Billion cigarettes	2019	2020	2021	2022	2023
Finland	(0.19)	(0.21)	(0.30)	(0.22)	(0.19)
Other	(0.03)	(0.03)	(0.01)	(0.01)	(0.01)
Total Outflows	(0.23)	(0.24)	(0.32)	(0.23)	(0.21)

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



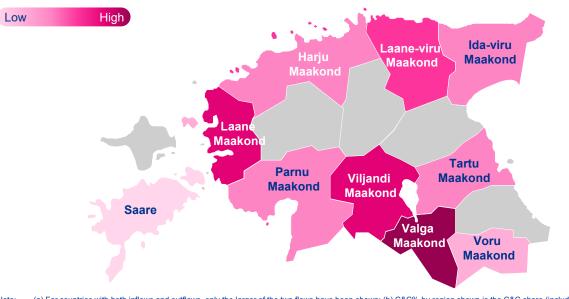
#### **Estonia**



#### Key inflows and outflows<sup>(1)(a)</sup>



#### C&C % by region<sup>(1)(b)(c)</sup>



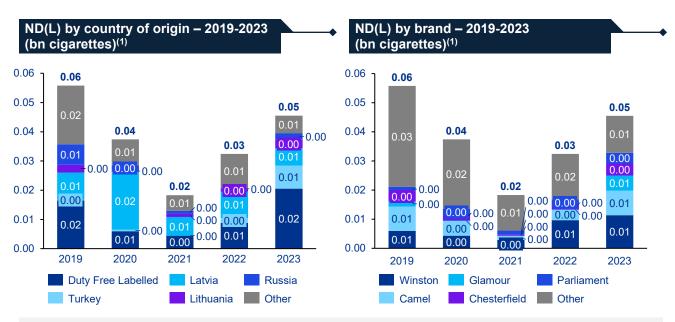
Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands. WHO 2020; (5) Prices, Euromonitor, 2020-2023





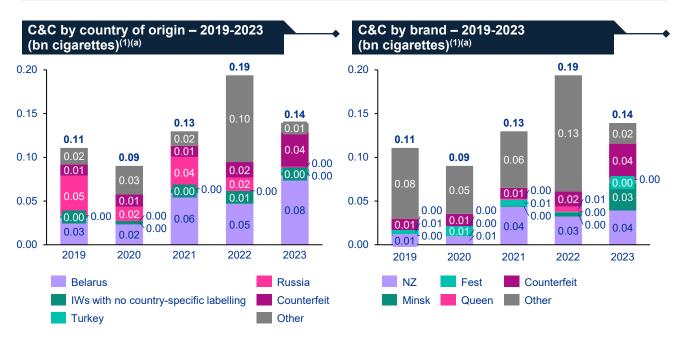
## ND(L) and C&C flows

Estonia



- Legal inflows (ND(L)) increased in 2023, with increasing legal inflows from all major source markets

 Illicit inflows (C&C) declined in 2023, driven by reduced illicit inflows from smaller source markets grouped together within 'Other' (primarily Ukraine), despite increased illicit inflows from Belarus and Counterfeit



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023



# Enland



Finland



## **3.2bn**

Cigarettes consumed



**0.5**bn

C&C cigarettes consumed





+0.48ppts on 2022



lost from C&C<sup>(b)</sup>

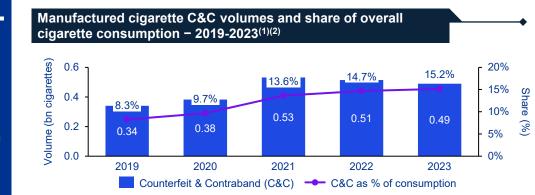


# C&C cigarette consumption and total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



- C&C as a share of total consumption increased by 0.5ppts to 15.2% in 2023 despite a decrease in C&C volumes, as C&C volumes declined more slowly than total cigarette consumption
- A decline in Other C&C was partly offset by an increase in Counterfeit



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup> 0.53 0.51 0 49 0.02<mark>-</mark>0.02 0.03 0.02 0.02 0.38 0.07 0.34 0.03 0.01 0.05<sup>-0.02</sup> 0.50 0.47 0.40 0.35 0.26 2019 2020 2021 2022 2023 Illicit Whites Counterfeit Other C&C

Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts
Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



#### Finland



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Finland Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	3.48	3.48	3.26	2.85	2.54	(11%)
Outflows	(0.03)	(0.02)	(0.01)	(0.01)	(0.02)	37%
Legal Domestic Consumption (LDC)	3.45	3.47	3.26	2.84	2.52	(11%)
Non-Domestic Legal (ND(L))	0.32	0.11	0.11	0.16	0.22	40%
Counterfeit and Contraband (C&C)	0.34	0.38	0.53	0.51	0.49	(5%)
Total Non-Domestic	0.66	0.49	0.64	0.67	0.71	5%
Total Consumption	4.11	3.96	3.90	3.51	3.23	(8%)

- Total consumption decreased by 8% in 2023, driven by a decline in Legal Domestic Sales

 Non-Domestic inflows increased by 5%, primarily driven by higher Counterfeit flows and, to a lesser extent, higher inflows from smaller markets grouped within 'Other'. This was partially offset by a decline in inflows from Estonia

- Estonia and Duty Free remained the largest sources of inflows
- Outflows from Finland remained low

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Finland					
Billion cigarettes	2019	2020	2021	2022	2023
Estonia	0.19	0.21	0.30	0.22	0.19
Duty Free Labelled	0.21	0.13	0.16	0.17	0.17
Counterfeit	0.05	0.03	0.02	0.03	0.07
Other	0.21	0.12	0.16	0.25	0.27
Total Inflows	0.66	0.49	0.64	0.67	0.71

Total outflows by destinati	Total outflows by destination – 2019-2023 <sup>(1)(a)</sup>					
Outflows from Finland						
Billion cigarettes	2019	2020	2021	2022	2023	
Other	(0.03)	(0.02)	(0.01)	(0.01)	(0.02)	
Total Outflows	(0.03)	(0.02)	(0.01)	(0.01)	(0.02)	

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



Finland





#### Key inflows and outflows<sup>(1)(a)</sup>

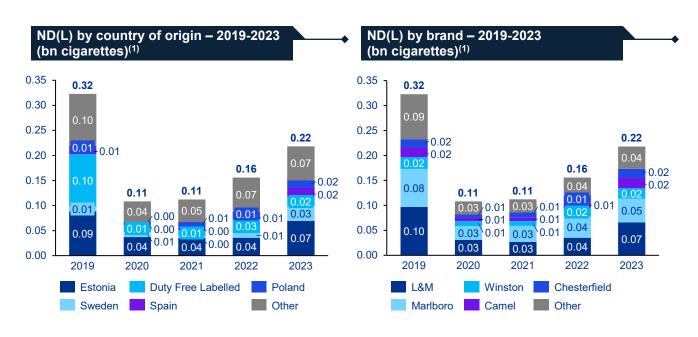


Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023

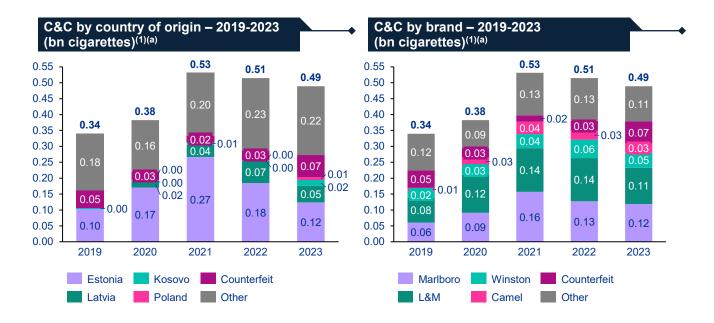




## Finland ND(L) and C&C flows



- Legal inflows (ND(L)) increased further in 2023, primarily driven by increased legal flows from Estonia and Sweden, but still remained below 2019 levels
- Illicit inflows (C&C) declined in 2023, showing a similar quantum of decrease as in 2022, with the largest components of change being a decline in illicit inflows from Estonia and an increase in Counterfeit



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023



## France



France

50.6bn

16.8bn

C&C cigarettes

consumed

-1.63bn

on 2022

-0.12bn

on 2022

€7,258m

+€3m

on 2022

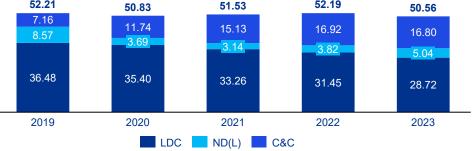
Total tax revenue lost from C&C<sup>(b)</sup>

Cigarettes

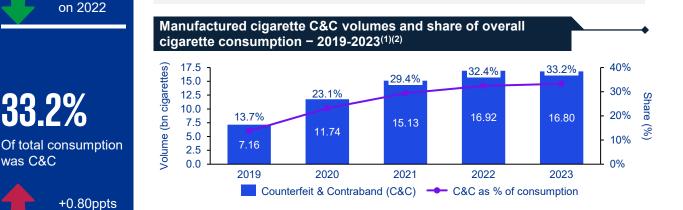
consumed

### **C&C cigarette consumption and** total consumption

## Solution - 2019-2023 (bn cigarettes)<sup>(1)(2)</sup> 52.21 50.83 51.53 52.19



- Despite overall C&C volumes declining, C&C as a share of total cigarette consumption increased by 0.8ppts to 33.2% in 2023
- Counterfeit volumes decreased by ~1.76bn cigarettes in 2023, but this decrease has been offset by an increase in Illicit Whites and Other C&C



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup> 16.92 16.80 15.13 0.81 1.61 0.69 11.74 8.03 6.27 0.68 7.96 7.16 5.98 0.84 1.08 8.92 8.08 6.48 5.23 5.08 2019 2020 2021 2022 2023 Illicit Whites Counterfeit Other C&C

Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



#### France



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total France Consumption									
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)			
Legal Domestic Sales (LDS)	37.21	35.82	33.48	31.73	29.13	(8%)			
Outflows	(0.73)	(0.42)	(0.22)	(0.28)	(0.41)	47%			
Legal Domestic Consumption (LDC)	36.48	35.40	33.26	31.45	28.72	(9%)			
Non-Domestic Legal (ND(L))	8.57	3.69	3.14	3.82	5.04	32%			
Counterfeit and Contraband (C&C)	7.16	11.74	15.13	16.92	16.80	(1%)			
Total Non-Domestic	15.73	15.44	18.27	20.74	21.84	5%			
Total Consumption	52.21	50.83	51.53	52.19	50.56	(3%)			

 Total cigarette consumption declined by 3%, primarily driven by a decrease in Legal Domestic Sales but partly offset by increased Non-Domestic inflows

 Declining Counterfeit inflows were more than offset by increased Non-Domestic inflows from Spain, Algeria, Poland, and a number of smaller source markets included within 'Other'

 Legal inflows (ND(L)) increased in 2023, reflecting ongoing recovery in cross border travel volumes<sup>(3)</sup>, but remained below pre-pandemic levels

Illicit consumption (C&C) formed 77% of Non-Domestic inflows (vs 82% in 2022) and Counterfeit, albeit declining, remained the largest source at 12.4% of total cigarette consumption (vs 15.4% in 2022)

Outflows from France increased in 2023, but remained below the pre-pandemic levels

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to France					
Billion cigarettes	2019	2020	2021	2022	2023
Counterfeit	0.84	5.98	7.96	8.03	6.27
Spain	4.08	2.77	2.56	2.62	3.23
Algeria	1.98	0.44	0.32	1.06	1.45
Duty Free Labelled	1.15	0.51	0.85	1.36	1.40
Poland	0.08	0.10	0.63	1.17	1.31
Other	7.59	5.64	5.96	6.50	8.18
Total Inflows	15.73	15.44	18.27	20.74	21.84

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from France					
Billion cigarettes	2019	2020	2021	2022	2023
Belgium	(0.13)	(0.07)	(0.03)	(0.07)	(0.12)
Germany	(0.08)	(0.06)	(0.05)	(0.05)	(0.06)
Ireland	(0.02)	(0.00)	(0.00)	(0.01)	(0.05)
Switzerland	(0.29)	(0.06)	(0.07)	(0.05)	(0.05)
Other	(0.21)	(0.23)	(0.08)	(0.11)	(0.13)
Total Outflows	(0.73)	(0.42)	(0.22)	(0.28)	(0.41)

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data; (3) UNWTO and Euromonitor travel data

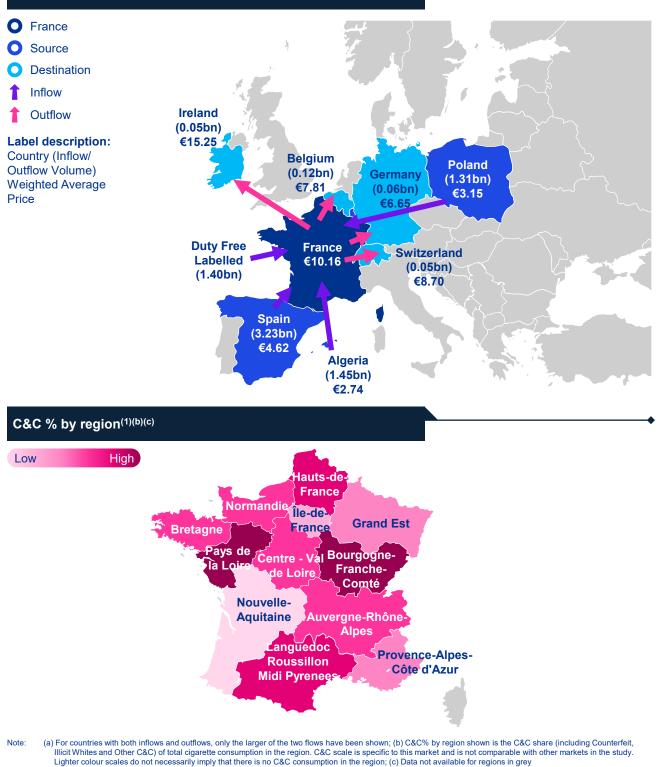


#### France



## Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>



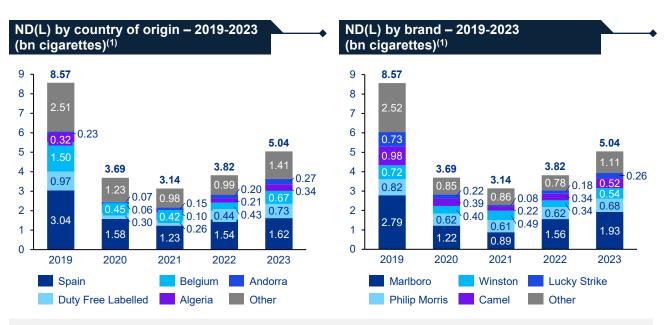
Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023



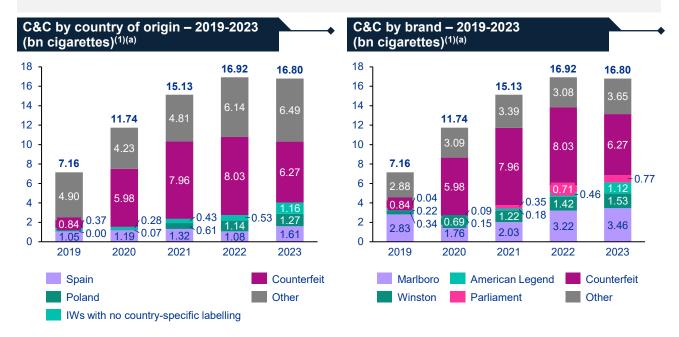


## ND(L) and C&C flows

France



- Legal inflows (ND(L)) increased in 2023, with increased inflows across all major sources and from smaller sources included within 'Other', but remained below pre-pandemic levels
- Illicit (C&C) inflows declined by 1%, with a 1.76bn decline in Counterfeit flows offset by increased illicit inflows from Spain, Poland and Illicit Whites with no country-specific labelling, as well as smaller volume sources grouped together within 'Other'



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023;



## Germany



76.0bn

-0.71bn

on 2022

-0.08bn

on 2022

Cigarettes

consumed

1.6bn

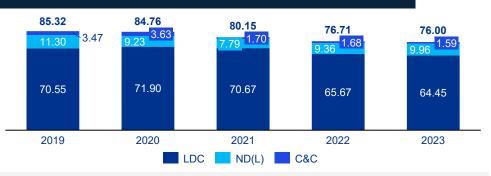
C&C cigarettes

consumed

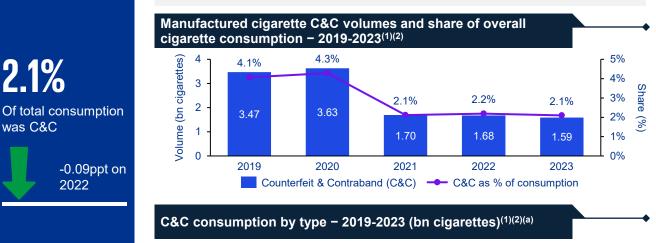


# C&C cigarette consumption and total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



- C&C as a share of total cigarette consumption decreased by 0.1ppts in 2023, driven by a decrease in in Counterfeit. This was partly offset by an increase in other C&C and Illicit Whites
- For the first time in 2023, Germany results are driven by an empty pack survey instead of a yellow bag survey. This change has been undertaken to allow the inclusion of Counterfeit data for all manufacturers participating in the empty pack survey (vs PMI data only in the yellow bag survey). As a result, Counterfeit volumes may not be directly comparable between 2022 and 2023, although we believe overall results are comparable year on year<sup>(d)</sup>



3.47	<b>3.63</b> 0.55			
0.93	0.58			
0.46		1.70	1.68	
2.09	2.50	0.31	0.32	C
2.00		1.06	0.83	
2019	2020	2021	2022	
	Illicit Whites	Counterfeit	Other C&C	

Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts (d) Refer to Page 239 for further details on Yellow Bag vs empty pack surveys

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data

KPMG

€368m

Total tax revenue lost from C&C<sup>(b)</sup>

-€5m on 2022

#### Germany



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Germany Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	72.35	72.96	71.62	66.54	65.43	(2%)
Outflows	(1.80)	(1.06)	(0.95)	(0.87)	(0.98)	12%
Legal Domestic Consumption (LDC)	70.55	71.90	70.67	65.67	64.45	(2%)
Non-Domestic Legal (ND(L))	11.30	9.23	7.79	9.36	9.96	6%
Counterfeit and Contraband (C&C)	3.47	3.63	1.70	1.68	1.59	(5%)
Total Non-Domestic	14.77	12.86	9.49	11.04	11.55	5%
Total Consumption	85.32	84.76	80.15	76.71	76.00	(1%)

 Total cigarette consumption declined marginally in 2023, with a decline in Legal Domestic Consumption partially offset by an increase in Non-Domestic inflows. The majority of these inflows were estimated to be legal (ND(L))

 Neighbouring Poland and the Czech Republic remained the largest sources of Non-Domestic inflows, with Polish inflows increasing and Czech Republic inflows continuing their long-term declining trend

- Outflows increased by 12%, mostly due to increased outflows to the Netherlands

Total inflows by country o							
Inflows to Germany							
Billion cigarettes	2019	2020	2021	2022	2023		
Poland	4.94	4.66	3.82	4.66	5.19		
Czech Republic	4.09	3.68	2.31	2.15	1.69		
Duty Free Labelled	1.44	0.86	0.53	0.67	1.06		
Luxembourg	0.35	0.43	0.37	0.55	0.64		
Counterfeit	0.46	0.58	0.31	0.53	0.37		
Other	3.50	2.64	2.15	2.48	2.60		
Total Inflows	14.77	12.86	9.49	11.04	11.55		

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Germany					
Billion cigarettes	2019	2020	2021	2022	2023
Netherlands	(0.38)	(0.22)	(0.23)	(0.19)	(0.29)
France	(0.71)	(0.33)	(0.12)	(0.22)	(0.19)
Poland	(0.05)	(0.09)	(0.06)	(0.08)	(0.07)
Austria	(0.08)	(0.05)	(0.10)	(0.07)	(0.07)
Czech Republic	(0.06)	(0.03)	(0.18)	(0.04)	(0.06)
Other	(0.51)	(0.34)	(0.25)	(0.28)	(0.30)
Total Outflows	(1.80)	(1.06)	(0.95)	(0.87)	(0.98)

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data;

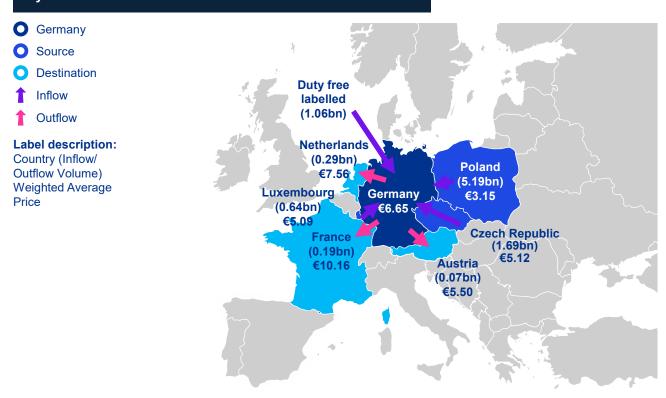


#### Germany



## Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>



#### C&C % by region<sup>(1)(b)(c)(d)</sup>

High

Low



Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region (c) Data not available for regions in grey (d) C&C incidence is relatively low across all regions and differs by just 2.1ppt with the lowest C&C percentage in lower Saxony at 1.7% and highest C&C% in Saxony at 3.8% Source: (1) KPMG European Elower Calculation 2003; (c) Prices and tax rates EC Excise Duty, 2003; (d) Drivest DAC Market and WAP, PML October 2003; (d) Prices, Park of 20 cincreties of

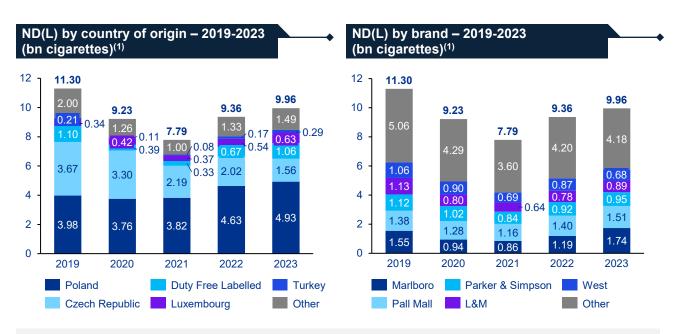
Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023 (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023



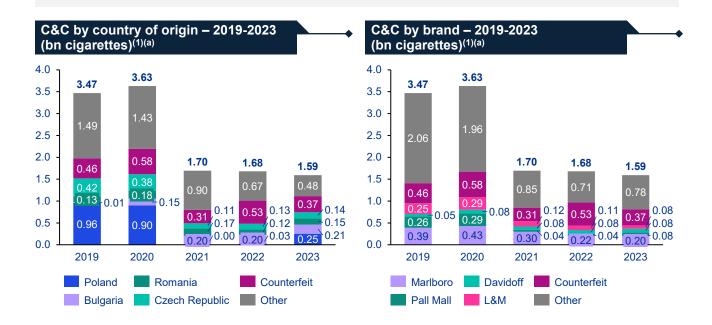


## ND(L) and C&C flows

Germany



- Legal inflows (ND(L)) increased by 6% in 2023, with Poland and the Czech Republic remaining the largest sources
- Illicit inflows (C&C) decreased by 5% primarily driven by decline in Counterfeit and inflows from smaller sources grouped within 'Other'



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023;



## Greece



Greece



### 14.8bn

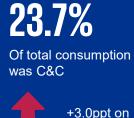
Cigarettes consumed

+0.75bn on 2022



3.5bn

C&C cigarettes



2022



Total tax revenue lost from C&C<sup>(b)</sup>

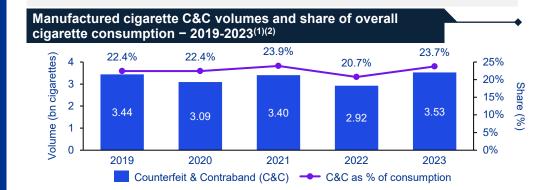


### **C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



 C&C as a share of total cigarette consumption increased by 3.0ppts to 23.7% in 2023, primarily driven by an increase in Counterfeit



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup> 3.53 3.44 3.40 3.09 2.92 1.00 1.24 1.66 1.20 0.96 2.16 1.74 1.73 1.62 1.51 0.42 0.27 0.27 0.24 0.36 2019 2020 2021 2022 2023 Illicit Whites Counterfeit Other C&C

Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consume legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts
Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



#### Greece



# Manufactured cigarette consumption, inflows and outflows

Total manufactured cigarette consumption – 2019-2023 <sup>(1)(2)</sup> Total Greece Consumption							
Legal Domestic Sales (LDS)	12.14	10.94	11.12	11.33	11.49	1%	
Outflows	(0.44)	(0.38)	(0.40)	(0.38)	(0.40)	4%	
Legal Domestic Consumption (LDC)	11.70	10.56	10.72	10.95	11.09	1%	
Non-Domestic Legal (ND(L))	0.20	0.12	0.12	0.22	0.23	5%	
Counterfeit and Contraband (C&C)	3.44	3.09	3.40	2.92	3.53	21%	
Total Non-Domestic	3.64	3.21	3.52	3.15	3.76	19%	
Total Consumption	15.34	13.77	14.24	14.10	14.85	5%	

- Total cigarette consumption increased by 5%, primarily driven by an increase in Non-Domestic inflows

 Non-Domestic inflows increased by 19%, and were primarily comprised of Counterfeit and Illicit Whites with no country specific labelling, both of which increased alongside increased inflows from smaller sources grouped together within 'Other'

 Outflows increased by 4%, with the majority of outflows to destinations for which Greece is a popular tourism destination

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup> Inflows to Greece **Billion cigarettes** 2019 2020 2021 2022 2023 2.16 Counterfeit 1.51 1.62 1.74 1.73 IWs with no country-specific labelling 1.61 1.15 1.21 0.90 0.95 Other 0.52 0.45 0.57 0.52 0.64 **Total Inflows** 3.64 3.21 3.52 3.15 3.76

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Greece								
Billion cigarettes	2019	2020	2021	2022	2023			
Germany	(0.15)	(0.12)	(0.10)	(0.14)	(0.11)			
Netherlands	(0.02)	(0.03)	(0.03)	(0.01)	(0.06)			
France	(0.05)	(0.04)	(0.05)	(0.04)	(0.06)			
UK	(0.07)	(0.02)	(0.14)	(0.10)	(0.03)			
Other	(0.14)	(0.17)	(0.07)	(0.09)	(0.14)			
Total Outflows	(0.44)	(0.38)	(0.40)	(0.38)	(0.40)			

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data;

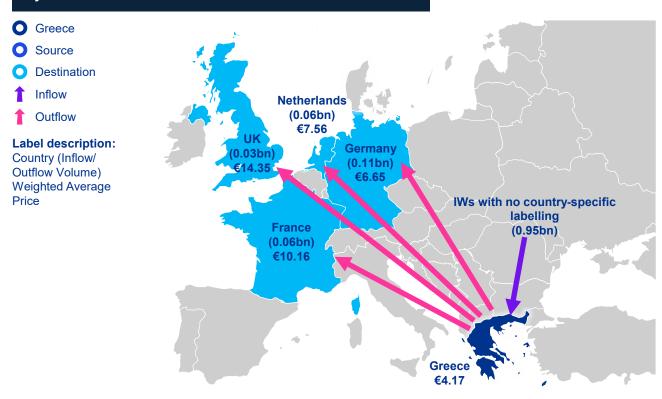


#### Greece



## Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>





Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region

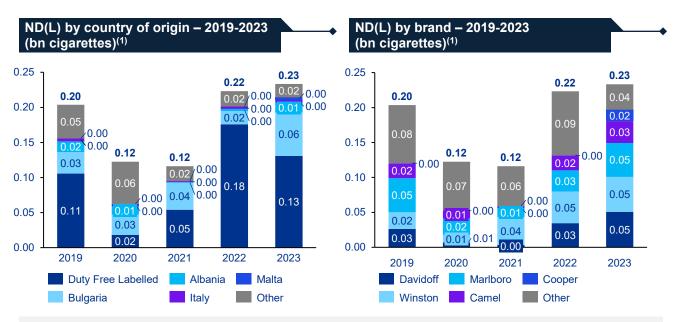
Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023



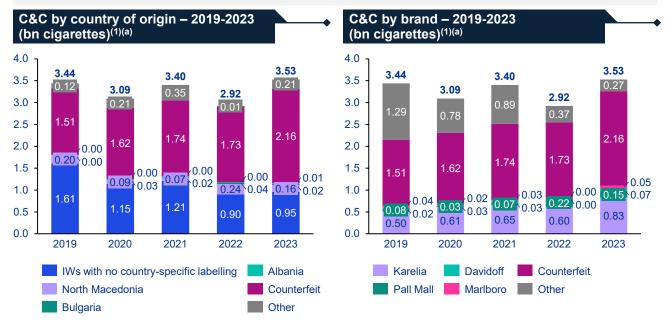


## ND(L) and C&C flows

Greece



- Legal inflows (ND(L)) remained largely stable, with a decline in legal inflows of Duty Free offset by increased legal Bulgarian inflows
- Counterfeit and the brand Karelia remain the major contributors to illicit inflows (C&C), both reaching the highest levels observed during the reporting period
- There have been continued successful raids on illegal cigarette factories, warehouses and transport in Greece in 2023, including a seizure of 24 million illicit cigarettes in a single operation in January<sup>(2)</sup>



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023; (2) www.capital.gr: AADE: Seizure of 4.5 tons of contraband cigarettes, 09 Feb 2023



# Hungary



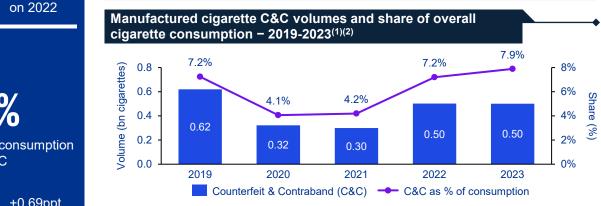


#### **Country profile C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)(1)(2)



C&C as a share of total consumption increased by 0.7ppts to 7.9% in 2023, with an increase in Counterfeit offset by a decline in Illicit Whites



#### C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>

0.62				
			0.50	0.50
0.46	0.32	0.30	0.00	0.16
0.04	0.23	0.24	0.39	0.33
0.12	0.02	0.01 0.05	0.09	0.02
2019	2020 Illicit W	2021 hites Counterfeit	2022 Other C&C	2023

Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data; 3) EUR 1 = HUF 377.380, InforEuro, European Commission, December 2023



Cigarettes consumed



0.5bn

C&C cigarettes consumed



7.9% Of total consumption was C&C





Total tax revenue lost from C&C<sup>(b)</sup> (HUF36,315m)(3)



KPMG



#### Hungary



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Hungary Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	8.21	7.73	6.88	6.50	5.72	(12%)
Outflows	(0.46)	(0.25)	(0.17)	(0.28)	(0.21)	(25%)
Legal Domestic Consumption (LDC)	7.74	7.49	6.72	6.22	5.51	(11%)
Non-Domestic Legal (ND(L))	0.19	0.11	0.10	0.25	0.33	35%
Counterfeit and Contraband (C&C)	0.62	0.32	0.30	0.50	0.50	(0%)
Total Non-Domestic	0.81	0.43	0.40	0.75	0.83	11%
Total Consumption	8.56	7.92	7.12	6.97	6.34	(9%)

- Total cigarette consumption declined by 9%, driven by a decline in Legal Domestic Sales

- Non-Domestic inflows increased by 11%
- Counterfeit inflows increased by 0.24bn in 2023 to the highest level recorded in the reporting period, and replaced Illicit Whites with no country-specific labelling as the largest source of inflows
- Outflows declined by 25%, primarily driven by reduced outflows to neighbouring Austria and a number of smaller markets grouped together within 'Other'

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Hungary								
Billion cigarettes	2019	2020	2021	2022	2023			
Counterfeit	0.04	0.07	0.05	0.09	0.33			
IWs with no country-specific labelling	0.44	0.16	0.21	0.37	0.14			
Slovakia	0.01	0.01	0.01	0.03	0.10			
Duty Free Labelled	0.02	0.02	0.01	0.03	0.04			
Austria	0.01	0.01	0.01	0.03	0.03			
Other	0.29	0.17	0.12	0.21	0.20			
Total Inflows	0.81	0.43	0.40	0.75	0.83			

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Hungary					
Billion cigarettes	2019	2020	2021	2022	2023
Austria	(0.23)	(0.14)	(0.06)	(0.11)	(0.08)
Germany	(0.07)	(0.04)	(0.02)	(0.03)	(0.03)
Switzerland	(0.02)	(0.00)	(0.01)	(0.00)	(0.02)
Slovenia	(0.00)	(0.01)	(0.00)	(0.02)	(0.01)
Other	(0.15)	(0.05)	(0.07)	(0.11)	(0.06)
Total Outflows	(0.46)	(0.25)	(0.17)	(0.28)	(0.21)

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data;

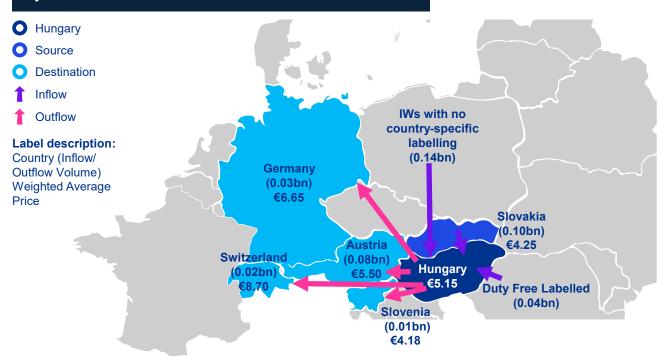


#### Hungary



## Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>



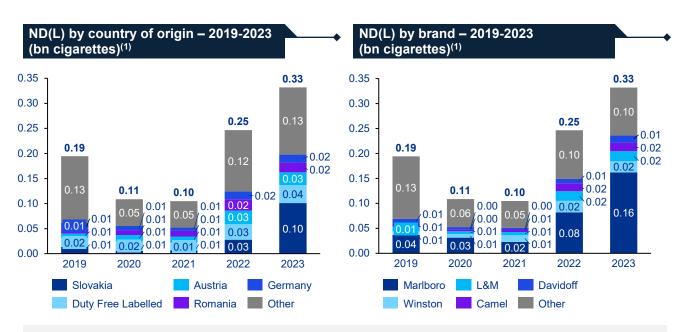
#### C&C % by region<sup>(1)(b)(c)</sup> Low High Borsod-Abaúj Szabolcs--Zemplén Szatmár-Bereg **Budapest** Nógrád Heves Győr-Moson Komárom Hajdú -Sopron Esztergom -Bihar Pest ász-Nagykur Vas -Szolnok Fejér Veszprém Békés Zala Bács-Kiskur Tolna Csongrád Somogy Csanád Baranya

Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023

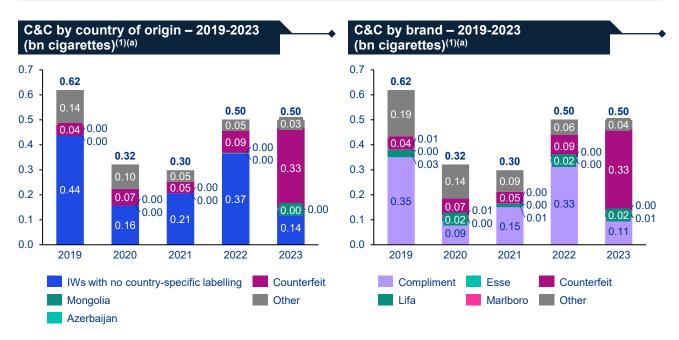




## ND(L) and C&C flows



- Legal inflows (ND(L)) increased by 35% driven by increased inflows from neighbouring Slovakia
- Counterfeit and Illicit Whites with no country-specific labelling continue to account for the majority of illicit consumption (C&C)
- Counterfeit's share of total C&C inflows increased from 18% in 2022 to 66% in 2023



 Note:
 (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys

 Source:
 (1) KPMG European Flows Calculation, 2019-2023;



# Ireland



Ireland

**3.3bn** 

Cigarettes

consumed

0.9bn

C&C cigarettes consumed

+0.04bn

on 2022

+0.12bn on 2022

### **Country profile C&C cigarette consumption and** total consumption

Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



C&C as a share of total consumption increased by 3.4ppts to 27.8%, driven by increased inflows of Illicit Whites and Other C&C

Manufactured cigarette C&C volumes and share of overall cigarette consumption - 2019-2023<sup>(1)(2)</sup> 27.8% volume (bn cigarettes) 30% 1.0 24.4% 25% 0.8 17.5% 17.3% 16.8% 20% 0.6 15% 0.92 0.4 0.80

Of total consumption was C&C

27.8%

+3.45ppt on 2022



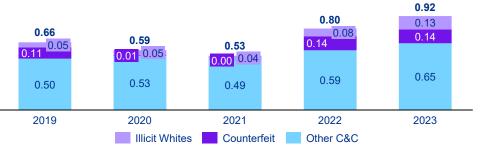
Total tax revenue lost from C&C<sup>(b)</sup>



C&C consumption by type - 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>

0.59

2020



0.53

2021

Counterfeit & Contraband (C&C) - C&C as % of consumption

2022

(a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty Note: pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



0.66

2019

0.2

0.0

Share

(%

10%

5%

0%

2023

### Ireland



## Manufactured cigarette consumption, inflows and outflows

### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Ireland Consumption								
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)		
Legal Domestic Sales (LDS)	2.55	2.70	2.54	2.16	1.91	(12%)		
Outflows	(0.03)	(0.03)	(0.01)	(0.08)	(0.04)	(54%)		
Legal Domestic Consumption (LDC)	2.52	2.67	2.53	2.09	1.88	(10%)		
Non-Domestic Legal (ND(L))	0.61	0.15	0.11	0.40	0.52	31%		
Counterfeit and Contraband (C&C)	0.66	0.59	0.53	0.80	0.92	15%		
Total Non-Domestic	1.27	0.73	0.64	1.20	1.44	21%		
Total Consumption	3.80	3.40	3.17	3.28	3.32	1%		

 Total cigarette consumption increased marginally, with a decrease in Legal Domestic Consumption more than offset by an increase in Non-Domestic inflows

- The Non-Domestic inflow increase was primarily driven by increased flows from Duty Free Labelled, Spain, and smaller source markets grouped together within 'Other'. These were partly offset by a decline in flows from Romania
- Outflows decreased in 2023, returning to similar levels as observed in 2019 and 2020

### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Ireland								
Billion cigarettes	2019	2020	2021	2022	2023			
Duty Free Labelled	0.14	0.08	0.07	0.23	0.29			
Romania	0.11	0.19	0.15	0.26	0.15			
Counterfeit	0.11	0.01	0.00	0.14	0.14			
Spain	0.12	0.02	0.01	0.07	0.11			
Poland	0.06	0.09	0.05	0.09	0.10			
Other	0.73	0.34	0.36	0.41	0.65			
Total Inflows	1.27	0.73	0.64	1.20	1.44			

### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Ireland					
Billion cigarettes	2019	2020	2021	2022	2023
Germany	(0.00)	(0.00)	0.00	(0.00)	(0.01)
Other	(0.03)	(0.03)	(0.01)	(0.08)	(0.02)
Total Outflows	(0.03)	(0.03)	(0.01)	(0.08)	(0.04)

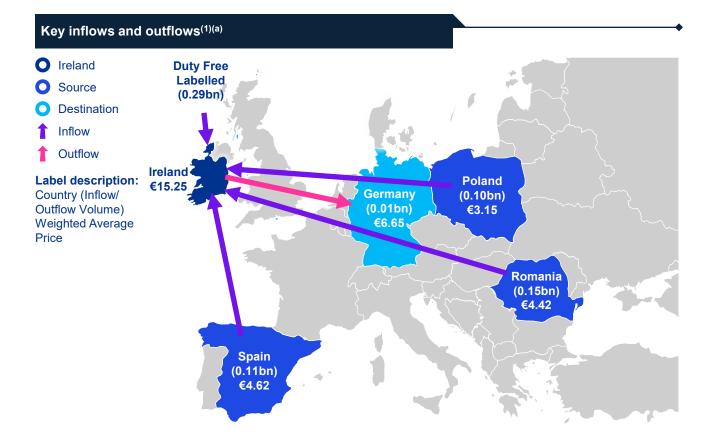
Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



