



A study of the illicit cigarette market  
in the European Union, Norway and Switzerland

**2014 Results**





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- Nothing in this Report constitutes legal advice. Information sources, the scope of our work, and scope and source limitations, are set out in the Appendices to this Report. The scope of our review of the contraband and counterfeit segments of the cigarette market within the 28 EU Member States, Switzerland and Norway was fixed by agreement with the Beneficiaries and is set out in the Appendices.
- We have satisfied ourselves, so far as possible, that the information presented in this Report is consistent with our information sources but we have not sought to establish the reliability of the information sources by reference to other evidence.
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GLOSSARY	
<b>Average Daily Consumption</b>	Daily average consumption by the adult population
<b>BAT</b>	British American Tobacco plc
<b>Bn</b>	Billion
<b>C&amp;C</b>	Counterfeit and Contraband, including Illicit Whites
<b>CAGR</b>	Compound Annual Growth Rate
<b>Cigarette</b>	Any factory-made product that contains tobacco and is intended to be burned under ordinary conditions of use
<b>Cigarillos</b>	A short, narrow cigar, which, like cigarettes, is often machine-made and sold in packs
<b>Consumption</b>	Actual total consumption of cigarettes in a market, including Legal Domestic Consumption (LDC) and illicit products as well as those legally purchased overseas
<b>Contraband (CB)</b>	Genuine products that have been either bought in a low-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
<b>Counterfeit (CF)</b>	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 participating manufacturers of BAT, ITL, JTI and PMI. No other counterfeit is included in the volumes reported due to lack of information
<b>Country of origin</b>	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 tax stamp is not shown, on the health warning and packaging characteristics
<b>Domestic Whites</b>	Domestic Whites are packs of domestic market variant, but those that are priced below the minimum tax yield. These products are treated as having not been legally sold in the country in question, and have therefore been reclassified as non-domestic
<b>Duty Free</b>	Cigarettes bought without payment of customs or excise duties. Consumers may buy Duty Free Cigarettes when travelling into or out of the EU (including Switzerland and Norway) by land, air or sea at legal Duty Free shops
<b>EPS</b>	Empty Pack Survey
<b>EU</b>	European Union
<b>EU Flows Model</b>	The primary methodology for measuring consumption in a market. The model has been developed by KPMG on a bespoke basis for the specific purpose of measuring inflows and outflows of cigarettes in the scope of this project
<b>Green Leaf</b>	Uncut dried tobacco leaf, which smokers cut themselves
<b>Illicit Whites</b>	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
<b>IMS</b>	In Market Sales (the primary source of legal domestic sales volumes)
<b>Inflows/Outflows</b>	Inflows of non-domestic product into a market / outflows of product from a market
<b>ITL</b>	Imperial Tobacco Limited
<b>JTI</b>	JT International SA
<b>LDC</b>	Legal Domestic Consumption is defined as Legal Domestic Sales (LDS) net of outflows





GLOSSARY	
<b>LDS</b>	Legal Domestic Sales – sales of genuine domestic product through legitimate, domestic channels based on In Market Sales (IMS) data
<b>Mn</b>	Million
<b>MPPC</b>	Most popular price category
<b>MYO</b>	Make Your Own tobacco products
<b>ND</b>	Non-Domestic product – product that originates from a different market than the one in which it is consumed
<b>ND(L)</b>	Non-Domestic (Legal) – product that is brought into the market legally by consumers, such as during a cross-border trip
<b>NMA / TMA</b>	National Manufacturers Association / Tobacco Manufacturers Association
<b>OTP</b>	Other Tobacco Products (RYO/MYO, cigarillos, portions, rolls and cigars; excluding smokeless tobacco and water-pipe tobacco)
<b>PMI</b>	Philip Morris International Management SA
<b>RYO</b>	Roll Your Own tobacco products
<b>Smoking prevalence</b>	The percentage of smokers in the total adult population
<b>Tobacco taxes</b>	The sum of all types of taxes levied on tobacco products. 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
<b>Under Declaration</b>	Tobacco products that are produced and distributed in the same country, a portion of which is not declared to the domestic tax authorities
<b>Unspecified</b>	Unspecified market variant refers to cigarette packs which do not bear specific market labelling or Duty Free labelling
<b>WAP</b>	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
<b>WTO</b>	World Tourist Organisation





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# EXECUTIVE SUMMARY

## KEY FINDINGS

### Counterfeit and contraband (C&C) consumption declined 3.3% in volume in 2014

- C&C consumption declined from 58.6 billion to 56.6 billion, equating to 10.4% of total consumption in 2014
- C&C remained high in countries which border lower-priced non-EU markets
- The UK, Greece and Italy all saw significant C&C growth

### As prices have risen in the EU, illicit flows from outside of the EU increased from 37.3 billion in 2009 to 44.6 billion in 2014

- Flows from outside the EU grew by 10% in 2014 largely offsetting an intra-EU decline
- Prices within the EU, especially in the Eastern EU, grew rapidly in order to meet the EU minimum excise requirements by latest 2018
- Flows of C&C between countries within the EU has fallen, equating to less than 15% of total illicit flows

### Illicit Whites grew in volume and are proliferating across the EU

- Illicit Whites brand flows grew by 8% to 21.2 billion cigarettes in 2014 and accounted for 37% of total C&C
- Fest, American Legend and Jin Ling are the most prevalent Illicit White brand flows
- Illicit Whites brand flows consumption was most prevalent in Poland, Italy, Spain and Greece

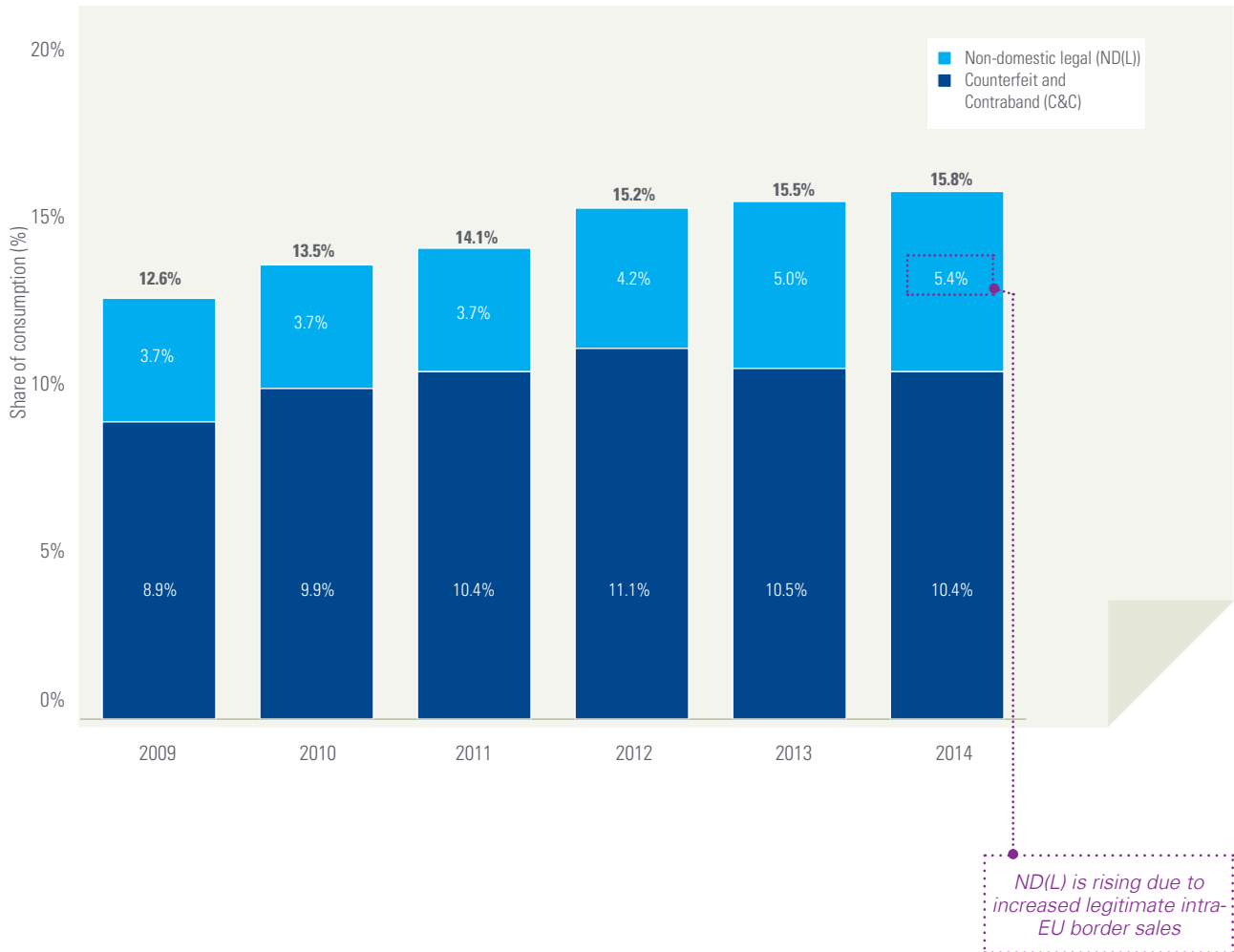




## EUROPEAN MARKET OVERVIEW

Overall consumption of EU counterfeit and contraband declined from 10.5% to 10.4%

ND(L) and C&C share of total consumption 2009-2014<sup>(1)(a)(b)(c)</sup>



ND(L) AND C&C VOLUMES (BN CIGARETTES)							
	2009	2010	2011	2012	2013	2014	2013-14%
ND(L) volume	25.0	23.7	23.3	24.8	27.8	29.7	6.7%
C&C volume	61.1	64.2	65.3	65.7	58.6	56.6	(3.3%)

Notes: (a) 2013 and 2014 share of consumption and volume includes Croatia

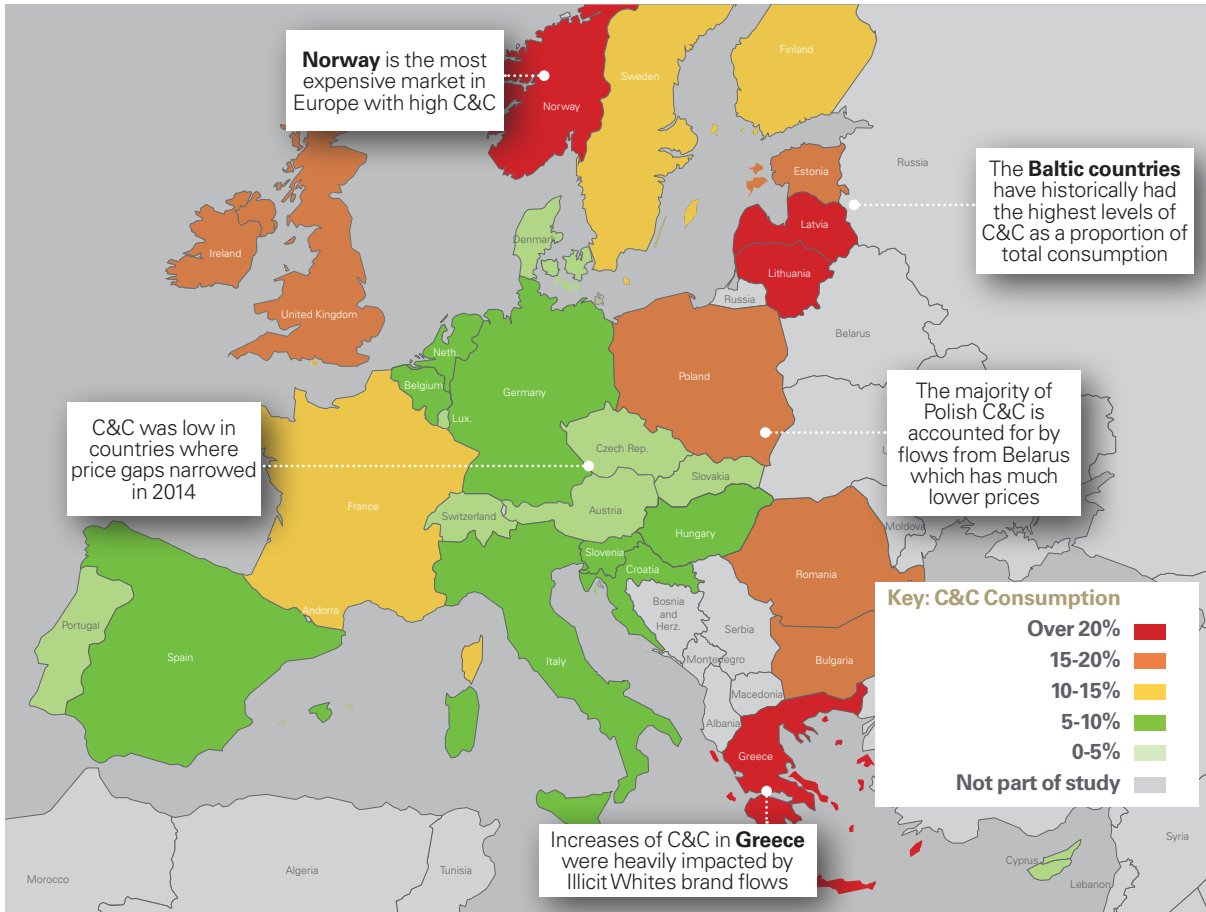
Source: (1) EU Flows Model 2009 - 2014



# EUROPEAN MARKET OVERVIEW

Many of the countries with the highest C&C consumption are in the eastern EU, bordering with cheaper priced non-EU countries