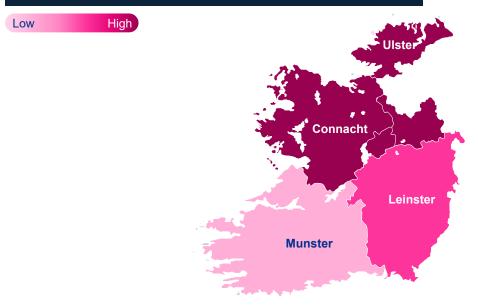
#### Ireland



### Key flows and C&C consumption patterns



### C&C % by region<sup>(1)(b)(c)</sup>



Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023



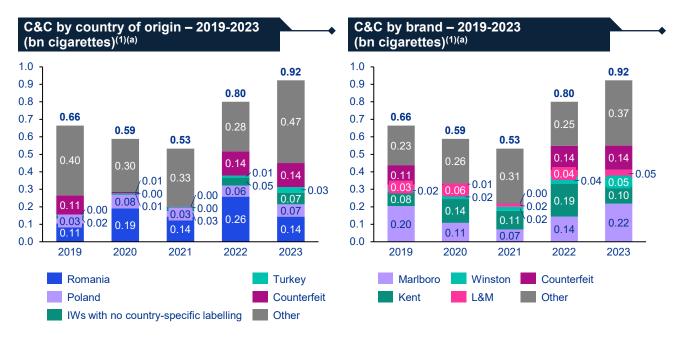


### ND(L) and C&C flows

Ireland



- Legal inflows (ND(L)) increased by 31% in 2023, primarily driven by increased legal inflows from Spain and smaller source markets grouped together within 'Other', but still remained below 2019 levels
- Illicit inflows (C&C) increased by 15%, with a decrease in illicit inflows from Romania more than offset by an increase from smaller source markets grouped together within 'Other'



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023





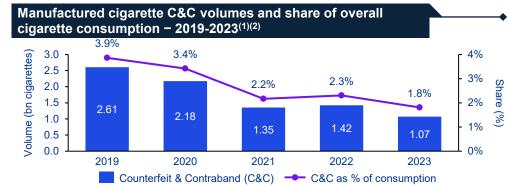


# C&C cigarette consumption and total consumption

### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



 C&C as a share of total consumption declined by 0.5ppts to 1.8% in 2023, primarily driven by a decline in Other C&C



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data

### 59.4bn

Cigarettes consumed

**1.1bn** 

C&C cigarettes consumed











Total tax revenue lost from C&C<sup>(b)</sup>





### Italy



## Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Italy Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	64.63	61.74	61.11	60.22	58.35	(3%)
Outflows	(0.90)	(0.61)	(0.49)	(0.65)	(0.93)	43%
Legal Domestic Consumption (LDC)	63.73	61.13	60.62	59.57	57.41	(4%)
Non-Domestic Legal (ND(L))	1.09	0.37	0.54	0.73	0.92	26%
Counterfeit and Contraband (C&C)	2.61	2.18	1.35	1.42	1.07	(25%)
Total Non-Domestic	3.70	2.55	1.89	2.15	2.00	(7%)
Total Consumption	67.42	63.68	62.51	61.72	59.41	(4%)

- Total cigarette consumption declined by 4% in 2023, continuing the long-term declining trend

Non-Domestic inflows declined, with increased legal inflows (ND(L)) more than offset by declining C&C inflows

 Outflows increased to similar levels as observed in 2019, primarily driven by increased outflows to the UK and smaller destination markets grouped together within 'Other'

### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Italy									
Billion cigarettes	2019	2020	2021	2022	2023				
Counterfeit	0.48	0.23	0.47	0.51	0.55				
Duty Free Labelled	0.68	0.45	0.25	0.34	0.33				
Slovenia	0.41	0.45	0.32	0.46	0.26				
Egypt	0.06	0.07	0.07	0.05	0.12				
IWs with no country-specific labelling	0.82	0.60	0.27	0.18	0.10				
Other	1.25	0.74	0.51	0.61	0.63				
Total Inflows	3.70	2.55	1.89	2.15	2.00				

### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Italy					
Billion cigarettes	2019	2020	2021	2022	2023
France	(0.38)	(0.31)	(0.18)	(0.19)	(0.22)
UK	(0.05)	(0.03)	(0.01)	(0.02)	(0.17)
Germany	(0.10)	(0.08)	(0.08)	(0.11)	(0.10)
Netherlands	(0.07)	(0.06)	(0.02)	(0.07)	(0.10)
Other	(0.30)	(0.12)	(0.20)	(0.25)	(0.35)
Total Outflows	(0.90)	(0.61)	(0.49)	(0.65)	(0.93)

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data

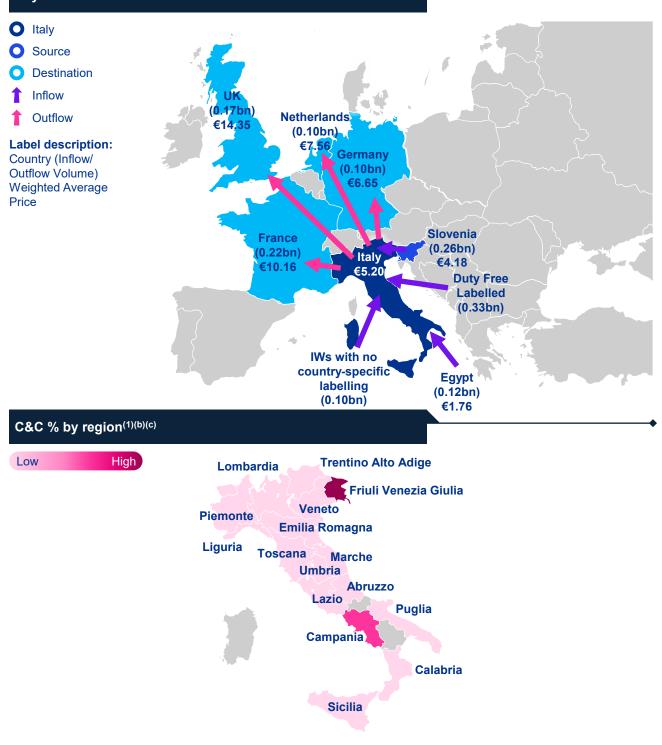


#### Italy



### Key flows and C&C consumption patterns



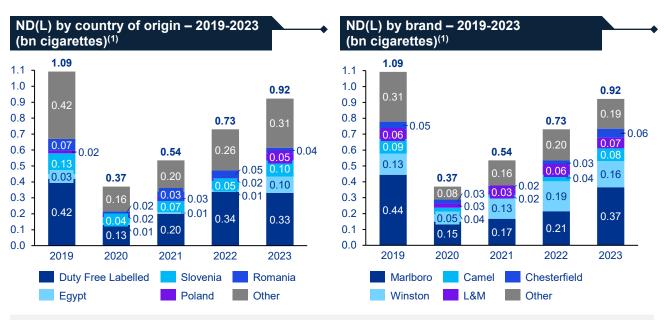


Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023

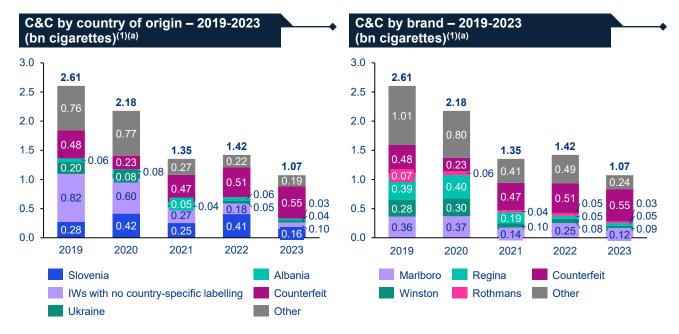




## ND(L) and C&C flows



- Increasing legal inflows (ND(L)) were primarily driven by increased inflows from Egypt and Poland, as well as a number of smaller markets included within 'Other'.
- Despite a decrease in total Slovenian Non-Domestic inflows in 2023, increased traveller numbers to and from Slovenia resulted in increasing Slovenian legal inflows
- Declining illicit consumption (C&C) was primarily driven by reduced overall Non-Domestic inflows from Slovenia, and reduced inflows of Illicit Whites with no country-specific labelling



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023;



## KOSOVO



Kosovo



### **3.2bn**

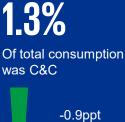
Cigarettes consumed



### 0.04bn

**C&C** cigarettes consumed

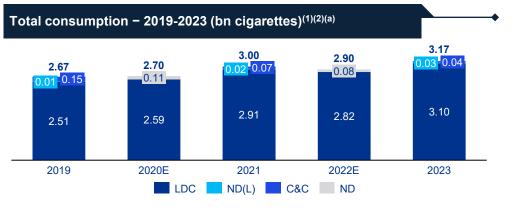




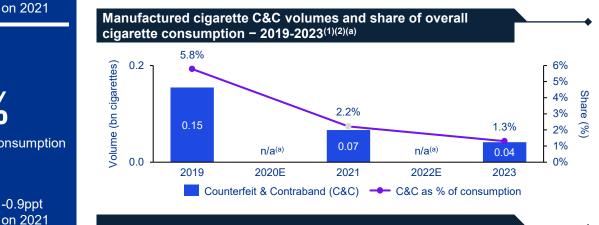


lost from C&C in 2023<sup>(c)</sup>

### **Country profile C&C cigarette consumption and** total consumption



C&C as a share of total consumption has followed a declining trend during the reporting period, driven by a decrease in Illicit Whites and Other C&C



### C&C consumption by type - 2019-2023 (bn cigarettes)<sup>(1)(2)(a)(b)</sup>

0.15				
0.04 0.00				
0.00				
		0.07		
0.11		0.00-0.01		0.04
		0.06		0.00 0.00
	n/a <sup>(a)</sup>	0.00	n/a <sup>(a)</sup>	0.04
2019	2020E	2021	2022E	2023
	Illicit Whites	Counterfe		

Note: (a) ND(L) and C&C detail is only shown for years with empty pack surveys (b) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (c)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (d) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



### Kosovo



## Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)(a)</sup>

Total Kosovo Consumption								
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)		
Legal Domestic Sales (LDS)	2.83	2.76	3.26	3.38	3.51	4%		
Outflows	(0.32)	(0.17)	(0.35)	(0.55)	(0.41)	(27%)		
Legal Domestic Consumption (LDC)	2.51	2.59	2.91	2.82	3.10	10%		
Non-Domestic Legal (ND(L))	0.01		0.02		0.03			
Counterfeit and Contraband (C&C)	0.15		0.07		0.04			
Total Non-Domestic	0.17	0.11	0.09	0.08	0.07	(11%)		
Total Consumption	2.67	2.70	3.00	2.90	3.17	9%		

 Total consumption followed an alternating trend between 2019 and 2023, largely driven by trends in Legal Domestic Consumption

 Inflows have decreased since 2019, driven by a decline in inflows from smaller markets grouped together within 'Other'

- Outflows from Kosovo are primarily to neighbouring Balkan markets, Switzerland and Germany

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)(b)</sup>

Inflows to Kosovo					
Billion cigarettes	2019	2020	2021	2022	2023
Duty Free Labelled	0.00		0.00		0.03
Serbia	0.02		0.01		0.01
Switzerland	0.01		0.00		0.01
Albania	0.03		0.02		0.00
Croatia	0.00		0.00		0.00
Other	0.12		0.05		0.01
Total Inflows	0.17	0.11	0.09	0.08	0.07

#### Total outflows by destination – 2019-2023<sup>(1)(a)(b)(c)</sup>

Outflows from Kosovo					
Billion cigarettes	2019	2020	2021	2022	2023
Serbia	(0.02)	(0.01)	(0.03)	(0.10)	(0.10)
Switzerland	(0.05)	(0.01)	(0.07)	(0.03)	(0.06)
Germany	(0.05)	(0.04)	(0.05)	(0.05)	(0.06)
Montenegro	(0.00)	0.00	(0.05)	(0.16)	(0.03)
Albania	(0.01)	(0.00)	(0.01)	(0.03)	(0.02)
Other	(0.20)	(0.10)	(0.14)	(0.19)	(0.14)
Total Outflows	(0.32)	(0.17)	(0.35)	(0.55)	(0.41)

Note: (a) Detailed breakdowns of ND(L), C&C, inflows and outflows are only shown for years with empty pack surveys. Total Non-Domestic, and inflows and outflows totals for years where empty pack surveys were not conducted are estimates only based on extrapolations of empty pack survey results from the prior and following years (b) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows (c) As empty pack surveys were not conducted in Montenegro in 2019 and Albania and Serbia in 2020, outflows shown to Montenegro in 2019 and Albania and Serbia in 2020, outflows shown to Montenegro in 2019 and Albania and 2021 empty pack surveys respectively for those markets and should be treated as indicative only

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



#### Kosovo



### Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>



### C&C % by region<sup>(1)(b)(c)</sup>

Low High



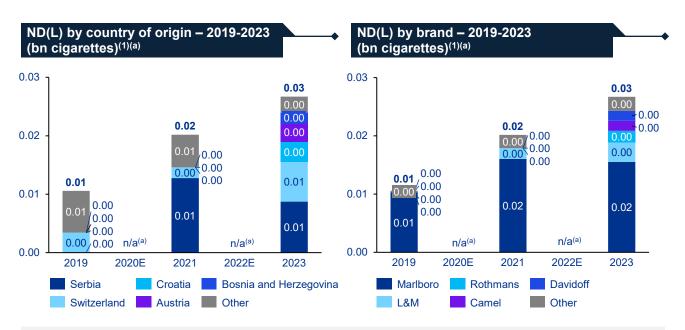
Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023





### ND(L) and C&C flows

Kosovo



 Legal inflows (ND(L)) have increased since 2019 with Serbia and, more recently, Switzerland the primary sources of legal inflows

- Illicit inflows (C&C) have declined since 2019, with a decline observed across all major sources



Note: (a) ND(L) and C&C country / brand breakdowns are only shown for the years where an empty pack survey was undertaken (b) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys

Source: (1) KPMG European Flows Calculation, 2019-2023







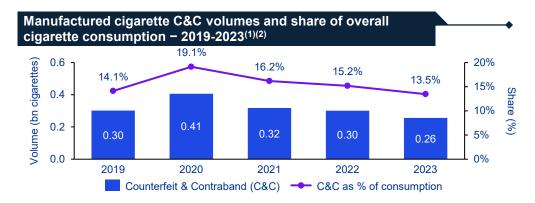
Latvia

### **C&C cigarette consumption and** total consumption

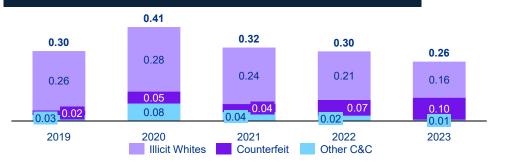
### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



 C&C as a share of total consumption decreased by 1.7ppts to 13.5% in 2023, primarily driven by a decline in Illicit Whites



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts
Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



Cigarettes consumed



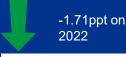
0.3bn

C&C cigarettes consumed



13.5%

Of total consumption was C&C



€43m

Total tax revenue lost from C&C<sup>(b)</sup>





### Latvia



### Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption - 2019-2023(1)(2)(a)

Total Latvia Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	1.90	1.80	1.80	1.85	1.74	(6%)
Outflows	(0.12)	(0.11)	(0.18)	(0.20)	(0.12)	(37%)
Legal Domestic Consumption (LDC)	1.79	1.69	1.63	1.65	1.61	(2%)
Non-Domestic Legal (ND(L))	0.05	0.03	0.02	0.03	0.03	(1%)
Counterfeit and Contraband (C&C)	0.30	0.41	0.32	0.30	0.26	(15%)
Total Non-Domestic	0.35	0.43	0.34	0.33	0.29	(13%)
Total Consumption	2.14	2.13	1.96	1.98	1.90	(4%)

Total consumption decreased by 4% in 2023, driven by a decline in both Legal Domestic Sales and Non-**Domestic inflows** 

 Belarus remains the largest source of Non-Domestic inflows, with a decline in these Belarusian inflows driving an overall declining inflow trend since 2020

Outflows decreased in 2023, driven by decline in outflows to Finland, Sweden and smaller outflow markets grouped together within 'Other'

#### Total inflows by country of origin – 2019-2023<sup>(1)(b)</sup> Inflows to Latvia **Billion cigarettes** 2019 2020 2021 2022 2023 0.22 Belarus 0.27 0.29 0.25 0.16 Counterfeit 0.02 0.05 0.04 0.07 0.10 Other 0.06 0.09 0.05 0.05 0.04 **Total Inflows** 0.35 0.43 0.34 0.33 0.29

#### Total outflows by destination – 2019-2023<sup>(1)(b)</sup>

Outflows from Latvia					
Billion cigarettes	2019	2020	2021	2022	2023
Finland	(0.02)	(0.03)	(0.05)	(0.08)	(0.06)
Sweden	(0.04)	(0.01)	(0.05)	(0.05)	(0.01)
Lithuania	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)
Denmark	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)
Ireland	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Other	(0.04)	(0.05)	(0.06)	(0.05)	(0.03)
Total Outflows	(0.12)	(0.11)	(0.18)	(0.20)	(0.12)

Note

(a) Latvia LDS has been calculated using State Revenue Service data. In 2023, Latvia IMS volumes were 1.736bn vs State Revenue Service volumes of 1.74bn; (b) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data

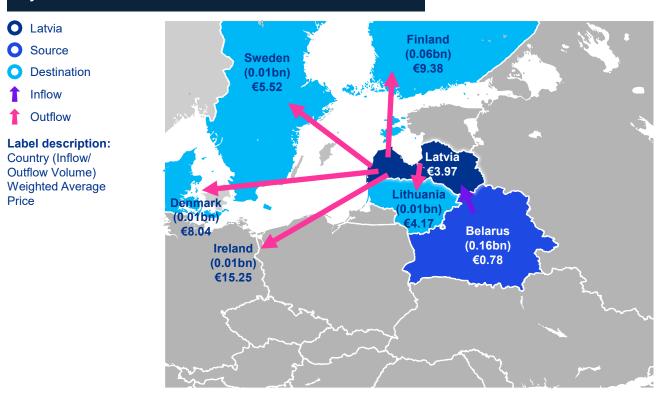


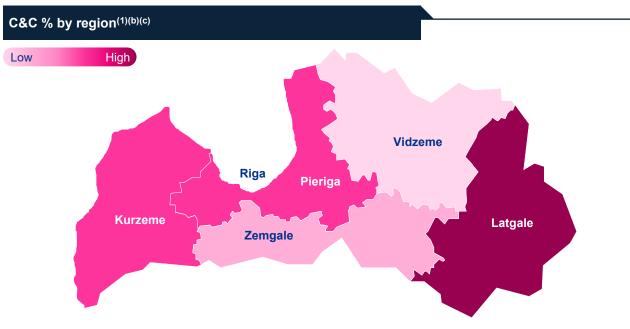
### Latvia



### Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>





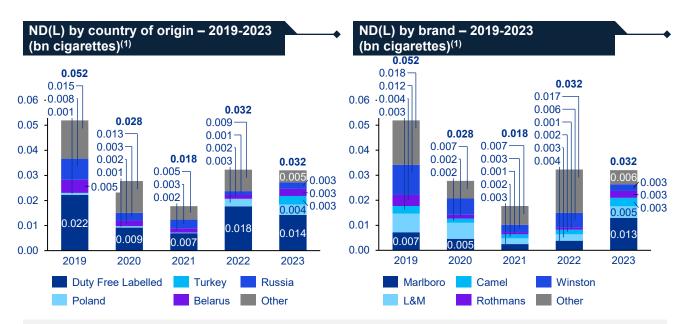
Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey.
Source: (1) KPMG European Elaws Calculation 2023; (2) Prices and tax rates EC Excise Duty, 2023; (3) Tax rate and WAP\_PMI. October 2023; (4) Prices. Pack of 20 cinarette.

Source: (1) KPMG European Flows Calculation 2023; ; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023





## ND(L) and C&C flows



- Legal inflows (ND(L)) remained stable in 2023, with decreasing legal Duty Free inflows offset by increased legal inflows from Poland, Turkey, Belarus and Russia
- Illicit inflows (C&C) decreased by 15%
- Belarus remained the largest source of illicit inflows, albeit with declining volumes



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023



## Lithuania





**2.5bn** 

Cigarettes

consumed

**0.4bn** 

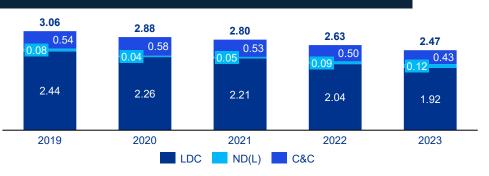
C&C cigarettes consumed

-0.16bn

on 2022

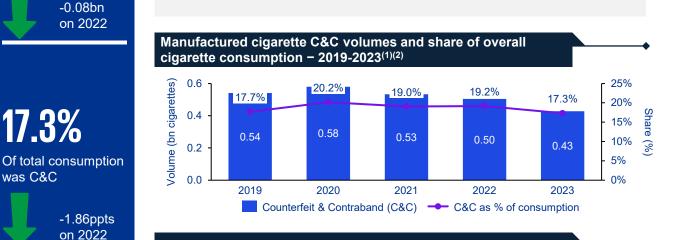
# C&C cigarette consumption and total consumption

### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>

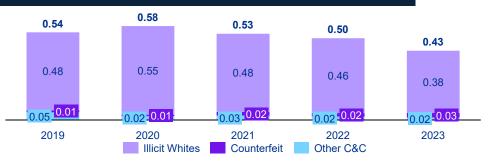


 C&C as a share of total consumption declined by 1.9ppts to 17.3% in 2023, the lowest level in the reporting period

C&C inflows remained predominantly Illicit Whites



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



€74m

Total tax revenue

-€5.4m

on 2022

lost from C&C<sup>(b)</sup>

### Lithuania



## Manufactured cigarette consumption, inflows and outflows

### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Lithuania Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	2.68	2.41	2.36	2.19	2.05	(6%)
Outflows	(0.24)	(0.16)	(0.15)	(0.15)	(0.13)	(14%)
Legal Domestic Consumption (LDC)	2.44	2.26	2.21	2.04	1.92	(6%)
Non-Domestic Legal (ND(L))	0.08	0.04	0.05	0.09	0.12	38%
Counterfeit and Contraband (C&C)	0.54	0.58	0.53	0.50	0.43	(15%)
Total Non-Domestic	0.62	0.62	0.58	0.59	0.55	(8%)
Total Consumption	3.06	2.88	2.80	2.63	2.47	(6%)

 Total consumption declined by 6% in 2023, with a decline in both Legal Domestic Sales and Non-Domestic consumption

 The Non-Domestic consumption decline was driven by a reduction in inflows from Belarus, partly offset by an increase in inflows from smaller source markets grouped together within 'Other'

- Belarus remained the largest source of inflows, albeit with inflow volumes declining since 2020
- Outflows from Lithuania declined by 14%, primarily due to a reduction in outflows to Germany

Total inflows by country of					
Inflows to Lithuania					
Billion cigarettes	2019	2020	2021	2022	2023
Belarus	0.49	0.55	0.49	0.46	0.39
Other	0.14	0.07	0.10	0.13	0.16
Total Inflows	0.62	0.62	0.58	0.59	0.55

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Lithuania				_	
Billion cigarettes	2019	2020	2021	2022	2023
Norway	(0.05)	(0.02)	(0.03)	(0.02)	(0.02)
Germany	(0.04)	(0.03)	(0.05)	(0.06)	(0.02)
Poland	(0.00)	(0.01)	(0.01)	(0.01)	(0.02)
Denmark	(0.01)	(0.00)	(0.01)	(0.01)	(0.02)
UK	(0.07)	(0.02)	(0.01)	(0.01)	(0.01)
Other	(0.07)	(0.07)	(0.03)	(0.05)	(0.04)
Total Outflows	(0.24)	(0.16)	(0.15)	(0.15)	(0.13)

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data

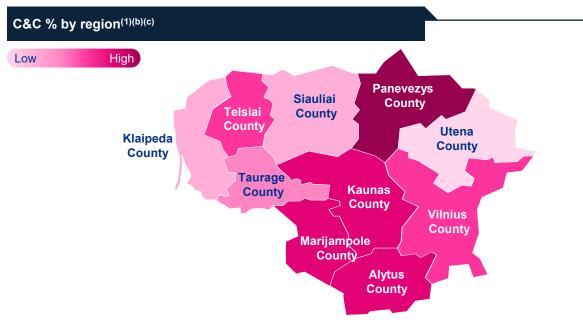


### Lithuania









Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey

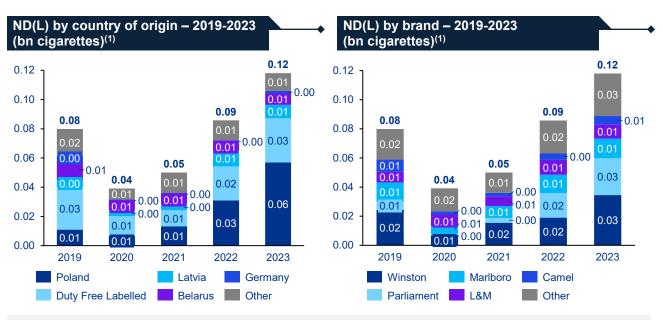
Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023



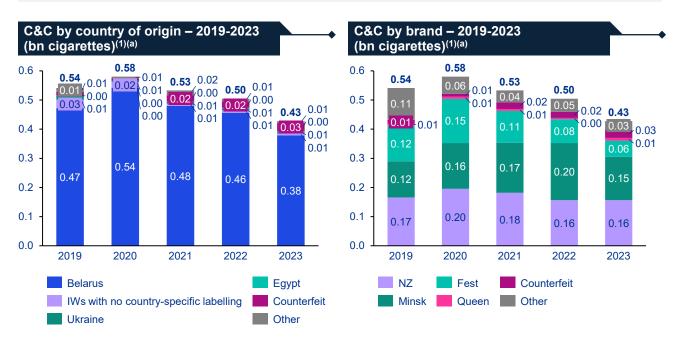


### ND(L) and C&C flows

Lithuania



- Legal inflows (ND(L)) increased in 2023 which was primarily driven by increased traveller flows from Poland
- Belarus continues to account for ~90% of total illicit (C&C) inflows, with NZ, Minsk and Fest the most prevalent brands



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023



## Luxembourg





**0.7bn** 

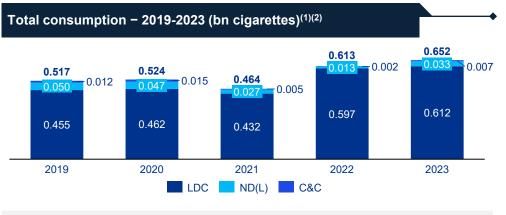
Cigarettes

consumed

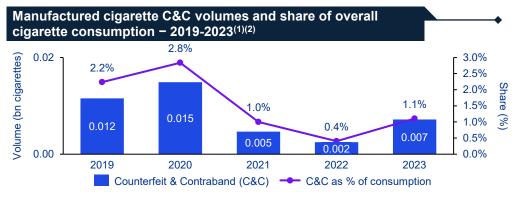
+0.04bn

on 2022

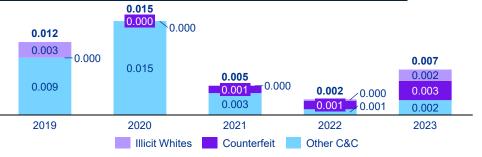
### **C&C cigarette consumption and** total consumption



C&C accounted for 1.1% of total cigarette consumption in 2023, an increase of 0.7ppts



C&C consumption by type − 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts
Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data









Total tax revenue lost from C&C<sup>(b)</sup>





### Luxembourg



## Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Luxembourg Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	3.31	3.21	3.53	4.04	4.34	7%
Outflows	(2.85)	(2.74)	(3.09)	(3.44)	(3.73)	8%
Legal Domestic Consumption (LDC)	0.46	0.46	0.43	0.60	0.61	2%
Non-Domestic Legal (ND(L))	0.05	0.05	0.03	0.01	0.03	146%
Counterfeit and Contraband (C&C)	0.01	0.01	0.00	0.00	0.01	190%
Total Non-Domestic	0.06	0.06	0.03	0.02	0.04	153%
Total Consumption	0.52	0.52	0.46	0.61	0.65	6%

- Total cigarette consumption increased by 6% in 2023

- Outflows increased by 8%, largely driven by increased outflows to France and Germany

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Luxembourg					
Billion cigarettes	2019	2020	2021	2022	2023
Belgium	0.02	0.03	0.01	0.00	0.01
Germany	0.01	0.01	0.00	0.00	0.01
France	0.01	0.01	0.01	0.00	0.01
Counterfeit	0.00	0.00	0.00	0.00	0.00
Other	0.02	0.03	0.01	0.01	0.01
Total Inflows	0.06	0.06	0.03	0.02	0.04

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Luxembourg					
Billion cigarettes	2019	2020	2021	2022	2023
France	(1.26)	(0.72)	(1.10)	(0.89)	(1.10)
Germany	(0.35)	(0.43)	(0.37)	(0.55)	(0.64)
Belgium	(0.18)	(0.26)	(0.43)	(0.43)	(0.46)
Other	(1.24)	(1.59)	(1.62)	(2.00)	(1.99)
Total Outflows	(2.85)	(2.74)	(3.09)	(3.44)	(3.73)

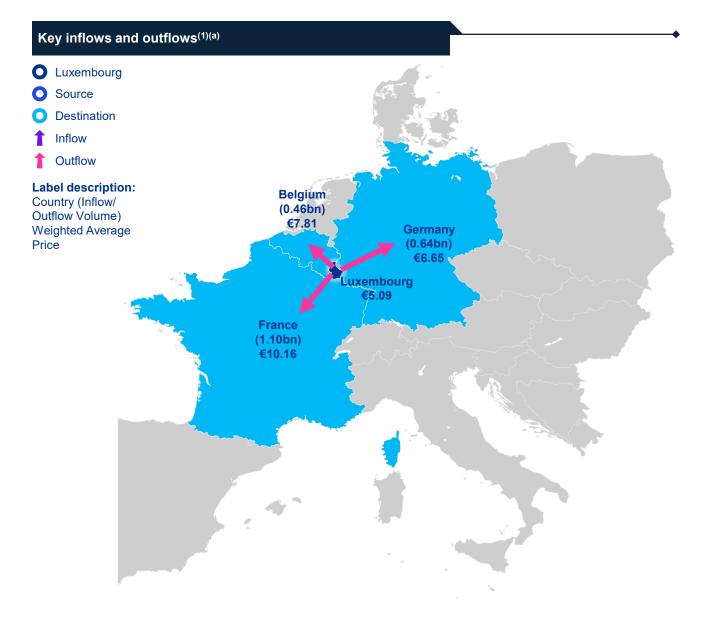
Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



Luxembourg

### **Key flows**





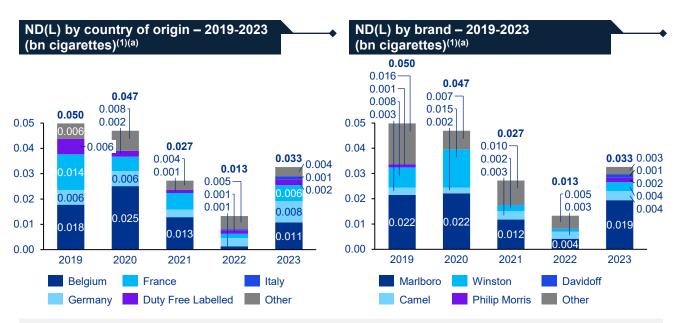
Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown

Source: (1) KPMG European Flows Calculation 2023;; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023

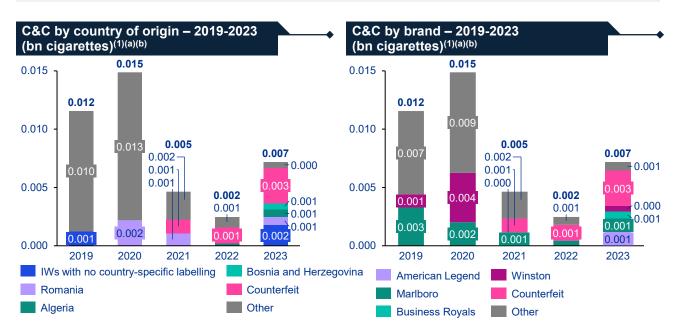




### ND(L) and C&C flows



- Legal inflows (ND(L)) have increased from Belgium, Germany and France, offset, to some extent, by a
  decline in legal inflows from smaller volume markets grouped together within 'Other'
- Illicit inflows (C&C) increased in 2023, primarily driven by Counterfeit and Illicit Whites with no countryspecific labelling



Note: (a) Due to rounding, segments highlighted in the charts may not add up to the total (b) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys

Source: (1) KPMG European Flows Calculation, 2019-2023



# Malta







0.6bn

Cigarettes

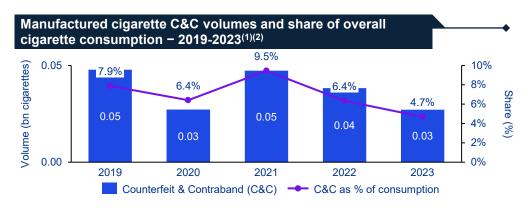
consumed

### **C&C cigarette consumption and** total consumption

### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



- C&C as a share of total cigarette consumption declined by 1.7ppts to 4.7% in 2023
- The decrease was driven by decline in consumption of Other C&C, partly offset by an increase in Illicit Whites



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup> 0.05 0.05 0.04 0.03 0.01 0.03 0.04 0.04 0.00 0.02 0.02 0.03 0.00 0.00 0.00 0.00 <mark>- 0.0</mark>0 0.01 0.01 0.01 2019 2020 2021 2022 2023 Illicit Whites Counterfeit Other C&C

Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data

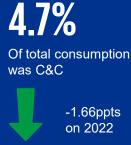


-0.02bn

on 2022

C&C cigarettes consumed

-0.01bn on 2022









### Malta



## Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Malta Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	0.58	0.44	0.47	0.57	0.57	0%
Outflows	(0.03)	(0.05)	(0.02)	(0.04)	(0.05)	41%
Legal Domestic Consumption (LDC)	0.54	0.39	0.44	0.53	0.52	(3%)
Non-Domestic Legal (ND(L))	0.01	0.01	0.01	0.03	0.03	0%
Counterfeit and Contraband (C&C)	0.05	0.03	0.05	0.04	0.03	(29%)
Total Non-Domestic	0.06	0.03	0.06	0.07	0.06	(16%)
Total Consumption	0.61	0.42	0.50	0.60	0.58	(4%)

 Total consumption declined by 4% in 2023, driven by an increase in outflows and a decrease in Non-Domestic inflows

 Decreased Non-Domestic inflows was the result of a decline in inflows from smaller source markets grouped together within 'Other'

- Outflows from Malta increased, due to larger outflows to smaller markets grouped together within 'Other'

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Malta								
Billion cigarettes	2019	2020	2021	2022	2023			
Italy	0.00	0.00	0.00	0.01	0.01			
IWs with no country-specific labelling	0.03	0.02	0.04	0.01	0.01			
Duty Free Labelled	0.01	0.01	0.00	0.01	0.01			
Other	0.02	0.01	0.01	0.04	0.02			
Total Inflows	0.06	0.03	0.06	0.07	0.06			

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Malta					
Billion cigarettes	2019	2020	2021	2022	2023
Italy	(0.00)	0.00	(0.00)	(0.01)	(0.01)
France	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)
Other	(0.01)	(0.04)	(0.01)	(0.02)	(0.03)
Total Outflows	(0.03)	(0.05)	(0.02)	(0.04)	(0.05)

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data

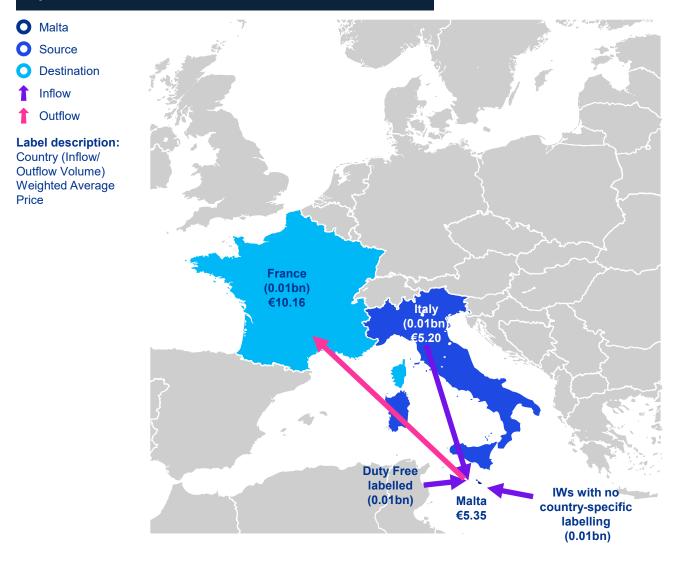


Malta





#### Key inflows and outflows<sup>(1)(a)</sup>



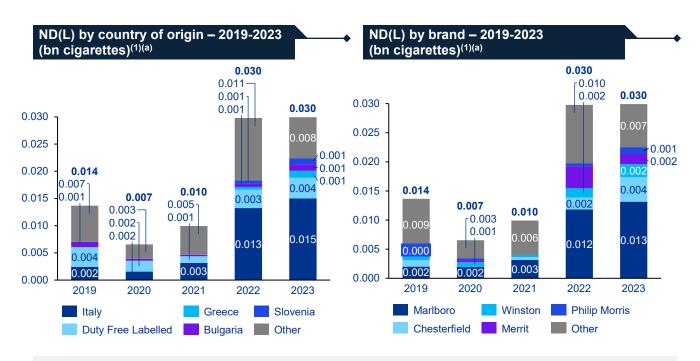
Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown

Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023



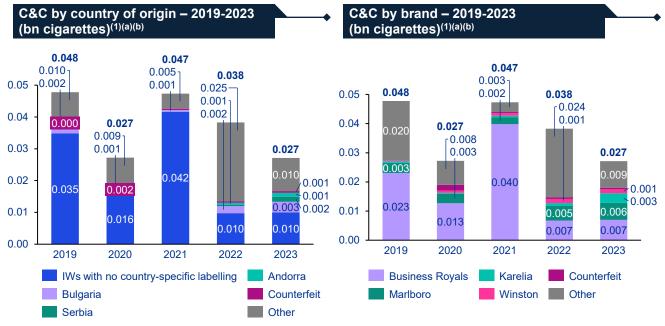


## ND(L) and C&C flows



 Legal inflows (ND(L)) remained stable overall in 2023, with an increase in legal inflows from Italy offset by a decrease in legal inflows from smaller source markets grouped together within 'Other'

 The C&C flows decline was driven by a decline in illicit inflows from smaller markets grouped together within 'Other'



Note: (a) Due to rounding, segments highlighted in the charts may not add up to the total (b) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys

Source: (1) KPMG European Flows Calculation, 2019-2023



## Noldova



Moldova



### **2.4**bn

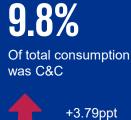
Cigarettes consumed

-0.44bn on 2022

### **0.2bn**

C&C cigarettes consumed

+0.06bn on 2022



on 2022



(L448m)<sup>(3)</sup> Total tax revenue lost fro<u>m C&C<sup>(b)</sup></u>

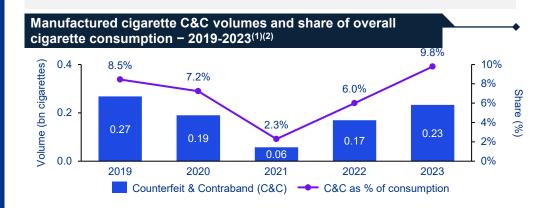


### **C&C cigarette consumption and** total consumption

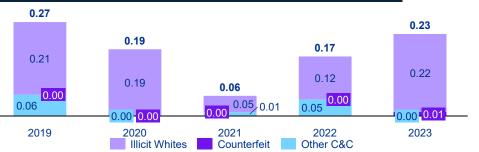
### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



 C&C as a share of total consumption increased by 3.8ppts to 9.8%, driven by increased inflows of Illicit Whites



### C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data; (3) EUR 1 = L 19.50, InforEuro, European Commission, December 2023



#### Moldova



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)(a)</sup>

Total Moldova Consumption								
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)		
Legal Domestic Sales (LDS)	3.66	2.95	2.85	2.99	2.50	(16%)		
Outflows	(0.78)	(0.52)	(0.42)	(0.38)	(0.38)	0%		
Legal Domestic Consumption (LDC)	2.88	2.42	2.44	2.62	2.13	(19%)		
Non-Domestic Legal (ND(L))	0.02	0.01	0.01	0.04	0.02	(38%)		
Counterfeit and Contraband (C&C)	0.27	0.19	0.06	0.17	0.23	38%		
Total Non-Domestic	0.29	0.20	0.07	0.21	0.26	24%		
Total Consumption	3.17	2.63	2.50	2.82	2.38	(16%)		

- Total consumption decreased by 16% to 2.38bn in 2023, driven by declining Legal Domestic Sales

 Non-Domestic inflows increased by 24%, due to increased inflows of Illicit Whites with no countryspecific labelling

 Outflows remained stable overall, with an increase in outflows to France offset by a decline in outflows to Romania

Total inflows by country of origin		•						
Inflows to Moldova								
Billion cigarettes	2019	2020	2021	2022	2023			
IWs with no country-specific labelling			0.02	0.08	0.21			
Other	Data not comparable		0.05	0.13	0.05			
Total Inflows			0.07	0.21	0.26			

In 2021, Moldova switched from a PMI-commissioned empty pack survey to pack swap surveys commissioned by Big-4 industry participants. Classification of origin of inflows in these studies is not directly comparable with the classification used in the empty pack surveys. Therefore, breakdown of inflows is only shown for 2021 and later