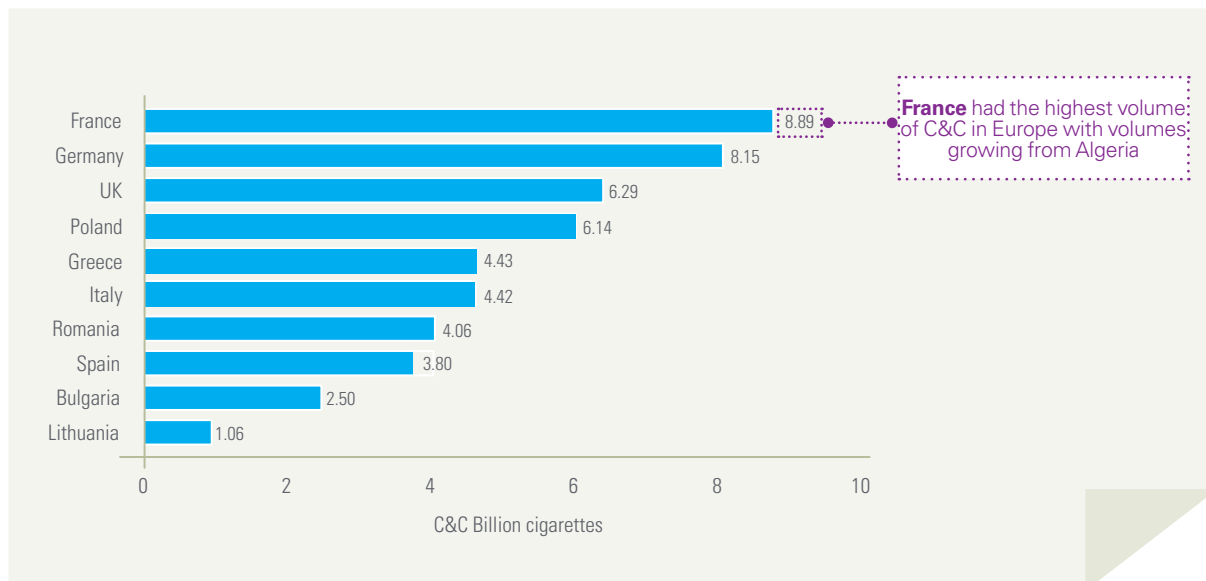
C&C consumption as a percentage of overall consumption 2014<sup>(1)</sup>



EXECUTIVE SUMMARY



Top 10 C&C countries by volume, 2014<sup>(1)</sup>



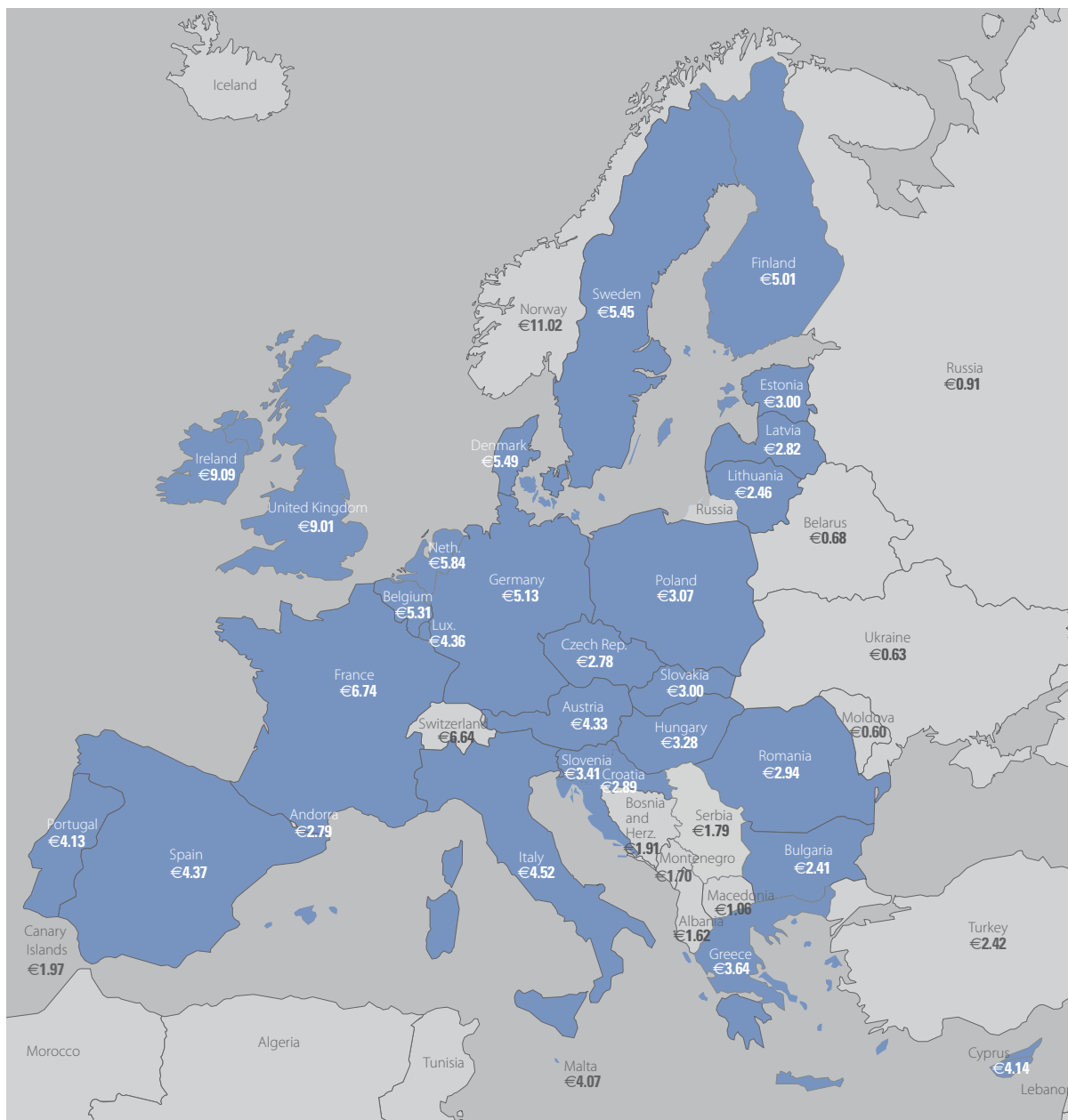
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Source: (1) KPMG EU Flows Model 2014

## EUROPEAN MARKET OVERVIEW

Price rises in many countries in the eastern EU resulted in narrowing price gaps within the EU, but wider price and tax differences with non-EU countries

Map denotes weighted average prices for a pack of 20 cigarettes - End of 2014<sup>(1)(a)(b)(c)</sup>



**Key:**

EU countries ■  
 Non-EU countries ■

Notes: (a) For countries not included in the EU Tax Tables, participating manufacturer estimates based on the price of the most-sold brand have been used

(b) Price rises in Belarus have been lower than those of neighbouring EU markets. This may be driving cross border flows

(c) Average prices in Ukraine and Russia measured in Euros will be affected by sizeable currency devaluations

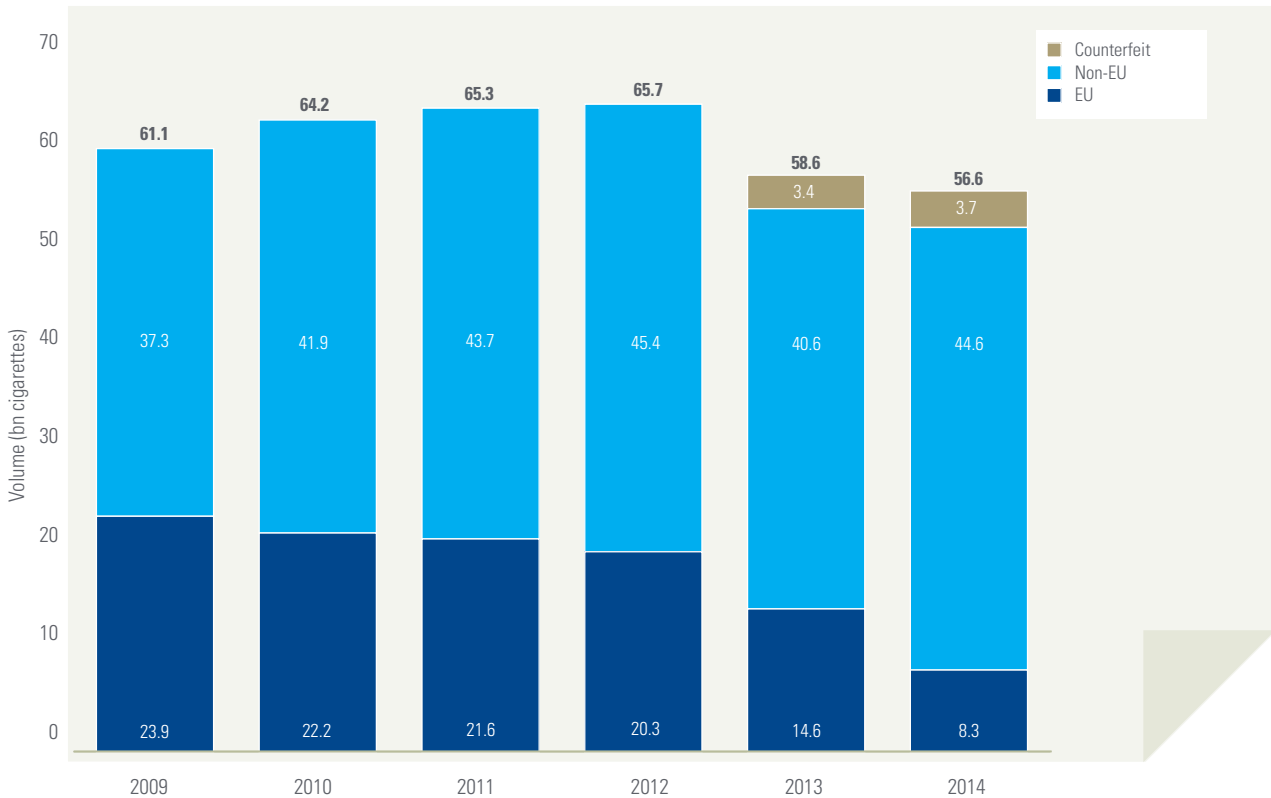
Source: (1) EU Tax Tables and pricing information on most-sold brands outside of EU





C&C from non-EU countries continued to increase. In 2014, non-EU countries contributed over 85% of all C&C, compared with less than 60% in 2009

C&C volume by source - 2009-2014<sup>(1)</sup>



- The growth in non-EU sourced C&C came largely from brands with no country-specific labelling, as well as from Belarus and Algeria
- The decline of intra-EU C&C since 2009 has been partially attributed to improved supply chain controls implemented under Cooperation Agreements with the European Commission:

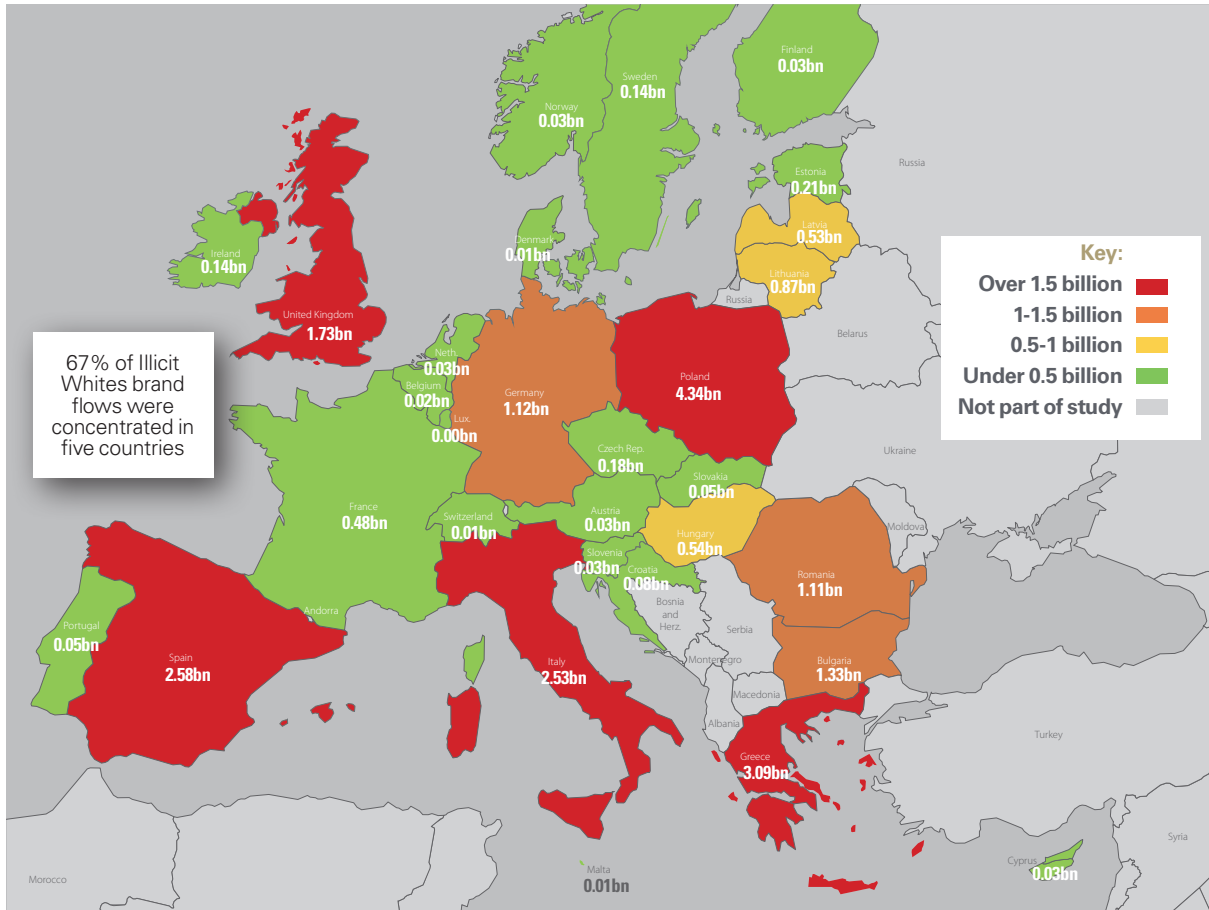
*"The measures implemented by the four big manufacturers under the Cooperation Agreements, such as tracking and tracing of tobacco products, due diligence in relation to customers and prevention of money laundering, have clearly led to a significant reduction in the presence of these companies' products on the illicit market"* European Commission<sup>(2)</sup>

Sources: (1) EU Flows Model 2009 - 2014 (2) Communication from the Commission to the Council and the European Parliament Stepping up the fight against cigarette smuggling and other forms of illicit trade in tobacco products - A comprehensive EU Strategy, Section 2.5 p.8.

## EUROPEAN MARKET OVERVIEW

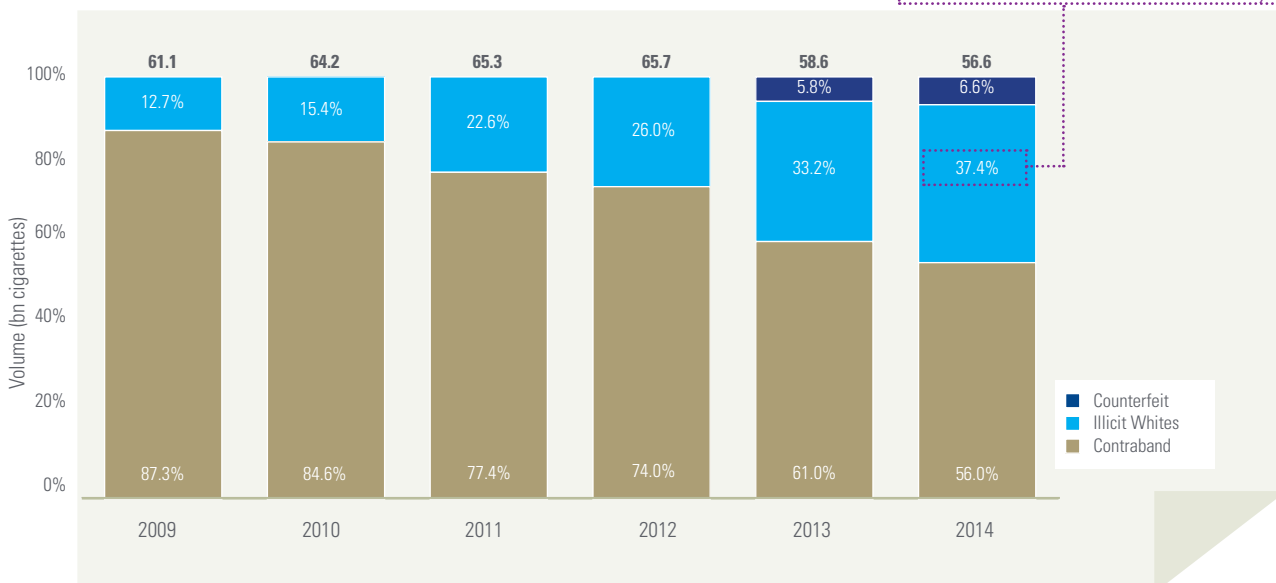
Illicit Whites were a growing component of C&C, comprising 37% of C&C in 2014

Illicit Whites brand flows, Volume - 2014<sup>(1)</sup>



EU C&C composition - 2009-2014<sup>(1)</sup>

2014 saw the highest percentage of Illicit Whites brand flows in the study.



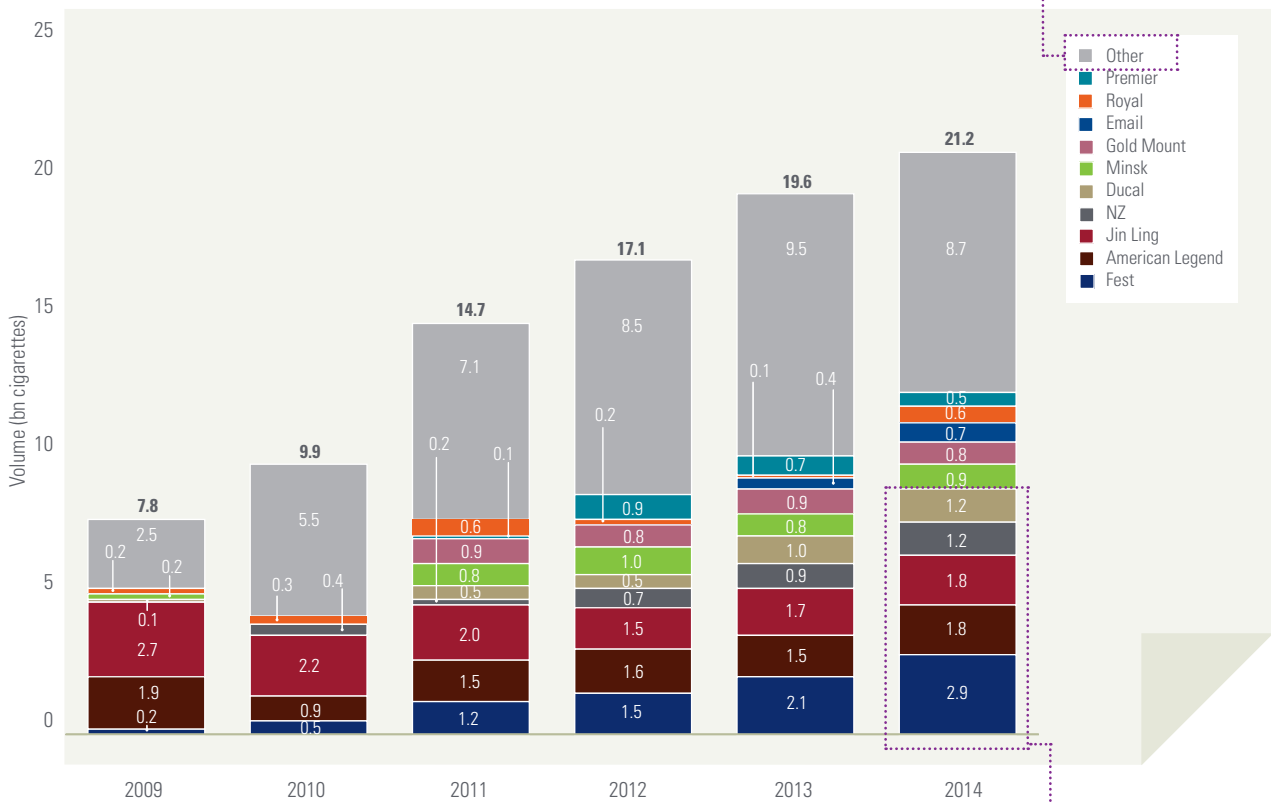
Source: (1) EU Flows Model 2009 - 2014



# EUROPEAN MARKET OVERVIEW

Increased Illicit Whites flows were driven by increases in some of the largest brand flows

Illicit Whites brand flows by brand - 2009-2014<sup>(1)(a)</sup>



Number of other brands identified in Illicit Whites flows totalled 303 in 2014

The five largest Illicit Whites brand flows increased in volume terms from 35% to 42% of the total in 2014

EXECUTIVE SUMMARY



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Note: (a) Excludes Norway and Switzerland  
 Source: (1) EU Flows Model 2009 - 2014



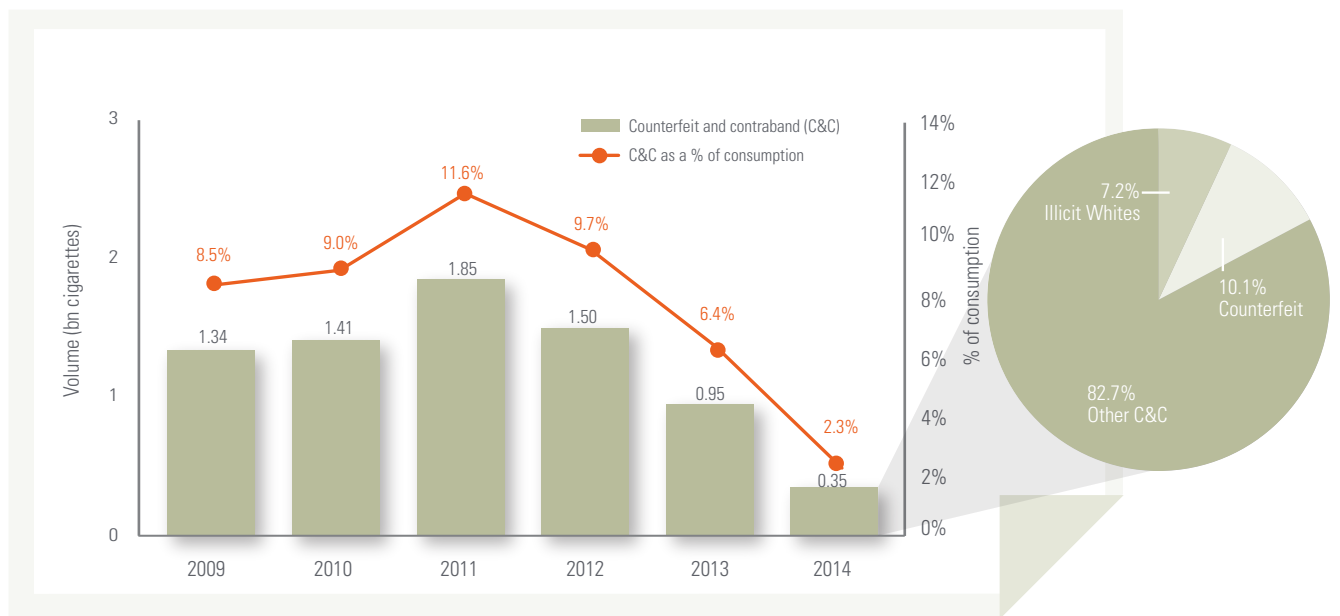


# AUSTRIA



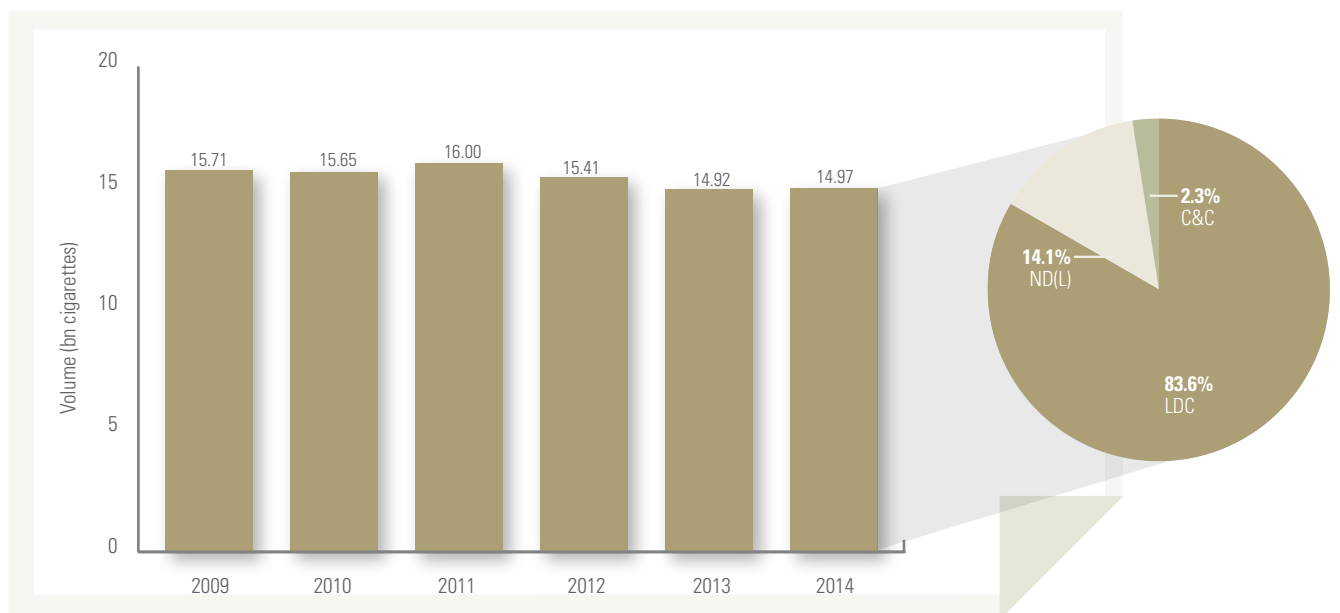
Inflows came mainly from lower priced neighbouring markets

Manufactured cigarette C&C volumes and share of overall consumption - 2009-14



AUSTRIA

Manufactured cigarette consumption - 2009-14





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# KEY INFLOWS AND OUTFLOWS



AUSTRIA  
  
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Main outflow   
Main inflow 

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

Source: (1) KPMG EU Flows Model

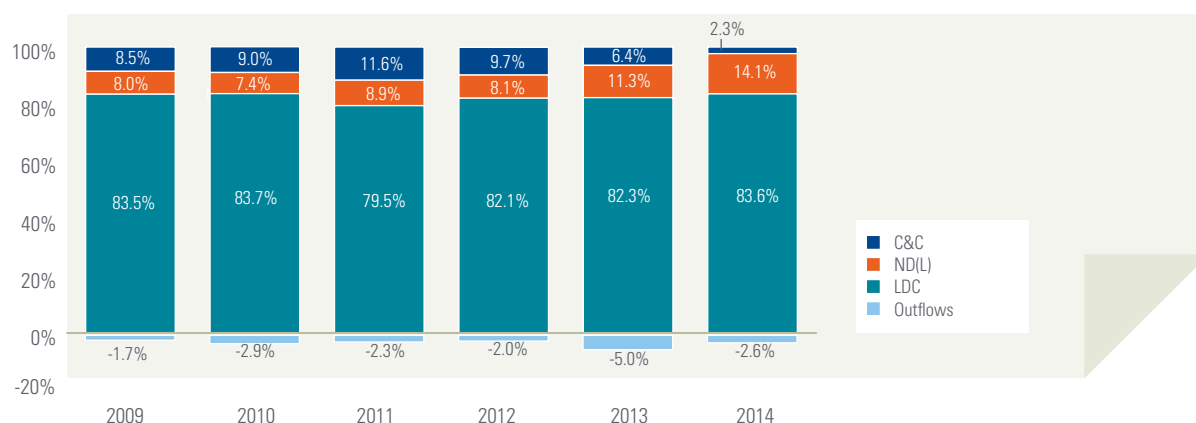


# C&C volumes declined against a background of narrowing price gaps with surrounding EU countries

## Total manufactured cigarette consumption – Austria<sup>(1)(2)(a)</sup>

TOTAL AUSTRIA CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	13.39	13.54	13.09	12.96	13.04	12.90	(1%)
Outflows	-0.27	-0.45	-0.36	-0.31	-0.75	-0.38	(50%)
Legal domestic consumption (LDC)	13.12	13.09	12.72	12.65	12.29	12.52	2%
Non-domestic legal (ND(L))	1.25	1.15	1.43	1.25	1.69	2.11	25%
Counterfeit and contraband (C&C)	1.34	1.41	1.85	1.50	0.95	0.35	(63%)
Total non-domestic	2.59	2.56	3.28	2.76	2.64	2.46	(7%)
<b>Total consumption</b>	<b>15.71</b>	<b>15.65</b>	<b>16.00</b>	<b>15.41</b>	<b>14.92</b>	<b>14.97</b>	<b>0%</b>

## Share of Austria manufactured cigarette consumption by type 2009-2014<sup>(1)(2)</sup>



### Overall consumption remained stable as cross-border shopping replaced illegal inflows

- Legal domestic sales remained stable as average prices grew 3.6% to €4.33<sup>(3)</sup>
- The fall in outflows was driven by declines in product flows to Germany
- Moderate economic growth may have impacted the decline in C&C volumes<sup>(4)(5)</sup>

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used  
 Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Fact book 2008-2013 and national visitor number statistics and EU flows model (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) 2014 Economist Intelligence Unit (5) 2014 Euromonitor

## InfloWS were largely from neighbouring lower-priced countries

### Total inflows by country of origin - 2009-2014<sup>(1)(a)</sup>

ND INFLOWSTO AUSTRIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Slovenia	0.79	0.85	1.04	0.83	0.68	0.74
Hungary	0.48	0.48	0.99	0.86	0.71	0.56
Czech Republic	0.23	0.25	0.47	0.41	0.61	0.47
Germany	0.06	0.07	0.05	0.05	0.05	0.14
Duty Free	0.22	0.12	0.11	0.07	0.12	0.13
Other	0.77	0.77	0.57	0.50	0.44	0.35
<b>Total inflows</b>	<b>2.59</b>	<b>2.56</b>	<b>3.28</b>	<b>2.76</b>	<b>2.64</b>	<b>2.46</b>

#### Overall non-domestic inflows declined by 7% driven by lower inflows from Hungary and the Czech Republic as price differences decreased and the legal allowance was reduced to 300 cigarettes

- The decline in inflows from Hungary may have been impacted by a decline in price difference which fell from €1.22 to €1.05 in 2014<sup>(2)</sup>
- Slovenian inflows grew despite a small increase in average prices from €0.91 to €0.92<sup>(2)</sup>

### Total outflows by destination country – 2009-2014<sup>(1)</sup>

OUTFLOWS FROM AUSTRIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Germany	0.18	0.33	0.28	0.18	0.62	0.27
Hungary	0.00	0.00	0.00	0.01	0.02	0.02
Netherlands	0.00	0.05	0.02	0.03	0.03	0.02
Other	0.09	0.07	0.06	0.09	0.09	0.07
<b>Total outflows</b>	<b>0.27</b>	<b>0.45</b>	<b>0.36</b>	<b>0.31</b>	<b>0.75</b>	<b>0.38</b>

#### Overall non-domestic outflows declined by 50%, primarily driven by Germany

- Outflows represent a small proportion of overall consumption as most of Austria's neighbouring countries have lower-priced cigarettes

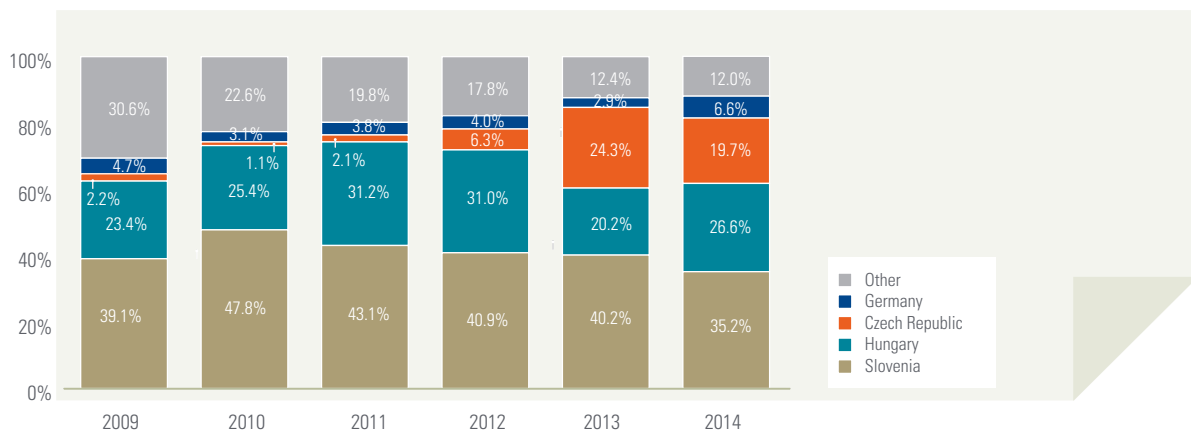
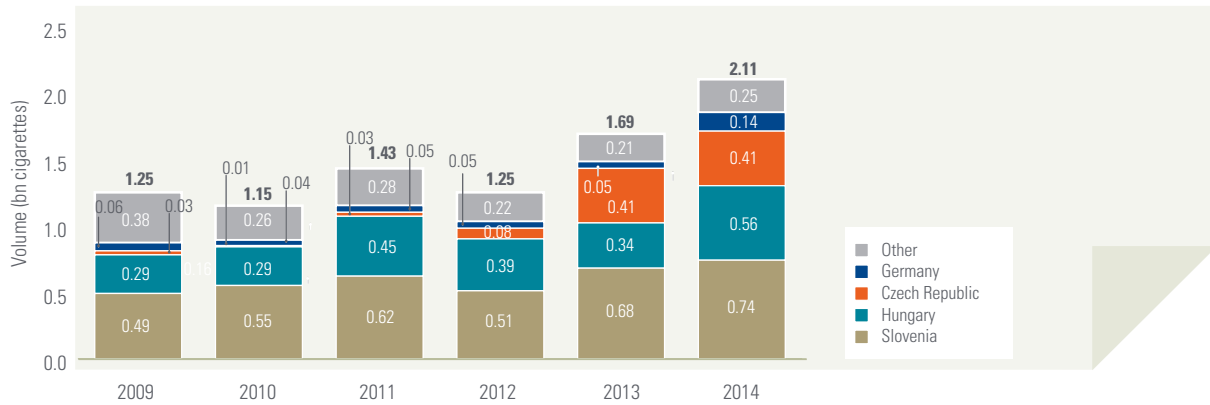
Note: (a) The Duty Free inflow contains both "other" Duty Free product and Illicit Whites which have Duty Free labelling

Sources: (1) KPMG EU Flows Model

(2) EC Excise Duty tables (Part III – Manufactured Tobacco)

# Increased travel to neighbouring countries underpinned growth in legal inflows

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



AUSTRIA



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**Approximately 80% of legal inflows came from Slovenia, Hungary and the Czech Republic as a result of cross-border shopping**