Total outflows by destinat					
Outflows from Moldova				-	
Billion cigarettes	2019	2020	2021	2022	2023
France	(0.03)	(0.07)	(0.07)	(0.10)	(0.15)
Romania	(0.57)	(0.35)	(0.21)	(0.17)	(0.13)
Ireland	(0.01)	(0.02)	(0.02)	(0.03)	(0.03)
Other	(0.17)	(0.08)	(0.12)	(0.08)	(0.08)
Total Outflows	(0.78)	(0.52)	(0.42)	(0.38)	(0.38)

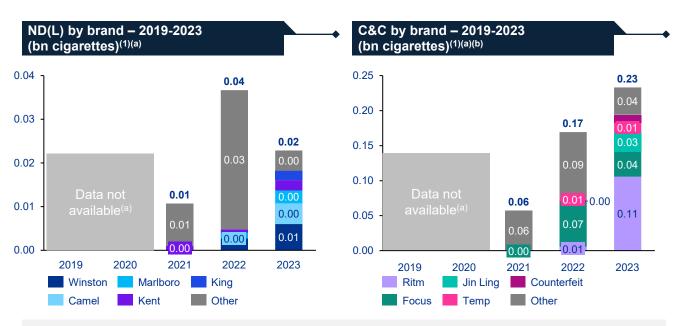
Note: (a) In 2021, Moldova switched from a PMI-commissioned empty pack survey to pack swap surveys commissioned by Big-4 industry participants. Therefore, given the change in methodology, trends may not be directly comparable between 2018-20 and 2021-22 (b) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows





## ND(L) and C&C flows

Moldova



 Legal inflows (ND(L)) decreased in 2023, driven by a decline in smaller volume brand inflows grouped together within 'Other'

 Illicit inflows (C&C) increased by 38% in 2023, primarily driven by increase in illicit flows of the brand Ritm, partly offset by a decline of the brand Focus

Note: (a) In 2021, Moldova switched from a PMI-commissioned empty pack survey to pack swap surveys commissioned by Big-4 industry participants. Classification of origin of inflows in these studies is not directly comparable with the classification used in the empty pack surveys. Therefore, the breakdown of inflows is only shown for 2021 and later; (b) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys
 Source: (1) KPMG European Flows Calculation, 2019-2023

KPMG

# **Nontenegro**







**1.2bn** 

Cigarettes

consumed

**0.1bn** 

C&C cigarettes consumed

was C&C

-0.19bn

on 2022

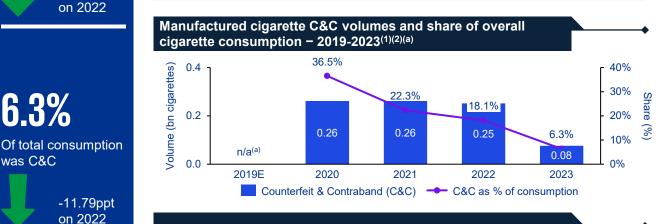
-0.18bn

### **Country profile C&C cigarette consumption and** total consumption

Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



C&C as a share of total consumption has followed a declining trend since 2020, and is primarily driven by inflows of Illicit Whites



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)(b)</sup>

	0.26	0.26	0.25	
	0.24	0.24	0.21	
				0.08
n/a <sup>(a)</sup>	0.02 0.00	0.02 0.00	0.04 0.00	0.07 0.00- <mark>0.00</mark>
2019E	2020 Illicit Whites	2021 Counterfeit	2022 Other C&C	2023

Note: (a) ND(L) and C&C detail is only shown for years with empty pack surveys (b) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (c)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (d) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



2023<sup>(c)</sup>

Total tax revenue lost from C&C in

> - €19m on 2022

#### Montenegro



## Manufactured cigarette consumption, inflows and outflows

Total manufactured cigarette consumption – 2019-2023 <sup>(1)(2)(a)</sup>									
Total Montenegro Consumption									
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)			
Legal Domestic Sales (LDS)	0.61	0.47	0.82	1.05	1.12	6%			
Outflows	(0.04)	(0.03)	(0.02)	(0.04)	(0.02)	(41%)			
Legal Domestic Consumption (LDC)	0.58	0.45	0.80	1.01	1.09	8%			
Non-Domestic Legal (ND(L))		0.01	0.11	0.12	0.03	(79%)			
Counterfeit and Contraband (C&C)		0.26	0.26	0.25	0.08	(70%)			
Total Non-Domestic	0.46	0.27	0.37	0.37	0.10	(73%)			
Total Consumption	1.04	0.72	1.18	1.39	1.20	(14%)			

- In 2023, total consumption decreased by 14%, primarily driven by a decline in Non-Domestic consumption
- Illicit Whites with no country-specific labelling were the largest component of Non-Domestic inflows in 2023, and have followed a declining trend since 2020
- · Outflows from Montenegro were low, and are primarily to neighbouring Balkan markets

Inflows to Montenegro									
Billion cigarettes	2019	2020	2021	2022	2023				
Ws with no country-specific labelling		0.23	0.19	0.08	0.04				
Kosovo		0.00	0.05	0.16	0.03				
Serbia		0.02	0.07	0.07	0.01				
Other		0.02	0.07	0.07	0.02				
Total Inflows	0.46	0.27	0.37	0.37	0.10				

#### Total outflows by destination – 2019-2023<sup>(1)(a)(b)</sup>

Outflows from Montenegro					
Billion cigarettes	2019	2020	2021	2022	2023
Croatia	(0.01)	0.00	0.00	0.00	(0.01)
Serbia	0.00	0.00	(0.01)	0.00	(0.00)
Albania	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
Other	(0.03)	(0.02)	(0.01)	(0.04)	(0.01)
Total Outflows	(0.04)	(0.03)	(0.02)	(0.04)	(0.02)

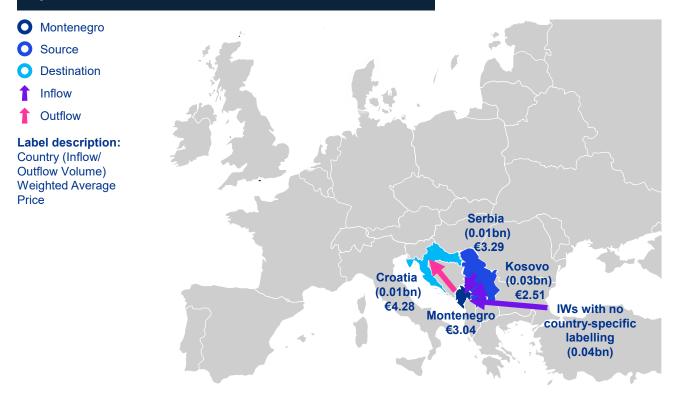
Note: (a) Detailed breakdowns of ND(L), C&C, inflows and outflows are only shown for years with empty pack surveys. Total Non-Domestic, and inflows and outflows totals for years where empty pack surveys were not conducted are estimates only based on extrapolations of empty pack survey results from the prior and following years (b) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows (b) As empty pack surveys were not conducted in Albania and Serbia in 2020, outflows shown are an extrapolation of Non-Domestic share per the 2019 and 2021 EPS for those markets and should be treated as indicative only



#### Montenegro



#### Key inflows and outflows<sup>(1)(a)</sup>



#### C&C % by region<sup>(1)(b)(c)</sup>

Low High



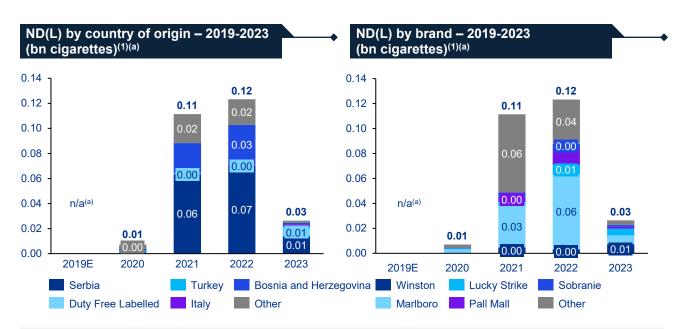
Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023





#### Montenegro

### ND(L) and C&C flows



- Legal inflows (ND(L)) have seen periods of growth and decline during the reporting period, with Serbia being a major historical source of legal inflows
- Illicit inflows (C&C) are largely comprised of Illicit Whites with no country-specific labelling and inflows from Kosovo, with both declining in 2023



Note: (a) ND(L) and C&C country / brand breakdowns are only shown for the years where an empty pack survey was undertaken (b) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys

Source: (1) KPMG European Flows Calculation, 2019-2023



# Netherlands,





10.6bn

-0.32bn

on 2022

-0.42bn on 2022

2022

€289m

Total tax revenue lost from C&C<sup>(b)</sup>

-€90m

on 2022

Cigarettes

consumed

**0.8bn** 

C&C cigarettes consumed

7.7%

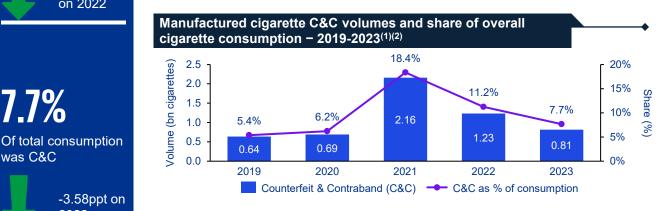
was C&C

### **Country profile C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



C&C as a share of total consumption decreased by 3.5ppts to 7.7% in 2023, driven by a decline in Other C&C



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup> 2.16 0.09<mark>-</mark>0.13 1.23 0.06 0.05 0.81 0.69 1.93 0.64 0.16<sup>0.07</sup> 0.09<mark>-</mark>0.03 0.05 0.06 1.12 0.58 0.52 0.57 2022 2019 2020 2021 2023 Illicit Whites Counterfeit Other C&C

(a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty Note: pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



#### Netherlands



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Netherlands Consumption								
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)		
Legal Domestic Sales (LDS)	9.84	9.56	9.08	9.01	8.64	(4%)		
Outflows	(0.29)	(0.20)	(0.23)	(0.22)	(0.31)	37%		
Legal Domestic Consumption (LDC)	9.56	9.36	8.85	8.79	8.34	(5%)		
Non-Domestic Legal (ND(L))	1.61	1.06	0.76	0.94	1.48	58%		
Counterfeit and Contraband (C&C)	0.64	0.69	2.16	1.23	0.81	(34%)		
Total Non-Domestic	2.25	1.75	2.92	2.17	2.29	6%		
Total Consumption	11.81	11.11	11.77	10.95	10.63	(3%)		

 Total cigarette consumption decreased by 3% in 2023, primarily driven by a decline in Legal Domestic Sales

 Non-Domestic inflows increased by 6%, driven by increased inflows from Duty Free, Germany, Counterfeit and a number of smaller markets grouped together within 'Other'. This was partly offset by declining inflows from Belgium which returned to 2019 levels

- Outflows increased by 37%, with increased outflows to all major destination markets

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Netherlands					
Billion cigarettes	2019	2020	2021	2022	2023
Duty Free Labelled	0.35	0.14	0.21	0.19	0.35
Germany	0.38	0.22	0.23	0.19	0.29
Poland	0.08	0.08	0.11	0.18	0.19
Counterfeit	0.05	0.09	0.09	0.06	0.16
Belgium	0.21	0.34	0.91	0.73	0.15
Other	1.17	0.87	1.37	0.82	1.15
Total Inflows	2.25	1.75	2.92	2.17	2.29

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Netherlands					
Billion cigarettes	2019	2020	2021	2022	2023
France	(0.04)	(0.03)	(0.11)	(0.06)	(0.11)
Germany	(0.08)	(0.06)	(0.04)	(0.04)	(0.08)
UK	(0.01)	(0.00)	(0.00)	(0.01)	(0.04)
Other	(0.16)	(0.11)	(0.08)	(0.12)	(0.08)
Total Outflows	(0.29)	(0.20)	(0.23)	(0.22)	(0.31)

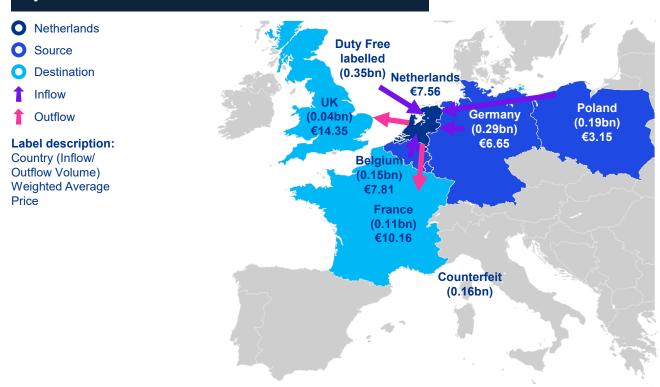
Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows



#### **Netherlands**

## Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>





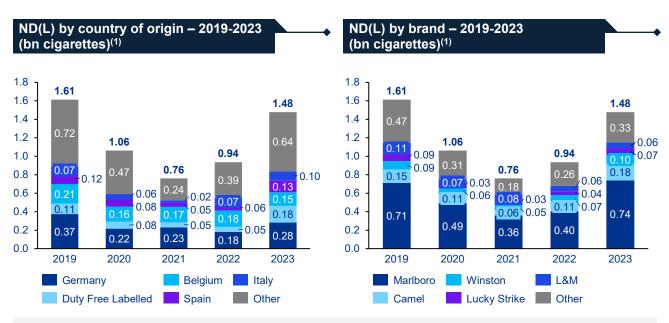
Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey

Source: (1) KPMG European Flows Calculation 2023;; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023

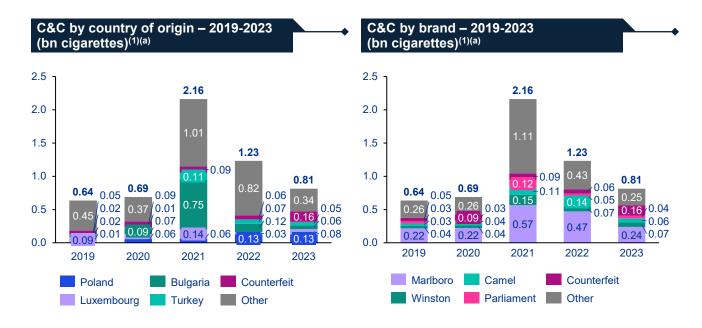




### ND(L) and C&C flows



- Legal inflows (ND(L)) increased by 58% in 2023, returning to similar levels as observed in 2019, with higher legal flows from all origin markets with the exception of Belgium
- This increase in legal flows is against the backdrop of a 63% increase in traveller volumes to / from the Netherlands in 2023<sup>(2)</sup>
- Illicit inflows (C&C) declined by 34%, primarily driven by lower illicit inflows from smaller markets grouped together within 'Other'



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023 (2) UNWTO travel and tourism dataset



## North Nacedonia





### 3.3bn

Cigarettes consumed



**0.1**bn C&C cigarettes consumed







Total tax revenue lost from C&C in 2023<sup>(c)</sup>



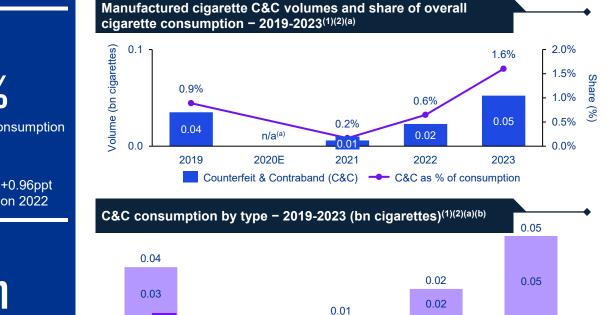
### Country profile **C&C cigarette consumption and** total consumption

#### Total consumption - 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



C&C as a share of total consumption has increased since 2021, albeit with C&C having a relatively low share compared to other markets in this study

This increase is primarily due to a growth in illicit whites consumption



0.01 0.00 0.00 <u>0.00</u> 0.00 n/a<sup>(a)</sup> 0.00<mark>-0.00</mark> 0.00 0.00 2019 2020E 2021 2022 2023 Illicit Whites Counterfeit Other C&C (a) ND(L) and C&C detail is only shown for years with empty pack surveys (b) C&C breakdown chart only includes Counterfeit

Note: volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (c)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (d) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts



#### North Macedonia



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)(a)</sup>

Total North Macedonia Consumption								
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)		
Legal Domestic Sales (LDS)	4.03	3.45	3.60	3.55	3.50	(1%)		
Outflows	(0.22)	(0.17)	(0.10)	(0.08)	(0.38)	370%		
Legal Domestic Consumption (LDC)	3.81	3.29	3.50	3.47	3.12	(10%)		
Non-Domestic Legal (ND(L))	0.10		0.10	0.07	0.09	29%		
Counterfeit and Contraband (C&C)	0.04		0.01	0.02	0.05	127%		
Total Non-Domestic	0.14	0.11	0.10	0.09	0.14	54%		
Total Consumption	3.95	3.39	3.60	3.56	3.27	(8%)		

 Total consumption has broadly followed the trend in Legal Domestic Sales between 2019 and 2022, albeit with a greater decrease in 2023 due to increasing outflows

- Non-Domestic inflows have represented a relatively low share of consumption
- Outflows followed a decreasing trend to 2022 before increasing in 2023, with increased outflows to Greece, Austria, Germany and Switzerland

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)(b)</sup>

Inflows to North Macedonia									
Billion cigarettes	2019	2020	2021	2022	2023				
Duty Free Labelled	0.00		0.00	0.00	0.06				
IWs with no country-specific labelling	0.02		0.00	0.01	0.05				
Kosovo	0.05		0.01	0.02	0.01				
Other	0.06		0.08	0.06	0.02				
Total Inflows	0.14	0.11	0.10	0.09	0.14				

#### Total outflows by destination – 2019-2023<sup>(1)(a)(b)</sup>

Outflows from North Macedonia									
Billion cigarettes	2019	2020	2021	2022	2023				
Greece	0.00	0.00	0.00	0.00	(0.17)				
Austria	0.00	0.00	0.00	0.00	(0.08)				
Germany	0.00	0.00	0.00	0.00	(0.04)				
Switzerland	0.00	0.00	0.00	0.00	(0.03)				
Other	(0.22)	(0.17)	(0.10)	(0.08)	(0.07)				
Total Outflows	(0.22)	(0.17)	(0.10)	(0.08)	(0.38)				

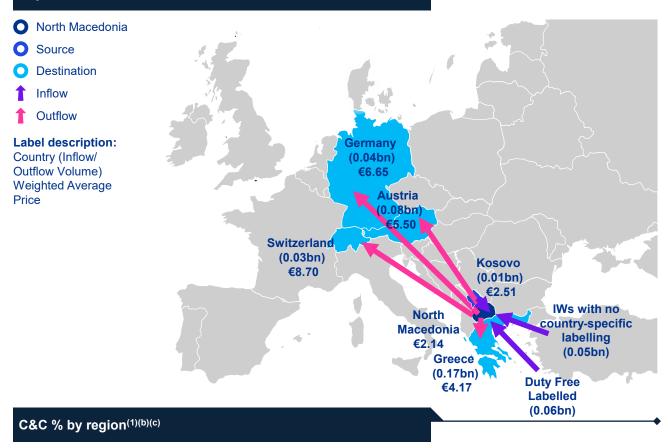
Note: (a) Detailed breakdowns of ND(L), C&C, inflows and outflows are only shown for years with empty pack surveys. Total Non-Domestic, and inflows and outflows totals for years where empty pack surveys were not conducted are estimates only based on extrapolations of empty pack survey results from the prior and following years (b) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows



North Macedonia

## Key flows and C&C consumption patterns





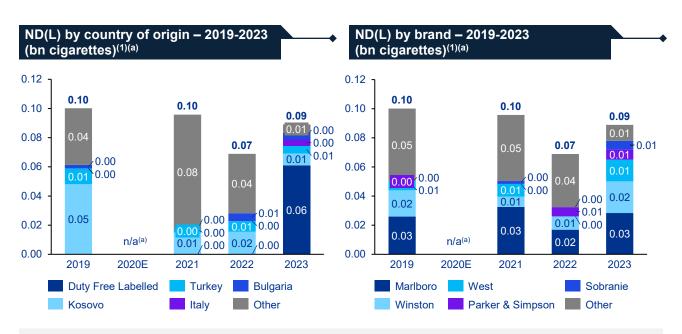


Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023

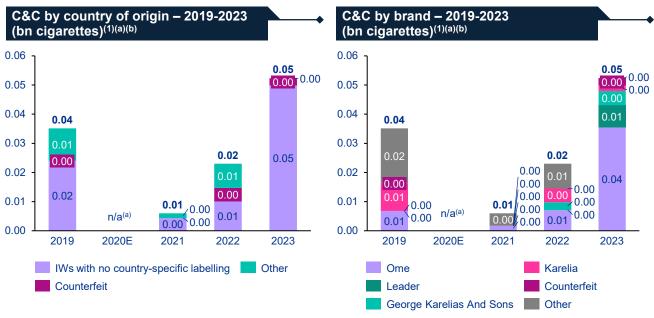




### ND(L) and C&C flows



- Legal inflows (ND(L)) have been relatively stable aside from a decline witnessed in 2022
- Duty Free was the principal component of legal inflows in 2023
- The growth of illicit inflows (C&C) increased in 2023, driven by flows of Illicit Whites with no countryspecific labelling
- At a brand level, Ome was the primary component of illicit inflows in 2023



Note: (a) ND(L) and C&C country / brand breakdowns are only shown for the years where an empty pack survey was undertaken (b) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys

Source: (1) KPMG European Flows Calculation, 2019-2023



## Norway



Norway



## **2.1bn**

Cigarettes consumed



### **0.3**bn

C&C cigarettes consumed

+0.08bn on 2022



+3.41ppt on 2022



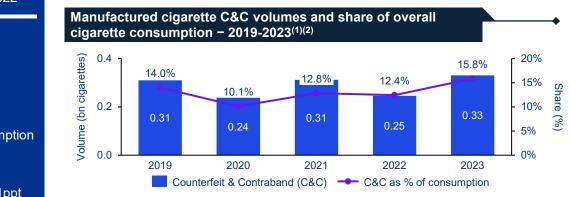
Total tax revenue lost from C&C<sup>(b)</sup> (NOK1,466m)<sup>(3)</sup>



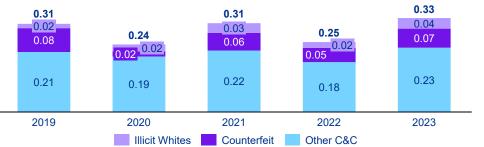
### **C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup> 2.43 2.35 2.22 0.31 2.09 0.24 1.97 0.31 0.22 1 21 0.33 0.25 0.54 0.45 0.43 1.90 1.90 1.37 1.32 1.28 2019 2020 2021 2022 2023 LDC ND(L) C&C

C&C as a share of total consumption increased by 3.4ppts to 15.8%, with an increase in consumption of all forms of C&C



C&C consumption by type – 2019-2023 (bn cigarettes) $^{(1)(2)(a)}$ 



Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data; (3) EUR 1 = NOK 11.697, InforEuro, European Commission, December 2023



#### Norway



## Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Norway Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	1.41	1.91	1.91	1.29	1.34	4%
Outflows	(0.04)	(0.01)	(0.01)	(0.01)	(0.01)	(5%)
Legal Domestic Consumption (LDC)	1.37	1.90	1.90	1.28	1.32	4%
Non-Domestic Legal (ND(L))	0.54	0.21	0.22	0.45	0.43	(5%)
Counterfeit and Contraband (C&C)	0.31	0.24	0.31	0.25	0.33	35%
Total Non-Domestic	0.85	0.45	0.54	0.70	0.76	9%
Total Consumption	2.22	2.35	2.43	1.97	2.09	6%

 Total cigarette consumption increased by 6%, driven by an increase in both Legal Domestic Consumption and Non-Domestic inflows

 The growth in Non-Domestic flows was driven by an increase in inflows from all major source markets, with the exception of Duty Free. Sweden became the largest source of inflows in 2023

Outflows from Norway remained low

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Norway									
Billion cigarettes	2019	2020	2021	2022	2023				
Sweden	0.16	0.02	0.09	0.17	0.22				
Duty Free Labelled	0.28	0.16	0.09	0.21	0.15				
Poland	0.06	0.12	0.11	0.07	0.10				
Counterfeit	0.08	0.02	0.06	0.05	0.07				
Romania	0.05	0.01	0.01	0.03	0.05				
Other	0.20	0.12	0.16	0.17	0.17				
Total Inflows	0.85	0.45	0.54	0.70	0.76				

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Norway					
Billion cigarettes	2019	2020	2021	2022	2023
Netherlands	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Sweden	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
France	0.00	0.00	(0.00)	(0.00)	(0.00)
Other	(0.03)	(0.01)	(0.01)	(0.01)	(0.00)
Total Outflows	(0.04)	(0.01)	(0.01)	(0.01)	(0.01)

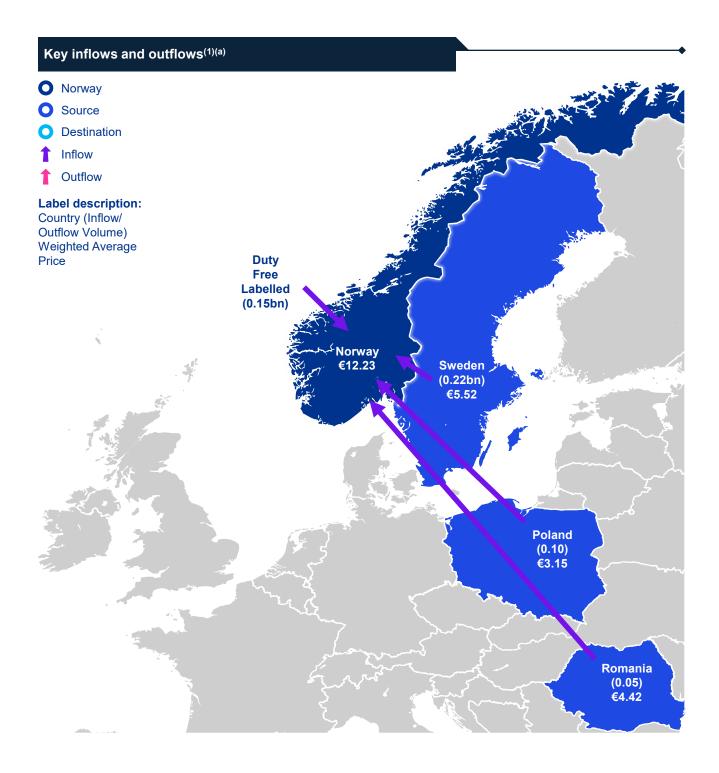
Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows



Norway







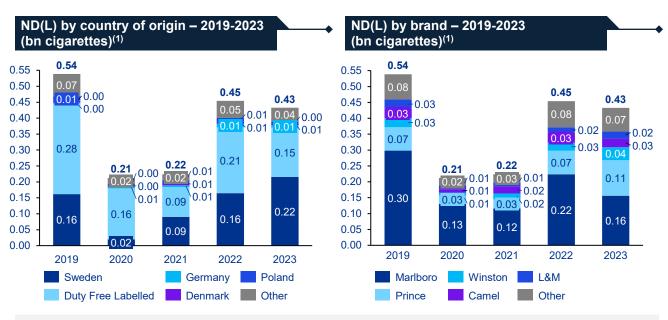
Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023

KPMG

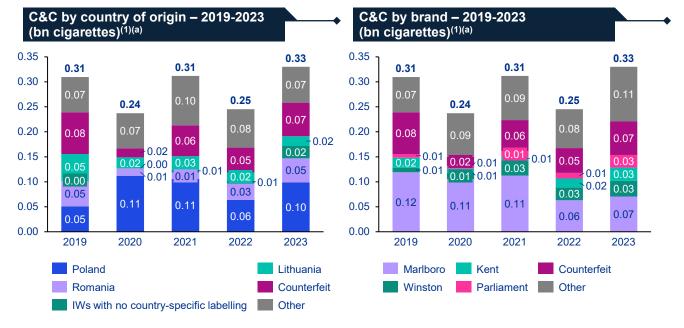


## ND(L) and C&C flows

Norway



- Legal inflows (ND(L)) remained relatively stable in 2023, with an increase in legal inflows from Sweden
  offset by decline in Duty Free
- As of 1<sup>st</sup> January 2023, the quantity of cigarettes that residents in Norway can import when travelling abroad has been reduced from 200 cigarettes to 100 cigarettes. This updated limit is reflected in the ND(L) results shown for 2023<sup>(2)</sup>
- Poland remained the largest source of illicit (C&C) flows. Illicit inflows from Poland, Romania and Counterfeit drove overall C&C growth



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023 (2) Tolletaten, Norwegian Customs, Alcohol and tobacco quotas



# Poland



Poland

# C&C cigarette consumption and total consumption

### **41.8bn**

Cigarettes consumed



### **1.5bn**

C&C cigarettes consumed

-0.33bn on 2022

## 3.6%

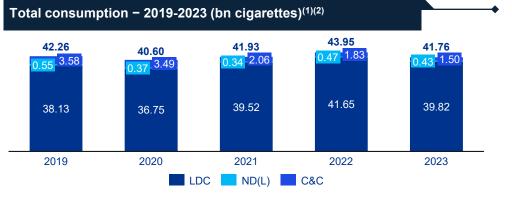
Of total consumption was C&C



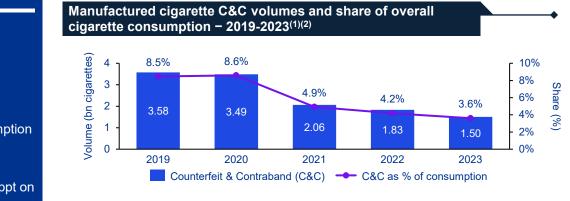


Total tax revenue lost from C&C<sup>(b)</sup>

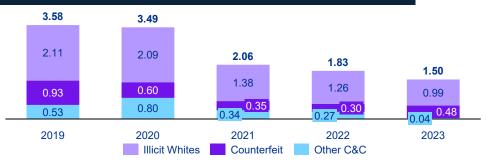




 C&C as a share of total consumption declined by 0.6ppts to 3.6%, continuing the declining trend observed since 2020. Poland experienced declining inflows of Illicit Whites and Other C&C partly offset by increased inflows of Counterfeit in 2023



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts
Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



#### Poland



## Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Poland Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	44.99	43.17	45.54	49.39	49.20	(0%)
Outflows	(6.85)	(6.42)	(6.03)	(7.75)	(9.37)	21%
Legal Domestic Consumption (LDC)	38.13	36.75	39.52	41.65	39.82	(4%)
Non-Domestic Legal (ND(L))	0.55	0.37	0.34	0.47	0.43	(8%)
Counterfeit and Contraband (C&C)	3.58	3.49	2.06	1.83	1.50	(18%)
Total Non-Domestic	4.12	3.85	2.41	2.30	1.93	(16%)
Total Consumption	42.26	40.60	41.93	43.95	41.76	(5%)

 Total cigarette consumption declined by 5% in 2023, driven by increased outflows and reduced Non-Domestic inflows

 The Non-Domestic inflow decline was driven by reduced flows from all major source markets, with the exception of Counterfeit which increased in 2023

 Outflows increased by 21%, driven by higher outflows to Germany, France, the Czech Republic and a number of smaller markets included within 'Other'

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Poland									
Billion cigarettes	2019	2020	2021	2022	2023				
Belarus	1.08	1.52	1.01	0.89	0.74				
Counterfeit	0.93	0.60	0.35	0.30	0.48				
IWs with no country-specific labelling	0.96	0.33	0.30	0.30	0.21				
Ukraine	0.55	0.88	0.34	0.22	0.08				
Other	0.60	0.54	0.42	0.59	0.43				
Total Inflows	4.12	3.85	2.41	2.30	1.93				

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Poland					
Billion cigarettes	2019	2020	2021	2022	2023
Germany	(4.94)	(4.66)	(3.82)	(4.66)	(5.19)
France	(0.08)	(0.10)	(0.63)	(1.17)	(1.31)
Czech Republic	(0.20)	(0.02)	(0.21)	(0.47)	(0.95)
Other	(1.64)	(1.64)	(1.35)	(1.45)	(1.93)
Total Outflows	(6.85)	(6.42)	(6.03)	(7.75)	(9.37)

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

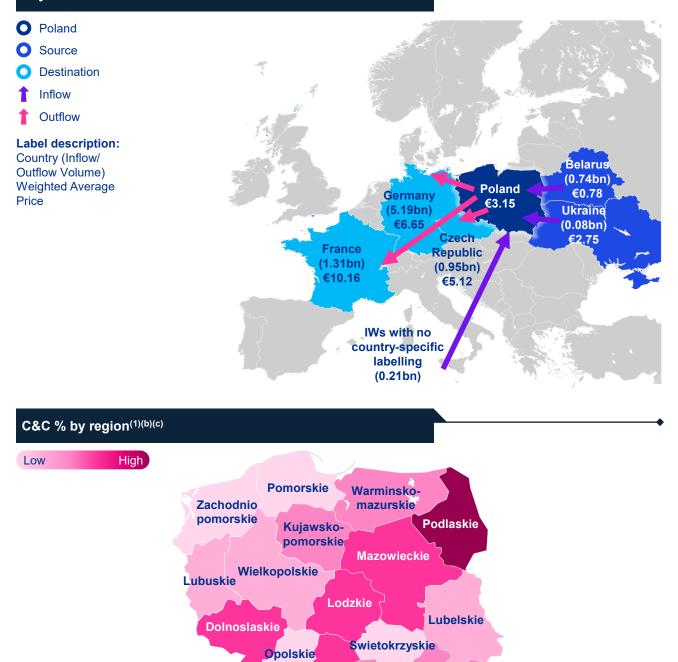


#### Poland



### Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>



Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey

Malopolskie

askie

**Podkarpackie** 

Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023



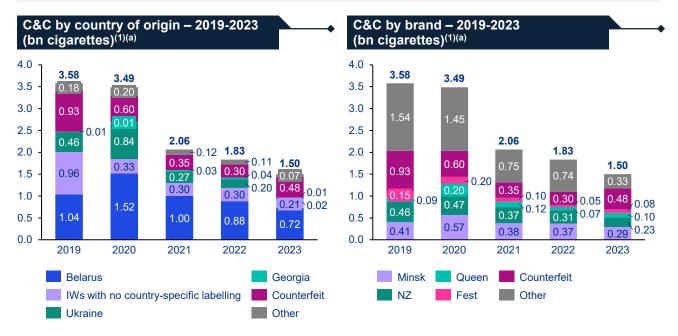


## ND(L) and C&C flows

Poland



- Legal inflows (ND(L)) decreased by 8%, driven by reduced Duty Free inflows and inflows from smaller markets grouped together within 'Other'
- Illicit inflows (C&C) continued to decline, with reduced illicit flows from Ukraine, Belarus and Illicit Whites with no country specific labelling partly offset by increased Counterfeit. The inflows from Belarus and Ukraine are predominantly considered illicit because travellers from these countries are only allowed to carry 40 cigarettes when they visit Poland
- Belarus remained the largest source of C&C in Poland and accounted for ~48% of total C&C



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023



# Portugal



Portugal



## **8.0bn**

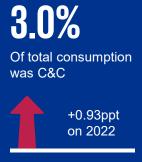
Cigarettes consumed



0.2bn C&C cigarettes

consumed

+0.06bn on 2022



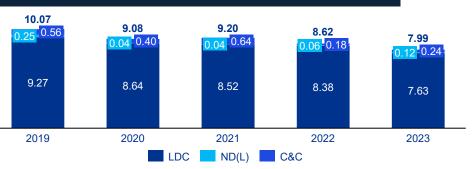


Total tax revenue lost from C&C<sup>(b)</sup>



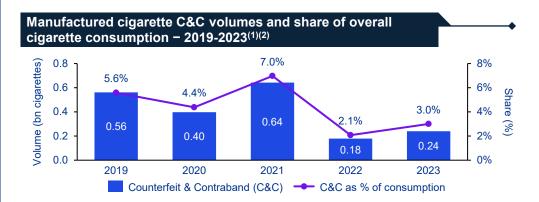
### **C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>

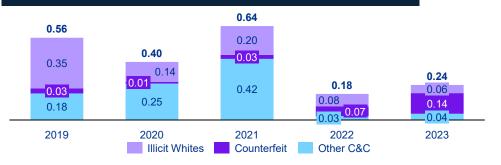


C&C as a share of total consumption increased by 0.9ppts to 3% in 2023

- This increase was primarily driven by an increase in Counterfeit



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts
Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



#### Portugal



(8%)

32%

(9%)

107%

34%

52%

(7%)

### Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup> **Total Portugal Consumption Billion cigarettes** 2019 2020 2021 2022 2023 2022-23 (%) Legal Domestic Sales (LDS) 9.77 8.99 8.77 8.68 8.03 Outflows (0.51) (0.35)(0.25)(0.30)(0.40)Legal Domestic Consumption (LDC) 9.27 8.64 8.52 8.38 7.63 0.25 0.04 0.04 0.12 Non-Domestic Legal (ND(L)) 0.06 Counterfeit and Contraband (C&C) 0.56 0.40 0.64 0.18 0.24 **Total Non-Domestic** 0.81 0.43 0.68 0.24 0.36 **Total Consumption** 10.07 9.08 9.20 8.62 7.99

 Total cigarette consumption decreased by 7% in 2023, driven by a decline in Legal Domestic Sales and an increase in outflows, partly offset by an increase in Non-Domestic consumption

Non-Domestic inflows increased by 52%, primarily driven by an increase in Counterfeit volumes and, to a lesser extent, Duty Free inflows and inflows from smaller markets grouped together within 'Other'. Nonetheless, Non-Domestic inflows remained below pre-Covid levels

Outflows increased by 32% in 2023, with increased outflows to France, the Netherlands and Ireland

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Portugal					
Billion cigarettes	2019	2020	2021	2022	2023
Counterfeit	0.03	0.01	0.03	0.07	0.14
IWs with no country-specific labelling	0.31	0.13	0.20	0.06	0.05
Duty Free Labelled	0.06	0.02	0.04	0.03	0.05
Other	0.41	0.27	0.42	0.08	0.12
Total Inflows	0.81	0.43	0.68	0.24	0.36

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Portugal					
Billion cigarettes	2019	2020	2021	2022	2023
France	(0.22)	(0.20)	(0.13)	(0.15)	(0.19)
Netherlands	(0.03)	(0.01)	(0.01)	(0.02)	(0.04)
Ireland	(0.03)	(0.01)	(0.00)	(0.01)	(0.04)
Other	(0.23)	(0.12)	(0.10)	(0.13)	(0.13)
Total Outflows	(0.51)	(0.35)	(0.25)	(0.30)	(0.40)

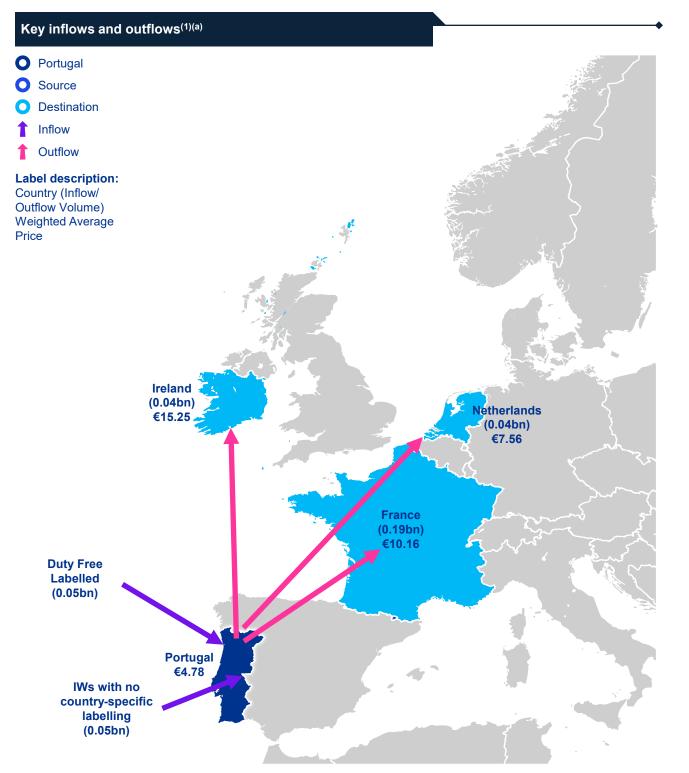
Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows









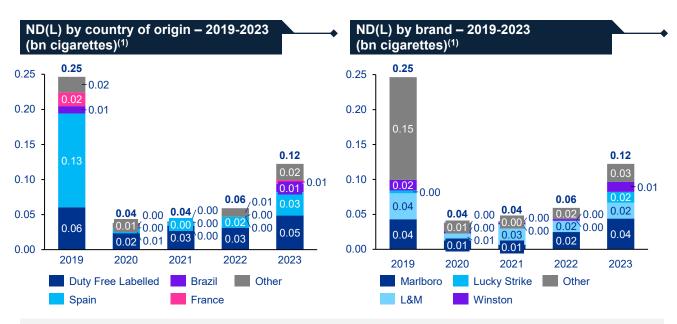


Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023

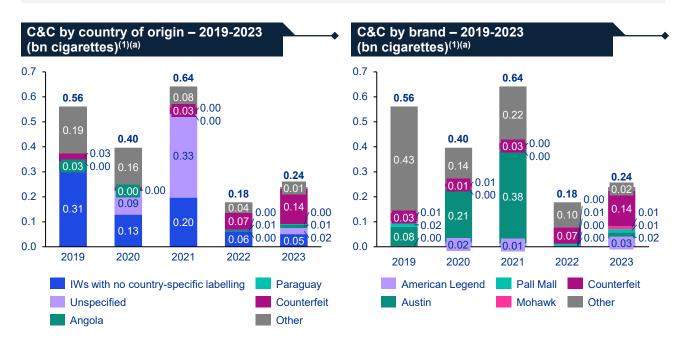




## ND(L) and C&C flows



- Legal inflows (ND(L)) increased in 2023, but still remained below 2019 levels, driven by an increase in legal flows from all major origin markets
- Illicit (C&C) inflows increased in 2023, primarily driven by an increase in Counterfeit, with Counterfeit volumes representing ~60% of illicit consumption in 2023 (vs 37% in 2022)



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023



## Romania



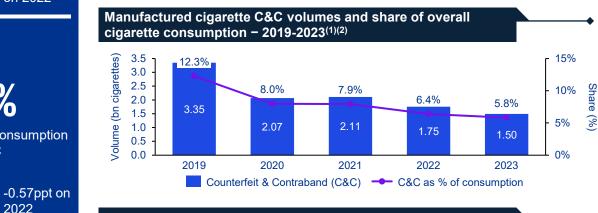
Romania

### Country profile **C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



C&C as a share of total consumption declined by 0.6ppt to 5.8%, driven by reduced inflows of Illicit Whites and Other C&C



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>

3.35				
2.49	2.07	2.11	4.75	
2.49	1.54	1.64	<b>1.75</b>	1.50
<mark>0.00</mark> 0.86	0.29	0.18 0.29	0.53	0.88 0.46
2019	2020	2021 s Counterfeit	2022 Other C&C	2023

Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data (3) EUR 1 = RON 4.973, InforEuro, European Commission, December 2023



Cigarettes consumed

**1.5bn** 

C&C cigarettes consumed

-1.70bn on 2022

-0.26bn on 2022

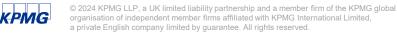






Total tax revenue lost from C&C<sup>(b)</sup> (RON1,269m)<sup>(3)</sup>





#### Romania



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Romania Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	25.14	24.90	25.70	27.45	26.30	(4%)
Outflows	(1.44)	(1.10)	(1.36)	(1.91)	(2.54)	33%
Legal Domestic Consumption (LDC)	23.70	23.80	24.34	25.54	23.77	(7%)
Non-Domestic Legal (ND(L))	0.24	0.10	0.11	0.18	0.50	184%
Counterfeit and Contraband (C&C)	3.35	2.07	2.11	1.75	1.50	(15%)
Total Non-Domestic	3.58	2.17	2.22	1.93	2.00	4%
Total Consumption	27.29	25.97	26.56	27.47	25.76	(6%)

 Total cigarette consumption decreased by 6% in 2023, driven by a decline in Legal Domestic Sales and an increase in outflows

 Non-Domestic inflows to Romania increased by 4%, all of which was driven by an increase legal inflows (ND(L)) as illicit inflows (C&C) declined

- An increase in Non-Domestic inflows of Bulgarian and Duty Free Labelled packs was partly offset by a decline in inflows of Illicit Whites with no country-specific labelling and inflows from smaller markets included within 'Other'
- Outflows increased by 33% in 2023, primarily driven by higher outflows to France and the UK

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Romania								
Billion cigarettes	2019	2020	2021	2022	2023			
IWs with no country-specific labelling	2.13	1.10	1.40	0.93	0.74			
Duty Free Labelled	0.25	0.19	0.17	0.52	0.61			
Bulgaria	0.01	0.02	0.03	0.05	0.23			
Other	1.19	0.85	0.62	0.43	0.42			
Total Inflows	3.58	2.17	2.22	1.93	2.00			

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Romania								
Billion cigarettes	2019	2020	2021	2022	2023			
France	(0.20)	(0.29)	(0.31)	(0.53)	(0.99)			
UK	(0.44)	(0.16)	(0.34)	(0.58)	(0.75)			
Germany	(0.22)	(0.20)	(0.19)	(0.18)	(0.20)			
Ireland	(0.11)	(0.19)	(0.15)	(0.26)	(0.15)			
Other	(0.48)	(0.26)	(0.36)	(0.37)	(0.44)			
Total Outflows	(1.44)	(1.10)	(1.36)	(1.91)	(2.54)			

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows



#### Romania



### Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>

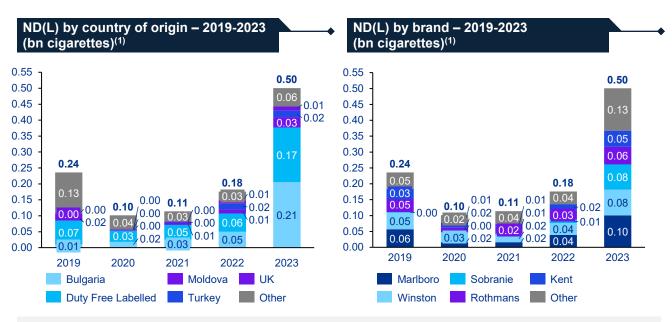


Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023

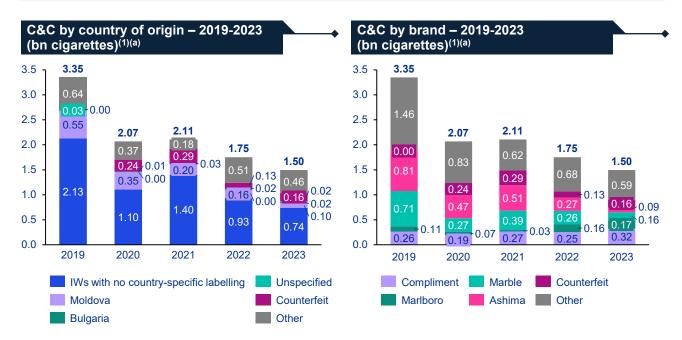




## ND(L) and C&C flows



- Legal inflows (ND(L)) increased by 184% in 2023, driven by an increase in legal flows from Bulgaria and Duty Free
- Illicit inflows (C&C) declined by 15%
- Inflows of Illicit Whites with no country-specific labelling declined in 2023, but remain the largest source of C&C



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023



## Serbia



Serbia



### 10.3bn

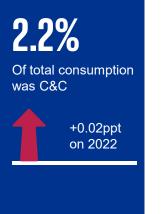
Cigarettes consumed



0.2bn C&C cigarettes

consumed



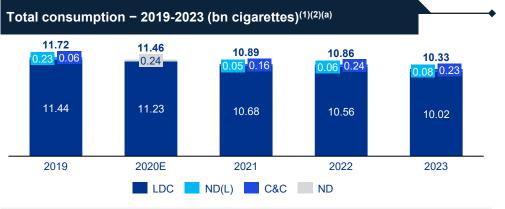




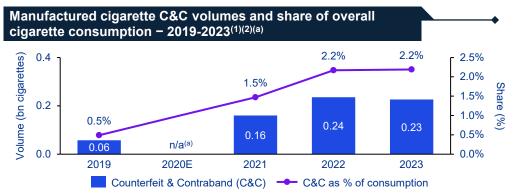
Total tax revenue lost from C&C in 2023<sup>(c)</sup>



### **C&C cigarette consumption and** total consumption



 C&C as a share of total consumption followed an increasing trend to 2022 and remained stable in 2023, with increasing flows of Illicit Whites offsetting declining flows of Other C&C since 2021



#### C&C consumption by type - 2019-2023 (bn cigarettes)<sup>(1)(2)(a)(b)</sup> 0.24 0.23 0 16 0.16 0.06 0.20 0.00 0.06 0.00 0.10 n/a<sup>(a)</sup> 0.07 0.03 <mark>0.00</mark> 0.06, 0.00 0.00 2019 2020E 2021 2022 2023 Illicit Whites Counterfeit Other C&C

Note: (a) ND(L) and C&C detail is only shown for years with empty pack surveys (b) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (c)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (d) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



#### Serbia



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)(a)</sup>

Total Serbia Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	12.35	11.60	11.22	11.14	10.47	(6%)
Outflows	(0.91)	(0.38)	(0.53)	(0.58)	(0.45)	(23%)
Legal Domestic Consumption (LDC)	11.44	11.23	10.68	10.56	10.02	(5%)
Non-Domestic Legal (ND(L))	0.23		0.05	0.06	0.08	30%
Counterfeit and Contraband (C&C)	0.06		0.16	0.24	0.23	(4%)
Total Non-Domestic	0.29	0.24	0.21	0.30	0.31	3%
Total Consumption	11.72	11.46	10.89	10.86	10.33	(5%)

 Total cigarette consumption has followed a declining trend, primarily driven by Legal Domestic Consumption

- Non-Domestic inflows decreased to 2021, before increasing from 2022 onwards

- Increased Non-Domestic consumption in 2022 and 2023 has predominantly been driven by inflows from Kosovo, Duty Free and Illicit Whites with no country specific labelling
- Outflows from Serbia have shown periods of growth and decline across the reporting period, with a
  decline in 2023 driven by reduced outflows to France and a number of smaller destination markets
  grouped together within 'Other'

Total inflows by country of origin		•			
Inflows to Serbia					
Billion cigarettes	2019	2020	2021	2022	2023
Ws with no country-specific labelling	0.05		0.06	0.08	0.12
Kosovo	0.02		0.03	0.10	0.10
Duty Free Labelled	0.00		0.00	0.00	0.04
Other	0.22		0.12	0.11	0.06
Total Inflows	0.29	0.24	0.21	0.30	0.31

#### Total outflows by destination – 2019-2023<sup>(1)(a)(b)</sup>

Outflows from Serbia					
Billion cigarettes	2019	2020	2021	2022	2023
France	(0.05)	(0.07)	(0.13)	(0.16)	(0.13)
Austria	(0.14)	(0.06)	(0.08)	(0.10)	(0.09)
Germany	(0.13)	(0.06)	(0.05)	(0.05)	(0.05)
Switzerland	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)
Croatia	(0.04)	(0.01)	(0.02)	(0.01)	(0.02)
Other	(0.54)	(0.15)	(0.24)	(0.26)	(0.14)
Total Outflows	(0.91)	(0.38)	(0.53)	(0.58)	(0.45)

Note: (a) Detailed breakdowns of ND(L), C&C, inflows and outflows are only shown for years with empty pack surveys. Total Non-Domestic, and inflows and outflows totals for years where empty pack surveys were not conducted are estimates only based on extrapolations of empty pack survey results from the prior and following years (b) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



#### Serbia



## Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>



#### C&C % by region<sup>(1)(b)(c)</sup>

Low High



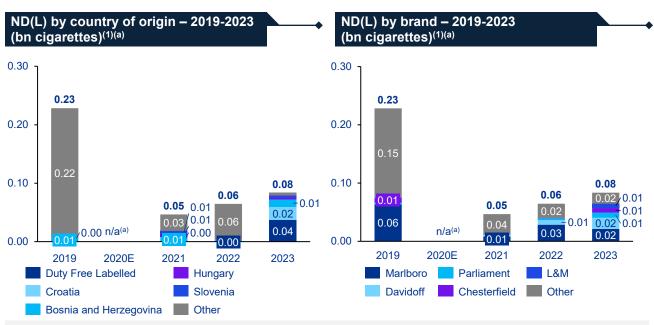
Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023





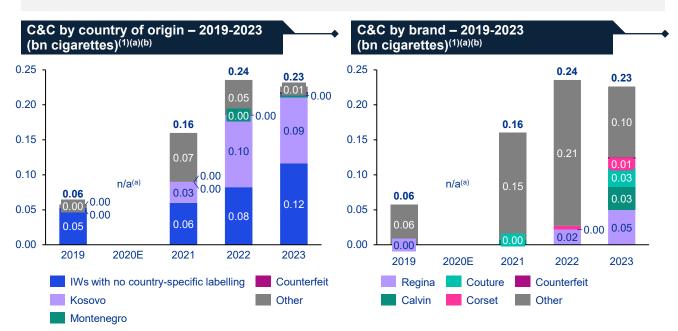
## ND(L) and C&C flows

Serbia



Legal inflows have increased since 2021 but still remain below 2019 levels

 Illicit inflows (C&C) declined marginally in 2023. These illicit inflows are primarily comprised of inflows from Kosovo and Illicit Whites with no country-specific labelling



Note: (a) ND(L) and C&C country / brand breakdowns are only shown for the years where an empty pack survey was undertaken (b) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys

Source: (1) KPMG European Flows Calculation, 2019-2023



# Slovakia





### **5.8bn**

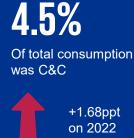
Cigarettes consumed



**0.3bn** 

C&C cigarettes consumed

+0.09bn on 2022





lost from C&C<sup>(b)</sup>

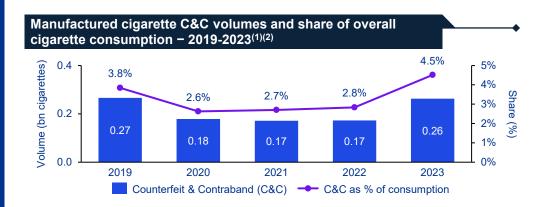


### **C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



- C&C as a share of total cigarette consumption increased by 1.7ppts to 4.5% in 2023, with C&C volumes returning to similar levels as observed in 2019
- This increase was primarily driven by an increase in Counterfeit and, to a lesser extent, Illicit Whites



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup> 0.27 0.26 0.07 0.18 0.15 0.17 0 17 0.03 0.05 0.11 0.18 0.10 0.11 0.10 0.07 0.04 0.02 0.01 0.00 0.00 2019 2020 2021 2022 2023 Illicit Whites Counterfeit Other C&C

Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



#### Slovakia



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Slovakia Consumption								
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)		
Legal Domestic Sales (LDS)	7.08	6.90	6.36	6.17	5.87	(5%)		
Outflows	(0.57)	(0.37)	(0.29)	(0.32)	(0.42)	31%		
Legal Domestic Consumption (LDC)	6.52	6.53	6.07	5.86	5.45	(7%)		
Non-Domestic Legal (ND(L))	0.13	0.10	0.11	0.07	0.11	51%		
Counterfeit and Contraband (C&C)	0.27	0.18	0.17	0.17	0.26	52%		
Total Non-Domestic	0.39	0.28	0.28	0.25	0.37	52%		
Total Consumption	6.91	6.81	6.35	6.10	5.83	(5%)		

 Total cigarette consumption decreased by 5% in 2023, due to a decline in Legal Domestic Sales and increased outflows, partly offset by an increase in Non-Domestic consumption

Non-Domestic inflows increased by 52% and returned to levels last seen in 2019. This was primarily
driven by an increase in Counterfeit, but with an increase in inflows observed from all major sources and
smaller source markets grouped together within 'Other'

 Increased outflows were primarily driven by larger outflows to Hungary and, to a lesser extent, the Czech Republic and smaller destination markets grouped together within 'Other'. This was partly offset by a decline in outflows to Germany

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows	to S	lovakia
		o vana

Billion cigarettes	2019	2020	2021	2022	2023
Counterfeit	0.10	0.07	0.10	0.11	0.18
IWs with no country-specific labelling	0.13	0.07	0.03	0.04	0.06
Poland	0.01	0.01	0.01	0.02	0.03
Czech Republic	0.06	0.06	0.05	0.02	0.03
Other	0.10	0.07	0.09	0.06	0.08
Total Inflows	0.39	0.28	0.28	0.25	0.37

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Slovakia					
Billion cigarettes	2019	2020	2021	2022	2023
Austria	(0.28)	(0.15)	(0.13)	(0.12)	(0.11)
Hungary	(0.01)	(0.01)	(0.01)	(0.03)	(0.10)
Czech Republic	(0.10)	(0.03)	(0.05)	(0.06)	(0.09)
Germany	(0.10)	(0.10)	(0.06)	(0.07)	(0.04)
Other	(0.08)	(0.08)	(0.04)	(0.03)	(0.06)
Total Outflows	(0.57)	(0.37)	(0.29)	(0.32)	(0.42)

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

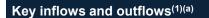
Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



#### Slovakia



### Key flows and C&C consumption patterns







Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey

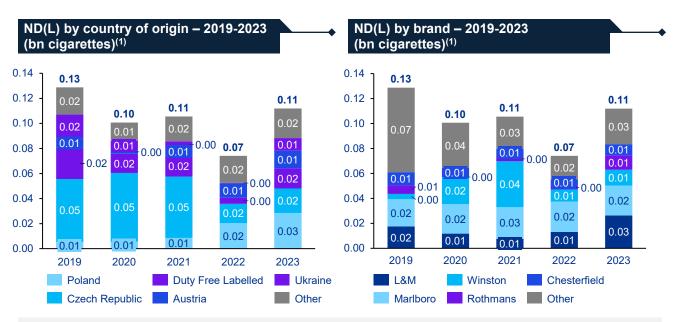
Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023





## ND(L) and C&C flows

Slovakia



- Legal inflows (ND(L)) increased in 2023, driven by increased inflows from Poland, Duty Free and Ukraine, returning to similar levels seen between 2019 and 2021
- Illicit (C&C) inflows also increased, returning to 2019 levels, primarily driven by an increase in Counterfeit volumes. Counterfeit comprised ~70% of C&C in 2023



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023



# Slovenia





### **3.0bn**

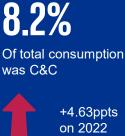
Cigarettes consumed



### **0.2**bn

C&C cigarettes consumed

+0.15bn on 2022





Total tax revenue lost from C&C<sup>(b)</sup>

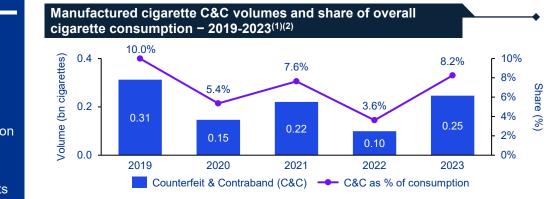


### **C&C cigarette consumption and** total consumption

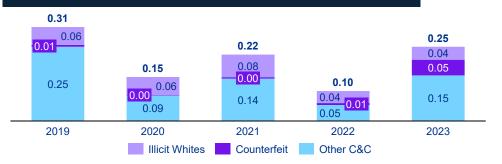
#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



 C&C as a share of total cigarette consumption increased by 4.6ppts to 8.2% in 2023, driven by an increase in Other C&C and Counterfeit volumes



#### C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts
Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



#### Slovenia



## Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Slovenia Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	3.37	3.21	3.19	3.33	3.06	(8%)
Outflows	(0.73)	(0.68)	(0.71)	(0.78)	(0.56)	(28%)
Legal Domestic Consumption (LDC)	2.64	2.52	2.48	2.55	2.51	(2%)
Non-Domestic Legal (ND(L))	0.17	0.06	0.19	0.10	0.24	143%
Counterfeit and Contraband (C&C)	0.31	0.15	0.22	0.10	0.25	148%
Total Non-Domestic	0.48	0.21	0.41	0.20	0.48	146%
Total Consumption	3.12	2.73	2.89	2.75	2.99	9%

Total cigarette consumption increased by 9% in 2023, driven by an increase in Non-Domestic consumption

 Non-Domestic inflows retuned to similar levels as observed in 2019, driven by an increase in inflows from all main source markets

- Outflows declined in 2023, primarily driven by a decline in outflows to neighbouring Italy

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Slovenia					
Billion cigarettes	2019	2020	2021	2022	2023
Bosnia and Herzegovina	0.12	0.03	0.05	0.02	0.06
Croatia	0.06	0.02	0.06	0.02	0.06
Romania	0.00	0.01	0.06	0.02	0.05
Poland	0.01	0.00	0.02	0.01	0.05
Counterfeit	0.01	0.00	0.00	0.01	0.05
Other	0.29	0.14	0.22	0.12	0.20
Total Inflows	0.48	0.21	0.41	0.20	0.48

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Slovenia					
Billion cigarettes	2019	2020	2021	2022	2023
Italy	(0.41)	(0.45)	(0.32)	(0.46)	(0.26)
Austria	(0.20)	(0.11)	(0.24)	(0.20)	(0.19)
Other	(0.12)	(0.12)	(0.14)	(0.12)	(0.11)
Total Outflows	(0.73)	(0.68)	(0.71)	(0.78)	(0.56)

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data

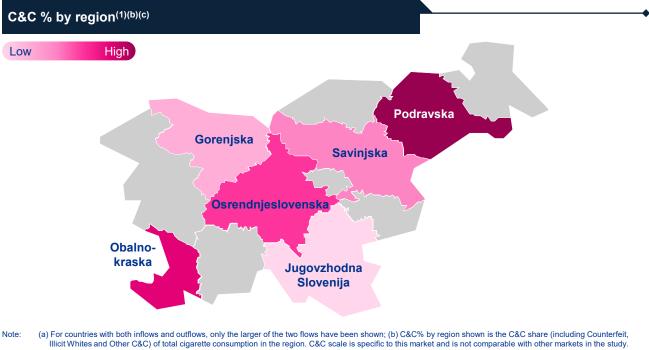


#### Slovenia



#### Key inflows and outflows<sup>(1)(a)</sup>





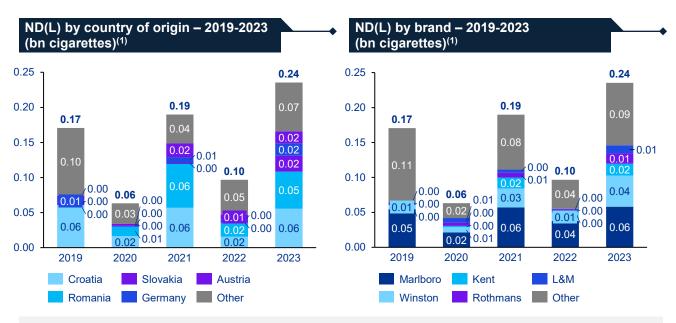
Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey Source: (1) KPMG European Flows Calculation 2023; ; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023



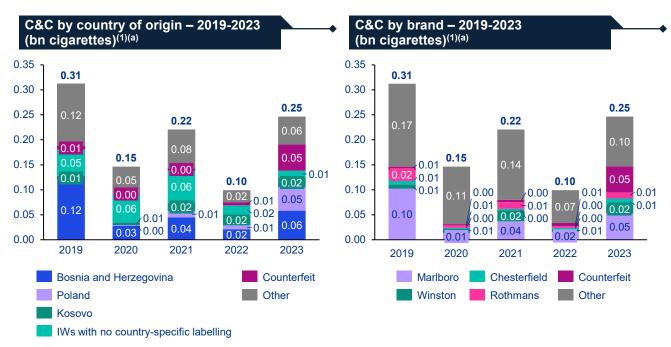


## ND(L) and C&C flows

Slovenia



- Legal inflows (ND(L)) increased in 2023 driven by an increase in legal inflows from all major source markets
- Illicit inflows (C&C) returned to similar levels as observed in 2021, primarily driven by an increase in illicit flows from Bosnia and Herzegovina, Poland and Counterfeit, as well as smaller markets grouped within 'Other'



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023



# Spain







### 40.7bn

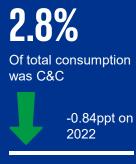
Cigarettes consumed



**1.2bn** 

C&C cigarettes consumed

-0.43bn on 2022



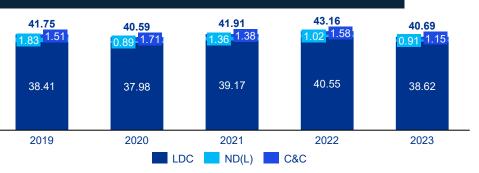


Total tax revenue lost from C&C<sup>(b)</sup>



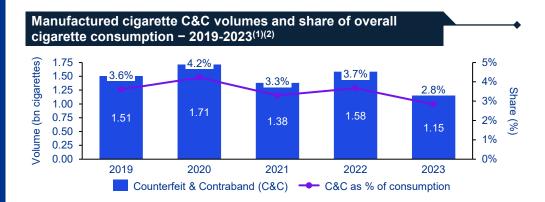
### **C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>

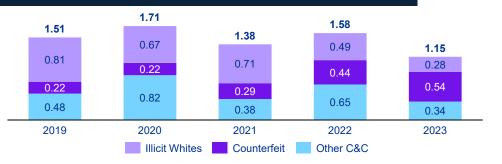


 C&C as a share of total cigarette consumption decreased by 0.9ppts to 2.8% in 2023, reaching the lowest level observed during the reporting period

This decline was driven by a reduction in inflows of Illicit Whites and Other C&C, partly offset by increased Counterfeit



C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



#### Spain



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup> **Total Spain Consumption Billion cigarettes** 2019 2020 2021 2022 2023 2022-23 (%) Legal Domestic Sales (LDS) 45.02 41.40 42.12 43.79 42.54 (3%) Outflows (6.61)(3.42)(2.95)(3.24)(3.92)21% Legal Domestic Consumption (LDC) 40.55 (5%) 38.41 37.98 39.17 38.62 0.91 Non-Domestic Legal (ND(L)) 1.83 0.89 1.36 1.02 (11%)Counterfeit and Contraband (C&C) 1.51 1.71 1.38 1.58 1.15 (27%) **Total Non-Domestic** 3.33 2.61 2.74 2.61 2.07 (21%)**Total Consumption** 41.75 40.59 41.91 43.16 40.69 (6%)

 Total cigarette consumption decreased by 6% in 2023, driven by a decline in Legal Domestic Sales, an increase in outflows and a decrease in Non-Domestic inflows

 Decreased inflows of Unspecified packs (i.e. packs with no country-specific nor Duty Free labelling) and inflows from smaller markets grouped within 'Other' led to a decline in overall Non-Domestic inflows. This was despite increased Counterfeit and inflows from the Canary Islands,

- Outflows increased by 21%. France remains the largest market for outflows from Spain

Total inflows by country o		•					
Inflows to Spain							
Billion cigarettes	2019	2020	2021	2022	2023		
Counterfeit	0.22	0.22	0.29	0.44	0.54		
Unspecified	0.00	0.00	0.06	0.52	0.28		
Canary Islands	0.13	0.02	0.11	0.19	0.24		
Other	2.98	2.36	2.28	1.45	1.00		
Total Inflows	3.33	2.61	2.74	2.61	2.07		

#### Total outflows by destination – 2019-2023<sup>(1)(b)</sup>

Outflows from Spain					
Billion cigarettes	2019	2020	2021	2022	2023
France	(4.08)	(2.77)	(2.56)	(2.62)	(3.23)
Other	(2.52)	(0.65)	(0.39)	(0.62)	(0.69)
Total Outflows	(6.61)	(3.42)	(2.95)	(3.24)	(3.92)

Note: (a) In 2023, 0.28bn of Unspecified origin packs were of the brand Ducal compared to 0.49bn in 2022. This brand has in prior years predominantly bore Gibraltarian labelling, however, analysis was not able to confirm this in 2022 and 2023. Refer to the appendix for further details (b) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data

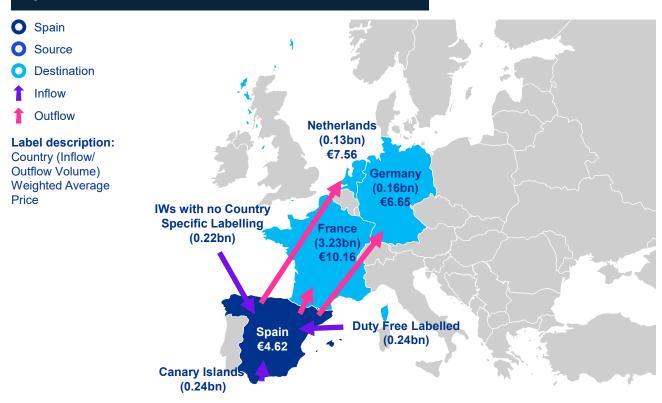


#### Spain



## Key flows and C&C consumption patterns





#### C&C % by region<sup>(1)(b)(c)</sup>

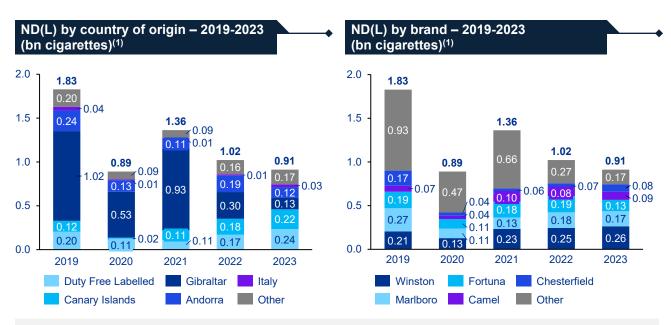


Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices, and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023

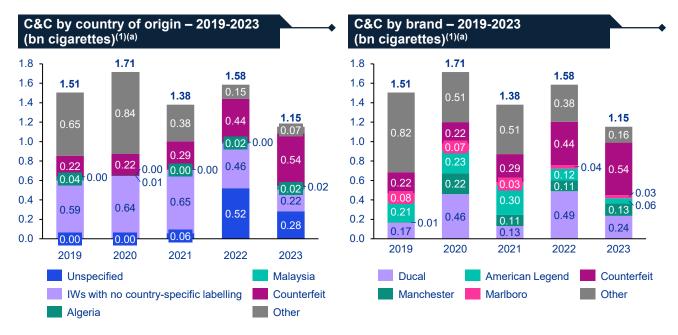




### Spain ND(L) and C&C flows



- Legal inflows (ND(L)) decreased by 11%, primarily driven by lower legal inflows from Gibraltar
- Illicit inflows (C&C) decreased by 27%, primarily driven by lower illicit inflows from unspecified sources and of Illicit Whites with no country-specific labelling
- Counterfeit's share of total illicit inflows increased to 47% in 2023 (vs 28% in 2022)



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023



# Sweden



Sweden



### **4.6bn**

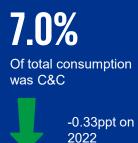
Cigarettes consumed



### **0.3**bn

C&C cigarettes consumed

-0.05bn on 2022





(SEK785m)<sup>(3)</sup> Total tax revenue lost from C&C<sup>(b)</sup>

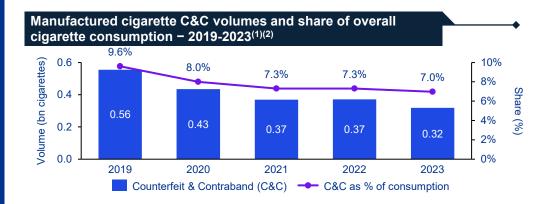


### **C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



- C&C as a share of total consumption declined by 0.3ppts to 7.0% in 2023, reaching the lowest level observed during the reporting period
  - The C&C decline was driven by a decrease in Other C&C, but was partly offset by an increase in Counterfeit and, to a lesser extent, Illicit Whites



#### C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>

0.56 0.05 0.16	<b>0.43</b>	<b>0.37</b> 0.04	0.37 0.03	<b>0.32</b>
0.35	0.33	0.24	0.27	0.11
		0.24		0.17
2019	2020	2021	2022	2023
	Illicit Whites	Counterfeit	Other C&C	

Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data; (3) EUR 1 = SEK 11.366, InforEuro, European Commission, December 2023



#### Sweden



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Sweden Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	5.18	5.01	4.79	4.79	4.46	(7%)
Outflows	(0.29)	(0.11)	(0.18)	(0.26)	(0.39)	49%
Legal Domestic Consumption (LDC)	4.89	4.90	4.60	4.53	4.07	(10%)
Non-Domestic Legal (ND(L))	0.35	0.10	0.08	0.19	0.18	(5%)
Counterfeit and Contraband (C&C)	0.56	0.43	0.37	0.37	0.32	(14%)
Total Non-Domestic	0.90	0.54	0.45	0.56	0.49	(11%)
Total Consumption	5.79	5.44	5.06	5.09	4.56	(10%)

 Total cigarette consumption decreased by 10%, primarily driven by a decline in Legal Domestic Consumption

 Non-Domestic inflows declined by 11%, with increased Counterfeit inflows more than offset by declining inflows from Duty Free and Poland

- Outflows to neighbouring Norway and Denmark, as well as other smaller markets, increased

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to Sweden					
Billion cigarettes	2019	2020	2021	2022	2023
Counterfeit	0.16	0.04	0.09	0.07	0.11
Duty Free Labelled	0.26	0.17	0.07	0.15	0.10
Poland	0.10	0.07	0.07	0.09	0.06
IWs with no country-specific labelling	0.02	0.01	0.02	0.01	0.02
Turkey	0.01	0.02	0.01	0.02	0.01
Other	0.35	0.23	0.20	0.21	0.19
Total Inflows	0.90	0.54	0.45	0.56	0.49

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Sweden					
Billion cigarettes	2019	2020	2021	2022	2023
Norway	(0.16)	(0.02)	(0.09)	(0.17)	(0.22)
Denmark	(0.08)	(0.03)	(0.07)	(0.05)	(0.10)
Other	(0.04)	(0.06)	(0.02)	(0.04)	(0.07)
Total Outflows	(0.29)	(0.11)	(0.18)	(0.26)	(0.39)

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data

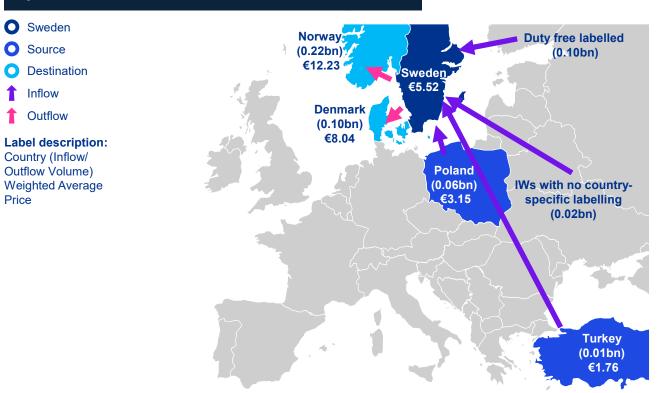


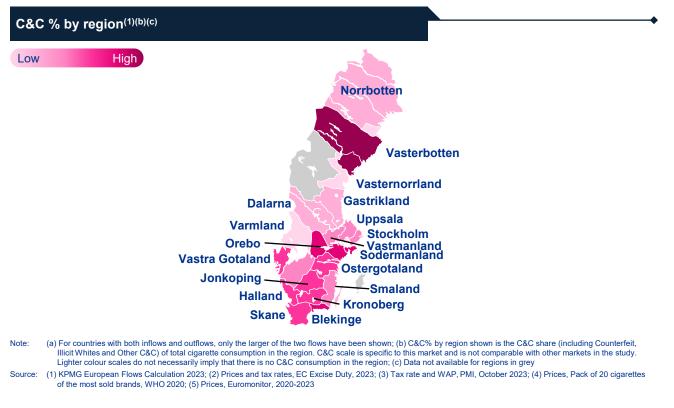
#### Sweden



### Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>









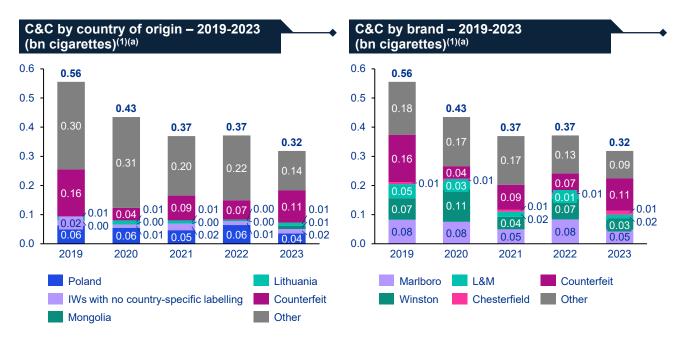
## ND(L) and C&C flows

Sweden



Legal inflows (ND(L)) remained relatively stable in 2023

 Illicit inflows (C&C) decreased by 14%, with an increase in Counterfeit inflows more than offset by a decline in inflows from Poland and other smaller markets included within 'Other'



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023



# Switzerland







### 9.0bn

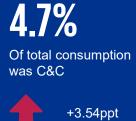
Cigarettes consumed



### **0.4**bn

C&C cigarettes consumed

+0.32bn on 2022







lost from C&C<sup>(b)</sup> +€84m

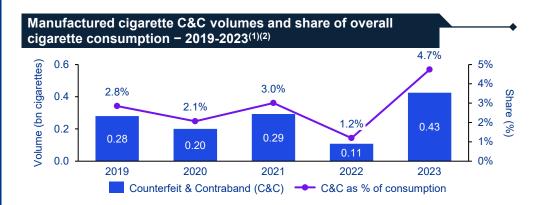
+€84m on 2022

### **C&C cigarette consumption and** total consumption

#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



 C&C as a share of total consumption increased by 3.5ppts to 4.7% in 2023, primarily driven by an increase in Other C&C



#### C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>

<b>0.28</b> <b>0.00</b> 0.04 0.24	<b>0.20</b> (0.00) 0.00 0.20	0.29 1 <mark>0.00</mark> 10.01 0.28	<b>0.11</b> 0.02 0.00 0.09	<b>0.43</b> <b>0.00</b> 0.04 0.38
2019	2020	2021	2022	2023
	Illicit Whites	Counterf	eit 📃 Other C&C	

Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data; (3) EUR 1 = CHF 0.963, InforEuro, European Commission, December 2023



#### Switzerland



# Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup>

Total Switzerland Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	8.77	9.19	8.94	8.46	7.99	(6%)
Outflows	(0.29)	(0.15)	(0.07)	(0.15)	(0.20)	31%
Legal Domestic Consumption (LDC)	8.48	9.05	8.87	8.31	7.79	(6%)
Non-Domestic Legal (ND(L))	1.07	0.47	0.57	0.60	0.76	27%
Counterfeit and Contraband (C&C)	0.28	0.20	0.29	0.11	0.43	295%
Total Non-Domestic	1.35	0.68	0.87	0.71	1.19	68%
Total Consumption	9.83	9.72	9.73	9.01	8.98	(0%)

 Total cigarette consumption volumes remained stable in 2023, with a decline in Legal Domestic Sales offset by an increase in Non-Domestic consumption (primarily C&C)

 Inflows increased by 68% in 2023, approaching levels observed in the pre-pandemic period, largely driven by an increase in inflows from Duty Free, Poland and smaller markets grouped within 'Other'

 Outflows from Switzerland increased by 31%, with increased outflows to France, Germany, the Netherlands, and smaller markets grouped within 'Other'

Total inflows by country of	f origin – 2019-2023 <sup>(1)</sup>	(a)			•
Inflows to Switzerland				<u>-</u>	
Billion cigarettes	2019	2020	2021	2022	2023
Duty Free Labelled	0.34	0.14	0.22	0.27	0.39
Poland	0.01	0.04	0.02	0.02	0.18
Italy	0.06	0.03	0.07	0.07	0.10
Kosovo	0.05	0.01	0.07	0.03	0.06
France	0.29	0.06	0.07	0.05	0.05
Other	0.60	0.40	0.41	0.27	0.41
Total Inflows	1.35	0.68	0.87	0.71	1.19

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from Switzerland					
Billion cigarettes	2019	2020	2021	2022	2023
France	(0.09)	(0.05)	(0.02)	(0.03)	(0.04)
Germany	(0.07)	(0.04)	(0.02)	(0.03)	(0.04)
Netherlands	(0.04)	(0.03)	(0.01)	(0.02)	(0.03)
Italy	(0.03)	(0.01)	(0.02)	(0.03)	(0.03)
Other	(0.06)	(0.02)	(0.02)	(0.04)	(0.06)
Total Outflows	(0.29)	(0.15)	(0.07)	(0.15)	(0.20)

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

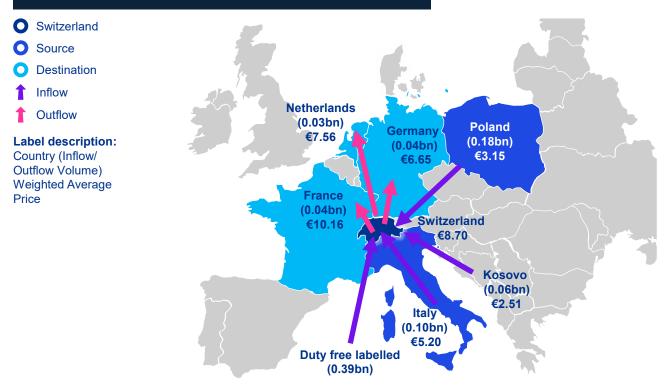
Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



#### Switzerland



#### Key inflows and outflows<sup>(1)(a)</sup>



#### C&C % by region<sup>(1)(b)(c)</sup> Low High Schaffhausen **Basel** Zurich St Gallen Neuchatel Luzern Bern Fribourg Vaud Grisons Ticino Geneva Valais

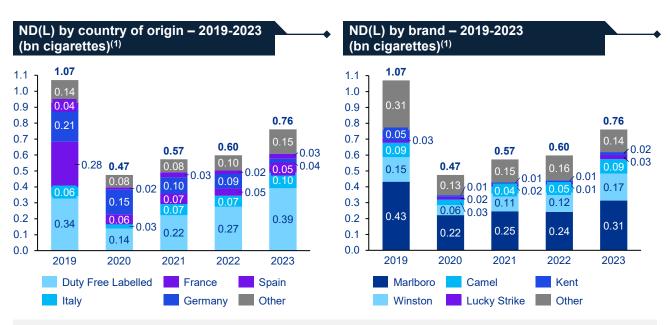
Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023