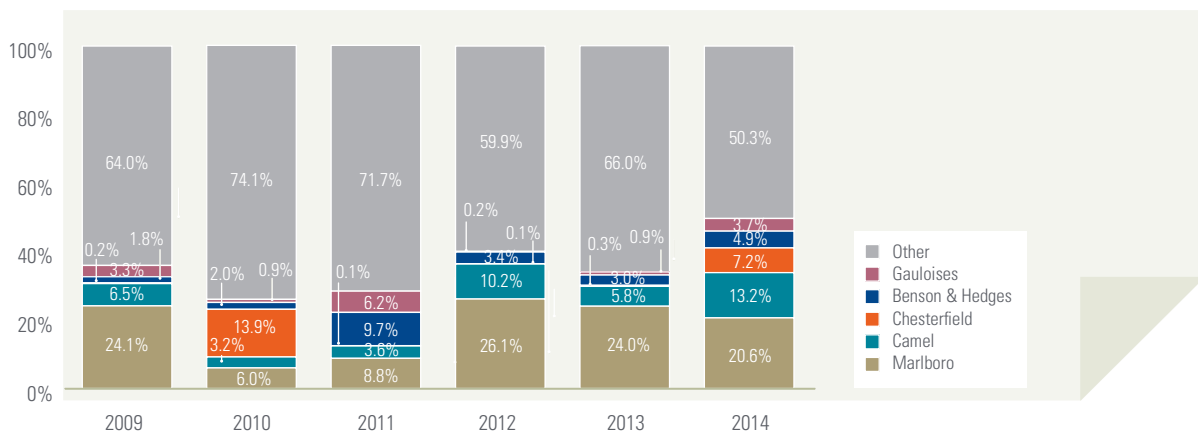
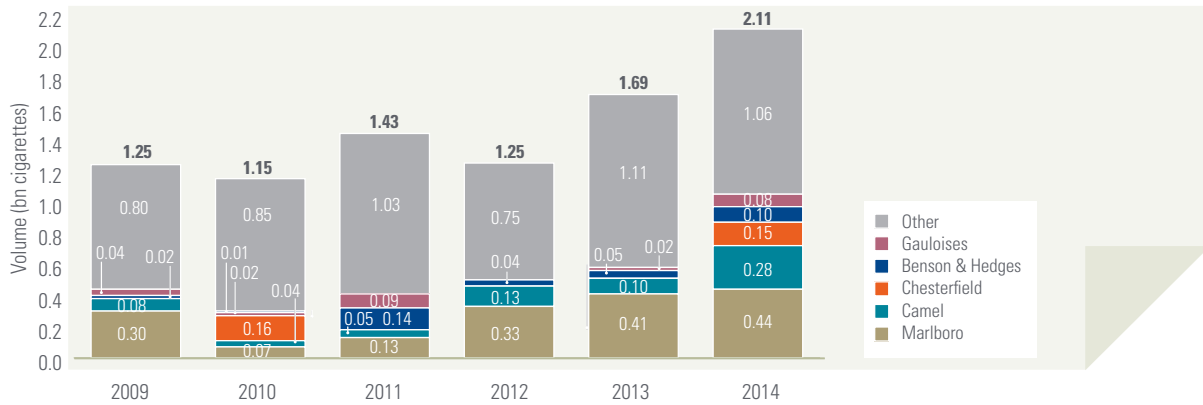
- Travel flows between Austria and Slovenia grew by 4%<sup>(1)</sup>
  - Slovenia was the biggest source of legal Marlboro inflows
- ND(L) volumes from Hungary increased despite a decline in the overall inflow. This increase was also influenced by a change in methodology in 2014 which saw the inflow categorised as 100% legal<sup>(b)</sup>
  - The growth in Hungarian inflows drove the increase in legal inflows of Camel and Chesterfield

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# NON-DOMESTIC LEGAL INFLOWS BY BRAND

Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>



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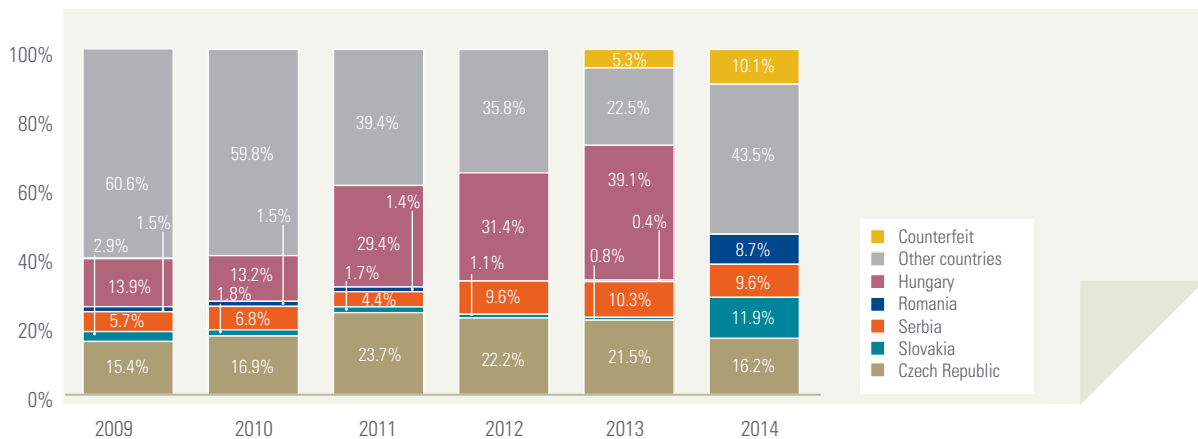
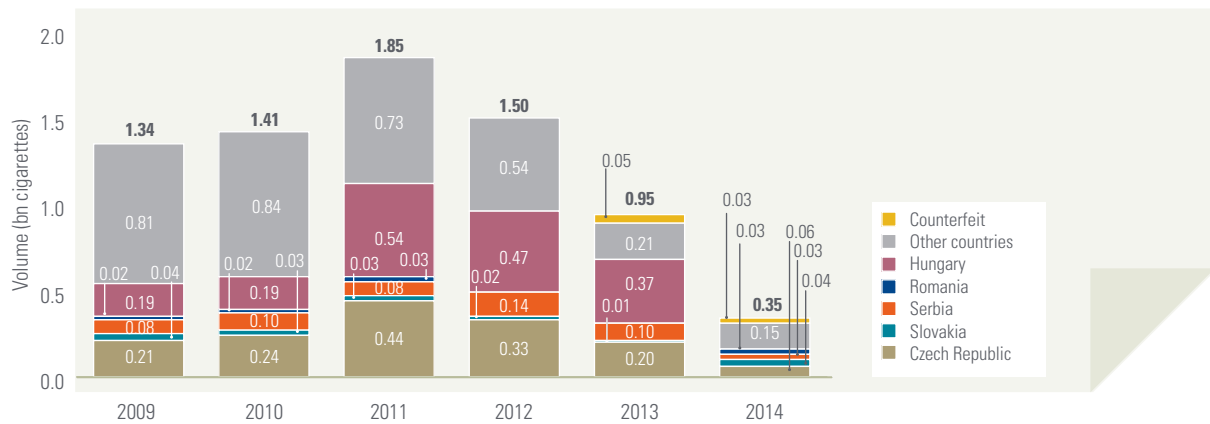
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# C&C volumes predominantly consisted of flows from non-EU countries

Total C&C by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



AUSTRIA



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### Flows from non-EU countries accounted for 63% of total C&C

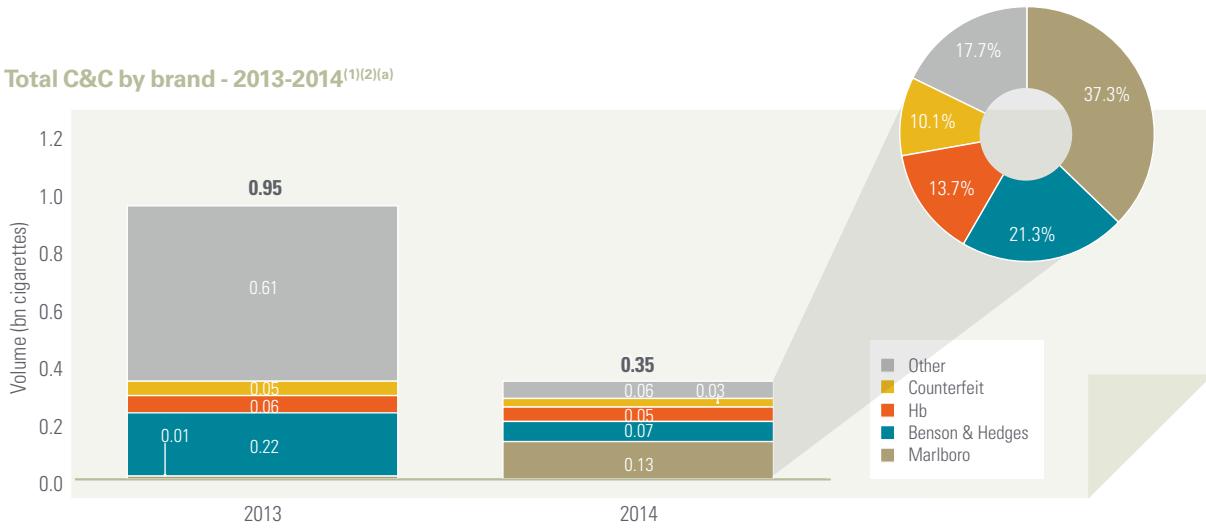
- Price differences with the Czech Republic and Slovakia are sufficient to support small C&C volumes
  - Approximately half of the illicit Benson & Hedges inflow came from the Czech Republic
  - Winston was the largest brand from Slovakia
- The majority of the Serbian inflow is classified as illicit due to limited travel flows between the two countries
  - Marlboro accounted for around a quarter of the Serbian inflow
- If the total volume of C&C had been consumed legally within the Austrian market, an additional tax revenue of approximately €56m would have been raised by the Austrian Treasury<sup>(3)</sup>

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) The decline in C&C may have been impacted by a change in methodology for calculating ND(L), which is now done on the basis of travel flows instead of consumer research

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

# C&C INFLOWS BY BRAND

Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>



Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

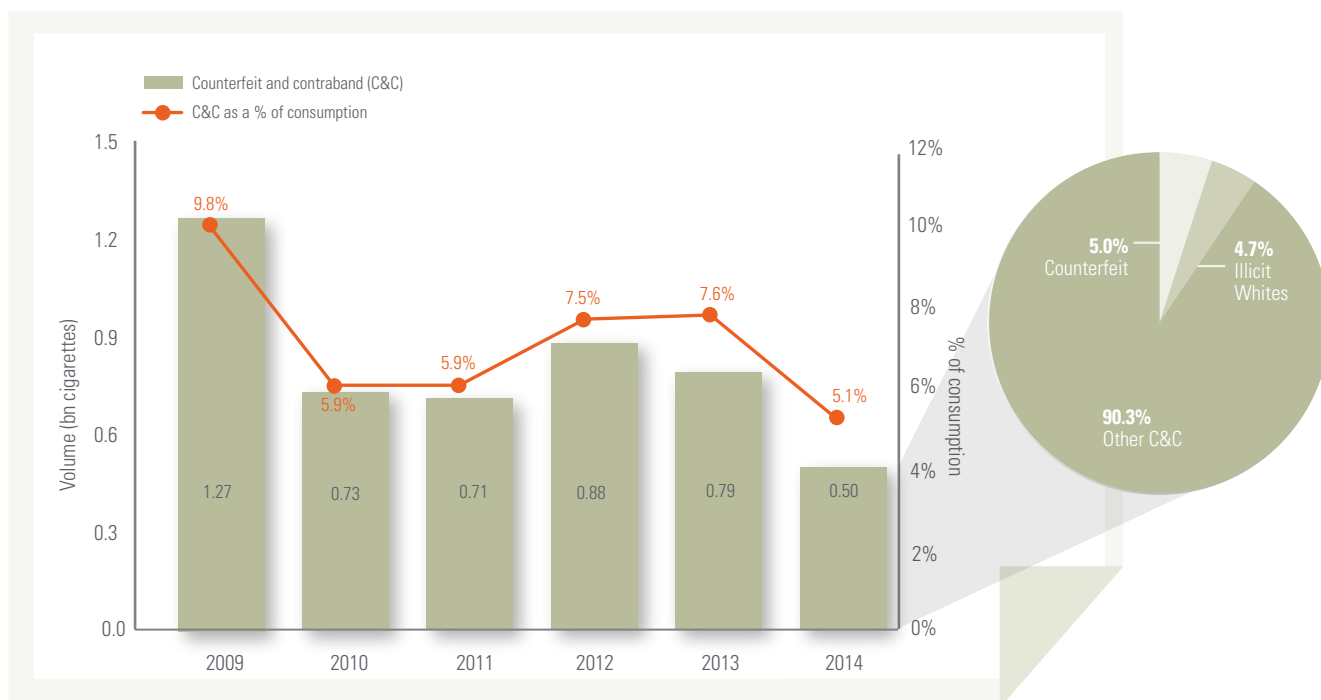
Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
 (2) KPMG analysis of data sources provided by manufacturers

# BELGIUM



Belgium has large outflows to surrounding more expensive markets

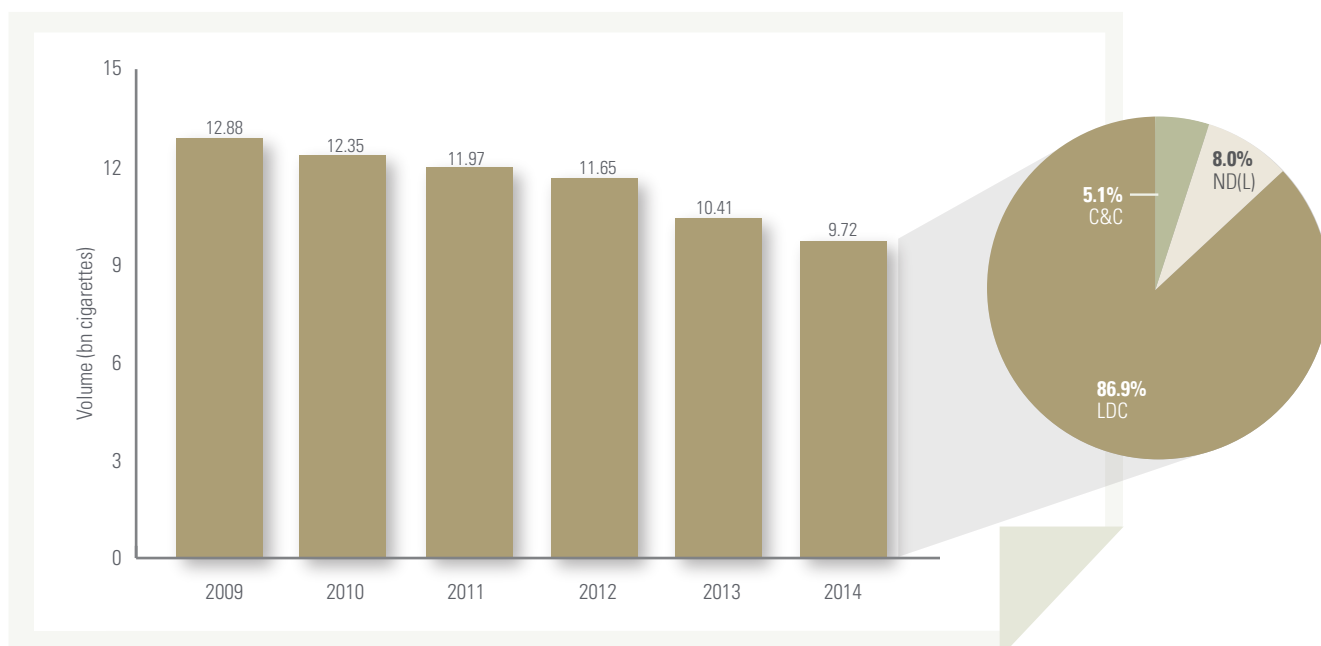
Manufactured cigarette C&C volumes and share of overall consumption - 2009-14



BELGIUM

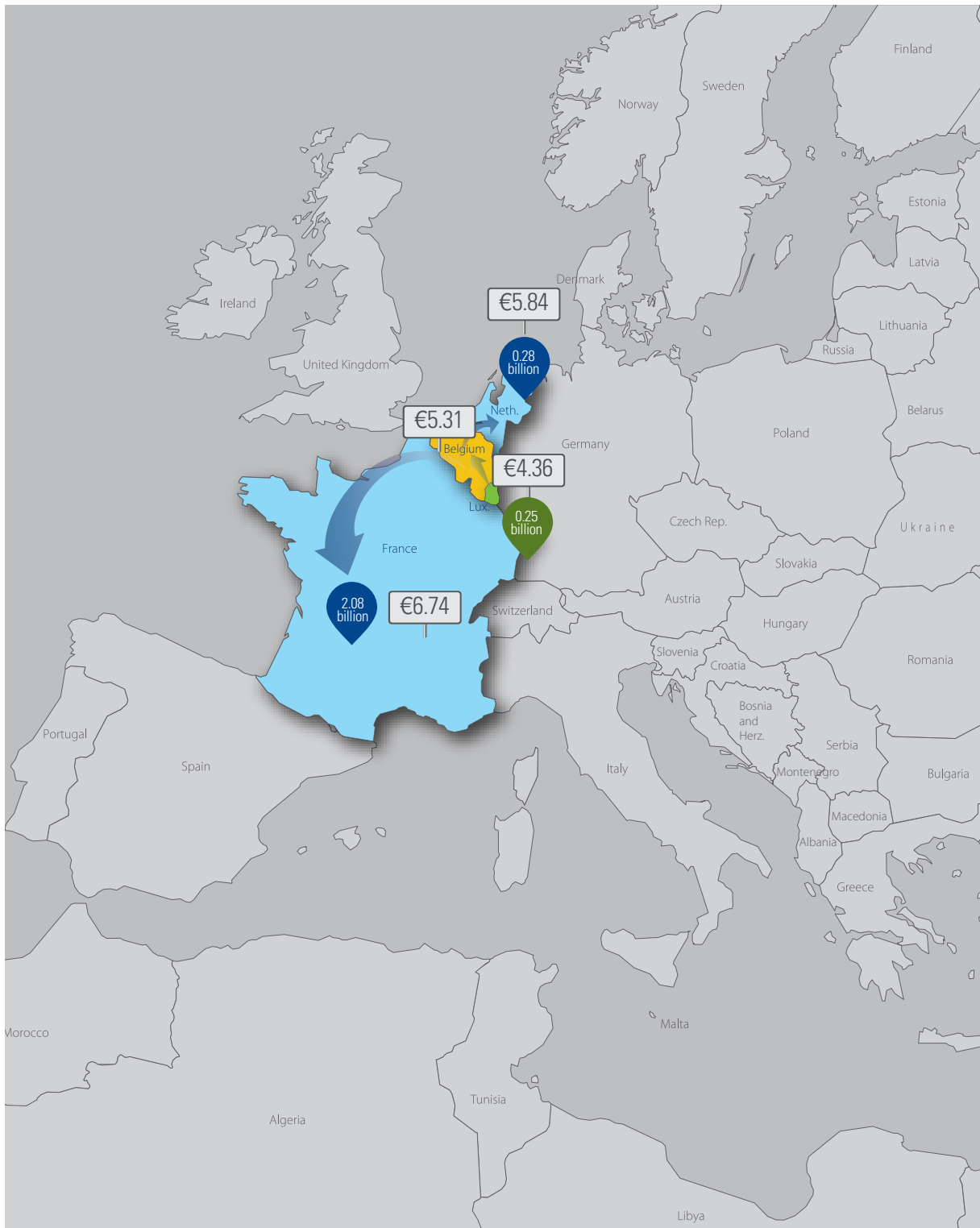


Manufactured cigarette consumption 2009-14





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# KEY INFLOWS AND OUTFLOWS




  
 BELGIUM
   

  
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Main outflow 
  
 Main inflow 

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

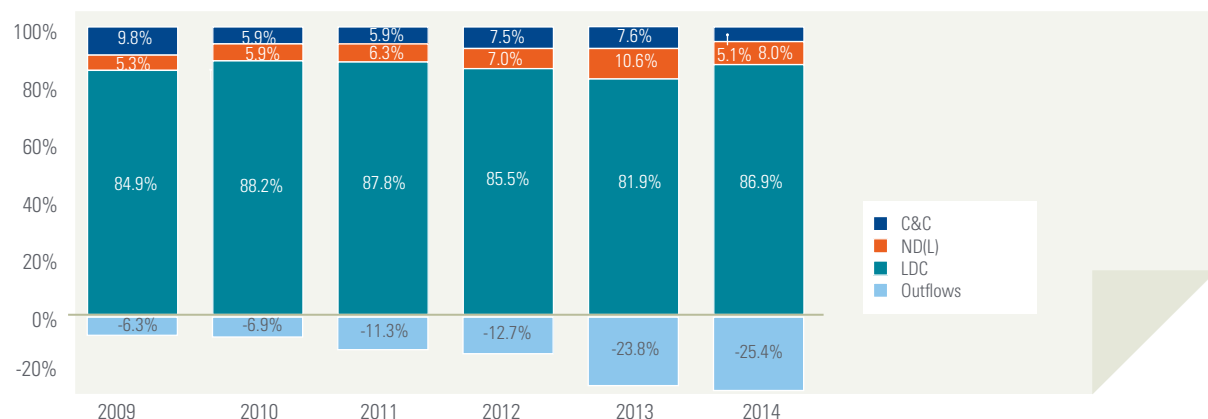
Source: (1) KPMG EU Flows Model

# Cigarette consumption fell as a result of declines in non-domestic consumption

Total manufactured cigarette consumption - Belgium<sup>(1)(2)(a)</sup>

TOTAL BELGIUM CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	11.74	11.73	11.86	11.44	11.00	10.92	(1%)
Outflows	-0.81	-0.85	-1.35	-1.48	-2.48	-2.47	(0%)
Legal domestic consumption (LDC)	10.93	10.89	10.50	9.96	8.52	8.45	(1%)
Non-domestic legal (ND(L))	0.68	0.73	0.76	0.81	1.10	0.78	(29%)
Counterfeit and contraband (C&C)	1.27	0.73	0.71	0.88	0.79	0.50	(37%)
Total non-domestic	1.95	1.46	1.46	1.69	1.89	1.27	(33%)
<b>Total consumption</b>	<b>12.88</b>	<b>12.35</b>	<b>11.97</b>	<b>11.65</b>	<b>10.41</b>	<b>9.72</b>	<b>(7%)</b>

Share of Belgium cigarette consumption by type - 2009-2014<sup>(1)(2)</sup>



**Whilst legal domestic consumption declined by 1% in 2014, consumption of C&C product declined by 37%**

- The decline in legal domestic sales was influenced by an 8.7% increase in the average price, whilst the decline in C&C inflows may have been impacted by improved effectiveness of Belgian Customs<sup>(3)</sup>
- The decline in consumption may also be explained by consumers switching to OTP products

**Outflows, in particular to Northern France, account for 25.5% of legal domestic sales**

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used  
 Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) EC Excise Duty tables (Part III – Manufactured Tobacco)



## Belgium continued to have high outflows in 2014, mainly to France

### Total inflows by country of origin - 2009-2014<sup>(1)(a)(b)</sup>

ND INFLOWSTO BELGIUM						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Luxembourg	0.12	0.23	0.47	0.51	0.42	0.25
Duty Free	0.37	0.27	0.18	0.20	0.22	0.20
Italy	0.01	0.02	0.01	0.01	0.03	0.11
Netherlands	0.11	0.13	0.06	0.04	0.17	0.08
France	0.16	0.07	0.06	0.09	0.29	0.07
Poland	0.07	0.08	0.10	0.17	0.09	0.07
Other	1.10	0.66	0.59	0.67	0.67	0.50
<b>Total inflows</b>	<b>1.95</b>	<b>1.46</b>	<b>1.46</b>	<b>1.69</b>	<b>1.89</b>	<b>1.27</b>

### Overall non-domestic inflows declined by 33%, mainly as a result of declines from the surrounding countries of France, Luxembourg and the Netherlands

- Of these three markets, Luxembourg was the only market with lower prices and the price difference did increase in 2014
- There was an increase of flows from Italy, a lower-priced market which was also supported by increases in tourism

### Total outflows by destination country – 2009-2014<sup>(1)(c)</sup>

OUTFLOWS FROM BELGIUM						
Billion cigarettes	2009	2010	2011	2012	2013	2014
France	0.48	0.43	0.90	1.01	2.00	2.08
Netherlands	0.15	0.24	0.29	0.32	0.38	0.28
UK	0.09	0.04	0.08	0.08	0.04	0.03
Other	0.09	0.15	0.08	0.08	0.06	0.09
<b>Total outflows</b>	<b>0.81</b>	<b>0.85</b>	<b>1.35</b>	<b>1.48</b>	<b>2.48</b>	<b>2.47</b>

### Outflows remained stable despite price increases in Belgium in 2014

- France accounts for the majority of Belgian outflows, mainly as a result of local cross-border shopping and the high level of cross-border commuting
- Outflows to the Netherlands fell which may have been impacted by a smaller price difference, which fell from €0.96 in 2013 to €0.53 in 2014<sup>(3)</sup>

Notes: (a) The Duty Free inflow contains both "other" Duty Free product and Illicit Whites which have Duty Free labelling (b) Border sales data from Belgium to Luxembourg indicated a lower volume decline compared to the pack collection methodology used in this study. Please refer to appendix for review of EPS and limitations of results (c) Cigarette outflow from Belgium to UK is considerably lower than Fine Cut outflow, which is mainly driven by lack of availability of popular UK cigarette brands in the Belgian market, as well as Fine Cut price differential