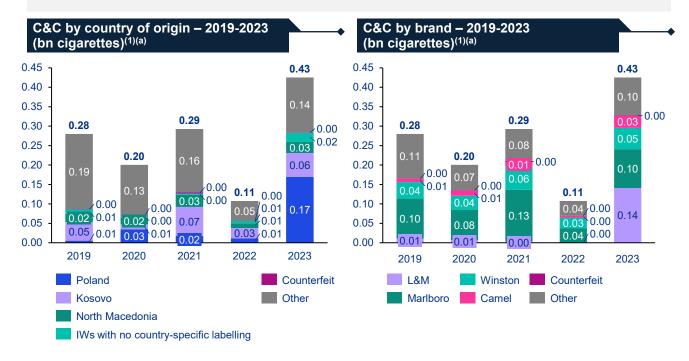


## ND(L) and C&C flows

Switzerland



- Legal inflows (ND(L)) increased by 27% in 2023, primarily driven by legal Duty Free inflows
- Illicit inflows (C&C) increased to the highest levels observed during the reporting period, primarily driven by an increase in illicit flows from Poland and other smaller markets grouped together within 'Others'
- Increased Illicit inflows of L&M in 2023 exclusively bore Polish labelling



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023



# Ukraine



Ukraine

38.6bn

+1.65bn

on 2022

+1.06bn

Cigarettes

consumed

**8.4bn** 

C&C cigarettes consumed

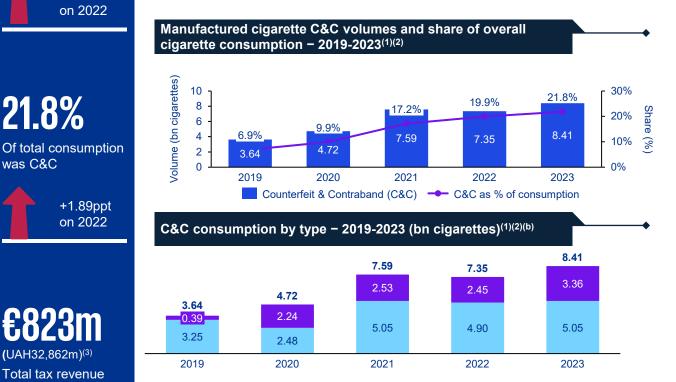
# C&C cigarette consumption and total consumption

Total measured consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



- C&C as a share of total consumption increased by 1.9ppts to 21.8% in 2023

 C&C volumes reached the highest level observed during the reporting period, primarily driven by an increase in Counterfeit flows



 Iost from C&C(c)
 Counterfiet
 Other C&C

 +€187m
 On 2022
 Note:
 (a) Pack swap survey data for Ukraine does not contain information regarding Domestic Legal (ND(L)) inflows cannot be estimated. Refer to the Methodo chart only includes Counterfiet volumes related to brands of manufactures:

Idet: (a) Pack swap survey data for Ukraine does not contain information regarding the origin of packs collected. Therefore, Non-Domestic Legal (ND(L)) inflows cannot be estimated. Refer to the Methodology section for further details; (b) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (c)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (d) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data; (3) EUR 1 = UAH 39.930, InforEuro, European Commission, December 2023



#### Ukraine



# Manufactured cigarette consumption, inflows and outflows

#### Total measured manufactured cigarette consumption – 2019-2023<sup>(1)(2)(a)</sup>

Total measured Ukraine Consumption						
Billion cigarettes	2019	2020	2021	2022	2023	2022-23 (%)
Legal Domestic Sales (LDS)	51.76	44.37	37.50	30.27	30.54	1%
Outflows	(2.73)	(1.56)	(0.87)	(0.71)	(0.38)	(46%)
Legal Domestic Consumption (LDC)	49.03	42.80	36.63	29.57	30.16	2%
Non-Domestic Legal (ND(L))	0.00	0.00	0.00	0.00	0.00	n/a
Counterfeit and Contraband (C&C)	3.64	4.72	7.59	7.35	8.41	14%
Total Non-Domestic	3.64	4.72	7.59	7.35	8.41	14%
Total Measured Consumption	52.67	47.53	44.21	36.92	38.57	4%

Total consumption increased by 4% in 2023, with an increase in both Domestic and Non-Domestic consumption

- Non-Domestic inflows increased by 14%, primarily driven by Counterfeit

- Due to limitations in the pack swap data available for Ukraine, ND(L) flows cannot be estimated
- Outflows continued their long-term declining trend in 2023, with the largest declines in outflows to Poland and smaller destination markets included within 'Other'

Inflows to Ukraine					
Billion cigarettes	2019	2020	2021	2022	202:
llegal products labelled 'For Duty Free Sale'	1.91	1.39	4.06	4.31	4.4
Counterfeit	0.39	2.24	2.53	2.45	3.36
Contraband	1.33	1.09	0.99	0.59	0.60
Total Inflows	3.64	4.72	7.59	7.35	8.4
Total outflows by destination – 2019 Outflows from Ukraine	<b>-2023</b> <sup>(1)(b)</sup>				
Outflows from Ukraine	2019	2020	2021	2022	2023
Outflows from Ukraine Billion cigarettes		<b>2020</b> (0.05)	<b>2021</b> (0.06)	<b>2022</b> (0.05)	<b>202</b> 3 (0.08
Outflows from Ukraine Billion cigarettes Czech Republic	2019				
Outflows from Ukraine Billion cigarettes Czech Republic Poland	<b>2019</b> (0.17)	(0.05)	(0.06)	(0.05)	(0.08
Outflows from Ukraine Billion cigarettes Czech Republic Poland Germany	<b>2019</b> (0.17) (0.55)	(0.05) (0.88)	(0.06) (0.34)	(0.05) (0.22)	(0.08 (0.08
Outflows from Ukraine Billion cigarettes Czech Republic Poland Germany UK	<b>2019</b> (0.17) (0.55) (0.16)	(0.05) (0.88) (0.12)	(0.06) (0.34) (0.09)	(0.05) (0.22) (0.07)	(0.08 (0.08 (0.05
Total outflows by destination – 2019 Outflows from Ukraine Billion cigarettes Czech Republic Poland Germany UK Italy Other	2019 (0.17) (0.55) (0.16) (0.55)	(0.05) (0.88) (0.12) (0.16)	(0.06) (0.34) (0.09) (0.08)	(0.05) (0.22) (0.07) (0.01)	(0.08 (0.08 (0.05 (0.04

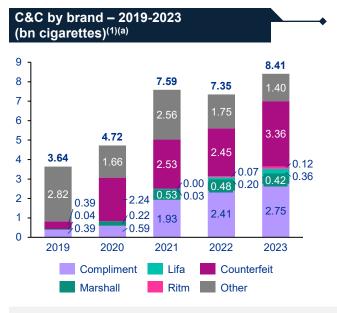
Note: (a) Pack swap survey data for Ukraine does not contain information regarding the origin of packs collected. Therefore, inflows to Ukraine have not been broken down by origin and ND(L) inflows cannot be estimated. Refer to the Methodology section for further details; (b) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data





### **C&C flows**



- Illicit inflows (C&C) to Ukraine increased by 1.06bn in 2023, primarily driven by an increase in Counterfeit brands and, to a lesser extent, Compliment, partly offset by a decrease in inflows of smaller volume brands grouped within 'Other'
- Please note that country of origin data is not available in the Ukraine pack swap survey. As such, ND(L) and C&C by country of origin cannot be estimated

Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023;



## United Kingdom







### 26.1bn

Cigarettes consumed



### **6.7bn**

C&C cigarettes consumed

+0.80bn on 2022





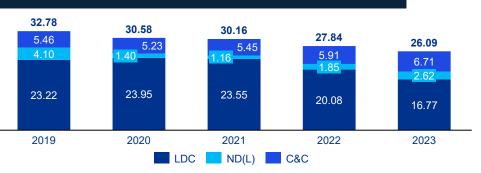
on 2022

(GBP3,371m)<sup>(3)</sup> Total tax revenue lost fro<u>m C&C<sup>(b)</sup></u>

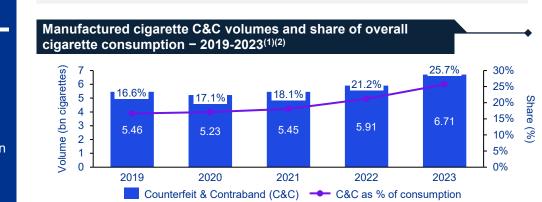


### **C&C cigarette consumption and** total consumption

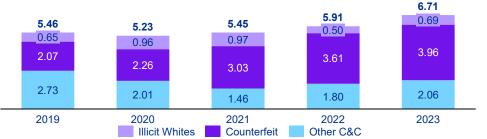
#### Total consumption – 2019-2023 (bn cigarettes)<sup>(1)(2)</sup>



 C&C as a share of total consumption increased by 4.5ppts to 25.7% in 2023, with increased inflows of Counterfeit, Other C&C and Illicit Whites



#### C&C consumption by type – 2019-2023 (bn cigarettes)<sup>(1)(2)(a)</sup>



Note: (a) C&C breakdown chart only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys; (b)Total tax revenue lost represents estimated excise and VAT if C&C volumes had been consumed legally in the country of study; (c) Due to rounding, segments highlighted in the charts may not add up to the total and year-on-year changes highlighted in the sidebar may differ from the charts

Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data; (3) EUR 1 = GBP 0.865, InforEuro, European Commission, December 2023



#### **United Kingdom**



## Manufactured cigarette consumption, inflows and outflows

#### Total manufactured cigarette consumption – 2019-2023<sup>(1)(2)</sup> Total UK Consumption 2022-23 (%) **Billion cigarettes** 2019 2020 2021 2022 2023 Legal Domestic Sales (LDS) 23.54 24.13 23.68 20.34 17.03 (16%) Outflows (0.32)(0.18)(0.13)(0.26)(0.26)1% Legal Domestic Consumption (LDC) (17%) 23.22 23.95 23.55 20.08 16.77 Non-Domestic Legal (ND(L)) 4.10 1.40 1.16 1.85 2.62 41% Counterfeit and Contraband (C&C) 5.46 5.23 5.45 5.91 6.71 14% **Total Non-Domestic** 9.56 6.62 6.61 7.76 9.32 20% **Total Consumption** 32.78 30.58 30.16 27.84 26.09 (6%)

 Total consumption decreased by 6% in 2023, driven by a decline in Legal Domestic Sales, partly offset by an increase in Non-Domestic consumption (both legal and illicit)

 Inflows increased 20% 2023, returning to 2019 levels, with higher inflows from all major origins as well as smaller origins grouped together within 'Other'

Outflows from the UK remained stable

#### Total inflows by country of origin – 2019-2023<sup>(1)(a)</sup>

Inflows to UK							
Billion cigarettes	2019	2020	2021	2022	2023		
Counterfeit	2.07	2.26	3.03	3.61	3.96		
Duty Free Labelled	1.37	0.65	0.47	1.17	1.56		
Poland	1.14	1.03	0.72	0.60	0.78		
Romania	0.44	0.16	0.34	0.58	0.75		
Turkey	0.10	0.17	0.14	0.22	0.43		
Other	4.44	2.34	1.90	1.59	1.84		
Total Inflows	9.56	6.62	6.61	7.76	9.32		

#### Total outflows by destination – 2019-2023<sup>(1)(a)</sup>

Outflows from UK					
Billion cigarettes	2019	2020	2021	2022	2023
Netherlands	(0.08)	(0.07)	(0.00)	(0.05)	(0.06)
France	(0.02)	(0.04)	(0.05)	(0.06)	(0.06)
Ireland	(0.12)	(0.02)	(0.02)	(0.04)	(0.05)
Denmark	(0.02)	(0.00)	(0.00)	(0.03)	(0.03)
Other	(0.08)	(0.05)	(0.05)	(0.08)	(0.08)
Total Outflows	(0.32)	(0.18)	(0.13)	(0.26)	(0.26)

Note: (a) The inflow and outflow tables only show the top five sources/destinations or countries that make up 80% of total flows

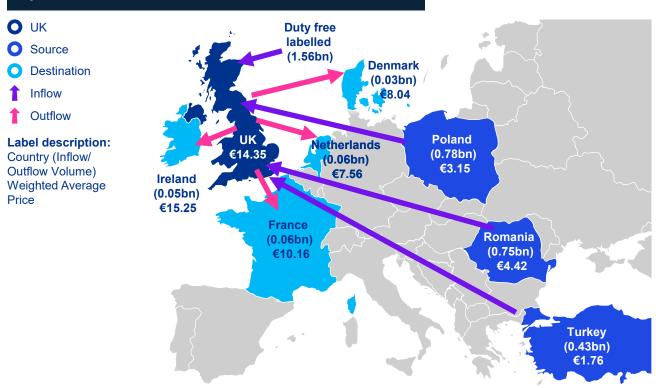
Source: (1) KPMG European Flows Calculation, 2019-2023; (2) In Market Sales data



#### United Kingdom

### Key flows and C&C consumption patterns

#### Key inflows and outflows<sup>(1)(a)</sup>

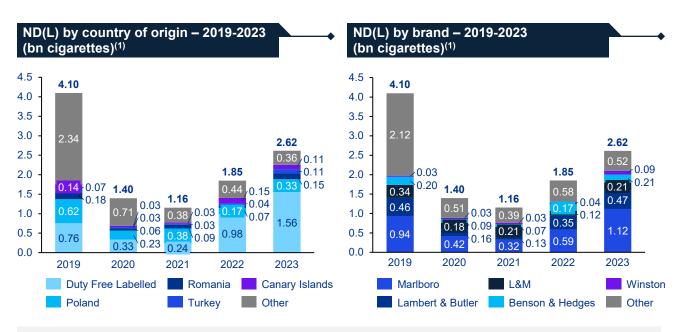




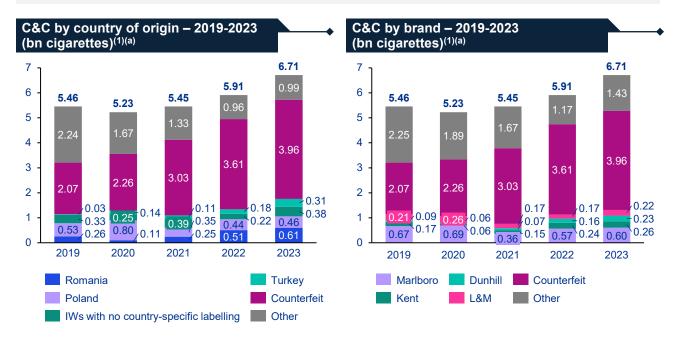
Note: (a) For countries with both inflows and outflows, only the larger of the two flows have been shown; (b) C&C% by region shown is the C&C share (including Counterfeit, Illicit Whites and Other C&C) of total cigarette consumption in the region. C&C scale is specific to this market and is not comparable with other markets in the study. Lighter colour scales do not necessarily imply that there is no C&C consumption in the region; (c) Data not available for regions in grey
 Source: (1) KPMG European Flows Calculation 2023; (2) Prices and tax rates, EC Excise Duty, 2023; (3) Tax rate and WAP, PMI, October 2023; (4) Prices, Pack of 20 cigarettes of the most sold brands, WHO 2020; (5) Prices, Euromonitor, 2020-2023



### ND(L) and C&C flows



- Legal inflows (ND(L)) increased by 41% in 2023 but remained below 2019 levels, primarily driven by legal Duty Free inflows, and to a lesser extent, legal inflows from Poland, Romania and Turkey
- Illicit inflows (C&C) increased by 14%, with the largest component being increased flows of Counterfeit
- Counterfeit accounted for ~60% of illicit inflows in 2023; a similar share to that observed in 2022



Note: (a) Only includes Counterfeit volumes related to brands of manufactures who participate in the empty pack/yellow bag/pack swap surveys Source: (1) KPMG European Flows Calculation, 2019-2023



# 03 Nethology



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### **Overview**



KPMG has developed and refined its methodology for estimating annual Counterfeit and	<ul> <li>The methodology has been tested extensively and refined to seek to ensure that it delivers robust and justifiable results</li> <li>Our approach integrates multiple sources and custom-built analytical tools</li> <li>From 2018, the annual study (previously known as Project SUN or Project Stella) was commissioned by Philip Morris International. In 2017, Project SUN was commissioned by the Royal United Services Institute (RUSI). RUSI contracted the work with funding from British American Tobacco and Philip Morris International to support RUSI's broader illicit trade research. As part of this, RUSI has also produced an Occasional Paper to shed light on some</li> </ul>
contraband incidence across European markets since 2006	of the main organised crime dynamics accompanying the trends revealed by the KPMG data. In 2016, similarly, RUSI commissioned Project Sun with funding from British American Tobacco, Philip Morris International and Imperial Tobacco Limited. Prior to this, between 2013-2015, Project Sun was commissioned jointly by the four major tobacco manufacturers (British American Tobacco plc, Imperial Tobacco Limited, JT International SA and Philip Morris International Management SA). KPMG LLP were previously commissioned by Philip Morris International Management SA to produce reports covering 2006 to 2012 ('Project STAR')
	<ul> <li>As a part of the 2018 study, an external panel of experts with a background in law enforcement, brand protection and tobacco control was appointed by KPMG. The panel had a mandate to review the methodology, validate and challenge any assumptions used, and suggest improvements KPMG could make, which were then implemented in the study and the report. For details on the panel of experts, refer to the 2018 Project Stella report</li> </ul>
	<ul> <li>The 27 EU markets and the UK have been included in the report since the 2006 results. Norway and Switzerland were included in the 2014 results. Ukraine and Moldova were included in the 2022 results. Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia and Kosovo were included in the 2023 results</li> </ul>
The methodology is based	The KPMG European Flows Calculation is a dynamic, iterative approach that is based on Legal Domestic Sales (LDS) and empty pack/ pack swap survey results and is used to estimate overall manufactured cigarette volumes
primarily on objective evidence from LDS and empty pack/ pack swap survey results,	• The KPMG European Flows Calculation has been developed by KPMG to specifically estimate inflows and outflows of cigarettes between European countries for the purpose of the annual study and report. It is an iterative, data-driven approach that uses LDS and empty pack survey results to estimate the volume of Non-Domestic outflows and inflows to and from the EU Member States, the UK, Norway, Switzerland, Ukraine, Moldova, Albania, Bosnia & Herzegovina, Montenegro, North Macedonia, Serbia and Kosovo
which are input to the	<ul> <li>LDS is the starting point of the methodology, from which outflows of legal sales to other countries are then subtracted to estimate Legal Domestic Consumption (LDC)</li> </ul>
bespoke European Flows Calculation	<ul> <li>Inflows from other countries are then added to estimate the total consumption within a market. Due to limitations in the data available from pack swap surveys, additional assumptions have been made to estimate inflows to Ukraine and Moldova. Refer to the 'Limitations of Results' section of this report for further details</li> </ul>
	<ul> <li>This methodology has been developed by KPMG for the manufactured cigarettes market specifically. For that reason, an assessment of other tobacco products (both legal and illicit) is excluded from the scope of this Report</li> </ul>





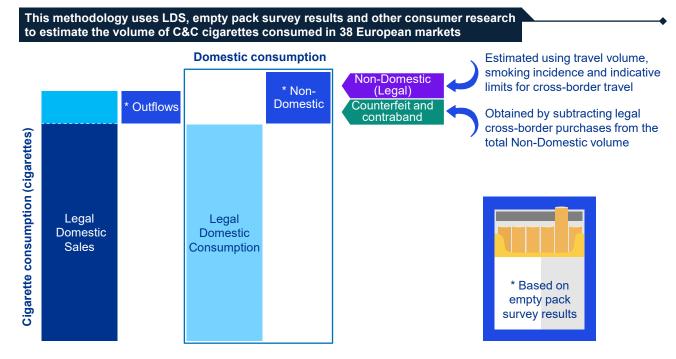
### **Overview (cont.)**

Empty pack/ pack swap survey results provide a robust indication of the incidence of Non-Domestic and Counterfeit packs and their country of origin	<ul> <li>An empty pack survey relies purely on physical evidence, avoiding the potential for consumer bias found in interview-based methods</li> <li>Empty pack surveys were separately commissioned by the tobacco manufacturers and conducted by independent market research agencies using a consistent methodology across all the EU27 markets, the UK, Norway, Switzerland, Albania, Bosnia &amp; Herzegovina, Montenegro, North Macedonia, Kosovo and Serbia, allowing for direct comparison of data and the identification of inflows and outflows between all the countries analysed</li> <li>In Moldova, empty pack surveys were commissioned by PMI between 2018 and 2020. However, between 2021 and 2023, PMI, JTI, IB and BAT commissioned a pack swap survey. All surveys were conducted by independent research agencies</li> <li>In Ukraine, pack swap surveys were conducted by independent research agencies between 2018 and 2023 commissioned by PMI, JTI, IB and BAT</li> <li>598,715 packs were collected in 2023 as part of this research for 38 countries</li> <li>Further detail regarding the reliability and validity of empty pack survey, the sampling approach and results by country at a regional level are provided later in this Report</li> <li>The external panel of experts involved in 2018 concluded that "the empty pack survey is the most reliable and objective approach to data collection available"</li> </ul>
Tourism and travel trends are used to estimate legal Non-Domestic cigarette purchases	<ul> <li>Tourism and travel data provided by publicly-available 3<sup>rd</sup> party sources are used to estimate genuine, legal Non-Domestic tobacco purchases (including cross-border shopping) in each market based on inbound visitor inflows</li> <li>United Nations World Tourism Organisation (UNWTO) data is the primary source used to identify travel trends, supplemented with Euromonitor and other publicly available data</li> <li>European Commission releases<sup>(a)</sup> are the source of the weighted average price (WAP) of a pack of cigarettes in EU27 countries. For non-EU27 countries assessed in the study, WAP and tax rates were provided by PMPSA. Where flows come into a country from a higher priced country, they are assumed to be 100% legal, as there is no price incentive for smuggling</li> <li>Due to limitations in data, Non-Domestic Legal (ND(L)) consumption cannot be estimated for Ukraine. Therefore, Total Measured Consumption (Total consumption excluding ND(L)) has been included in the Ukraine country report. Refer to the 'Limitations of Results' section in the appendix for further details</li> </ul>
There are some specific limitations in the methodology	<ul> <li>Given the complexity of measuring C&amp;C, we recognise there are some limitations within the methodology</li> <li>There are broadly two types of limitations: scope exclusions and source limitations</li> <li>Scope exclusions include areas which cannot or have not been accounted for in our scope of work and approach, such as geographic, brand (non-participating manufacturer counterfeit), category exclusions (other tobacco products) and legal domestic product flows out of the Europe</li> <li>Source limitations include the availability of information and the potential errors inherent with any data sources such as sampling criteria, coverage issues and seasonality factors</li> </ul>
To help improve the accuracy of results, some minor refinements were necessary at a country level	<ul> <li>Comparison of results from alternative sources identified a few markets where country-to-country flows required minor adjustment</li> <li>In nearly all instances, overall country results and flows from the KPMG European Flows Calculation appeared in line with estimates from other third-party sources. However, in a limited number of instances, specific adjustments were made to country-to-country flows where additional data provided by third parties or manufacturers allowed for further refinement of the analysis. Refer to page 233 for further details</li> </ul>

Notes: (a) EC Excise Duty Tables, 2023. At the time of publication of this report, the latest WAP data available from the European Commission Excise Duty tables were for the year 2023



### **Overview (cont.)**

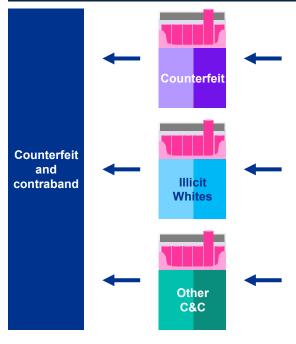


This methodology was developed by KPMG. It has been deployed consistently since 2006, enabling comparisons to be made between Counterfeit and contraband volumes from year to year



### **Overview (cont.)**

#### Counterfeit and contraband is allocated into three constituent parts: Counterfeit, Illicit Whites and Other C&C



Counterfeit packets are identified by those manufacturers participating in the given wave of empty pack/ pack swap survey research. Each manufacturer analyses their own packaging from the packs collected and marks whether the pack is Counterfeit

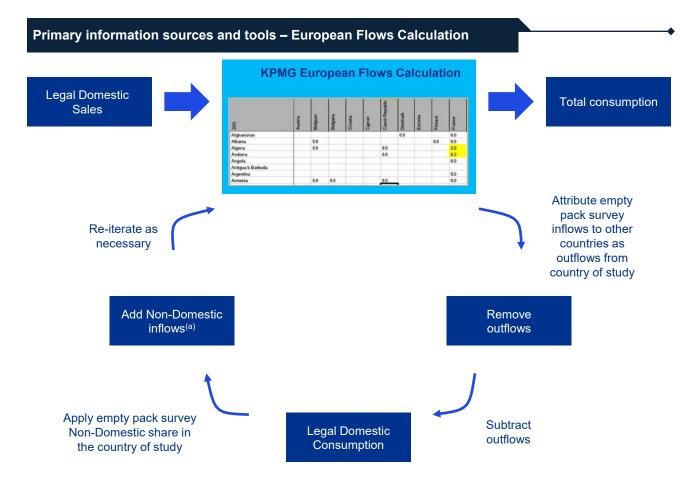
Illicit Whites are defined as cigarettes which are usually manufactured legally in one country or market but which the evidence suggests have been smuggled across borders to the destination market where they have limited or no legal distribution and are sold without the payment of tax. KPMG has an approach to estimate Illicit Whites brand flows using specific criteria described on page 259

'Other C&C' comprises contraband which does not fall within the Illicit Whites definition. It is often Duty Paid product from both EU27 and non-EU27 countries. There may also be counterfeit of brands that are not trademark-owned by participant manufacturers<sup>(a)</sup>

Note: (a) Cigarette packs of brands that are not trademark owned by participant manufacturers are not analysed and are all considered to be genuine



### **KPMG European Flows Calculation**



#### The KPMG European Flows Calculation is a dynamic, iterative approach that is principally based on LDS and empty pack/ pack swap survey results

- LDS volumes are the starting point of the calculation from which outflows of legal sales to other countries are then subtracted to estimate Legal Domestic Consumption in a market
- Non-Domestic inflows from other countries are then added back in to give an estimate for the total consumption within a market
- The calculation is then re-iterated as necessary reflecting the relationship of inflows and outflows between all 27 EU countries, the UK, Norway, Switzerland, Ukraine, Moldova, Albania, Bosnia and Herzegovina. Montenegro, North Macedonia, Kosovo and Serbia
- Empty pack survey results provide an estimate of the share of Non-Domestic packs by country of origin in all markets
  - In the 27 EU markets, the UK, Norway, Switzerland, Albania, Bosnia & Herzegovina, Montenegro, North Macedonia, Kosovo and Serbia, empty pack survey results provide a consistent source of Non-Domestic packs by country of origin from which we can estimate total product outflow from each market to the other 37 markets
- Pack swap surveys in Moldova provide an estimate of legal and illicit inflows into the country at a summary level. Breakdown of these figures by country of origin is not available
- Pack swap surveys in Ukraine provide an estimate of illicit consumption in the country. Information on the origins of
  packs collected is not available and, therefore, ND(L) inflows cannot be estimated<sup>(a)</sup>
- For Albania, Bosnia & Herzegovina, Montenegro, North Macedonia, Kosovo and Serbia, empty pack surveys were not conducted for some of the historical years. These have been marked as 'n/a' in representation of results in the country profiles

Note: (a) The methodology to identify the ND(L) and C&C components of Non-Domestic flows is explained in the ND(L) methodology section



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#### B C O

### **Legal Domestic Sales**

#### LDS data is sourced from Nielsen and other independent agencies<sup>(a)</sup>

• Since the beginning of this annual study in 2006, LDS estimates for all brands have been sourced from In Market Sales (IMS) data compiled by Nielsen, and other independent sources

#### Where appropriate, external estimates of LDS have been used instead of the above approach

- In certain markets, publicly available estimates of legal manufactured cigarette sales are widely used by manufacturers, industry participants, government bodies and non-governmental organisations.
- In these instances, we have deemed it more appropriate to incorporate these recognised estimates of LDS in the KPMG European Flows Calculation. For 2023, this is the case with:
  - Latvia: LDS figure reported by the State Revenue Service
  - Bulgaria: LDS figure reported by the Bulgarian Customs Authority

Source: (1) LDS data provided by Nielsen and other independent agencies. Refer to appendix section for a list of sources





### **Empty pack survey methodology**

An empty pack survey is a research system of collecting discarded empty cigarette packs, the results of which are used to estimate the share of domestic (duty paid), Non-Domestic and Counterfeit packs in each of the markets
• Empty pack surveys are conducted by independent market research agencies (e.g. Nielsen or Ipsos) in each of the countries sampled. The surveys are commissioned by the participating manufacturers and the sampling plan is designed by the agencies in conjunction with the manufacturers to help make the sampling plan statistically representative of consumption in the country for the whole year studied.
<ul> <li>Results are based on a large sample of packs collected in various population centres throughout the countries, although the exact collection plan differs by country. Accuracy and credibility of results is driven by sound design of the sampling plan</li> </ul>
<ul> <li>Results are not subject to respondent behaviour and are therefore less prone to sampling errors than many other alternative methodologies</li> </ul>
<ul> <li>Results reflect actual overall Non-Domestic share and provide a good snapshot of brands consumed</li> </ul>
Empty pack surveys rely purely on physical evidence, avoiding the potential for consumer bias in interview-based methods
<ul> <li>The independent market research agencies randomly collect empty packs of any brand and market variant from streets and easy access bins</li> </ul>
<ul> <li>Homes and workplaces are not visited, and the collection route specifically excludes sports stadia, shopping malls and stations, or any other locations where Non-Domestic incidence is likely to be higher as a result of a skewed population or demographic visiting these areas</li> </ul>
<ul> <li>Once packs are collected, they are sorted by manufacturer and brand and the number of packs with domestic versus Non-Domestic tax stamps counted to estimate the proportion of packs that did not originate from that jurisdiction (including Duty Free variants)</li> </ul>
<ul> <li>In cases where tax stamps are not shown on a packet, health warning and packaging characteristics are used to determine the source market and where no markings are found they are recorded as unspecified</li> </ul>
• For brands belonging to the major manufacturers, packs are sent to the manufacturers for analysis to determine which are genuine and which are Counterfeit. Only the manufacturers can determine this, based on ink, paper and other characteristics of the packaging
<ul> <li>KPMG used the results of the empty pack surveys to extrapolate overall consumption in the market using LDS and the percentage of Non-Domestic cigarettes in the market as found through empty pack surveys</li> </ul>
<ul> <li>The process is repeated across all countries of study using an approach which iterates the level of Non-Domestic cigarettes until all inflows and outflows are equal</li> </ul>
The total number of packs collected in each market is not solely based on population but is determined by a number of factors such as the size of the market, the likelihood of high Non-Domestic incidence and the manufacturers' share of the legal market. However, the locations where packs are collected 'in market' are based on city and regional populations to seek to ensure the sample is nationally representative
<ul> <li>Small surveys (300-4,999 packs): Albania, Bosnia &amp; Herzegovina, Croatia, Cyprus, Kosovo, Latvia, Luxembourg, North Macedonia, Malta, Montenegro, Portugal, Serbia and Slovenia</li> </ul>
<ul> <li>Medium surveys (5,000-9,999 packs): Belgium, Estonia, Finland, Ireland, Lithuania, Norway, Slovakia and Switzerland</li> </ul>
<ul> <li>Large surveys (10,000 packs or more collected): Austria, Bulgaria, Czech Republic, Denmark, France, Germany, Greece, Hungary, Italy, Netherlands, Poland, Romania, Spain, Sweden and the UK</li> </ul>



### Empty pack survey methodology (cont.)

#### Estimate of Non-Domestic incidence on a stick basis since 2012

Overview	<ul> <li>Prior to 2012, the KPMG European Flows Calculation assumed that all packs collected were the same size (20 cigarettes). In 2012 the approach was updated to take into account different pack sizes, and this approach has been continued since then</li> <li>This update to the approach was made to help give a more accurate result for the volume flows between European countries, as pack sizes vary on a country-by-country basis</li> </ul>
Process	<ul> <li>Empty pack survey results provide the number of cigarettes in each packet</li> <li>It is therefore possible to calculate the total number of sticks accounted for by the pack collection despite the different size packs, hence improving the overall accuracy of volume estimations</li> </ul>
Impact	<ul> <li>The effect of this change on Non-Domestic incidence is dependent upon whether the typical domestic pack size was greater or less than the average pack size of 20 on a country-by-country basis</li> <li>In countries where the average domestic pack size was less than 20 cigarettes (for example, historically most LDS in the UK and Italy were of 10 or 20 cigarette packs, giving an average domestic pack size of less than 20 cigarettes, and in Denmark domestic cigarettes were sold in packs of 19), then the conversion to a sticks basis is likely to decrease the proportion of domestic cigarettes in the empty pack survey sample, giving a higher Non-Domestic incidence than estimating on a pack basis</li> <li>In countries where the average domestic pack size was greater than 20 cigarettes), then the conversion to a sticks basis was likely to increase the proportion of domestic cigarettes in the empty pack survey sample, giving a basis was likely to increase the proportion of domestic cigarettes in a stick basis was likely to increase the proportion of domestic cigarettes in the empty pack survey sample, giving a basis was likely to increase the proportion of domestic cigarettes in the empty pack survey sample, giving a lower Non-Domestic incidence than estimating on a pack basis</li> </ul>





### Empty pack survey methodology



The empty pack survey is conducted in a consistent way for each country. It follows a four step process:

#### 1. Population centre selection

• The population centres chosen are representative of the country of study. Each population centre is divided into five sectors (north, south, east, west and centre). Each sector is subdivided into neighbourhoods of the same size (250-meter radius)

#### 2. Pack collection

- Each neighbourhood is assigned a number of discarded packs for collection based on the size of the overall population centre in comparison with the national population. For example, in France 126 cities are sampled in each wave of 11,500 packs. Of all packs collected, 3,780 are collected in Paris, which represents over 11% of the packs collected. The neighbourhoods sampled include residential, commercial and industrial areas
- A minimum number of packs are collected from each neighbourhood. Each neighbourhood has a specific starting
  point and a fixed route. The collectors accumulate as many empty packs as possible within each neighbourhood
  regardless of the quota requested in the sampling plan. Packs are collected from any manufacturer regardless of
  whether they participate in the survey. Collectors revisit the neighbourhood as many times as necessary in order to
  achieve the required quotas
- The training of collectors includes an explanation of the methodology and running of pilots prior to the collection. Each team of collectors is supervised by a team leader
- An additional 5% extra packs are collected in case there are issues with the existing sample

#### 3. Pack processing

• The empty packs are placed into bags and stored at a safe collection point. Packs are discarded if they do not meet the survey quality requirements (e.g. torn, unreadable, rotten). Each survey qualified pack is cleaned and placed in a transparent nylon bag with a zipper that carries a unique barcode label indicating the serial number attributed to the pack (corresponding to the data sheet). The details are then entered into the survey "Data Sheet". The packs are delivered to the participating manufacturers in the given wave of empty pack survey in a way that enables easy processing and identification

#### 4. Pack analysis

- The participating manufacturers check the packets belonging to their brands to identify Counterfeit and inform the agency that collates and updates the data sheets
- These data sheets are finally provided to KPMG by the manufacturers and analysed to estimate the Non-Domestic incidence and contraband and Counterfeit volumes





### Pack swap methodology

Overview	A pack swap is a research methodology based on collecting cigarette packs from respondents door to door. These packs are then assessed to estimate the share of domestic (duty paid), Non-Domestic and Counterfeit packs
	• Pack swaps are conducted by independent market research agencies in Moldova (Nielsen & Ipsos) and Ukraine (Kantar). The surveys are commissioned by the participating manufacturers (PMI, JTI, IB and BAT) and the survey plan is designed by the agencies in conjunction with the manufacturers to help make the sampling plan nationally representative of consumption in the country for the whole year studied
	• The outputs are based on the analysis of packs collected in various population centres throughout the countries
	Results summarise the share of non-duty paid cigarettes consumed in the markets
	<ul> <li>In Moldova, the packs are assessed by the research agency and classified into Duty- Free, Illicit Whites, Non-Domestic Duty Paid (NDDP), Counterfeit and Unspecified</li> </ul>
	<ul> <li>In Ukraine, the packs are assessed by the research agency and classified into Contraband, Illegal products labelled "For Duty Free Sale" and Counterfeit</li> </ul>
Process	• Pack swap surveys are conducted across both rural and urban regions. Urban regions are subdivided into smaller sub-regions based on sub-regional population with a predetermined target for the number of packs to be collected in each region and sub-region to give a nationally representative picture of consumption in the country
	• For Ukraine in 2022 and 2023, research did not include the following areas impacted by the ongoing war: Luhansk, Donetsk, Kherson, Mykolaiv, 70% of Kharkiv, Zaporizhzhia (except for the city of Zaporizhzhia)
	A random route 'door to door' approach is used to identify respondents in each region
	• The independent market research agencies conduct short face to face interviews where respondents are offered to swap their current cigarette pack in exchange for an incentive, typically a voucher. If respondents decline the interview or to swap their pack, the interview is terminated
	An interviewer records the details of the swapped pack after interview completion
	• Once the swapped packs are collected, the research agency sorts them by manufacturer and brand, and the number of packs with domestic versus Non-Domestic tax stamps is counted to determine the proportion of packs that did not originate from that jurisdiction (including Duty Free variants)
	• The health warning labelling, excise stamp details and pack descriptors are then evaluated by the research agency to determine the source market
	• For brands belonging to the participating manufacturers (BAT, IB, JTI, PMI), packs are sent to the manufacturers for analysis to determine which are genuine and which are Counterfeit
	• KPMG used the results of the pack swaps to extrapolate overall consumption in the market using LDS and the percentage of Non-Domestic cigarettes in the market as found through the pack swaps
	• The forensic analysis in Ukraine is conducted in a similar manner as the empty pack surveys wherein the participating companies analyse collected samples of their brands while packs of non-participating companies are sent to the Institute of Forensic Expertise – a government agency
	- The primary focus during the analysis is to establish the authenticity of fiscal stamps
	- Based on this analysis, Kantar also reports packs that have labelling not compliant with local legislation including no graphical health warning, text not in the local language, no fiscal stamps





### Pack swap methodology

Process	<ul> <li>Additionally, during the pack swap study, respondents are asked questions related to the point of purchase to check if they have been purchased from a legitimate Duty-Free channel or from street vendors, open markets, shops or kiosks</li> </ul>
Coverage	The total number of packs collected in each market is not solely based on the population but is determined by a number of factors such as the size of the market, the likelihood of high Non-Domestic incidence and the manufacturers' share of the legal market. However, the locations where packs are collected 'in market' are based on regional, city and city sub-region populations to seek to ensure the sample is nationally representative



Methodology

### **Empty pack survey adjustment overview**

#### Empty pack survey adjustments

Where necessary, we make adjustments to the empty pack survey results in our analysis in the form of reweighting different packs or quarterly surveys, based on additional evidence available. Adjustments are made to correct for issues identified in the empty pack survey. The main issues identified this year are covered below:

Empty pack survey	Explanation	Method	Countries where adjustment made
1. Brand oversampling	Domestic packs collected by brand in the empty pack survey deviate significantly from the domestic brand shares	<ul> <li>Some brands may be oversampled which we can check through a comparison with the LDS</li> <li>KPMG assumes that an oversampling of brands domestically will result in an oversampling of brands Non-Domestically. As a result, the weights of Non-Domestic packs are adjusted using the assumption that Non-Domestic packs are oversampled to the same extent as domestic packs</li> </ul>	France (Marlboro)
2. Adjustments to specific country flows	The flows from some countries appear to have been over or under-sampled based on the timing of the survey, areas sampled, or sales from other countries	<ul> <li>Adjustments were made when the empty pack surveys over or under sampled some flows as highlighted by other sources of data</li> <li>Some examples include: <ul> <li>Border sales data from Spain, Belgium and Luxembourg indicated that inflows from these countries were being under sampled in the French empty pack survey. Hence, the inflows from these countries were adjusted</li> </ul> </li> <li>A detailed list of empty pack survey adjustments and their impact can be found in the following pages</li> </ul>	Belgium, France