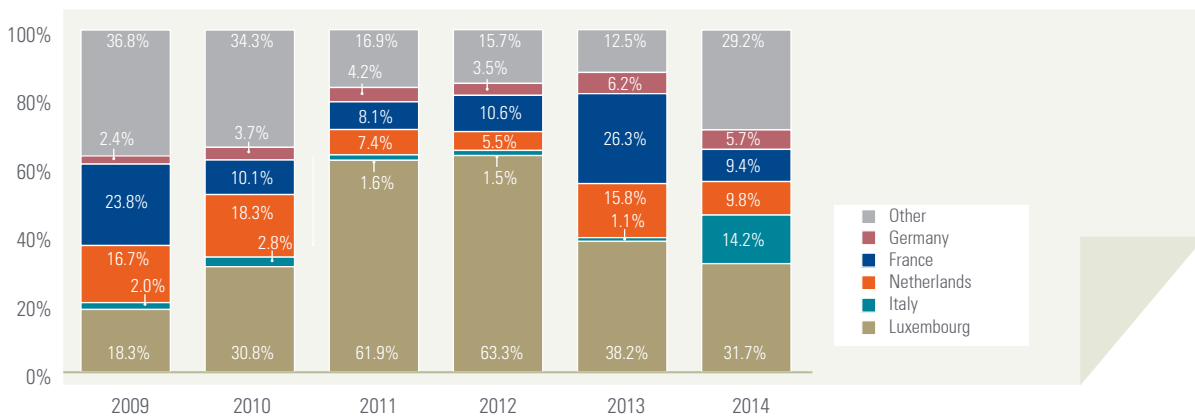
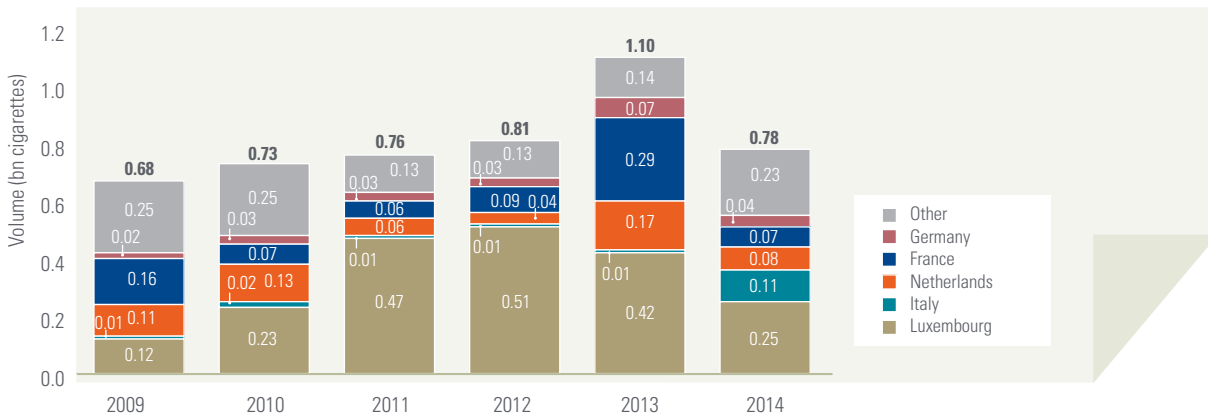
Sources: (1) KPMG EU Flows Model (2) KPMG analysis of UNWTO Factbook 2008-2013 (3) EC Excise Duty tables (Part III – Manufactured Tobacco)





# Despite decreasing volumes, Luxembourg continued to be the largest source of ND(L)

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



BELGIUM



PROJECT SUN

**The majority of flows into Belgium come from similarly priced neighbouring markets with high volumes of border crossings**

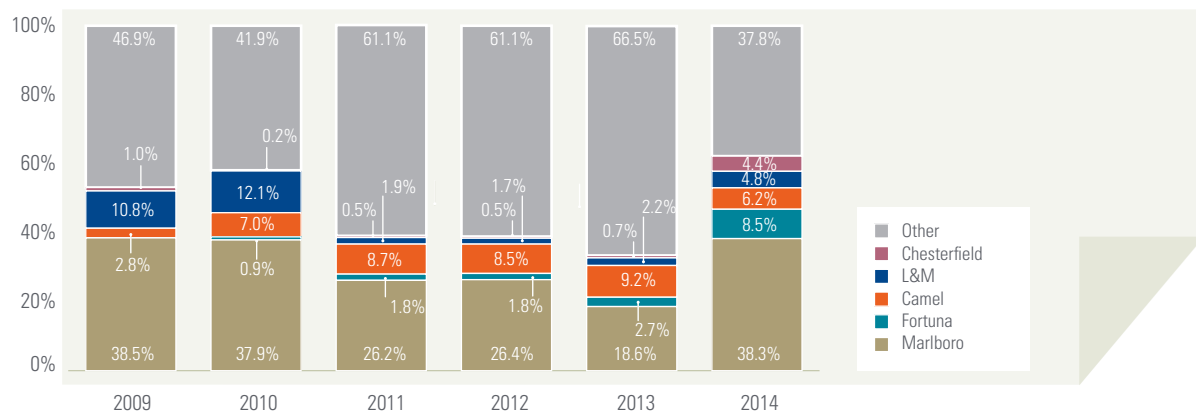
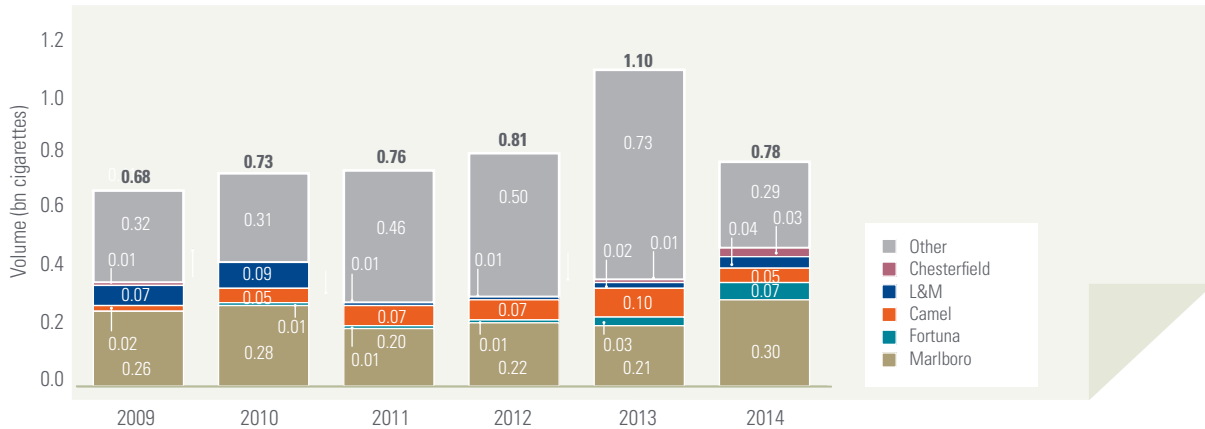
- Despite a 2.3% increase in travel flows and an increase in price difference from €0.71 to €0.95, inflows from Luxembourg declined<sup>(3)</sup>
- France and the Netherlands are higher-priced markets where all flows are assumed to be legal
  - Marlboro was the leading brand from Luxembourg
- The average price difference between Belgium and Italy grew from €0.30 to €0.79, resulting in a greater incentive to purchase cigarettes by Belgian tourists on holiday in Italy<sup>(3)</sup>

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

# NON-DOMESTIC LEGAL INFLOWS BY BRAND

Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>



BELGIUM

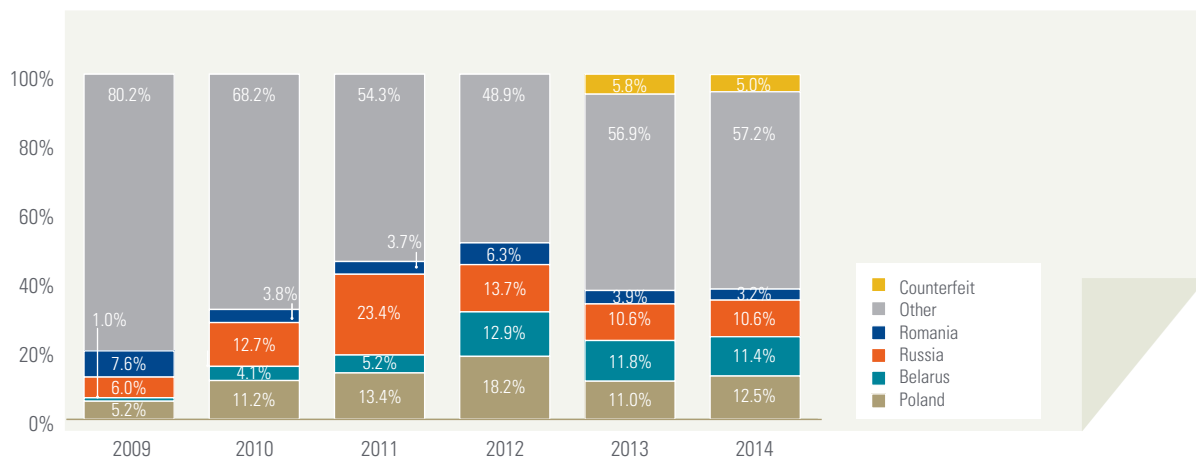
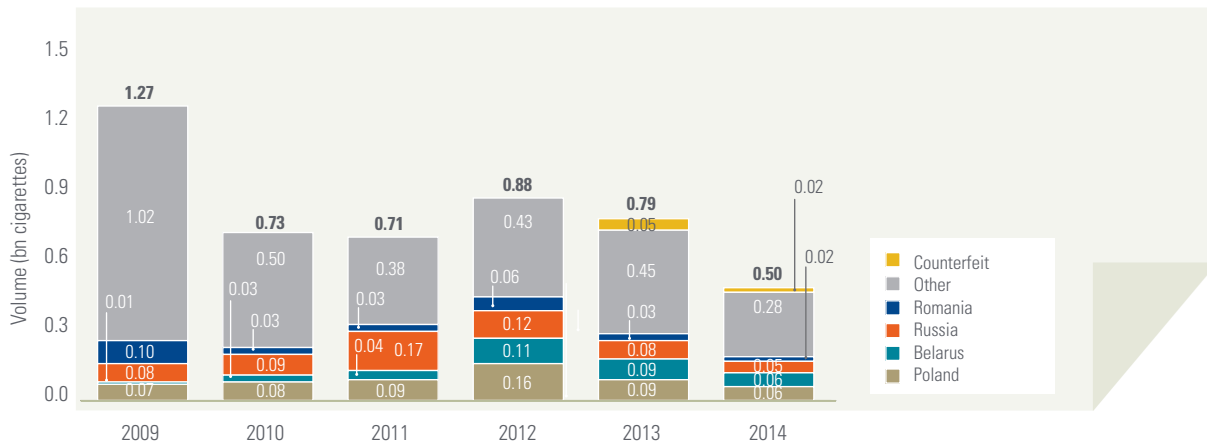
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers

# C&C consumption reduced by over 37% in 2014

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



BELGIUM



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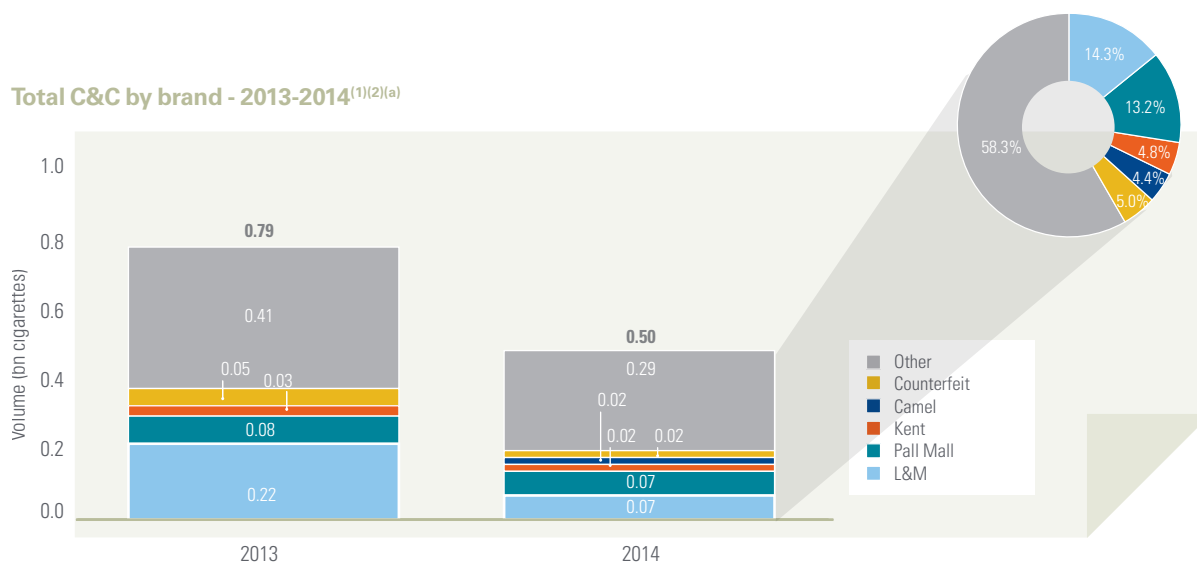
**Whilst the overall level of C&C consumption declined, the countries of origin remained the same**

- The main flows of C&C came from the Central and Eastern European markets of Belarus, Poland and Russia where manufactured cigarette prices are less expensive than domestic product
  - L&M came mainly from Russia
- The decline in C&C may be explained by more effective customs enforcement activity in Belgium
- If the total volume of C&C had been consumed legally within the Belgian market, an additional tax revenue of approximately €94m would have been raised by the Belgian Treasury<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

## C&C INFLOWS BY BRAND



### Breakdown of Illicit Whites by type - 2009-2014<sup>(1)(2)(a)</sup>

LABELLING OF ILLICIT WHITES INFLOWS TO BELGIUM						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	0.00	0.00	0.06	0.05	0.04	0.02
Duty Free	0.00	0.00	0.00	0.00	0.01	0.00
Unspecified	0.00	0.00	0.00	0.00	0.01	0.01
<b>Total Illicit Whites</b>	<b>0.02</b>	<b>0.03</b>	<b>0.07</b>	<b>0.05</b>	<b>0.06</b>	<b>0.02</b>