### Empty pack survey adjustments

Country	Sample dates	Packs collected	Number of cities	Adjustment	Impact
Albania	Q4: Nov	2,800	15	None	n/a
Austria	Q2: Jun-Jul Q4: Nov	13,000	24	None	n/a
Belgium	Q2: Apr-May Q4: Oct-Nov	5,600	18	<ul> <li>Country flows adjustments:</li> <li>Analysis of Luxembourg LDS data indicated that Luxembourg packs were being under sampled in the Belgian empty pack survey. Therefore, inflows from Luxembourg were adjusted using the rate of change of Luxembourg LDS in 2022 and 2023</li> </ul>	Inflows from Luxembourg increased from 0.04bn to 0.46bn
Bosnia and Herzegovina	Q2: May	1,300	7	None	n/a
Bulgaria	Q2: May Q4: Nov	11,600	20	None	n/a
Croatia	Q4: Oct	3,000	8	None	n/a
Cyprus	Q4: Oct	1,000	4	None	n/a
Czech Republic	Q2: Apr Q3: Jul Q4: Sep-Oct	31,506	30	<ul> <li>Brand adjustment:</li> <li>Flows of the brand Winston from Poland to other European markets were in excess of sales of the brand in the origin market (after accounting for domestic consumption in the origin market), indicating this brand was potentially over-sampled in some empty pack surveys, including the Czech Republic. Therefore, we limited outflows of this brand from Poland to equal the sales of the brand in Poland less domestic consumption of the brand (per LDS and empty pack surveys)</li> </ul>	Inflows from Poland reduced from 1.07bn to 0.95bn
Denmark	Q2: Apr Q4: Oct	10,000	6	None	n/a
Estonia	Q2: May Q3: Sep	6,600	14	None	n/a

#### Source: (1) UNWTO







#### Empty pack survey – adjustments made in KPMG analysis

Country	Sample dates	Packs collected	Number of cities	Adjustment	Impact
Finland	Q2: Apr-May	5,000	10	None	n/a
France	Q1: Feb-Mar Q2: <i>May-Jun</i> Q3: Aug-Sep Q4: Nov-Dec	46,000 (incl. Q2)	126	Exclusion of Q2 results Q2 empty pack survey results indicated markedly different brand /country inflow and city level results to the three other quarters in 2023 To understand the validity of the Q2 results, we	Not quantified
				<ul> <li>LDS analysis was undertaken on the source markets of Non-Domestic brands found in the French Q2 EPS to ascertain if the quantum of flows suggested was realistic. This analysis indicated that the Non-Domestic flows suggested by the French Q2 EPS could not have been possible. This conclusion was based on the LDS and domestic consumption of those brands in their domestic markets (based on the source markets' IMS data and empty pack surveys), as the scale of the inflows to France were not supported by either: <ul> <li>A concurrent increase in legal domestic sales of those brands in the source markets, or</li> </ul> </li> </ul>	
				<ul> <li>ii. A concurrent decline in domestic consumption of those brands in the source markets</li> <li>As a result, we concluded that the increase in flows from those markets suggested by the Q2 EPS results were not supported by recorded sales in the source market. Since these brands driving the results were from the participating companies of the EPS we also knew these were not Counterfeit products</li> </ul>	
				<ul> <li>The Non-Domestic flows suggested by the French Q2 EPS would have indicated a large decline in total cigarette consumption in some source markets that contradicted other data sources (e.g. smoking incidence and average daily consumption statistics, historic trends etc)</li> <li>Analysis of the results at an individual pack and city level suggested there may have been issues with the collection process that was overstating Non-Domestic consumption from some specific markets</li> </ul>	
				As a result of the above findings the Q2 2023 empty pack survey results (representing 11,500 packs) were not considered representative of consumption in that period and have been excluded from our analysis and results	



#### Empty pack survey – adjustments made in KPMG analysis

Country	Sample dates	Packs collected	Number of cities	Adjustment	Impact
France	Q1: Feb-Mar Q2: May-Jun Q3: Aug-Sep Q4: Nov-Dec	46,000		<ul> <li>Country flows adjustments:</li> <li>Inflows from Spain, Belgium and Luxembourg were adjusted using publicly available data sources for local border populations, car ownership, average daily consumption, smoking incidence, adult population, etc. (from sources such as Eurobarometer, WHO, European Environment Agency, France National Institute of Statistics and Economic Studies, etc.), and were corroborated with manufacturer border sales data (market estimates using sales data)</li> <li>Inflows were adjusted to reflect tourism trends and border sales, which indicate higher flows into France</li> <li>Brand adjustment:</li> <li>A comparison of Marlboro LDS with domestic packs collected in the empty pack survey indicated that the brand was oversampled in the empty pack survey. Therefore, the volume of Non-Domestic packs was reduced, using the assumption that Non-Domestic packs were oversampled to the same extent as domestic packs</li> <li>Flows of the brand Winston from Poland to other European markets were in excess of sales of the brand in the origin market (after accounting for domestic consumption in the origin market), indicating this brand was potentially over-sampled in some empty pack surveys, including France. Therefore, we limited outflows of this brand from Poland to equal the sales of the brand in Poland less domestic consumption of the brand (per LDS and empty pack surveys)</li> </ul>	<ul> <li>Inflows from Spain increased from 1.50bn to 3.23bn</li> <li>Inflows from Belgium increased from 0.43bn to 0.73bn</li> <li>Inflows from Luxembourg increased from 0.49bn to 1.10bn</li> <li>Inflows from Poland reduced from 2.39bn to 1.31bn</li> </ul>

#### Empty pack survey – adjustments made in KPMG analysis

Country	Sample dates	Packs collected	Number of cities	Adjustment	Impact
Germany	Q1: Feb	181,591	56	Brand adjustment:	Inflows from Poland
	Q2: May Q3: Aug Q4: Nov			Flows of the brand Winston from Poland to other European markets were in excess of sales of the brand in the origin market (after accounting for domestic consumption in the origin market), indicating this brand was potentially over- sampled in some empty pack surveys, including Germany. Therefore, we limited outflows of this brand from Poland to equal the sales of the brand in Poland less	reduced from 5.49bn to 5.19bn
				domestic consumption of the brand (per LDS and empty pack surveys)	
Greece	Q2: Apr-May Q3: Sep-Oct	12,000	20	None	n/a
Hungary	Q3: Aug-Oct	17,000	40	None	n/a
Ireland	Q2: May	5,000	22	None	n/a
Italy	Q1: Mar-Apr Q2: May-Jun Q3: Jul-Aug Q4: Oct-Nov	40,000	85	None	n/a
Kosovo	Q4: Nov-Dec	1,800	7		
Latvia	Q2: May	4,900	25	None	n/a
Lithuania	Q2: May	5,800	20	None	n/a
Luxembourg	Q2: May Q4: Oct	400	2	None	n/a
Malta	Q4: Oct	1,000	8	None	n/a
Moldova	n/a	1,530	n/a	<ul> <li>2021, 2022 and 2023 pack swap surveys exclude the Transnistria region. To ensure consistency across all years, pack swap survey results from the Transnistria region in 2019 and 2020 have been excluded from our analysis</li> </ul>	n/a
				<ul> <li>A pack swap survey was not undertaken in Moldova in 2019. 2019 Non-Domestic share (ND%) has been estimated by applying the annual growth rate implied between 2018 and 2020 to the 2018 pack swap results</li> </ul>	
Montenegro	Q4: Nov	1,000	4	None	n/a



Empty pack		liustmonte m	ado in KD	MG analysis	
	sulvey – au	justinents in			
Country	Sample dates	Packs collected	Number of cities	Adjustment	Impact
Netherlands	Q2: Jun Q4: Oct-Nov	14,000	50	None	n/a
North Macedonia	Q4: Nov	1,200	10	None	n/a
Norway	Q2: May	5,000	8	None	n/a
Poland	Q2: Apr-May Q3: Jul-Aug Q4: Oct-Nov	37,500	40	None	n/a
Portugal	Q2: Apr	3,000	10	None	n/a
Romania	Q1: Jan-Mar Q2: May Q3:Jun- Jul,Sep-Oct Q4: Oct-Dec	12,101	41	None	n/a
Serbia	Q1: March	2,700	15		
Slovakia	Q2: Jun	5,000	25	None	n/a
Slovenia	Q4: Oct	3,000	8	None	n/a
Spain	Q2: Apr-May Q4: Oct-Nov	30,000	58	None	n/a
Sweden	Q2: Apr-May	10,000	29	None	n/a
Switzerland	Q3: Aug-Sep	5,600	20	None	n/a
UK	Q2: Apr-May	12,700	105	None	n/a



6



### **Empty pack survey analysis**

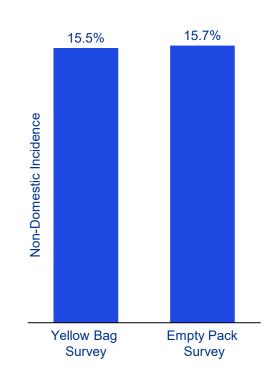
#### Empty pack survey comparison

#### Comparison of empty pack survey analysis to other sources

Comparison of empty pack survey results against other means of measuring household cigarette consumption indicates that Non-Domestic cigarette consumption in public areas is not significantly different to 'at home':

- The Yellow Bag Survey (YBS) in Germany is conducted using household waste which is collected and sorted, mainly for the purposes of recycling. This makes it possible to separate and collect cigarette packs
- Yellow Bag Survey samples are collected every month, with a sample of 120,000 packs in 2023
- A collection from streets and open access bins (i.e. an empty pack survey) was conducted alongside the Yellow Bag Survey
- Empty cigarette packs were collected across all four quarters, with 181,591 packs collected in total throughout 2023
- The street collection and Yellow Bag surveys recorded a similar level of non-domestic incidence in 2023

#### Comparison of empty pack survey and Yellow Bag Survey, Germany – 2023<sup>(1)(2)(a)</sup>



Notes: (a) The comparison between methodologies is made on a "sticks basis" in 2023 rather than a packs basis Sources: (1) Ipsos empty pack surveys (2) Ipsos Yellow Bag Surveys





Volume estimated by travel flows, border crossings, smoking incidence and additional analysis as discussed below



ND(L) was estimated by analysis of travel trends, border crossings and cigarette pricing data. C&C volumes formed the remaining Non-Domestic balance after subtracting ND(L) from total Non-Domestic

ND(L) was estimated using two methods:

- 1. Countries where ND(L) is 100% of total ND
  - Non-Domestic cigarettes in the empty pack surveys from higher priced inbound tourist/visitor countries were categorised as legal, as long as these flows were not identified as Counterfeit or Illicit Whites brands, as there is no price incentive to smuggle
- 2. Travel flows analysis
  - Business and tourism travel data from the World Tourism Organization (UNWTO), Euromonitor, national statistics offices and other publicly available sources were used to estimate the number of trips made by travellers over the age of 18
  - This total number of trips was then multiplied by the average cigarette smoking prevalence of the country of origin to estimate the total number of trips by cigarette smokers. Smoking prevalence data for 2023 was provided by WHO and Euromonitor
  - We assumed that the number of packs purchased per trip is equal to the Duty-Free allowance, or the indicative legal limit for cross-border travel
  - The empty pack survey and European Flows Calculation form the basis of all Non-Domestic analysis. As a result, where the ND(L) calculation was greater than 100% of the flow calculated by the European Flows Calculation, it is capped at the volume generated by the European Flows Calculation
  - In certain cases travel data may not capture the extent of cross-border travel where such travel does not entail an overnight stay. Where this is a material source of cross-border flows, it is estimated based on regional border populations, retail sales data and other publicly available data

Countries where ND(L) is 100% of total Non-Domestic	ND from European Flows Calculation	Total = ND(L) (sticks)	2 Travel flows analysis	Total trips where cigarettes purchased	x	Cigarettes per trip	=	Total ND(L) (sticks)
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#### Example using illustrative data

1 Countr	ies where ND(L	) is 100% of total		
Country of Study	Country of Origin	ND (bn sticks) <sup>(1)</sup>	ND(L) (bn sticks)	% of ND
Norway	Sweden	0.22	0.22	100%

#### Travelers flow analysis example

2 Tra	vel Flow Anal	lysis										
Country of study	Country of origin	ND (bn sticks) <sup>(1)</sup>	Category	Number of journeys (m) <sup>(2)(3)</sup>		Smoking Prevalence <sup>(3)(5)</sup>	Trips where cigarettes purchased (m)	Cigarettes per trip <sup>(b)</sup>	ND(L) (bn sticks)	Total ND(L) (bn sticks)	% of ND	
Austria	Austria Slovenia	nia 0.19 -		Returners	0.41	83%	23%	0.077	40	0.06	0.49	0.49/
Austria			Incomers	0.19	82%	18%	0.028	2	0.00	• 0.18	94%	

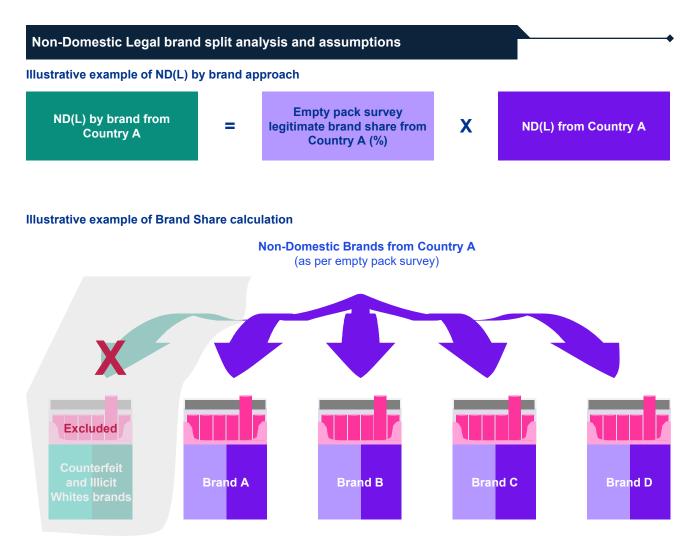
Notes (a) KPMG estimates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

(b) Unless stated otherwise it is assumed that returning travellers purchase the indicative maximum allowed

Sources: (1) KPMG European Flows Calculation (2) UN WTO Tourism Factbook (3) Euromonitor (4) UNICEF (5) WHO



### Non-Domestic Legal analysis (cont.)



Empty pack survey legitimate brand share from Country A (%)

#### Having estimated the volume of ND(L) inflows on a country basis as detailed on the previous page, the brand share was estimated by analysis of the brands that were found in the empty pack survey from that country

The ND(L) inflow from each source country was split into brands by using the following approach

- Illicit Whites brands and Counterfeit packs were excluded from being potentially classified as ND(L) as these brands are always C&C, leaving only brands that could have potentially legal inflow volumes
- For the remaining potentially legal brands, the ND(L) percentage share was estimated to be the same as the Non-Domestic share of these brands
- ND(L) volume by brand was estimated as the product of the total ND(L) inflow and the brand percentage share





### Non-Domestic Legal adjustments

Non-Domestic	Legal adjustments
Country	Adjustment
Austria	<b>ND(L) from Czech Republic</b> Assumed to be predominately legal due to the countries' proximity and high non-tourism travel volumes
	<b>ND(L) from Slovenia</b> Assumed to be predominately legal due to high non-tourism travel volumes
	<b>ND(L) from Slovakia</b> ND(L) in Eastern Border areas from Slovakia assumed to be predominately legal given large price differentials and opportunities for Austrians to cross-border shop
Belgium	ND(L) from Luxembourg Assumed to be predominately legal due to high non-tourism travel volumes
Bulgaria	None
Croatia	None
Cyprus	None
Czech Republic	<ul> <li>ND(L) from Poland</li> <li>Given the increase in Non-Domestic inflows from Poland in 2023, year on year changes in border sales and border region cigarette consumption data provided by PMI were used to estimate the legal component of the increased flow.</li> <li>Polish border area cigarette consumption volume estimates based on local population, smoking incidence and average daily consumption data provided by PMI were subtracted from Polish border</li> </ul>
	area LDS, to estimate the volume of cigarettes that could potentially be purchased legally by Czech cross border shoppers.
Denmark	None
Estonia	None
Finland	None
France	Change in intra-EU27 cigarette cross-border legal limit French authorities changed the legally allowed pack limit from 40 packs to 10 packs for all EU countries with effect from 1st August 2020
	<ul> <li>ND(L) from Spain, Belgium and Luxembourg</li> <li>In addition to tourist ND(L), ND(L) flows into France were increased to account for legal flows from border shoppers (using data points on local border populations, car ownership, average daily consumption, smoking incidence, adult population, etc to estimate the volume of cigarettes that could be bought legally by French smokers near the border). Border shopping is common in these bordering and cheaper markets, and border shopper crossings are not captured in tourist data</li> <li>ND(L) from Algeria</li> <li>ND(L) in France from Algeria was estimated using traveller volumes from the WTO and Bulletin Statistics, and traveller research carried out at airports in Algeria by Kantar TNS ('Tobacco brought back from Algeria to France by travellers of direct flights', May 2018) that indicated that 33% of travellers carry tobacco products from Algeria to France. The indicative legal limit remains 200</li> </ul>



Non-Domestic Legal adjustments (cont.)

Country	Adjustment
Germany	ND(L) from Czech Republic
	Czech Republic ND(L) was estimated to be 1.56bn in this Report, by supplementing the WTO traveller numbers with yearly change in travel volume of border crossing data from the Czech Statistics Office. This is because WTO traveller data does not account for the high number of non-tourism related border crossings between Germany and Czech Republic related to workers and shoppers. The updated number of travellers was multiplied by the adult population %, smoking prevalence % and an assumed allowance of 420 cigarettes per person (cigarette number based on previous consumer research provided by PMI pre 2016)
	Assumed to be predominately legal due to the high number of border crossings
Greece	None
Hungary	None
Ireland	None
Italy	None
Latvia	None
Lithuania	None
Luxembourg	None
Malta	None
Moldova	None
Netherlands	None
Norway	Change in legal import limit for cigarettes
	As per Tolletaten (Norwegian Customs) alcohol and tobacco quotas, since 1 <sup>st</sup> January 2023 the quantity of cigarettes that residents in Norway can import when travelling abroad has been reduced from 200 cigarettes to 100 cigarettes
	ND(L) from Sweden
	Assumed to be predominately legal due to the high number of border crossings for shopping. Cigarettes are a popular border shopping purchase as prices in Sweden are almost half that in Norway
	ND(L) from World Wide Duty Free
	Assumed to be predominately legal. As Norway is a non-EU27 market, Norwegians can purchase Duty Free when travelling to the EU27 and abroad



### Non-Domestic Legal adjustments (cont.)

Non-Domes	tic Legal adjustments
Non-Donies	
Country	Adjustment
Poland	None
Portugal	None
Romania	None
Slovakia	None
Slovenia	None
Spain	ND(L) from Andorra
	ND(L) was increased to 0.12bn (from an original 0.00bn). This is to reflect additional border crossings for work and shopping not captured in tourism data sources (additional border crossing data sourced from the 2021 Nielsen study 'Volume assessment among travellers in Andorra 2021'). This 2021 data is extrapolated to 2023, using the 2021-23 CAGR of inbound arrivals from Andorra to Spain sourced from Euromonitor. The Andorra flow is considered predominately legal given the large number of tourist and cross border workers and shoppers
	ND(L) from Canary Islands
	ND(L) has been estimated at 0.22bn using total tourist border crossings sourced from government data as tourist data between Spain and the Canary Islands is not recorded in the WTO travel database. This flow is considered predominately legal given high tourism volumes
	ND(L) from Gibraltar
	ND(L) has been adjusted to 0.13bn (from an original 0.00bn). This is to reflect government data on total border crossings in 2023 of 8.4m which does not get captured in WTO travel data. This is then split between tourists and workers (sourced from HM Government of Gibraltar: Frontier workers by nationality, 2023 (Employment department) and Land frontier visitor arrivals, 2023 (Tourism department)). The relevant smoking prevalence for workers and tourists, adult population and purchase assumptions are then used to estimate total ND(L)
Sweden	None



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### Non-Domestic Legal adjustments (cont.)

	ic Legal adjustments							
Country	Adjustment							
Switzerland	ND(L) from Germany							
	Assumed to be predominately legal given its proximity and large number of tourists and cross border workers							
	ND(L) from World Wide Duty Free							
	Assumed to be predominately legal. As Switzerland is a non-EU27 market, Swiss can purchase Dut Free when travelling to the EU27 and abroad							
UK	ND(L) from Poland							
	The smoking prevalence of Polish visitors to the UK was increased from 21.7% to 22.4% to correspond to the proportions of male to female visitors (there were more male than female visitors from Poland, with men having a higher smoking prevalence, as sourced from the Office for National Statistics to correspond to the proportions of male to female visitors (there were more male than female visitors from Poland, with men having a higher smoking prevalence, as sourced from the Office for National Statistics to correspond to the proportions of male to female visitors (there were more male than female visitors from Poland, with men having a higher smoking prevalence, as sourced from the ('Visits to and spending in UK: by sex, purpose of visit and country of residence 2022' subsequently extrapolated for 2023 using 2022-23 CAGR of inbound arrivals from Poland to UK sourced from Euromonitor)							
	The smoking prevalence of UK visitors to Poland was also updated to 19.1% (the Polish smoking prevalence) to account for the fact that a large majority of these UK visitors are Polish, as sourced from the Office for National Statistics (Number of visits to specified countries: by main country visited and nationality 2022 and extrapolated for 2023 (using 2022-23 CAGR of outbound departures from UK to Poland sourced from Euromonitor). Packs brought to the UK by Polish visitors was increased from 2 to 37 (based on previous consumer research provided by PMI pre 2016). This increased ND(L) from 0.07bn to 0.33bn							
	ND(L) from Romania							
	Packs brought to the UK by Romanian visitors were increased from 2 to 40 (based on previous consumer research provided by PMI pre 2016). Given the large price differentials between the UK and Romania, and the Romanian population in the UK, these travellers may be resident or working i the UK with the price incentive to purchase cigarettes up to the indicative legal limit. This increased ND(L) from 0.01bn to 0.15bn							



#### Primary information sources and tools - 2023 Non-Domestic legal major flow calculations

Albania											
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)		
Greece	Outbound	_		Flows con	sidered predon	ninantly legal			0.01bn		
010000	Inbound								0.01011		
Itali	Outbound	_									
Italy	Inbound			Flows considered predominantly legal							
Kosovo	Outbound	0.05mn	80%	19%	0.01mn	10	200	0.00bn	— 0.00bn		
KUSUVU	Inbound	0.00mn	74%	29%	0.00mn	2	40	0.00bn	- 0.00011		
Croatia	Outbound	0.00mn	80%	19%	0.00mn	10	200	0.00bn	— 0.00bn		
Gludia	Inbound	0.04mn	83%	33%	0.01mn	2	40	0.00bn			
Others									0.04bn		
Total									0.06bn		

Austria												
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)			
Slovenia	Outbound	_	Figure based on tourism statistics and border region consumption analysis									
Siovenia	Inbound		Figure based o	ที่ เป็นทราที่ รเสแร		region consump			0.18bn			
Hupgon	Outbound							0.08bn				
Hungary	Inbound	-	Flows considered predominantly legal									
Croatia	Outbound			Elowe conci	dered predomir	antly logal			0.08bn			
Croalia	Inbound			FIOWS CONSIC		ianuy iegai			0.00011			
Czech Republic	Outbound		Figure based a	n tauriam atatiat	tion and harder		tion analysis		0.07bn			
Czech Republic	Inbound	-	Figure based on tourism statistics and border region consumption analysis									
Others	thers						0.46bn					
Total									0.86bn			

Belgium													
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)				
Luxembourg	Outbound	_		Elows consi	dorod prodomi	inantly logal			0.46bn				
Luxembourg	Inbound		Flows considered predominantly legal										
France	Outbound	_	Eleve considered productionsthy level										
France	Inbound	Flows considered predominantly legal											
Germany	Outbound	_	Flows considered predominantly legal										
Germany	Inbound			T IOWS COTIS		inianuy iegai			0.04bn				
Poland	Outbound	0.25mn	80%	23%	0.05mn	40	800	0.04bn	— 0.04bn				
Folanu	Inbound	0.10mn	82%	22%	0.02mn	2	40	0.00bn	0.04011				
Others									0.21bn				
Total									0.87bn				



#### Primary information sources and tools - 2023 Non-Domestic legal major flow calculations

Bosnia & Herzegov	rina								
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
Creatia	Outbound				- (				0.04br
Croatia	Inbound	_		Flows con	sidered predo	minantiy legal			0.040
Slovenia	Outbound			<b>E</b> l	:				0.01b
Siovenia	Inbound	_		Flows cons	idered predom	linantiy legal			0.010
A	Outbound			<b>F</b> lower <b>1</b>	:				0.046
Austria	Inbound	_		Flows cons	idered predom	ninantiy legal			0.01b
0	Outbound	0.15mn	81%	28%	0.03mn	10	200	0.01bn	0.041
Serbia	Inbound	0.14mn	83%	36%	0.04mn	2	40	0.00bn	— 0.01b
Others									0.02b
Total									0.08b
Bulgaria									
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
	Outbound								0.001
Furkey	Inbound	-		Flows con	sidered predor	minantly legal			0.03bi
	Outbound								0.044
Serbia	Inbound	-		Flows con	sidered predor	ninantly legal			0.01bi
_	Outbound								
Germany	Inbound	-		Flows con	sidered predor	ninantly legal			0.01bi
	Outbound	0.04mn	83%	36%	0.01mn	10	200	0.00bn	
North Macedonia	Inbound	0.74mn	80%	28%	0.16mn	2	40	0.01bn	— 0.01bi
Others									0.08bi

Total

Croatia									
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
Austria	Outbound	_		Elows consis	lered predomir	antly logal			0.02bn
Austria	Inbound			T IOWS COTISIC		iantiy legal			0.02011
Bosnia and	Outbound	0.15mn	83%	33%	0.04mn	10	200	0.01bn	– 0.01bn
Herzegovina	Inbound	0.46mn	81%	28%	0.11mn	2	40	0.00bn	0.01011
Slovenia	Outbound	_		Flows consis	lered predomir	antly logal			0.01bn
Olovenia	Inbound			T IOWS COTISIC		lanuy legal			0.01011
Germany	Outbound			Flows consis	lered predomir	antly logal			0.01bn
Germany	Inbound			T IOWS COTISIC		lanuy legal			0.01011
Others									0.04bn
Total									0.10bn

Note: Predominantly legal indicates that for the purposes of this Report cross-border travel volumes are sufficiently large that we have classified the flows as 100% ND(L), but recognise in reality that an element of the flow could be illicit as smuggling or imports over the allowed limits may occur 4



0.14bn

#### Primary information sources and tools – 2023 Non-Domestic legal major flow calculations

Cyprus									
Country		# of border crossings	Population 18+	Smoking Prevalence	Smoker trips	Packs per Trip	# of cigarettes	ND(L) volume	Total ND(L)
Northern Part of	Outbound		Circum Is a set of						0.066
Cyprus	Inbound	_	Figure based o	n tourism statis	lics and bordel	r region consum	ption analysis		0.06br
Turkey	Outbound	0.02mn	81%	29%	0.00mn	10	200	0.00bn	– 0.00br
тикеу	Inbound	0.00mn	74%	29%	0.00mn	2	40	0.00bn	- 0.000
Unspecified	Outbound	0.00mn	0%	0%	0.00mn	0	0	0.00bn	– 0.00br
Unspecified	Inbound	0.00mn	0%	0%	0.00mn	0	0	0.00bn	- 0.0001
1.000	Outbound	0.00mn	81%	29%	0.00mn	10	200	0.00bn	– 0.00br
Laos	Inbound	0.00mn	64%	22%	0.00mn	2	40	0.00bn	- 0.00br
Others									0.01br
Total									0.08br
Czech Republic									
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
Deland	Outbound	·	Figure based a	n tourism statis	tion and hards		ntion enclusio		0.746
Poland	Inbound	-	Figure based o	n lounsm statis	ucs and border	r region consum	puon analysis		0.74br
Slovakia	Outbound			Elevie consi	dered predomi	nonthy logol			0.09br
SIOVAKIA	Inbound	-		FIOWS CONSIG	uerea predomi	nanuy legal			0.0901
Austria	Outbound		Circuit based a						0.06br
Austria	Inbound	-	Figure based o	n tourism statis	lics and borde	r region consum	ption analysis		0.000
Cormony	Outbound		Figure heard -	n tourism statia	tion and hard-		ntion analysi-		0.055
Germany	Inbound	-	Figure based o	n lourism statis	ucs and bordel	r region consum	puon analysis		0.05br
Others									0.22bi
Total									1.17bi

Denmark									
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
Sweden	Outbound	0.67mn	81%	14%	0.07mn	40	800	0.06bn	— 0.06bn
Sweden	Inbound	1.53mn	79%	9%	0.10mn	2	40	0.00bn	- 1000.0
Cormony	Outbound			<b>E</b> 1					0.04hm
Germany	Inbound	_		Flows cons	sidered predom	inantiy legal			0.04bn
	Outbound			-					0.025-
UK	Inbound	_		Flows cons	sidered predom	inantiy legal			0.03bn
Dalarad	Outbound	0.23mn	81%	14%	0.03mn	40	800	0.02bn	0.001
Poland	Inbound	0.19mn	82%	22%	0.03mn	2	40	0.00bn	— 0.02bn
Others									0.16bn
Total									0.30bn



#### Primary information sources and tools - 2023 Non-Domestic legal major flow calculations

Estonia										
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)	
Turkey	Outbound	0.21mn	80%	23%	0.04mn	10	200	0.01bn	— 0.01bn	
титкеу	Inbound	0.01mn	74%	29%	0.00mn	2	40	0.00bn	- 0.0100	
Latvia	Outbound			Elever en el	d d d :				0.01bn	
Latvia	Inbound	_	Flows considered predominantly legal							
Lithuania	Outbound			Elever en el	d d d :				0.006m	
Lithuania	Inbound	-		Flows consi	dered predomi	nantiy legal			0.00bn	
Duraia	Outbound	0.13mn	80%	23%	0.02mn	2	40	0.00bn	0.001	
Russia	Inbound	0.15mn	79%	28%	0.03mn	2	40	0.00bn	– 0.00bn	
Others									0.03bn	
Total									0.05bn	

Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
	Outbound	0.72mn	82%	15%	0.09mn	40	800	0.07bn	
Estonia	Inbound	0.10mn	80%	23%	0.02mn	2	40	0.00bn	— 0.07bn
0 1	Outbound	0.30mn	82%	15%	0.04mn	40	800	0.03bn	0.001
Sweden	Inbound	0.29mn	79%	9%	0.02mn	2	40	0.00bn	— 0.03bn
Casia	Outbound			Elever en el					0.0268
Spain	Inbound	_		FIOWS CONSI	dered predomi	nantiy legal			0.02bn
Poland	Outbound	0.16mn	82%	15%	0.02mn	40	800	0.02bn	— 0.02bn
	Inbound	0.05mn	82%	22%	0.01mn	2	40	0.00bn	- 0.0201
Others									0.09bn
Total									0.22bn

France												
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)			
Spain	Outbound		Figure based a	n tourism statis	tion and bords	er region consum	ntion analysis		1.62bn			
opain	Inbound	_	Figure based o	in lounsin statis		er region consum	puon analysis		1.02011			
Belgium	Outbound	_	Eiguro basod o	n tourism statis	tics and bords		ntion analysis		0.67bn			
Deigium	Inbound	_	Figure based o	gure based on tourism statistics and border region consumption analysis								
Algeria	Outbound		Figure based a	n touriam atatia	tion and bords	er region consum	ntion analysis		0.34bn			
Aigena	Inbound		i igure based o	in tourism statis		er region consum	plion analysis		0.04011			
Andorra	Outbound	3.86mn	79%	30%	0.91mn	15	300	0.27bn	— 0.27bn			
Andorra	Inbound	0.00m	85%	30%	0.00mn	2	40	0.00bn	0.27011			
Others									2.14bn			
Total									5.04bn			



#### Primary information sources and tools - 2023 Non-Domestic legal major flow calculations

Germany										
Country		# of border crossings	Population 18+	Smoking Prevalence	Smoker trips	Packs per Trip	# of cigarettes	ND(L) volume	Total ND(L)	
Poland	Outbound	38.97mn	83%	19%	6.16mn	40	800	4.93bn	— 4.93bn	
Poland	Inbound	1.28mn	82%	22%	0.23mn	2	40	0.01bn	- 4.93DN	
Creek Depublic	Outbound		Einer hard	4					1.56bn	
Czech Republic	Inbound	_	Figure based on tourism statistics and border region consumption analysis							
1	Outbound								0.001	
Luxembourg	Inbound	_	Figure based	on tourism stati	stics and borde	er region consur	nption analysis		0.63bn	
Turkey	Outbound	8.95mn	83%	19%	1.41mn	10	200	0.28bn	0.001	
Turkey	Inbound	0.36mn	74%	29%	0.08mn	2	40	0.00bn	— 0.29bn	
Others									2.55bn	
Total									9.96bn	

Greece										
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)	
Bulgaria	Outbound	_	Figure based	on touriom stati	stics and border	r ragion conque	notion on olygia		0.06bn	
Dulgana	Inbound		Figure based (	on tourism stati			npuon analysis		0.00011	
Albania	Outbound	_	Figure based	on touriom stati	ation and harder	r ragion conque	nation on olygic		0.01bn	
Albania	Inbound	-	Figure based on tourism statistics and border region consumption analysis							
Italy	Outbound				idered predemi	nonthy logal			0.00bn	
Italy	Inbound			FIOWS CONS	idered predomi	nantiy legal			0.0001	
Malta	Outbound				idered predemi	nonthe logal			0.00bn	
Ivialia	Inbound	-		FIGWS CONS	idered predomi	nanny iegai			0.0001	
Others									0.15bn	
Total									0.23bn	

Hungary												
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)			
Slovakia	Outbound			Eleure con	aidered wreder	ninently legal			0.10bn			
SIOVAKIA	Inbound			Flows con	sidered predor	ninanuy iegai			0.1001			
Austria	Outbound	_	Flows considered predominantly legal									
Austria	Inbound		Flows considered predominantly legal									
Romania	Outbound	_	Flows considered predominantly legal									
Rumania	Inbound			FIOWS COIL	sidered predor	minantiy legal			0.02bn			
Cormonu	Outbound	_		Flowe con	aidarad pradar	ninantly logal			0.02bn			
Germany	Inbound	_		FIOWS COIL	sidered predor	minantiy legal			0.02011			
Others									0.17bn			
Total									0.33bn			



#### Primary information sources and tools - 2023 Non-Domestic legal major flow calculations

Ireland												
Country		# of border crossings	Population 18+	Smoking Prevalence	Smoker trips	Packs per Trip	# of cigarettes	ND(L) volume	Total ND(L)			
Spain	Outbound	_		Elowa consi	dered prodomi	nonthy logal			0.11bn			
Spain	Inbound			FIOWS CONSI	dered predomi	nanuy legal			U. I IDN			
UK	Outbound		Flows considered predominantly legal									
UK	Inbound	-	Flows considered predominantly legal									
France	Outbound				dered predemi	nently level			0.05bn			
France	Inbound	-		FIOWS CONSI	dered predomi	nanuy legal			0.00011			
Destruct	Outbound			<b>-</b>	d d	in a status da sua l			0.045-			
Portugal	Inbound	-		FIOWS CONSI	dered predomi	nantiy legal			0.04bn			
Others									0.28bn			
Total									0.52bn			

Italy									
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
Found	Outbound		Figure base	d on tourism sta	tistics and have		mation analysis		0.10bn
Egypt	Inbound	-	Figure base	d on tourism sta	lustics and bord	ler region const	impuon analysis	<b>j</b>	0. TODA
Clavania	Outbound	0.55mn	85%	21%	0.10mn	40	800	0.08bn	0.1065
Slovenia	Inbound	3.21mn	82%	18%	0.48mn	2	40	0.02bn	— 0.10bn
Deland	Outbound				oidorod prodor	ain an thu la sal			0.0565
Poland	Inbound	-		FIOWS CON	isidered predor	ninanuy legal			0.05bn
Domonio	Outbound				oidorod prodor	ain an thu la sal			0.04bn
Romania	Inbound	_		FIOWS CON	isidered predor	ninanuy legal			0.04bh
Others									0.64bn
Total									0.92bn

Kosovo											
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)		
Serbia	Outbound										
Gerbia	Inbound	- Flows considered predominantly legal									
Switzerland	Outbound	- Flows considered predominantly legal									
Switzenanu	Inbound										
Croatia	Outbound	0.00mn	74%	29%	0.00mn	10	200	0.00bn	— 0.00bn		
Citalia	Inbound	0.01mn	83%	33%	0.00mn	2	40	0.00bn	- 0.00011		
Austria	Outbound	0.00mn	74%	29%	0.00mn	10	200	0.00bn	— 0.00bn		
Austria	Inbound	0.01mn	83%	33%	0.00mn	2	40	0.00bn	0.00011		
Others									0.00bn		
Total									0.03bn		



#### Primary information sources and tools - 2023 Non-Domestic legal major flow calculations

Latvia												
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)			
Poland	Outbound											
Foldriu	Inbound		Flows considered predominantly legal									
Turkey	Outbound	- Flows considered predominantly legal										
тикеу	Inbound											
Belarus	Outbound	0.15mn	81%	27%	0.03mn	2	40	0.00bn	0.00hm			
Delarus	Inbound	0.19mn	80%	24%	0.04mn	2	40	0.00bn	— 0.00bn			
Dussia	Outbound	- Flows considered predominantly legal										
Russia	Inbound											
Other									0.02bn			
Total									0.03bn			

Lithuania											
Country		# of border crossings	Population 18+	Smoking Prevalence	Smoker trips	Packs per Trip	# of cigarettes	ND(L) volume	Total ND(L)		
Poland	Outbound	- Flows considered predominantly legal									
Foland	Inbound										
Latvia	Outbound	- Flows considered predominantly legal									
Latvia	Inbound										
Belarus	Outbound	0.78mn	82%	26%	0.17mn	2	40	0.01bn	— 0.01bn		
Delalus	Inbound	0.13mn	80%	24%	0.03mn	2	40	0.00bn	- 0.01011		
Germany	Outbound										
Germany	Inbound	_	Flows considered predominantly legal								
Other									0.04bn		
Total									0.12bn		

Luxembourg											
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)		
5.1.1	Outbound										
Belgium	Inbound	Flows considered predominantly legal									
Cormony	Outbound	- Flows considered predominantly legal									
Germany	Inbound										
France	Outbound	- Flows considered predominantly legal									
France	Inbound										
Italy	Outbound	- Flows considered predominantly legal									
Italy	Inbound										
Others									0.01bn		
Total									0.03bn		



#### Primary information sources and tools - 2023 Non-Domestic legal major flow calculations

Malta									
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
Italy	Outbound	_		Elows con	sidered predom	inantly logal			0.01br
lialy	Inbound	_		FIOWS COIL	sidered predori	inanuy iegai			0.0101
Greece	Outbound	0.02mn	84%	22%	0.00mn	40	800	0.00bn	— 0.00bn
Greece	Inbound	0.04mn	83%	30%	0.01mn	2	40	0.00bn	- 0.000
Dulgoria	Outbound	0.01mn	84%	22%	0.00mn	40	800	0.00bn	— 0.00br
Bulgaria	Inbound	0.03mn	83%	36%	0.01mn	2	40	0.00bn	- 10001
Playania	Outbound	0.01mn	84%	22%	0.00mn	40	800	0.00bn	0.00br
Slovenia	Inbound	0.01mn	82%	18%	0.00mn	2	40	0.00bn	— 0.00br
Other									0.01br
Total									0.03bn
Moldova									
Country		# of border crossings	Population 18+	Smoking Prevalence	Smoker trips	Packs per Trip	# of cigarettes	ND(L) volume	Total ND(L)
1000	Outbound								0.001
NDDP	Inbound	-		Flows con	sidered predom	inately legal			0.02b
	Outbound	0.00mn	78%	26%	0.00mn	10	200	0.00bn	0.001
Nepal	Inbound	0.00mn	66%	15%	0.00mn	2	40	0.00bn	— 0.00b
<b>F</b>	Outbound			-					0.001
Furkey	Inbound	-		Flows con	sidered predom	linately legal			0.00b
4-14-	Outbound	0.00mn	78%	26%	0.00mn	10	200	0.00bn	0.001
Malta	Inbound	0.00mn	84%	22%	0.00mn	2	40	0.00bn	— 0.00b
Others									0.00bi
Fotal									0.02b
Nontenegro									
Country		# of border crossings	Population 18+	Smoking Prevalence	Smoker trips	Packs per Trip	# of cigarettes	ND(L) volume	Total ND(L)
	Outbound	0.08mn	78%	29%	0.02mn	10	200	0.00bn	
Serbia	Inbound	0.61mn	83%	36%	0.18mn	2	40	0.01bn	— 0.01bi
	Outbound	0.03mn	78%	29%	0.01mn	10	200	0.00bn	0.00
Furkey	Inbound	0.04mn	74%	29%	0.01mn	2	40	0.00bn	— 0.00b
	Outbound	0.05mn	78%	29%	0.01mn	10	200	0.00bn	
taly	Inbound	0.04mn	85%	21%	0.01mn	2	40	0.00bn	— 0.00b
Bosnia &	Outbound	0.02mn	78%	29%	0.01mn	10	200	0.00bn	
Herzegovina	Inbound	0.20mn	81%	28%	0.05mn	2	40	0.00bn	— 0.00b
Others									0.01b
Fotal									0.03b



#### Primary information sources and tools - 2023 Non-Domestic legal major flow calculations

Netherlands									
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
Germany	Outbound		Figure based	on tourism statis	tics and bord	er region consur	notion analysis		0.28bn
Germany	Inbound		i igure based			er region consu	npuon analysis		0.20011
Belgium	Outbound	_		Flows const	idered prodem	ainantly logal			0.15bn
Deigium	Inbound	Inbound Flows considered predominantly legal							0.13011
Chain	Outbound				dered preder	inently legal			0.13bn
Spain	Inbound			FIOWS CONS	idered predom	inanuy legal			0.1300
Itoly	Outbound			Elowa conci	idered prodem	ainently logal			0.10bn
Italy	Inbound	_			idered predom	imanuy legal			U.TUDN
Other									0.82bn
Total									1.48bn

North Macedonia									
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
Kosovo	Outbound	_		Flowe con	aidarad pradam	ainently legal			0.01bn
KUSUVU	Inbound			FIOWS COIL	sidered predom	inianuy iegai			0.01011
Turkey	Outbound	0.27mn	80%	28%	0.06mn	10	200	0.01bn	— 0.01bn
Turkey	Inbound	0.13mn	74%	29%	0.03mn	2	40	0.00bn	- 0.01011
Italy	Outbound	0.09mn	80%	28%	0.02mn	10	200	0.00bn	— 0.00bn
naiy	Inbound	0.01mn	85%	21%	0.00mn	2	40	0.00bn	- 0.0001
Dulgaria	Outbound				idarad prodami	inently legal			0.00bn
Bulgaria	Inbound	-		Flows cons	idered predomi	inanuy legal			1000.0
Others									0.07bn
Total									0.09bn

Country		# of border crossings	Population 18+	Smoking Prevalence	Smoker trips	Packs per Trip	# of cigarettes	ND(L) volume	Total ND(L)
Sweden	Outbound			Elowa con	sidered predomi	natoly logal			0.22bn
Sweden	Inbound			FIOWS CON	sidered predomi	nately legal			0.22011
Cormony	Outbound	0.43mn	80%	11%	0.04mn	5	100	0.00bn	0.01hm
Germany	Inbound	1.23mn	83%	19%	0.20mn	2	40	0.01bn	– 0.01bn
Denmerk	Outbound				idered prodemi	nently level			0.01hm
Denmark	Inbound	-		FIOWS CON	sidered predomi	nanuy legal			0.01bn
Deland	Outbound	0.47mn	80%	11%	0.04mn	5	100	0.00bn	0.00hm
Poland	Inbound	0.13mn	82%	22%	0.02mn	2	40	0.00bn	– 0.00bn
Others									0.20bn
Total									0.43bn



#### Primary information sources and tools - 2023 Non-Domestic legal major flow calculations

Poland									
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
Cormony	Outbound	_	Figure book	d on tourism sta	tiation and hard		motion analysis		0.06bn
Germany	Inbound	_	Figure base	d on tourism sta	listics and bord	er region consu	impuon analysis		0.00011
Ukraine	Outbound	0.12mn	82%	22%	0.02mn	2	40	0.00bn	— 0.06bn
Okraine	Inbound	7.43mn	82%	25%	1.53mn	2	40	0.06bn	
Itali	Outbound		Figure boos	d on tourism sta	tistics and hard		mention analysis		0.0565
Italy	Inbound	_	Figure base	d on tourism sta	tistics and bord	er region consu	imption analysis		0.05bn
<b>T</b> 1	Outbound			-					0.001
Turkey	Inbound	-		Flows cor	isidered predon	ninantiy legal			0.02bn
Others									0.23bn
Total									0.43bn

Portugal									
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
Spain	Outbound	_		Elowe con	sidered predom	ainently logal			0.03bn
opain	Inbound	_		FIOWS COIL	isidered predori	inianuy iegai			0.03011
Brazil	Outbound	0.21mn	84%	22%	0.04mn	10	200	0.01bn	— 0.01bn
DIAZII	Inbound	1.22mn	76%	11%	0.10mn	2	40	0.00bn	- 0.01011
France	Outbound	_		Flows con	sidered predom	ainantly logal			0.01bn
Tance	Inbound			TIOWS CON	sidered predori	inianuy iegai			0.01011
Netherlands	Outbound			Elowe con	aidered prodem	ainently legal			0.00bn
Neurenanus	Inbound			FIOWS CON	sidered predom	intantity legal			0.00011
Others									0.07bn
Total									0.12bn

Romania									
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
Pulgorio	Outbound		Eiguro booo	d on tourism stat	tistics and bord	or region concu	mption analysis		0.21bn
Bulgaria	Inbound	_	Figure based	on tourism sta		er region consu	impuon analysis		0.21011
Moldova	Outbound	0.03mn	80%	26%	0.01mn	10	200	0.00bn	— 0.03bn
wowa	Inbound	3.89mn	78%	26%	0.78mn	2	40	0.03bn	- 0.03DN
Turkov	Outbound				aidered prodem	in on the logal			0.0265
Turkey	Inbound	_		FIOWS CON	sidered predom	imanuy legal			0.02bn
UK	Outbound				aidered prodem	in on the logal			0.0165
UK	Inbound	_		FIOWS CON	sidered predom	imanuy legal			0.01bn
Others									0.23bn
Total									0.50bn



#### Primary information sources and tools - 2023 Non-Domestic legal major flow calculations

Serbia									
Country		# of border crossings	Population 18+	Smoking Prevalence	Smoker trips	Packs per Trip	# of cigarettes	ND(L) volume	Total ND(L)
Croatia			Flo	ows considered p	oredominately	legal			0.02bn
Bosnia &	Outbound	0.14mn	83%	36%	0.04mn	10	200	0.01bn	
Herzegovina	Inbound	0.15mn	81%	28%	0.03mn	2	40	0.00bn	— 0.01bn
Hungary			Flo	ows considered p	predominately	legal			0.00bn
Slovenia			Flo	ows considered p	predominately	legal			0.00bn
Others									0.04bn
Total									0.08bn

Slovakia									
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
Poland	Outbound	_		Elowa con	sidered predom	ainently logal			0.03bn
Folanu	Inbound	_		FIOWS COIL	sidered predori	inianuy iegai			0.03011
Creek Depublic	Outbound		Figure based	on tourism stat	liation and hard		mation analysis		0.02bn
Czech Republic	ic Figure based on tourism statistics and border region consumption analysis Inbound								
Austria	Outbound		Cierce has a						0.045-
Austria	Inbound	_	Figure based	on tourism sta	listics and dorde	er region consu	mption analysis		0.01bn
L Hanalia a	Outbound	0.00mn	81%	27%	0.00mn	10	200	0.00bn	0.041
Ukraine	Inbound	1.21mn	82%	25%	0.25mn	2	40	0.01bn	— 0.01bn
Others									0.04bn
Total									0.11bn

Slovenia												
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)			
Croatia	Outbound			Elowe con	sidered predon	ainataly logal			0.06bn			
Citalia	Inbound	_		FIOWS COIL	sidered predori	iniately legal			0.00011			
Romania	Outbound			Elowe con	aidered proden	ainotoly logol			0.05bn			
Rumania	Inbound	_	Flows considered predominately legal									
Slovakia	Outbound		Flows considered predominately legal									
SIUVANIA	Inbound	_		FIOWS COIL	sidered predori	iniately legal			0.02bn			
Cormony	Outbound	0.13mn	82%	18%	0.02mn	40	800	0.02bn	0.001			
Germany	Inbound	0.68mn	83%	19%	0.11mn	2	40	0.00bn	— 0.02bn			
Others									0.09bn			
Total									0.24bn			



#### Primary information sources and tools - 2023 Non-Domestic legal major flow calculations

Spain									
Country		# of border crossings	Population 18+	Smoking Prevalence	Smoker trips	Packs per Trip	# of cigarettes	ND(L) volume	Total ND(L)
Conony Johanda	Outbound		Cinum har 1	on tourism of t	istics and him		motion or shut		0.001
Canary Islands	Inbound	-	Figure based	on tourism stat	istics and bord	ler region consur	mption analysis		0.22b
Pibroltor	Outbound			Elewe eee	aidanad pradar	ningtoly logol			0.425
Gibraltar	Inbound	_		Flows con	sidered predor	ninately legal			0.13b
Andorro	Outbound		Figure based	on tourism stat	istics and hard		mation analysis		0.406
Andorra	Inbound	_	Figure based	on tourism stat	istics and bord	ler region consur	mption analysis		0.12b
toly	Outbound			Elewe een	aidanad pradan	ninataly land			0.026
Italy	Inbound			FIOWS CON	sidered predor	ninately legal			0.03b
Others									0.41b
Total									0.91b
Sweden									
Country		# of border crossings	Population 18+	Smoking Prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
	Outbound	0.41mn	79%	9%	0.03mn	40	800	0.02bn	
Poland	Inbound	0.16mn	82%	22%	0.03mn	2	40	0.00bn	— 0.02b
	Outbound								
Denmark	Inbound	-		Flows con	sidered predor	ninantly legal			0.01
	Outbound								
Germany	Inbound	-		Flows con	sidered predor	ninantly legal			0.01b
	Outbound								
Spain	Inbound	-		Flows con	sidered predor	ninantly legal			0.01b
Others									0.12b
Total									0.18b
Switzerland									
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
	Outbound								
taly	Inbound	-		Flows con	sidered predor	ninantly legal			0.10b
_	Outbound								
France	Inbound	-		Flows con	sidered predor	ninantiy legal			0.05
2	Outbound			-					0.04k
Germany	Inbound	-	Flows considered predominantly legal						
	Outbound								0.05
Spain	Inbound	-	⊢igure based o	on tourism stati	stics and borde	er region consum	nption analysis		0.03b
Others									0.54
Total									0.76b



#### Primary information sources and tools - 2023 Non-Domestic legal major flow calculations

UK <sup>(a)</sup>									
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)
Poland	Outbound	2.87mn	80%	19%	0.43mn	10	200	0.09bn	0.026m
Poland	Inbound	1.78mn	82%	22%	0.33mn	37	740	0.24bn	— 0.33bn
Damania	Outbound	0.28mn	80%	12%	0.03mn	10	200	0.01bn	0.455-
Romania	Inbound	0.84mn	80%	26%	0.18mn	40	800	0.14bn	— 0.15bn
<b>T</b> 1	Outbound	5.83mn	80%	12%	0.56mn	10	200	0.11bn	0.441
Turkey	Inbound	0.30mn	74%	29%	0.07mn	2	40	0.00bn	— 0.11bn
0	Outbound	5.75mn	80%	12%	0.55mn	10	200	0.11bn	0.441
Canary Islands	Inbound	0.00mn	83%	0%	0.00mn	0	0	0.00bn	— 0.11bn
Others									1.92bn
Total									2.62bn

Ukraine										
Country		# of border crossings	Population 18+	Smoking prevalence	Smoker trips	Packs per trip	# of cigarettes	ND(L) volume	Total ND(L)	
India	Outbound	0.00mn	82%	25%	0.00mn	10	200	0.00bn	— 0.00bn	
Inuia	Inbound	0.00mn	70%	4%	0.00mn	2	40	0.00bn	- 0.0001	
Poland	Outbound									
	Inbound	_	Flows considered predominantly legal							
Northern part of	Outbound	0.00mn	82%	25%	0.00mn	0	0	0.00bn	0.001	
Cyprus	Inbound	0.00mn	81%	29%	0.00mn	2	40	0.00bn	— 0.00bn	
Creek Depublic	Outbound			<b>E</b> l	.:				0.00bn	
Czech Republic	Inbound	_		Flows cons	idered predomi	nantiy legal			10001	
Others									0.00bn	
Total									0.00bn	

Notes: (a) Smoking prevalence has been weighted to take account of the nationality and gender of the travellers between Poland and the UK; (b) Predominantly legal indicates that for the purposes of this Report cross-border travel volumes are sufficiently large that we have classified the flows as 100% ND(L), but recognise in reality that an element of the flow could be illicit as smuggling or imports over the allowed limits may occur



### **Illicit Whites analysis**

### Illicit Whites brand flows accounted for ~17% of total C&C volumes in the 38 European markets

#### Illicit Whites are defined as

 Cigarettes which are usually manufactured legally in one country or market but which the evidence suggests have been smuggled across borders to the destination market where they have limited or no legal distribution and are sold without the payment of tax

KPMG undertook the following analysis to estimate which brands made up Illicit Whites brand flows:

- Non-Domestic volumes were compared to LDS on a country by country basis to estimate the Non-Domestic share of total consumption
- KPMG conservatively assumed that where Non-Domestic volumes of a brand represented over 99% of total consumption, it is classified as an Illicit Whites brand

Where Illicit Whites packs do not have any country-specific tax stamps, they are categorised as 'Illicit Whites with no country-specific labelling' in the Report. This includes Duty Free labelled packs

An Illicit Whites brand's overall volume is the total of only those countries where the brand flow meets the 99% criteria

Many of the Illicit Whites flows are identified in high volumes in the empty pack survey. However, given our identification of Counterfeit product is limited to the empty pack survey participants, we cannot assess whether these flows are genuine or counterfeit

#### Non-Domestic volumes by brand and destination country Brand Country 1 Country 2 **Country 3 Country 4** Brand A 0.01 0.24 0.01 0.01 LDS by brand and by country **Country 3** Country 4 Brand **Country 1** Country 2 Brand A 0.00 0.01 Non-Domestic volumes as share of total consumption Brand Country 2 **Country 3** Country 4 Country 1 Brand A 100% 100% 100% 38% Illicit White volumes by brand and by destination country **Country 3** Brand Country 2 Country 4 Country 1 Brand A 0.01 0.24 0.01 Classified as an Illicit White in country 1, 2 and 3 Not classified as an Illicit White in where there is limited or no evidence of legal country 4 where Non-Domestic distribution volumes are 38% of consumption

Illustrative example

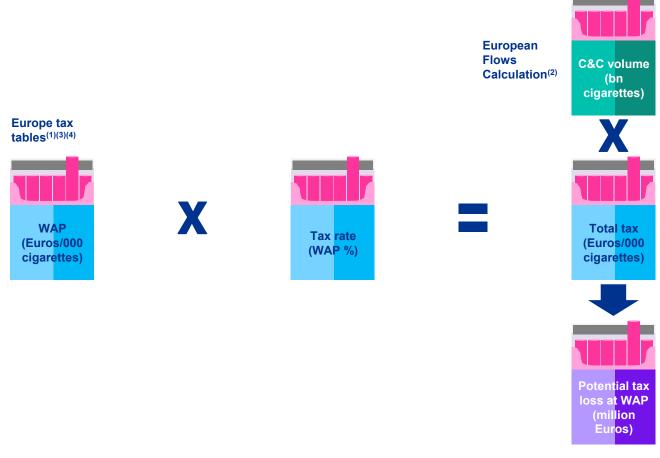


### **Tax Revenue Loss**



### The Report estimates the excise and VAT revenue that would have been gained had the volume of C&C cigarettes consumed in a country been legally purchased in that country

- The calculation shown below was performed for each EU27 country:
  - European Commission Excise Duty Tables tax tables 2023 were used to estimate the Weighted Average Price<sup>(a)</sup> for cigarettes in each country within the EU27
  - This is then multiplied by the tax rate (as a % of Weighted Average Price (WAP)) in each country within the EU27
  - The resultant tax take (per cigarette) is multiplied by the C&C consumption volumes for that country per the European Flows Calculation to give the total potential tax loss based on WAP
- KPMG also similarly estimated tax losses for Norway, Switzerland, UK, Ukraine, Moldova, Albania, Bosnia & Herzegovina, Montenegro, North Macedonia, Kosovo and Serbia using the tax rates in these countries and WAP data available through other sources<sup>(3)(4)</sup>
- Total tax losses for the 38 European countries based on WAP were estimated to be €16.7bn in 2023.
- Tax losses are estimated based on sales volumes and are not reflective of any other factors, like affordability or price elasticity and are always reported at what would have been lost if the C&C had been purchased legally



Note: (a) WAP denotes Weighted Average Price per pack of 20 cigarettes

Sources: (1) For EU countries, tax rate and WAP from EC Excise Duty tables; (2) KPMG European Flows Calculation and analysis of data sources provided by manufacturers; (3) For UK, Norway, Switzerland, Ukraine, Moldova, Kosovo and North Macedonia, tax rate and WAP from PMI as on October 2023; (4) For Albania, Bosnia & Herzegovina, Montenegro, Serbia and other countries, WHO 2020 most sold brand prices extrapolated for 2023 using 2020-23 CAGR from Euromonitor





### Illegal factory seizure data

Seizure data shown in this report is based on data provided by PMPSA, and may differ from seizure data released from other sources	<ul> <li>Seizure data included in this Report is based on information received from PMPSA</li> <li>Seizure data is gathered via two methods: <ul> <li>Publicly available press articles and legal notifications</li> <li>Notifications from law enforcement agencies to legitimate manufacturers. Law enforcement agencies typically notify manufacturers when an illegal cigarette factory has been raided that is Counterfeiting a brand belonging to the legitimate manufacturer. This information may not always be in the public domain</li> </ul> </li> <li>This PMPSA seizure data may differ from seizure data released by other sources, e.g. law enforcement agencies, or OLAF</li> <li>In some cases, law enforcement agencies may not notify manufacturers or publicly announce seizures, e.g. when an investigation is ongoing</li> <li>Classification of what constitutes a seizure may differ between agencies vs PMPSA. For example, some law enforcement agencies may not recognise a factory in the set-up phase as a seizure event, whereas these are included in the figures shown in this report.</li> </ul>
Where required, we have converted seized tobacco volumes into cigarette equivalents	<ul> <li>To allow a consistent and comparable measure of seizure events, we have converted some seizures events into cigarette equivalents</li> <li>Seizure events may discover cigarettes, processed or raw tobacco</li> <li>Where processed or raw tobacco is seized, it has been converted into a cigarette equivalent with the assumption that 1 cigarette contains 0.7g of tobacco<sup>(2)</sup></li> </ul>
Seizure data and the trends therein may not align with the illicit cigarette consumption results shown in this Report at an overall or subcategory level	<ul> <li>There are differences between seizure data and the illicit cigarette consumption results in this Report, which may be due to the investigation-led nature of seizures</li> <li>For example, 36% of illicit cigarettes consumed within the EU27 were identified as Counterfeit in 2023 in this Report. However, OLAF seizures data notes that Counterfeit represented 22% of seizures<sup>(1)</sup></li> <li>Seizures are often intelligence led and tend to target specific manufacturing or transport operations. It is not possible to estimate what share of total illicit activity or consumption these seizures represent, as a result the mix and evolution of seizure activity is likely to differ to the total illicit cigarette consumption estimates contained in this Report</li> </ul>

Source: (1) OLAF, Tobacco smuggling: over 600 million illicit cigarettes seized thanks to OLAF in 2023, 11 April 2024 (2) Tobacco Product Standard for Nicotine Level of Combusted Cigarettes, FDA, 2018



# 04 Appendices



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### **Limitations of Results**

#### The below noted limitations of results apply across 2019 to 2023

Limitation	Detail	Impact	Adjustment
Geographic coverage	<ul> <li>We have limited our geographic coverage in some markets where the inclusion of additional territories would impact confidence levels in the ND(L) research</li> <li>In some instances (e.g. Greek islands), LDS data is also insufficient</li> <li>Regions impacted by the ongoing war in Ukraine have been excluded from pack swap surveys in 2022 and 2023</li> </ul>	<ul> <li>Spanish results only cover mainland Spain and do not include the Canary Islands, Balearic Islands or Ceuta &amp; Melilla</li> <li>French results cover only mainland France and do not include Corsica. As a result, LDS from Corsica is not included in France consumption figures</li> <li>Portuguese results only cover mainland Portugal and do not include Madeira or the Azores</li> <li>Greek results only cover mainland Greece and do not include the Greek islands</li> <li>UK results only cover Great Britain and Northern Ireland and do not include the Channel Islands or Isle of Man</li> <li>The following regions were excluded from the pack swap survey in Ukraine: Luhansk, Donetsk, Kherson, Zaporizhia (except for the city of Zaporizhzhia), Crimea, Mykolaiv and 70% of Kharkiv</li> </ul>	<ul> <li>Not adjusted for</li> </ul>
Non-major manufacturer Counterfeit	Empty pack survey results do not identify Counterfeit packs that have been made by manufacturers other than British American Tobacco, Imperial Tobacco, Japan Tobacco International, and Philip Morris International as only the manufacturer/trademark owner can confirm whether their brand pack is genuine	<ul> <li>In some instances, the volume of Legal Domestic Consumption may be overstated where domestic Counterfeit variants exist, leading to corresponding understatements of C&amp;C volumes for some brands (although the impact is likely to be minimal)</li> <li>We cannot distinguish non-major manufacturer brand Counterfeit (Non-Domestic variants) and Contraband product, although this will not impact the overall volume of C&amp;C</li> <li>Illicit Whites volumes may include Counterfeit</li> <li>For Moldova, Counterfeit analysis is not available</li> <li>For Ukraine, a detailed breakdown of C&amp;C by brand is only available for 2020-23. For 2019, brand level breakdowns are only available for the top five contraband brands during the year of survey, meaning volumes for some of the top C&amp;C brands identified in 2023 are not available in 2019 and may be included within the 'Other' category</li> <li>In Ukraine and Germany, Counterfeit brand and/ or pack labelling data is not available for all years, so these markets are included in the 'Other' category</li> </ul>	Not adjusted for
Non-EU27 outflows	<ul> <li>In order to estimate consumption, we have assumed no outflows of LDS outside the 38 countries of study</li> </ul>	<ul> <li>Non-EU27 LDS outflows are not considered to be material for all countries of study except Luxembourg. This is because of the high prices relative to other parts of the world and Duty Free import restrictions. This is supported by market discussions and non-EU27 empty pack surveys</li> <li>For Luxembourg, additional research by industry participants indicates that there is a significant outflow of cigarettes to non-EU27 markets and has been adjusted for</li> </ul>	Not adjusted for except Luxembourg



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# Limitations of Results (cont.)

Source	Limitation
Empty pack survey	Whilst the empty pack survey for every country is designed by the third party market research agencies to be representative of the overall population, in some countries, owing to the geographical circumstances or demographics it may not be possible to ensure that the sample is fully representative. This may be because:
	• The sample is more heavily weighted towards populous, urban areas and therefore may not be fully representative of consumption habits in rural regions
	Homes and workplaces or public spaces are not covered
	Results from Germany were historically based on a monthly analysis of approximately 10,000 packs collected at recycling centres as well as via empty pack surveys. However, in 2023, we received the empty pack survey results based on a quarterly analysis along with partial results from the historical monthly analysis. On comparing, both methods produce similar results (see page 239 for details)
	In 2021, Moldova switched from a PMI-commissioned empty pack survey to pack swap surveys commissioned by Big-4 industry participants. Therefore, given the change in methodology, trends may not be directly comparable between 2019-20 and 2021-23
	Although empty pack survey dates are selected by the third party market research agencies to seek to minimise seasonal factors, there may be specific events that impact the results such as significant price changes between countries and major national events which result in large numbers visiting the country, such as the Olympics or World Cup
	<ul> <li>In some instances the timing of empty pack surveys has changed between years. To seek to ensure comparability of results, we analyse monthly LDS figures, consumption trends and visitor data and make adjustments where appropriate</li> </ul>
	• Where there are specific outflows related to tourism limited to the summer months, the reported numbers may underrepresent the full picture as the empty pack survey will only capture one point in time
	<ul> <li>COVID-19 related lockdowns and travel restrictions have impacted the timings of empty pack surveys in some markets in the 2020 and 2021 results. To seek to ensure comparability of results, we have analysed monthly LDS figures, consumption trends, visitor data and other data sources to make adjustments where appropriate. Refer to the 2020 results version of this Report for further details on the estimated impact of COVID-19 on the results and our methodology</li> </ul>
	Brand and market variant share can only be extrapolated with a degree of statistical accuracy for brands where a sufficiently large number of packs have been collected
	We analyse empty pack survey results to identify any outliers that may impact results, such as geographic concentrations of a specific brand or market variant. We also compare brand specific data to known sales in the source market to identify whether results are credible
	• Where data suggests a sampling or data capture error may have occurred at a specific location, we adjust the results in our analysis accordingly
	In some specific instances it is not possible to differentiate between Duty Free and Duty Paid variants from the empty packs collected
	<ul> <li>In some countries it is possible to purchase duty free labelled product but, when travelling within the EU27, duty is in fact paid on the product. It is not possible for the third party market research agencies, participating manufacturers or us to determine this distinction</li> </ul>
	The study also does not take account of various duty free loopholes that exist for some travel



within the Europe and the EU27

# Limitations of Results (cont.)

Sourcel	Limitation
LDS	<ul> <li>In some cases tax stamp data on packs released for sale may not correspond to the calendar year and may also be distorted by inventory holdings in advance of increases in taxation. In these instances we have used the LDS source considered by local country PMI management to be representative of smoker consumption during the calendar year, or official government data sources</li> </ul>
	<ul> <li>Slight timing variances may arise between the date the product was shipped and actual consumption but, following discussions with local PMI management, this is not considered significant and the full year LDS information we have is considered to be a fair and accurate representation in each market</li> </ul>
ND(L)	<ul> <li>From 2014, we have used business and tourism travel data from sources such as the UN World Tourism Organization (UNWTO) and national statistics offices to estimate the number of trips made</li> </ul>
	<ul> <li>We have estimated the volume of cigarettes purchased by travellers by assuming that smokers purchase the Duty Free limit, or the indicative legal limit for intra-EU27 travel</li> </ul>
	This may over-weight ND(L) volume as a proportion of the total Non-Domestic flow
	In some markets consumer research help us to overcome some of these limitations, such as the number of packs purchased per trip
	• We assume that traveller demographics are the same as the domestic population. It is likely that travellers will be older on average, with fewer under 18s. This may under-estimate ND(L)
	<ul> <li>In order to estimate the ND(L) brand split, we used brand shares from the empty pack surveys. Refer to page 241 for details</li> </ul>
	<ul> <li>Pack swap survey data for Ukraine does not contain information regarding the origin of packs collected. Therefore, inflows to Ukraine cannot be broken down by origin and ND(L) inflows cannot be estimated</li> </ul>
	<ul> <li>Pack swap survey results for Moldova have been summarised by the market research agency into four categories –Duty-Free, Non-Domestic Duty Paid (NDDP), Illicit Whites, Counterfeit and Unspecified. For the purposes of this report, the first two categories have been considered to be legal inflows into Moldova and the last two along with Counterfeit have been considered C&amp;C. Furthermore, data on origins of these packs is not available and, therefore, breakdown of ND(L) and C&amp;C by country of origin cannot be estimated</li> </ul>
Weighted Average Price (WAP)	<ul> <li>At the time of publication of this Report, the latest WAP data available from the European Commission Excise Duty tables were for the year 2023</li> </ul>
Illegal factory seizure data	<ul> <li>Seizure data contained in this Report only includes data which is publicly available or of which PMPSA have been notified by law enforcement agencies. The actual number of seizures and the quantities of cigarettes seized may be higher than that shown in this Report</li> </ul>
	• There may be a time delay between a seizure event and PMPSA being notified of the seizure. Again, this may mean the actual number of seizures and the quantities of cigarettes seized is higher than that shown in this Report



### Empty pack survey results by country

#### Empty pack survey results in 38 European markets, 2020-23<sup>(a)(c)</sup>

	1	Number of p	oacks colled	cted	ND incide	nce in emp	ty pack survey <sup>(b)</sup>			
Region	2020	2021	2022	2023	2020	2021	2022	2023		
Albania 🗱	-	2,800	2,800	2,800	-	4.3%	3.5%	5%		
Austria	6,500	6,500	6,500	13,000	11%	10%	11%	12%		
Belgium	2,800	5,600	5,600	5,600	12%	10%	21%	18%		
Bosnia & Herzegovina  🔪	1,300	2,600	2,600	1,300	25%	16%	11.3%	12%		
Bulgaria	23,200	23,200	23,200	11,600	2%	2%	2%	2%		
Croatia	3,000	3,000	3,000	3,000	7%	7%	6%	5%		
Cyprus 🥑	1,000	1,000	1,000	1,000	9%	16%	15%	20%		
Czech Republic	21,004	20,423	21,004	31,506	3%	8%	9%	16%		
Denmark	5,000	10,000	10,000	10,000	5%	10%	9%	16%		
Estonia	3,300	6,600	6,600	6,600	9%	12%	16%	14%		
Finland	5,000	5,000	5,000	5,000	12%	16%	19%	22%		
France	46,000	46,000	46,000	34,500	28%	29%	34%	40%		
Germany	120,000	120,000	120,000	181,591	17%	14%	15%	16%		
Greece	18,000	18,000	18,000	12,000	25%	25%	22%	25%		
Hungary	17,240	17,241	17,240	17,000	5%	6%	11%	13%		
Ireland	5,000	5,000	5,000	5,000	22%	20%	36%	44%		
Italy	30,000	40,000	40,000	40,000	4%	3%	3%	3%		
Kosovo 💗	-	1,800	-	1,800	-	2.7%	-	2%		
Latvia	4,900	9,800	9,800	4,900	20%	17%	17%	15%		
Lithuania	5,800	11,600	11,600	5,800	22%	21%	22%	22%		
Luxembourg	200	400	400	400	12%	6%	17%	15%		
Malta 📩	1,000	1,000	1,000	1,000	8%	12%	11%	10%		

Note:

(a) Only base survey data in the empty pack surveys have been summarised in this table, i.e. 'focus' samples designed to investigate particular regional phenomena are excluded as they do not form part of the statistically representative national sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report; (c) Regions and years with "-" indicates that EPS was not conducted in those countries for the particular year



#### Empty pack survey results in 38 European markets, 2020-23<sup>(a)(c)</sup>

	ſ	Number of p	oacks colle	cted	ND incide	ence in emp	ty pack sur	vey <sup>(b)</sup>
Region	2020	2021	2022	2023	2020	2021	2022	2023
Moldova <sup>(e)</sup>	-	1,534	1,532	1,530	-	2%	7%	12%
Montenegro	1,000	1,000	1,000	1,000	37%	31.6%	26.8%	10%
Netherlands	7,000	14,000	14,000	14,000	16%	27%	15%	22%
North Macedonia	-	1,200	1,200	1,200	-	2.8%	2.6%	4%
Norway	5,000	5,000	5,000	5,000	23%	22%	35%	37%
Poland	25,000	50,000	50,000	37,500	9%	6%	5%	5%
Portugal	3,000	3,000	3,000	3,000	5%	7%	3%	5%
Romania	12,646	10,049	15,076	12,101	8%	8%	7%	8%
Serbia	-	1,000	2,700	2,700	-	32%	3%	4%
Slovakia 💌	5,000	5,000	5,000	5,000	4%	4%	4%	6%
Slovenia	3,000	3,000	3,000	3,000	8%	14%	7%	16%
Spain 🔹	15,000	30,000	30,000	30,000	9%	8%	6%	5%
Sweden	10,000	10,000	10,000	10,000	10%	9%	11%	11%
Switzerland	5,600	5,600	5,600	5,600	9%	9%	8%	13%
UK 💦	12,700	25,400	25,400	12,700	24%	22%	28%	36%
Ukraine <sup>(d)</sup>	12,000	13,200	5,527	9,000	6%	16%	19%	20%
Total	442,390	536,547	537,079	548,728	14%	14%	14%	15%

Note:

(a) Only base survey data in the empty pack surveys have been summarised in this table, i.e. 'focus' samples designed to investigate particular regional phenomena are excluded as they do not form part of the statistically representative national sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report; (c) Regions and years with "-" indicates that EPS was not conducted in those countries for the particular year; (d) Pack swap survey (e) Pack swap survey in 2021 - 2023



#### Albania and Austria results by region, 2020-23<sup>(1)(2)(a)</sup>

Albania <sup>(c)</sup>	Nur	nber of pac	ks collected	I	ND incidence in empty pack survey <sup>(b)</sup>					
Region	2020	2021	2022	2023	2020	2021	2022	2023		
Berat		100	100	100	-	3%	2%	5%		
Durres	-	300	300	300	-	5%	8%	6%		
Elbasan	-	200	200	200	-	2%	2%	5%		
Fier	-	200	200	200	-	4%	2%	5%		
Gjirokaster		100	100	100	-	2%	4%	23%		
Kavaje		100	100	100	-	7%	3%	6%		
Korce	-	100	100	100	-	5%	6%	5%		
Kukes		100	100	100	-	12%	4%	30%		
Lezhe	-	100	100	100	-	6%	6%	2%		
Lushnje		100	100	100	-	1%	5%	8%		
Pogradec	-	100	100	100	-	15%	6%	4%		
Sarande	-	100	100	100	-	2%	0%	5%		
Shkoder		200	200	200	-	16%	3%	4%		
Tirana		800	800	800	-	2%	3%	3%		
Vlore	-	200	200	200	-	4%	3%	5%		
Total	-	2,800	2,800	2,800	-	4%	4%	5%		

Austria	Num	ber of pack	s collected		ND incide	idence in empty pack survey			
Region	2020	2021	2022	2023	2020	2021	2022	2023	
Burgenland	220	220	220	440	11%	7%	15%	12%	
Kärnten	425	425	425	850	14%	11%	15%	13%	
Niederösterreich	1,242	1,242	1,242	2,484	13%	11%	9%	11%	
Oberösterreich	1,089	1,089	1,089	2,178	10%	7%	9%	7%	
Salzburg	408	408	408	816	9%	12%	10%	16%	
Steiermark	927	927	927	1,854	11%	13%	12%	14%	
Tirol	552	552	552	1,104	5%	6%	8%	6%	
Vorarlberg	287	287	287	574	4%	6%	3%	5%	
Wien	1,350	1,350	1,350	2,700	11%	11%	15%	15%	
Total	6,500	6,500	6,500	13,000	11%	10%	11%	12%	

(a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report (c) No surveys conducted in years with blanks. Results shown in country packs for these years are estimates only based on extrapolations of empty pack survey results from the prior and following years

Sources: (1) Ipsos marketing empty pack surveys, 2020-2023; (2) Nielsen empty pack surveys, 2020-2023



Note:

#### Belgium and Bosnia & Herzegovina results by region, 2020-23<sup>(1)(2)(a)</sup>

Belgium	Num	ber of pack	s collected		ND incide	) incidence in empty pack survey <sup>(b)</sup>			
Region	2020	2021	2022	2023	2020	2021	2022	2023	
Aalst	100	200	200	200	9%	4%	20%	16%	
Anderlecht	120	240	240	240	17%	15%	24%	15%	
Antwerp	550	1,100	1,100	1,100	12%	9%	21%	18%	
Arlon	80	160	160	160	74%	45%	19%	20%	
Brugge	120	240	240	240	12%	9%	24%	13%	
Brussels	190	380	380	380	8%	8%	20%	16%	
Charleroi	230	460	460	460	17%	16%	14%	17%	
Genk	100	200	200	200	9%	22%	12%	12%	
Ghent	250	500	500	500	12%	7%	25%	19%	
Hasselt	100	200	200	200	11%	13%	22%	18%	
Kortrijk	100	200	200	200	15%	5%	22%	19%	
Leuven	100	200	200	200	5%	5%	19%	25%	
Liege	220	440	440	440	7%	6%	18%	21%	
Mechelen	100	200	200	200	7%	7%	24%	20%	
Mons	100	200	200	200	11%	5%	18%	20%	
Namur	120	240	240	240	16%	15%	19%	20%	
Sambreville	80	160	160	160	2%	17%	26%	23%	
Schaerbeek	140	280	280	280	8%	8%	23%	25%	
Total	2,800	5,600	5,600	5,600	12%	10%	21%	18%	

Bosnia & Herzegovina <sup>(c)</sup>	Nun	nber of pac	ks collected	ł	ND incide	ND incidence in empty pack survey <sup>(b)</sup>				
Region	2020	2021	2022	2023	2020	2021	2022	2023		
Banja Luka	300	600	600	300	22%	12%	18%	2%		
Bijeljina	100	200	200	100	41%	24%	24%	28%		
Brcko	100	200	200	100	49%	27%	26%	49%		
Mostar	100	200	200	100	10%	19%	15%	6%		
Sarajevo	500	1,000	1,000	500	20%	13%	7%	6%		
Tuzla	100	200	200	100	20%	23%	9%	18%		
Zenica	100	200	200	100	55%	18%	7%	23%		
Total	1,300	2,600	2,600	1,300	25%	16%	11%	12%		

(a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report (c) No surveys conducted in years with blanks. Results shown in country packs for these years are estimates only based on extrapolations of empty pack survey results from the prior and following years

Sources: (1) Ipsos marketing empty pack surveys, 2020-2023; (2) WSPM empty pack surveys, 2020-23



Note:

#### Bulgaria and Croatia results by region, 2020-23<sup>(1)(2)(a)</sup>

Bulgaria	Nur	nber of pac	ks collected	ł	ND incide	nce in emp	ty pack sur	2%         3%           3%         2%           2%         2%           3%         3%           3%         6%           -         -           3%         1%           1%         1%           3%         5%		
Region	2020	2021	2022	2023	2020	2021	2022	2023		
Blagoevgrad	600	600	600	300	2%	3%	2%	2%		
Burgas	1,332	1,332	1,332	666	2%	2%	2%	3%		
Dobric	600	600	600	300	5%	2%	2%	3%		
Gabrovo	600	600	600	300	2%	1%	3%	2%		
Grad Sofia	7,056	7,056	7,056	3,528	2%	2%	2%	2%		
Haskovo	1,524	1,524	1,524	762	2%	1%	3%	3%		
Jambol	600	600	600	300	3%	1%	3%	6%		
Kjustendil	-	-	-	-	-	-	-	-		
Lovec	672	672	672	336	4%	1%	3%	1%		
Montana	-	-	-	-	-	-	-	-		
Pazardzik	600	600	600	300	3%	4%	1%	1%		
Pernik	600	600	600	300	2%	4%	1%	2%		
Plovdiv	2,828	2,828	2,828	1414	2%	3%	3%	5%		
Ruse	984	984	984	492	3%	1%	3%	2%		
Sliven	600	600	600	300	3%	2%	4%	2%		
Sumen	600	600	600	300	2%	2%	2%	1%		
Varna	2,204	2,204	2,204	1102	3%	2%	4%	2%		
VelikoTarnovo	600	600	600	300	0%	1%	3%	1%		
Vidin	600	600	600	300	3%	2%	5%	3%		
Vratsa	600	600	600	300	3%	3%	3%	1%		
Total	23,200	23,200	23,200	11,600	2%	2%	2%	2%		

Croatia	Number of packs collected ND incidence in empty pack surve						ty pack surv	vey <sup>(b)</sup>
Region	2020	2021	2022	2023	2020	2021	2022	2023
Osijek	193	193	187	187	8%	3%	4%	3%
Pula	132	132	129	129	1%	8%	5%	4%
Rijeka	295	295	267	267	4%	5%	5%	1%
Sesvete	124	124	136	136	9%	2%	4%	11%
Slavonski Brod	123	123	111	111	19%	19%	19%	28%
Split	384	384	370	370	3%	3%	12%	6%
Zadar	164	164	165	165	2%	2%	1%	0%
Zagreb	1,585	1,585	1,635	1,635	9%	9%	4%	4%
Total	3,000	3,000	3,000	3,000	7%	7%	6%	5%

Note: (a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report

Source: (1) Nielsen empty pack surveys, 2020-2023 (2) Ipsos marketing empty pack surveys, 2023



#### Cyprus, Czech Republic and Denmark results by region, 2020-23<sup>(1)(2)(3)(a)</sup>

🥑 Cyprus	Num	ber of pack	s collected		ND incide	nce in emp	ty pack sur	vey <sup>(b)</sup>
Region	2020	2021	2022	2023	2020	2021	2022	2023
Larnaca	150	150	150	150	17%	17%	15%	29%
Limassol	300	300	300	300	4%	9%	18%	16%
Nicosia	400	400	400	400	11%	22%	13%	21%
Paphos	150	150	150	150	8%	8%	18%	17%
Total	1,000	1,000	1,000	1,000	9%	<b>16%</b>	15%	20%

Czech Republic	Nun	nber of pac	ks collected		ND incidence in empty pack survey <sup>(b)</sup>				
Region	2020	2021	2022	2023	2020	2021	2022	2023	
Jihocesky Kraj	724	702	724	1,086	2%	5%	3%	11%	
Jihomoravsky Kraj	2,148	2,099	2,148	3,222	3%	7%	7%	11%	
Karlovarsky Kraj	300	275	300	450	5%	13%	12%	15%	
Kralovehradecky Kraj	526	509	526	789	3%	6%	11%	15%	
Liberecky Kraj	1,034	966	1,034	1,551	4%	12%	12%	21%	
Moravsoslezsky Kraj	3,332	3,234	3,332	4,998	3%	14%	22%	35%	
Olomoucky Kraj	1,062	1,035	1,062	1,593	3%	8%	6%	15%	
Pardubicky Kraj	510	505	510	765	3%	5%	7%	8%	
Plzensky Kraj	948	909	948	1,422	2%	8%	4%	17%	
Praha	7,114	7,000	7,114	10,671	3%	5%	6%	11%	
Stredocesky Kraj	636	618	636	954	1%	4%	4%	10%	
Ustecky Kraj	1,750	1,673	1,750	2,625	4%	12%	10%	15%	
Vysocina	496	483	496	744	1%	7%	4%	8%	
Zlinsky Kraj	424	415	424	636	3%	6%	6%	16%	
Total	21,004	20,423	21,004	31,506	3%	8%	9%	16%	

Denmark	Nun	nber of pac	ks collectec	l	ND incidence in empty pack survey <sup>(b)</sup>			
Region	2020	2021	2022	2023	2020	2021	2022	2023
Capital Region	2,612	5,224	5,224	4,700	4%	10%	9%	16%
Mid Jutland	1,011	2,022	2,022	2,000	6%	8%	7%	19%
North Jutland	422	844	844	1,300	4%	13%	11%	13%
South Denmark	955	1,910	1,910	2,000	8%	10%	9%	16%
Zealand	-	-	-	-	-	-	-	-
Total	5,000	10,000	10,000	10,000	5%	10%	9%	16%

Note: (a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report

Sources: (1) Ipsos marketing empty pack surveys, 2023 (2) Nielsen empty pack surveys, 2020-2023; (3) Ultex empty pack surveys, 2020-2022



#### Estonia and Finland results by region, 2020-23<sup>(1)(2)(a)</sup>

Estonia	Nu	mber of pac	cks collecte	d	ND incidence in empty pack survey <sup>(b)</sup>					
Region	2020	2021	2022	2023	2020	2021	2022	2023		
Har	1,600	3,200	3,200	3,200	10%	10%	17%	14%		
Ida	550	1,100	1,100	1,100	9%	20%	15%	15%		
Lääne	100	200	200	200	1%	6%	18%	18%		
Lvi	100	200	200	200	4%	15%	21%	14%		
Pär	150	300	300	300	7%	11%	17%	17%		
Saa	100	200	200	200	4%	5%	13%	12%		
Tar	400	800	800	800	11%	13%	16%	14%		
Val	100	200	200	200	14%	13%	13%	18%		
Vil	100	200	200	200	3%	8%	13%	20%		
Võr	100	200	200	200	6%	5%	15%	12%		
Total	3,300	6,600	6,000	6,600	9%	12%	16%	14%		

Finland	Num	ber of pack	s collected		ND incide	nce in emp	ty pack surv	vey <sup>(b)</sup>
Region	2020	2021	2022	2023	2020	2021	2022	2023
Etela-Karjala	-	-	-	-	-	-	-	-
Keski-Suomi	315	315	315	315	4%	20%	10%	17%
Kymenlaakso	193	193	193	193	5%	11%	23%	21%
Lappi	-	-	-	-	-	-	-	-
Paijat-Hame	271	271	271	271	20%	14%	12%	21%
Pirkanmaa	517	517	517	517	7%	14%	7%	17%
Pohjois-Karjala	-	-	-	-	-	-	-	-
Pohjois-Savo	267	267	267	267	11%	14%	9%	12%
Prohiois-Pohianmaa	454	454	454	454	4%	15%	10%	19%
Uusimaa	2,558	2,558	2,558	2,558	16%	17%	25%	26%
Varsinais-Suomi	425	425	425	425	12%	21%	22%	20%
Total	5,000	5,000	5,000	5,000	12%	16%	19%	22%

Note: (a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report

Sources: (1) Nielsen empty pack surveys, 2020-2023; (2) WSPM empty pack survey, 2020-23



#### France and Germany results by region, 2020-23<sup>(1)(2)(a)</sup>

France	Nun	nber of pac	ks collected	ł	ND incide	nce in emp	ty pack sur	urvey <sup>(b)</sup> 2023 - - - - 40%					
Region	2020	2021	2022	2023	2020	2021	2022	2023					
Alsace Lorraine Champagne Ardennes	4,000	4,000	-	-	36%	29%	33%	-					
Aquitaine	2,456	2,456	4,000	-	26%	29%	34%	-					
Auvergne Limousin	1,500	1,500	4,396	-	16%	23%	33%	-					
Auvergne-Rhône-Alpes	4,760	4,760	5,760	4,320	25%	26%	33%	40%					
Basse Haute Normandie	2,804	2,804	2,804	-	19%	27%	33%	-					
Bourgogne-Franche-Comté	3,200	3,200	3,040	2,280	22%	28%	33%	42%					
Bretagne	3,600	3,600	3,600	2,700	15%	25%	29%	40%					
Centre - Val de Loire	2,000	2,000	2,000	1,500	18%	25%	39%	39%					
Grand Est	-	-	-	3,000	-	-	-	39%					
Hauts-de-France	-	-	-	3,297	-	-	-	41%					
Île-de-France	7,200	7,200	7,200	5,400	33%	29%	33%	39%					
Normandie	-	-	-	2,103	-	-	-	38%					
Nouvelle Aquitaine	-	-	-	3,000	-	-	-	40%					
Occitanie	3,200	3,200	3,200	2,400	37%	37%	33%	40%					
Nord Picardie	4,396	4,396	4,000	-	34%	31%	35%	-					
Pays de la Loire	3,284	3,284	2,400	1,800	17%	21%	34%	37%					
Provence-Alpes-Côte d'Azur	3,600	3,600	3,600	2,700	30%	33%	38%	40%					
Total	46,000	46,000	46,000	34,500	28%	29%	34%	40%					

Germany	Num	ber of pacl	ks collected	(c)	ND incide	nce in emp	ty pack sur	vey <sup>(b)</sup>
Region	2020	2021	2022	2023	2020	2021	2022	2023
Lower Saxony	20,411	20,527	19,852	24,727	9%	7%	10%	10%
North Rhine-Westphalia	24,222	26,070	26,338	29,905	10%	8%	10%	11%
Rhineland-Palatinate	16,599	15,051	16,551	30,870	10%	10%	13%	13%
Baden-Württemberg	15,248	14,651	14,729	25,980	10%	9%	11%	10%
Bavaria	19,372	18,656	18,389	-	22%	16%	19%	-
Berlin	-	-	6,875	2,393	-	-	42%	28%
Brandenburg	15,121	16,072	8,914	16,235	39%	30%	35%	38%
Saxony	9,026	8,972	8,302	15,711	33%	28%	34%	29%
Bayern	-	-	-	30,836	-	-	-	17%
Schleswig-Holstein	-	-	-	4,934	-	-	-	0%
Total	120,000	120,000	120,000	181,591	17%	14%	15%	16%

Note: (a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report (c) Results for this year based on empty pack survey. This is different from the yellow bag survey results shared till last year

Sources: (1) WSPM empty pack surveys, 2020-2023 (2) Ipsos Empty Pack Survey for 2023



#### Greece results by region, 2020-23<sup>(1)(a)</sup>

🗮 Greece	Nur	Number of packs collected ND in					incidence in empty pack survey <sup>(b)</sup>			
Region	2020	2021	2022	2023	2020	2021	2022	2023		
Attica	6,900	6,900	6,900	4,600	27%	28%	23%	28%		
Central Greece	600	600	600	400	19%	20%	22%	21%		
Central Macedonia	3,600	3,600	3,600	2,400	25%	25%	23%	24%		
Crete	1,500	1,500	1,500	1,000	23%	25%	23%	25%		
East Macedonia/Thrace	-	-	-	-	-	-	-	-		
Epirus	600	600	600	400	22%	20%	25%	20%		
Ionian Islands	600	600	600	400	27%	17%	18%	20%		
South Aegean	600	600	600	400	21%	20%	21%	23%		
Thessaly	1,800	1,800	1,800	1,200	28%	27%	20%	20%		
West Greece	1,800	1,800	1,800	1,200	24%	19%	23%	29%		
West Macedonia	-	-	-	-	-	-	-	-		
Total	18,000	18,000	18,000	12,000	25%	25%	22%	25%		

Note:

 (a) Only base survey data in the empty pack surveys/ yellow bag surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey/ yellow bag survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report

Sources: (1) Nielsen empty pack surveys, 2020-2023



#### Hungary and Ireland results by region, 2020-23<sup>(1)(2)(a)</sup>

Hungary	Nun	ber of pacl	ks collected		ND incide	nce in emp	ty pack sur	vey <sup>(b)</sup>
Region	2020	2021	2022	2023	2020	2021	2022	2023
Bács-Kiskun	775	775	775	724	6%	6%	8%	12%
Baranya	645	645	605	597	3%	5%	9%	11%
Békés	555	555	555	481	5%	5%	11%	12%
Borsod-Abaúj-Zemplén	850	850	790	774	11%	12%	12%	18%
Budapest	6,250	6,250	6,250	6,870	5%	5%	12%	14%
Csongrád	900	900	900	844	6%	6%	10%	13%
Fejér	640	640	640	567	5%	4%	10%	10%
Gyor-Moson-Sopron	934	934	975	886	5%	5%	8%	12%
Hajdú-Bihar	990	990	990	949	8%	8%	13%	19%
Heves	390	390	390	325	5%	10%	15%	16%
Jász-Nagykun-Szolnok	315	315	315	281	6%	6%	12%	13%
Komárom-Esztergom	440	440	440	399	5%	7%	8%	10%
Nógrád	165	165	165	138	5%	10%	12%	22%
Pest	1,235	1,235	1,295	1,212	6%	5%	10%	9%
Somogy	285	285	285	254	2%	5%	11%	7%
Szabolcs-Szatmár-Bereg	485	485	485	495	10%	9%	13%	19%
Tolna	145	145	145	128	3%	5%	7%	9%
Vas	335	335	335	314	2%	4%	7%	9%
Veszprém	417	417	415	344	3%	5%	6%	10%
Zala	489	490	490	418	1%	6%	7%	7%
Total	17,240	17,241	17,240	17,000	5%	6%	11%	13%

Ireland	Num	Number of packs collected				ND incidence in empty pack surve		
Region	2020	2021	2022	2023	2020	2021	2022	2023
Connacht	400	400	400	400	21%	25%	34%	47%
Leinster	3,225	3,225	3,225	3,225	22%	20%	38%	43%
Munster	1,275	1,275	1,275	1,275	19%	19%	34%	43%
Ulster	100	100	100	100	19%	21%	22%	48%
Total	5,000	5,000	5,000	5,000	34%	22%	20%	44%

Note: (a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report

Sources: (1) PDF report not received for Hungary, but LDS report is from IMS (2) WSPM empty pack surveys, 2020-23



#### Italy, Kosovo and Latvia results by region, 2020-23<sup>(1)(2)(a)</sup>

Italy	Nur	nber of pac	ks collected	k	ND incidence in empty pack survey <sup>(b)</sup>					
Region	2020	2021	2022	2023	2020	2021	2022	2023		
Abruzzo	540	720	720	720	1%	1%	1%	1%		
Calabria	660	880	880	880	1%	1%	1%	1%		
Campania	2,790	3,720	3,720	3,720	12%	11%	8%	9%		
Emilia Romagna	2,910	3,880	3,880	3,880	4%	2%	3%	2%		
Friuli Venezia Giulia	480	640	640	640	24%	26%	35%	20%		
Lazio	5,490	7,320	7,320	7,320	4%	1%	1%	1%		
Liguria	1,260	1,680	1,680	1,680	1%	1%	2%	2%		
Lombardia	3,360	4,480	4,480	4,480	3%	3%	3%	4%		
Marche	450	600	600	600	2%	2%	2%	1%		
Piemonte	2,190	2,920	2,920	2,920	1%	1%	2%	3%		
Puglia	2,220	2,960	2,960	2,960	3%	3%	3%	3%		
Sicilia	3,630	4,840	4,840	4,840	2%	1%	2%	2%		
Toscana	1,440	1,920	1,920	1,920	1%	1%	1%	1%		
Trentino Alto Adige	300	400	400	400	6%	6%	4%	3%		
Umbria	540	720	720	720	0%	1%	1%	0%		
Veneto	1,740	2,320	2,320	2,320	2%	2%	1%	3%		
Total	30,000	40,000	40,000	40,000	4%	3%	3%	3%		

🌾 Kosovo <sup>(c)</sup>	Num	ber of pack	s collected		ND incidence in empty pack survey <sup>(b)</sup>				
Region	2020	2021	2022	2023	2020	2021	2022	2023	
Dakovica	-	159	-	159	-	1%	-	3%	
Gnjilane	-	211	-	211	-	3%	-	0%	
Mitrovica	-	180	-	180	-	5%	-	3%	
Pec	-	190	-	190	-	3%	-	4%	
Pristina	-	563	-	563	-	3%	-	2%	
Prizren	-	331	-	331	-	2%	-	3%	
Urosevac	-	166	-	166	-	3%	-	1%	
Total	-	1,800	-	1,800	-	3%	-	2%	

Latvia	Num	ber of pack	s collected		ND incidence in empty pack survey <sup>(b)</sup>				
Region	2020	2021	2022	2023	2020	2021	2022	2023	
Kurzeme	600	1,200	1,200	600	21%	14%	14%	14%	
Latgale	700	1,400	1,400	700	31%	32%	29%	32%	
Pieriga	700	1,400	1,400	700	21%	15%	14%	15%	
Riga	2,000	4,000	4,000	2,000	19%	15%	16%	13%	
Vidzeme	400	800	800	400	12%	21%	15%	8%	
Zemgale	500	1,000	1,000	500	17%	13%	11%	10%	
Total	4,900	9,800	9,800	4,900	20%	17%	17%	15%	

Note:

(a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report (c) No surveys conducted in years with blanks. Results shown in country packs for these years are estimates only based on extrapolations of empty pack survey results from the prior and following years

Sources: (1) Ipsos empty pack surveys, 2020-2023; (2) Nielsen empty pack surveys, 2020-2023



#### Lithuania, Luxembourg and Malta results by region, 2020-23<sup>(1)(2)(a)</sup>

Lithuania	Nun	nber of pac	ks collected		ND incide	nce in emp	ty pack surv	vey <sup>(b)</sup>
Region	2020	2021	2022	2023	2020	2021	2022	2023
Alytus	300	600	600	300	25%	24%	23%	25%
Kaunas	1,400	2,800	2,800	1,400	26%	21%	27%	26%
Klaipeda	800	1,600	1,600	800	18%	20%	18%	14%
Marijampole	200	400	400	200	18%	19%	26%	23%
Panevezys	300	600	600	300	22%	24%	23%	29%
Siauliai	400	800	800	400	29%	19%	18%	16%
Taurage	100	200	200	100	25%	23%	26%	18%
Telsiai	400	800	800	400	16%	19%	19%	19%
Utena	300	600	600	300	12%	14%	18%	13%
Vilnius	1,600	3,200	3,200	1,600	19%	21%	22%	24%
Total	5,800	11,600	11,600	5,800	22%	21%	22%	22%

Luxembourg	Num	ber of pack	s collected		ND incidence in empty pack survey <sup>(b)</sup>			
Region	2020	2021	2022	2023	2020	2021	2022	2023
Esch-Sur-Alzette	80	160	320	160	21%	6%	18%	19%
Luxembourg	120	240	480	240	5%	6%	16%	13%
Total	200	400	800	400	12%	6%	17%	15%

Malta	Num	ber of pack	s collected		ND incidence in empty pack surve			
Region	2020	2021	2022	2023	2020	2021	2022	2023
Northern	350	350	350	450	7%	12%	11%	10%
Northern Harbour	550	550	550	450	9%	11%	12%	9%
Southern Harbour	100	100	100	100	5%	10%	11%	14%
Total	1,000	1,000	1,000	1,000	8%	12%	11%	10%

- Note:
- (a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report

Sources: (1) Nielsen Empty pack surveys, 2020-2023; (2) WSPM empty pack surveys, 2020-2023



### Montenegro, Netherlands and North Macedonia results by region, 2020-23<sup>(1)(2)(a)</sup>

Montenegro	Num	ber of pack	s collected		ND incide	nce in emp	ty pack surv	vey <sup>(b)</sup>
Region	2020	2021	2022	2023	2020	2021	2022	2023
Bijelo Polje	100	100	100	100	42%	38%	24%	11%
Niksic	300	300	300	300	41%	39%	27%	12%
Pljevlja	100	100	100	100	45%	36%	34%	13%
Podgorica	500	500	500	500	34%	27%	26%	9%
Total	1,000	1,000	1,000	1,000	37%	32%	27%	10%

Netherlands	Nun	Number of packs collected				ND incidence in empty pack survey <sup>(b)</sup>				
Region	2020	2021	2022	2023	2020	2021	2022	2023		
Drenthe	101	202	202	202	17%	26%	18%	11%		
Flevoland	252	504	504	504	15%	23%	15%	23%		
Friesland	166	332	332	332	11%	28%	17%	15%		
Gelderland	542	1,084	1,084	1,084	15%	27%	10%	16%		
Groningen	182	364	364	364	9%	17%	24%	25%		
Limburg	376	752	752	752	12%	45%	15%	19%		
North Brabant	930	1,860	1,860	1,860	16%	40%	14%	18%		
North Holland	1,545	3,090	3,090	3,090	16%	21%	18%	26%		
Overijssel	496	992	992	992	19%	29%	12%	22%		
South Holland	1,972	3,994	3,944	3,944	16%	24%	15%	22%		
Utrecht	438	876	876	876	20%	25%	11%	22%		
Total	7,000	14,000	14,000	14,000	16%	27%	15%	22%		

North Macedonia <sup>(c)</sup>	Num	ber of pack	s collected		ND incidence in empty pack survey <sup>(b)</sup>				
Region	2020	2021	2022	2023	2020	2021	2022	2023	
East	-	80	80	80	-	3%	3%	0%	
North-East	-	100	100	100	-	3%	5%	8%	
Pelagonia	-	200	200	200	-	2%	2%	6%	
Polog	-	180	180	180	-	8%	4%	6%	
Skopje	-	400	400	400	-	2%	2%	3%	
South-East	-	80	80	80	-	1%	4%	9%	
South-West	-	80	80	80	-	5%	6%	3%	
Vardar	-	80	80	80	-	3%	3%	1%	
Total	-	1,200	1,200	1,200	-	3%	3%	4%	

Note: (a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report (c) No surveys conducted in years with blanks. Results shown in country packs for these years are estimates only based on extrapolations of empty pack survey results from the prior and following years

Sources: (1) Ipsos empty pack surveys, 2020-2023; (2) WSPM Group empty pack surveys, 2020-2023



#### Norway, Poland and Portugal results by region, 2020-23<sup>(1)(2)(3)(a)</sup>

Norway	Num	Number of packs collected				ND incidence in empty pack survey <sup>(b)</sup>				
Region	2020	2021	2022	2023	2020	2021	2022	2023		
Akershus	376	376	376	376	20%	20%	34%	30%		
Hordaland	866	866	866	866	23%	14%	36%	39%		
Oslo	2,012	2,012	2,012	2,012	27%	29%	35%	38%		
Ostfold	248	248	248	248	24%	23%	36%	37%		
Rogaland	419	419	419	419	17%	19%	36%	37%		
Sor-Trondelag	579	579	579	579	21%	20%	36%	42%		
Vest-Adger	227	273	227	227	16%	16%	35%	39%		
Troms	273	227	273	273	16%	8%	39%	21%		
Total	5,000	5,000	5,000	5,000	23%	22%	35%	37%		

Poland	Nur	nber of pac	ks collectec	l	ND incide	nce in emp	ty pack surv	vey <sup>(b)</sup>
Region	2020	2021	2022	2023	2020	2021	2022	2023
Dolnoslaskie	2,000	4,000	4,000	3,000	9%	4%	5%	5%
Kujawsko-Pomorskie	1,850	3,700	3,700	2,775	8%	4%	4%	3%
Lodzkie	1,650	3,300	3,300	2,475	12%	8%	7%	6%
Lubelskie	800	1,600	1,600	1,200	6%	4%	3%	3%
Lubuskie	600	1,200	1,200	900	5%	3%	2%	2%
Malopolskie	1,950	3,900	3,900	2,925	3%	5%	5%	5%
Mazowieckie	4,500	9,000	9,000	6,750	16%	8%	8%	6%
Opolskie	300	600	600	450	2%	3%	2%	2%
Podkarpackie	400	800	800	600	16%	10%	7%	4%
Podlaskie	650	1,300	1,300	975	18%	16%	15%	13%
Pomorskie	1,550	3,100	3,100	2,325	5%	3%	2%	2%
Slaskie	4,900	9,800	9,800	7,350	8%	5%	5%	5%
Swietokrzyskie	450	900	900	675	2%	2%	3%	1%
Warminsko-Mazurskie	700	1,400	1,400	1,050	13%	7%	5%	4%
Wielkopolskie	1,500	3,000	3,000	2,250	5%	3%	4%	5%
Zachodniopomorskie	1,200	2,400	2,400	1,800	9%	2%	3%	2%
Total	25,000	50,000	50,000	37,500	9%	6%	5%	5%

Portugal	Num	Number of packs collected ND incidence in en				nce in emp	ty pack sur	vey <sup>(b)</sup>
Region	2020	2021	2022	2023	2020	2021	2022	2023
Center	200	200	200	200	0%	0%	0%	1%
Lisboa	1,900	1,900	1,900	1,900	3%	3%	2%	3%
North	900	900	900	900	9%	16%	4%	7%
Total	3,000	3,000	3,000	3,000	5%	7%	3%	5%

Note: (a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report

Sources: (1) WSPM Group empty pack surveys, 2020-2023; (2) Almares Research empty pack surveys, 2020-2023; (3) Ipsos empty pack surveys, 2020-2023



#### Romania and Serbia results by region, 2020-23<sup>(1)(2)(a)</sup>

Romania	Nun	nber of pac	ks collected	l	ND incidence in empty pack survey <sup>(b)</sup>				
Region	2020	2021	2022	2023	2020	2021	2022	2023	
Bucharest	1,398	1,078	1,467	1,259	4%	4%	5%	6%	
Caras-Severin	296	154	258	156	4%	6%	8%	8%	
Center	1,214	1,008	1,504	1,292	1%	1%	1%	2%	
North-East	2,349	1,883	2,761	1,964	21%	23%	21%	24%	
North-West	1,743	1,430	2,215	1,841	11%	12%	7%	8%	
Satu Mare	35	1,410	-	-	29%	4%	-	-	
South	1,642	1,410	2,044	1,682	4%	7%	4%	6%	
South-East	1,659	1,250	1,991	1,682	5%	6%	6%	6%	
South-West	1,357	1,065	1,593	1,262	10%	11%	6%	5%	
West	953	771	1,243	963	9%	4%	6%	7%	
Total	12,646	10,049	15,076	12,101	8%	9%	7%	8%	

Serbia <sup>(c)</sup>	Nun	nber of pack	s collected		ND incide	nce in emp	ty pack sur	vey <sup>(b)</sup>
Region	2020	2021	2022	2023	2020	2021	2022	2023
Belgrade	-	1,000	1,000	1,000	-	2%	3%	3%
Cacak	-	100	100	100	-	2%	4%	2%
Kragujevac	-	200	200	200	-	2%	3%	2%
Kraljevo	-	100	100	100	-	3%		12%
Krusevac	-	100	100	100	-	2%	2%	6%
Leskovac	-	100	100	100	-	2%	4%	3%
Nis	-	200	200	200	-	0%	2%	3%
Novi Pazar	-	100	100	100	-	1%	1%	3%
Novi Sad	-	200	200	200	-	2%	1%	4%
Pancevo	-	100	100	100	-	6%	7%	0%
Smederevo	-	100	100	100	-	7%	1%	0%
Subotica	-	100	100	100	-	0%	1%	11%
Valjevo	-	100	100	100	-	2%	2%	1%
Vranje	-	100	100	100	-	1%	2%	3%
Zrenjanin	-	100	100	100	-	0%	0%	4%
Total	-	2,700	2,700	2,700	-	2%	3%	4%

Note:

(a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report (c) No surveys conducted in years with blanks. Results shown in country packs for these years are estimates only based on extrapolations of empty pack survey results from the prior and following years

Sources: (1) Novel Study, 2020-2023; (2) Ipsos empty pack surveys, 2020-2023



#### Slovakia and Slovenia results by region, 2020-23<sup>(1)(2)(a)</sup>

Slovakia	Nun	uber of pacl	ks collected	ND incidence in empty pack survey <sup>(b)</sup>				
Region	2020	2021	2022	2023	2020	2021	2022	2023
Banskobystricky Kraj	450	450	450	450	2%	3%	1%	7%
Bratislavsky Kraj	1,200	1,200	1,200	1,200	1%	2%	2%	5%
Kosicky Kraj	800	800	800	800	5%	5%	7%	9%
Nitriansky Kraj	650	650	650	650	5%	7%	5%	7%
Presovsky Kraj	600	600	600	600	5%	8%	5%	6%
Trenciansky Kraj	400	400	400	400	10%	4%	7%	6%
Trnavsky Kraj	300	300	300	300	9%	3%	5%	14%
Zilinsky Kraj	600	600	600	600	2%	4%	2%	3%
Total	5,000	5,000	5,000	5,000	4%	4%	4%	6%

🔚 Slovenia	Num	ber of pack	s collected		ND incide	cidence in empty pack surv				
Region	2020	2021	2022	2023	2020	2021	2022	2023		
Celje	210	210	210	210	9%	9%	6%	6%		
Koper	139	139	139	139	5%	22%	22%	14%		
Kranj	208	208	208	208	7%	25%	9%	7%		
Ljubljana	1,539	1,539	1,539	1,539	8%	9%	5%	16%		
Maribor	531	531	531	531	9%	22%	8%	28%		
Novo Mesto	130	130	130	130	3%	19%	15%	8%		
Ptuj	101	101	101	101	5%	18%	4%	18%		
Velenje	142	142	142	142	7%	17%	5%	17%		
Total	3,000	3,000	3,000	3,000	8%	14%	7%	16%		

Note: (a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report

Sources: (1) Nielsen empty pack surveys, 2020-2023; (2) WSPM empty pack surveys, 2020-2023



#### Spain results by region, 2020-23<sup>(1)(2)(a)</sup>

Spain	Nur	nber of pac	ks collected	ł	ND incidence in empty pack survey <sup>(b)</sup>			
Region	2020	2021	2022	2023	2020	2021	2022	2023
Andalucia	2,588	5,176	5,176	5,176	36%	32%	20%	15%
Aragon	585	1,170	1,170	1,170	1%	1%	1%	2%
Asturias	429	858	858	858	0%	1%	3%	3%
Basque Country	767	1,534	1,534	1,534	2%	2%	3%	3%
Cantabria	152	304	304	304	2%	2%	3%	1%
CastillaY Leon	660	1,320	1,320	1,320	0%	6%	2%	1%
Castilla-La Mancha	148	296	296	296	3%	12%	1%	0%
Catalonia	2,697	5,394	5,394	5,394	4%	3%	3%	4%
Comunidad Valenciana	1,421	2,842	2,842	2,842	2%	1%	2%	2%
Extremadura	129	258	258	258	17%	25%	8%	18%
Galicia	565	1,130	1,130	1,130	2%	2%	5%	3%
La Rioja	131	262	262	262	2%	0%	1%	0%
Madrid	3,996	7,992	7,992	7,992	4%	4%	4%	4%
Murcia	563	1,126	1,126	1,126	1%	2%	2%	2%
Navarra	169	338	338	338	1%	2%	0%	1%
Total	15,000	30,000	30,000	30,000	9%	8%	6%	5%

Note:

e: (a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report

Sources: (1) Ipsos empty pack surveys, 2020-2023



#### Sweden results by region, 2020-23<sup>(1)(2)(a)</sup>

Sweden	Nur	nber of pac	ks collected	d l	ND incide	ence in emp	ty pack sur	vey <sup>(b)</sup>
Region	2020	2021	2022	2023	2020	2021	2022	2023
Blekinge	150	150	150	150	10%	9%	18%	12%
Dalarna	150	150	150	150	5%	19%	7%	9%
Gastrikland	190	190	190	200	8%	6%	7%	6%
Halland	304	304	304	350	8%	11%	10%	10%
Jönköping	233	233	233	300	4%	10%	15%	13%
Kronoberg	154	154	154	200	5%	12%	8%	11%
Norrbotten	150	150	150	150	4%	5%	6%	7%
Örebro	272	272	272	300	10%	6%	7%	12%
Östergötland	500	500	500	550	10%	14%	14%	10%
Skåne	1,101	1,101	1,101	1,250	13%	12%	18%	13%
Smaland	150	150	150	150	12%	9%	10%	11%
Södermanland	316	316	316	350	10%	10%	12%	12%
Stockholm	3,284	3,284	3,284	2,700	11%	7%	10%	10%
Uppsala	355	355	355	500	9%	6%	9%	10%
Värmland	162	162	162	200	15%	9%	7%	6%
Västerbotten	359	359	359	400	2%	6%	8%	18%
Västernorrland	150	150	150	200	8%	5%	14%	7%
Västmanland	296	296	296	300	8%	7%	10%	9%
Västra Götaland	1,724	1,724	1,724	1,600	8%	11%	10%	11%
Total	10,000	10,000	10,000	10,000	10%	9%	11%	11%

Note:

(a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report

Sources: (1) Global Vox Populi empty pack surveys, 2020-2022 (2) WSPM empty pack surveys, 2023



#### Switzerland results by region, 2020-23<sup>(1)(a)</sup>

🕂 Switzerland	Nun	ber of pack	s collected		ND incide	nce in emp	ty pack sur	vey <sup>(b)</sup>
Region	2020	2021	2022	2023	2020	2021	2022	2023
Basel	400	400	400	400	9%	11%	5%	9%
Bern	900	900	900	900	7%	6%	5%	10%
Biel	-	-	-	-	-	-	-	-
Chur	-	-	-	-	-	-	-	-
Fribourg	200	200	200	200	5%	11%	6%	9%
Geneva	700	700	700	700	9%	14%	11%	19%
Grisons	200	200	200	200	4%	8%	7%	13%
Jura	-	-	-	-	-	-	-	-
Koniz	-	-	-	-	-	-	-	-
La Chaux De Fonds	-	-	-	-	-	-	-	-
Lausanne	-	-	-	-	-	-	-	-
Lugano	-	-	-	-	-	-	-	-
Luzern	200	200	200	200	10%	7%	6%	14%
Neuchatel	400	400	400	400	4%	11%	9%	12%
Schaffhausen	200	200	200	200	9%	8%	10%	13%
Sion		-	-	-	-	-	-	-
St Gallen	200	200	200	200	13%	9%	7%	14%
Thun	-	-	-	-	-	-	-	-
Thurgau	-	-	-	-	-	-	-	-
Ticino	200	200	200	200	36%	10%	12%	28%
Uster	-	-	-	-	-	-	-	-
Valais	200	200	200	200	13%	7%	9%	12%
Vaud	300	300	200	300	7%	7%	7%	12%
Vernier	-	-	-	-	-	-	-	-
Winterthur	-	-	-	-	-	-	-	-
Zurich	1,500	1,500	1,500	1,500	7%	8%	8%	12%
Total	5,600	5,600	5,600	5,600	9%	9%	8%	13%

Note:

(a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report

Sources: (1) WSPM empty pack surveys, 2020-2023



#### UK results by region, 2020-23<sup>(1)(2)(a)</sup>

₩ UK	Nun	nber of pac	ks collectec	ł	nce in emp	empty pack survey <sup>(b)</sup>		
Region	2020	2021	2022	2023	2020	2021	2022	2023
East Midlands	1,000	2,000	2,000	1,000	23%	25%	23%	35%
East of England	1,100	2,200	2,200	1,100	34%	23%	28%	35%
London	1,500	3,000	3,000	1,500	20%	17%	26%	37%
North East England	500	1,000	1,000	500	40%	38%	41%	35%
North West England	1,299	2,598	2,598	1,299	24%	22%	30%	36%
Northern Ireland	500	1,000	1,000	500	14%	20%	22%	35%
Scotland	1,099	2,198	2,198	1,099	22%	20%	33%	44%
South East England	2,001	4,002	4,002	2,001	19%	19%	25%	34%
South West England	900	1,800	1,800	900	17%	18%	27%	32%
Wales	700	1,400	1,400	700	13%	12%	23%	29%
West Midlands	1,201	2,402	2,402	1,201	28%	26%	28%	38%
Yorkshire and The Humber	900	1,800	1,800	900	36%	32%	34%	38%
Total	12,700	25,400	25,400	12,700	24%	22%	18%	36%

Note: (a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report

Sources: (1) MS Intelligence empty pack surveys, 2020; (2) Ipsos empty pack surveys, 2021-2023



### Pack swap results by country

#### Moldova results by region, 2021-23<sup>(1)(a)(c)</sup>

Moldova	Nu	mber of pac	ks swaps		ND incidence in pack swaps <sup>(b)</sup>			
Region	2020	2021	2022	2023	2020	2021	2022	2023
Anenii Noi	-	35	39	33	-	0%	4%	11%
Mun. Bălți	-	73	77	78	-	0%	1%	1%
Briceni	-	34	33	35	-	13%	14%	21%
Basarabeasca	-	14	13	14	-	5%	9%	42%
Mun. Chişinău	-	335	336	334	-	2%	4%	4%
Cahul	-	54	54	53	-	1%	10%	1%
Călărași	-	32	32	34	-	2%	5%	28%
Cimișlia	-	25	26	24	-	0%	6%	30%
Criuleni	-	31	32	27	-	0%	3%	19%
Căușeni	-	40	43	41	-	0%	3%	11%
Cantemir	-	22	21	22	-	0%	20%	9%
Dubasari	-	10	12	10	-	0%	0%	26%
Dondușeni	-	17	16	22	-	0%	24%	15%
Drochia	-	36	33	34	-	4%	17%	35%
Edineț	-	34	35	35	-	6%	15%	18%
Fălești	-	35	33	39	-	0%	15%	25%
Florești	-	42	38	37	-	5%	10%	12%
Glodeni	-	23	21	26	-	5%	19%	16%
Hâncesti	-	48	48	49	-	0%	4%	10%
laloveni	-	48	44	45	-	0%	3%	5%
Leova	-	24	22	22	-	0%	3%	16%
Nisporeni	-	28	28	28	-	0%	14%	29%
Ocnița	-	24	23	20	-	2%	25%	28%
Orhei	-	56	59	54	-	3%	0%	0%
Râșcani	-	28	29	28	-	9%	2%	0%
Rezina	-	24	30	24	-	0%	1%	21%
Şoldănești	-	24	21	21	-	7%	0%	11%
Sângerei	-	37	37	39	-	0%	9%	4%
Soroca	-	41	40	39	-	0%	14%	9%
Strășeni	-	46	46	46	-	1%	6%	11%
Ştefan Vodă	-	27	33	29	-	0%	12%	7%
Telenești	-	28	22	29	-	4%	0%	16%
Taraclia	-	22	21	23	-	8%	13%	11%
Ungheni	-	66	66	66	-	6%	5%	21%
UTA Găgăuzia	-	71	69	70	-	2%	15%	17%
Total	-	1,534	1,532	1,530	-	2%	7%	12%

Note: (a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report (c) In 2021, Moldova switched from a PMI-commissioned empty pack survey to pack swap surveys commissioned by Big-4 industry participants. Therefore, given the change in methodology, only pack counts for 2021-23 are shown

Sources: (1) Ipsos Pack Swaps, 2021-2023



### Pack swap results by country (cont.)

#### Ukraine results by region, 2020-23<sup>(1)(a)(c)</sup>

Ukraine	Nu	mber of pac	ks swaps		C&C in	cidence in	pack swaps	(b)
Region	2020	2021	2022	2023	2020	2021	2022	2023
Cherkas`ka	334	1,071	224	362	2%	8%	12%	16%
Chernihivs`ka	275	302	98	265	2%	4%	8%	8%
Chernivets`ka	302	298	157	291	18%	18%	17%	28%
Dnipropetrovs`ka	1,230	1,256	552	796	9%	18%	38%	38%
Donets`ka	-	695	-	-	-	23%	-	-
Ivano-Frankivs`ka	388	451	258	490	2%	6%	4%	9%
Kharkivs`ka	914	1,072	266	478	14%	24%	26%	32%
Khersons'ka	521	392	-	-	5%	20%	0%	-
Khmelnyts`ka	353	368	213	405	20%	27%	32%	32%
Kiev	867	548	608	820	3%	15%	12%	9%
Kirovohrads`ka	308	453	155	286	5%	4%	30%	37%
Kyivs`ka	589	453	290	431	3%	6%	20%	15%
Luhans`ka	-	231	-	-	-	28%	-	-
Lvivs`ka	776	911	513	824	3%	14%	13%	20%
Mykolayivs`ka	522	421	-	106	5%	13%	-	-
Odes`ka	916	1034	408	557	10%	25%	33%	39%
Poltavs`ka	464	365	209	383	3%	8%	18%	19%
Rivnens`ka	280	405	193	357	8%	15%	25%	27%
Sums`ka	219	222	179	229	2%	25%	12%	15%
Ternopils`ka	360	250	147	307	0%	11%	24%	15%
Vinnyts`ka	639	289	299	481	3%	11%	13%	10%
Volyns`ka	237	285	145	328	-	2%	1%	1%
Zakarpats`ka	417	476	245	366	6%	9%	14%	5%
Zaporiz`ska	624	526	92	131	10%	24%	17%	23%
Zhytomyrs`ka	475	444	267	294	1%	7%	1%	4%
Total <sup>(d)</sup>	12,000	13,200	5,527	9,000	6%	16%	19%	20%

Note: (a) Only base survey data in the empty pack surveys have been summarised in the tables, i.e. 'focus' samples designed to investigate specific issues have been excluded as they do not form part of the national statistically representative sample; (b) ND incidence listed in this table is based on the number of Non-Domestic packs collected in the empty pack survey. It doesn't account for differences due to country and brand adjustments made as a part of this study. Therefore, this incidence may differ from the ND incidence stated elsewhere in this Report (c) Pack swap survey data for Ukraine does not contain information regarding the origin of packs collected. Therefore, inflows to Ukraine have not been broken down by origin and ND(L) inflows cannot be estimated and therefore all ND incidence is C&C incidence (d) Total number of packs at regional level have been calculated using the total number of pack swaps in Ukraine multiplied by regional incidence of DP and DNP packs. Due to rounding off error of regional incidence, sum of all regional packs may differ with total number of pack swaps in Ukraine

Sources: (1) Kantar Pack Swaps, 2020-2023



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The sources listed below are those used only in this year's analysis and reporting. Sources for analysis and findings for previous years can be found in previous year reports.

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### Sources (cont.)

#### Data sources

The sources listed below are those used only in this year's analysis and reporting. Sources for analysis and findings for previous years can be found in previous year reports.

#### Sources

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### **Scope of work**

Estimating the size, nature and financial impact (i.e., equivalent tax value) of illicit consumption of cigarettes in the EU27, the UK, Norway, Switzerland, Moldova, Ukraine, Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia and Kosovo for the calendar year 2023

#### Methodology and Reporting

- 1. The purpose of the study is to consider and comment on:
  - a) the estimated size and composition of the total cigarette market (including counterfeit and contraband products), for each of the 27 EU member states, the UK, Norway, Switzerland, Moldova, Ukraine, Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia and Kosovo for 2023
- 2. The Contractor will prepare a Report which will be provided in PDF format which covers the results of the analysis undertaken as set out below:
  - a) The findings from the work on the 38 markets will be used both individually and to produce a summary covering an overall view of the total market for Europe (with the UK, Norway, Switzerland, Moldova, Ukraine, Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia and Kosovo to be included in any individual country figures quoted), and an analysis of sources of illicit manufactured cigarettes, including reference to specific source countries and free trade zones where appropriate. The Contractor will also provide a section in the Report on counterfeit and contraband flows for each of the 38 markets.
  - b) Each market section will consist of the equivalent of four pages if printed and will include a table detailing total manufactured cigarette consumption from 2019 to 2023, along with charts showing the Non-Domestic Legal (ND(L)) and Counterfeit & Contraband (C&C) volumes by source country and by brand. The commentary will be brief and factual and will source publicly available data on tobacco prices, traveller data and total tobacco consumption where relevant. The commentary will also source other quantitative and qualitative research and analysis as deemed necessary, for example to in relation to trends in C&C.
  - c) The Contractor's analysis of the cigarette market will be based on a methodology that incorporates primary research, market analysis, existing industry surveys and other sources of data.
- For each of the 38 markets, the Contractor will use in-market cigarette sales data provided by PMPSA to
  estimate Legal Domestic Sales and estimate Legal Domestic Consumption by subtracting outflows to
  other markets based on the results of Empty Pack Surveys provided by PMPSA.
- The Contractor will analyse the results of the Empty Pack Surveys to estimate the level of Non-Domestic cigarette inflows for each market, which will then be added to Legal Domestic Consumption to estimate Total Consumption.
- Using publicly available data, the Contractor will analyse tourism flows, smoking incidence, cigarette purchase limits for travellers and border sales data to estimate the proportion of Non-Domestic inflows that could be considered to be legal, and as a direct result provide an estimate of the level of counterfeit and contraband for each of the 38 markets.
- The steps above will be undertaken to simultaneously analyse the inflows and outflows between all of the 38 markets using Excel and Alteryx analytical tools, which have been specifically developed for this purpose by the Contractor and are consistent with those used in previous engagements for the Client, using the data sources above.
- Additional data sources may be used to refine the Contractor's analysis.



### Scope of work (cont.)

- The Contractor will request meetings or interviews with Law Enforcement representatives to discuss the Contractor's initial findings and other relevant information regarding illicit cigarette consumption. Where Law Enforcement representatives agree to participate in such meetings or interviews the Contractor will, where appropriate, include in the Report, with their permission, a high-level aggregated summary of trends in illicit consumption that they have highlighted.
- The Contractor will set out the estimation process in detail in a methodology section in the Report.
- The Contractor will also conduct analysis on illicit whites. This will be reported in the consolidated section of the Report.





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**Document Classification: KPMG Public** 

CREATE: CRT148567A