BELGIUM

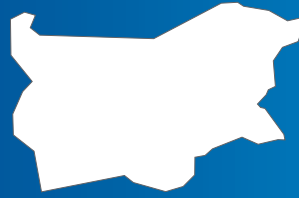


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Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

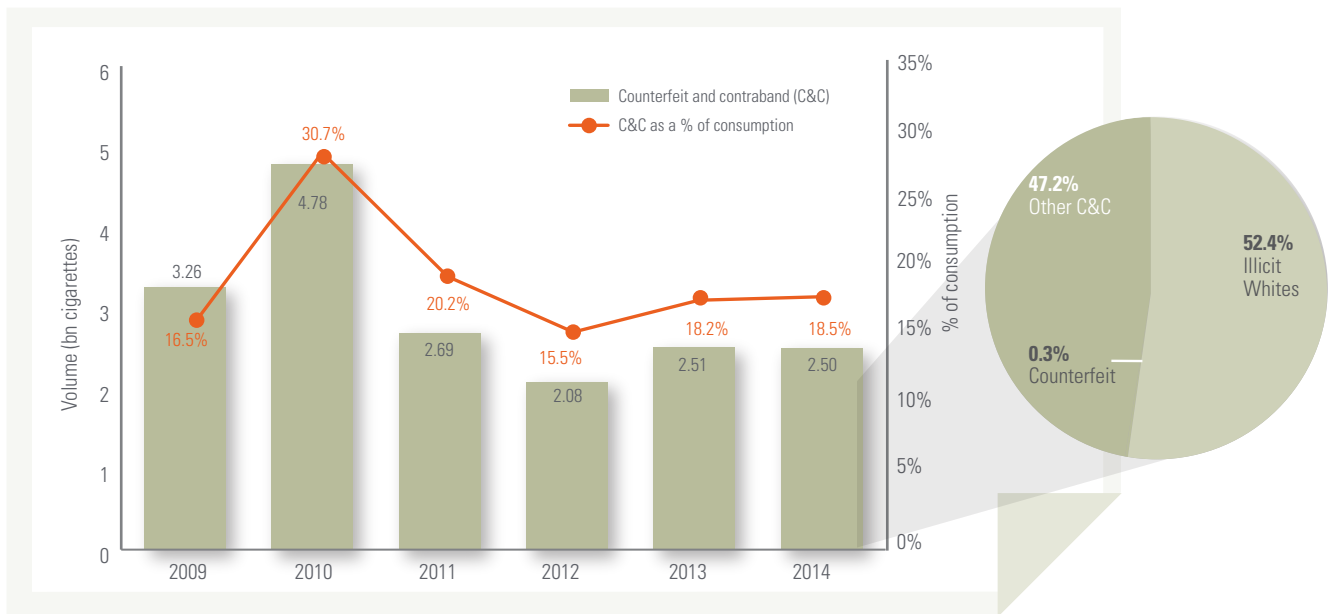
Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers

# BULGARIA



C&C is one of the highest in Europe

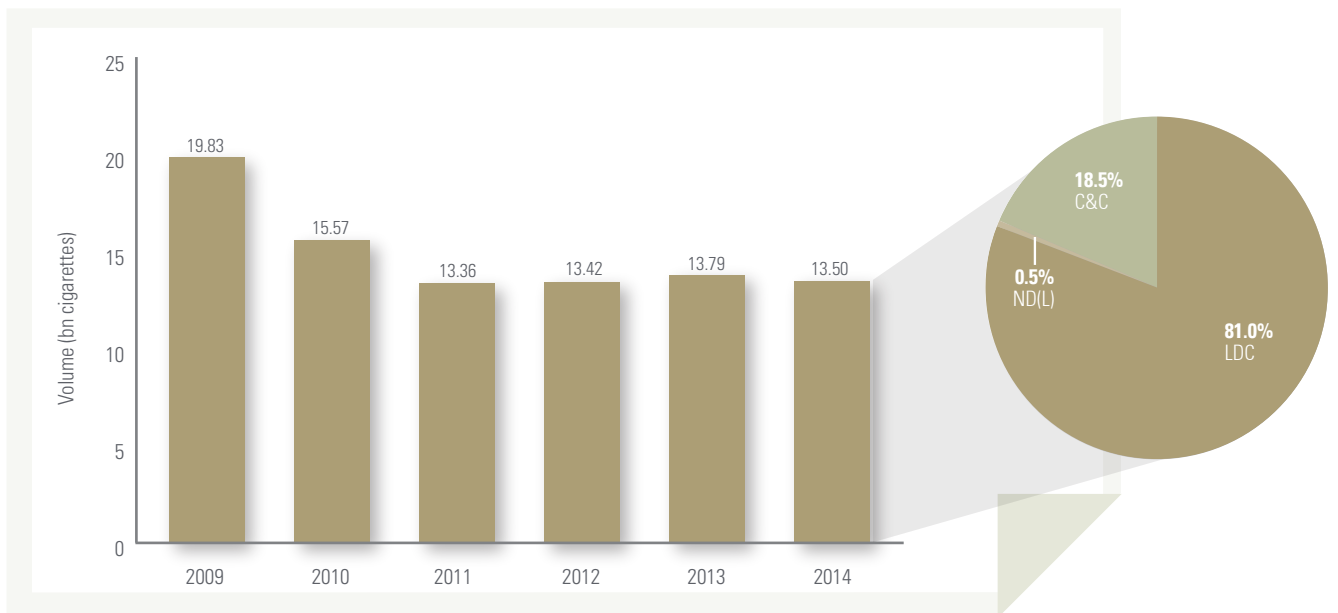
Manufactured cigarette C&C volumes and share of overall consumption - 2009-14



BULGARIA

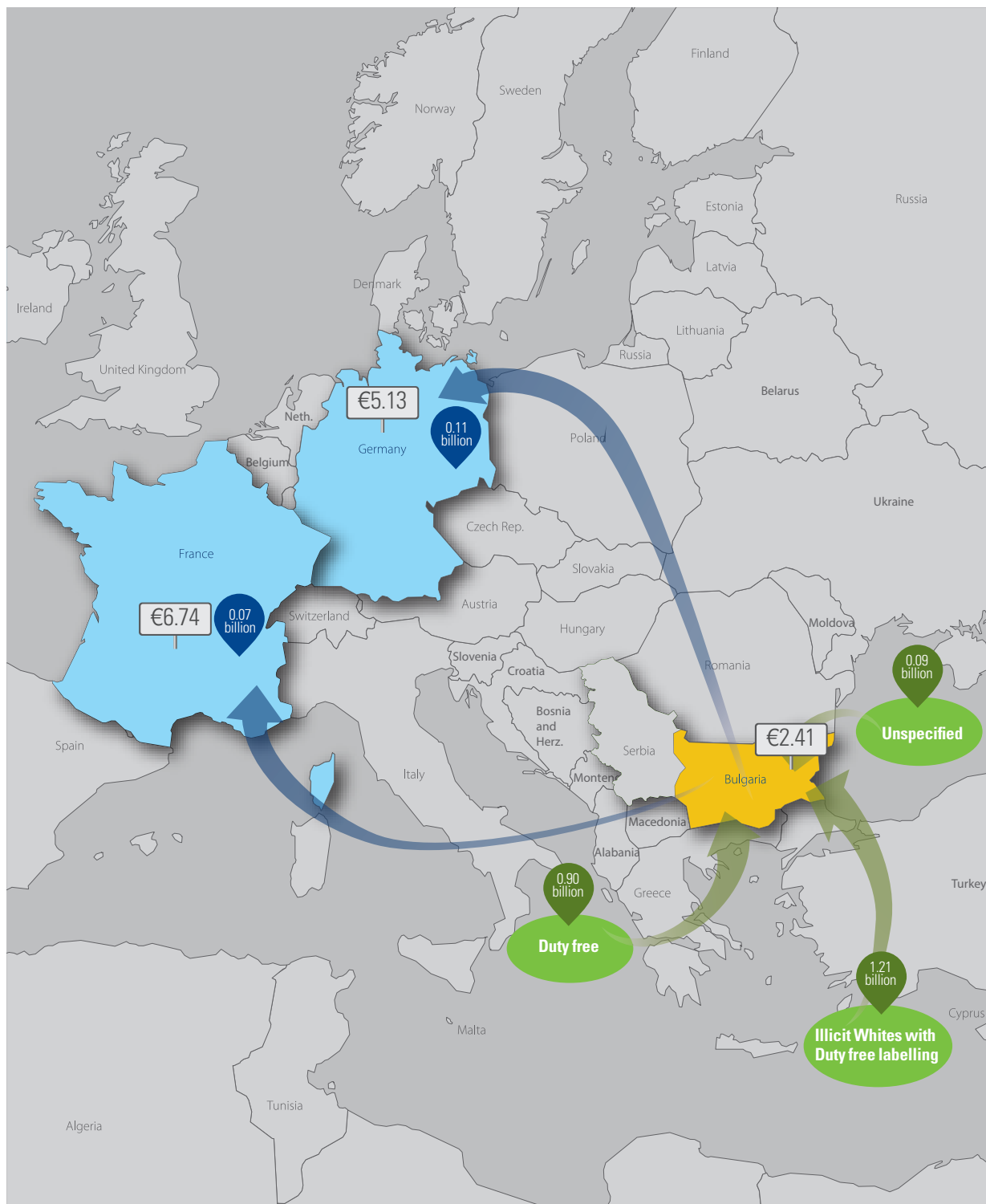


Manufactured cigarette consumption 2009-14



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# KEY INFLOWS AND OUTFLOWS



BULGARIA



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Main outflow ■  
Main inflow ■

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

Source: (1) KPMG EU Flows Model



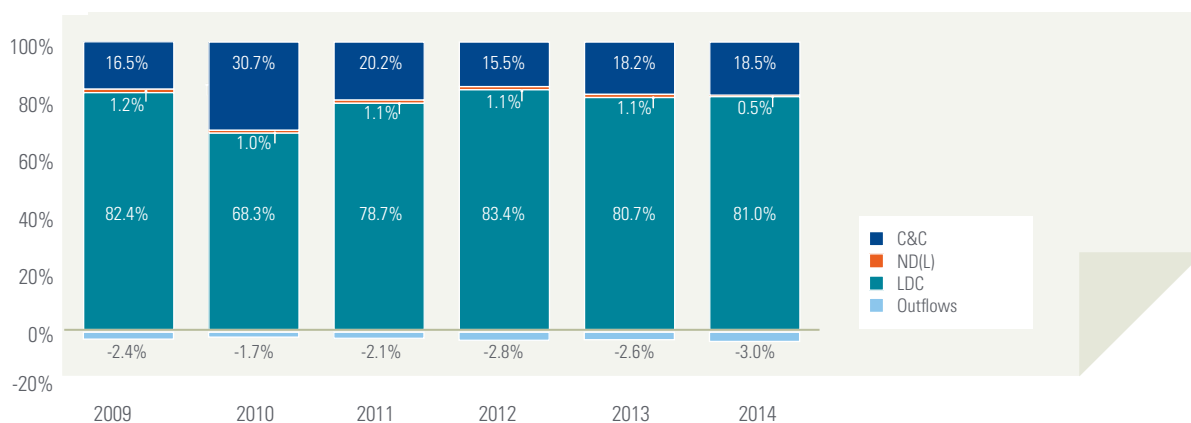
# Bulgaria's share of illicit consumption continued to grow, the majority of which was Illicit Whites

*Note: There also appears to be significant non-EU outflow from Bulgaria to Turkey of approximately 10bn cigarettes. This is based upon over 40% of non-domestic cigarettes collected in the 2014 Turkey EPS being brands trademark owned by Bulgartabac. This volume is not included in the outflows figure.*

## Total manufactured cigarette consumption – Bulgaria<sup>(1)(2)(a)</sup>

TOTAL BULGARIA CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	16.80	10.91	10.80	11.57	11.50	11.34	(1%)
Outflows	-0.47	-0.27	-0.29	-0.38	-0.36	-0.41	13%
Legal domestic consumption (LDC)	16.33	10.64	10.51	11.19	11.14	10.93	(2%)
Non-domestic legal (ND(L))	0.23	0.15	0.15	0.15	0.15	0.07	(55%)
Counterfeit and contraband (C&C)	3.26	4.78	2.69	2.08	2.51	2.50	(0%)
Total non-domestic	3.50	4.93	2.84	2.23	2.66	2.57	(3%)
<b>Total consumption</b>	<b>19.83</b>	<b>15.57</b>	<b>13.36</b>	<b>13.42</b>	<b>13.79</b>	<b>13.50</b>	<b>(2%)</b>

## Share of Bulgaria cigarette consumption by type 2009-2014<sup>(1)(2)</sup>



### Both domestic and non-domestic consumption declined whilst C&C volumes remained stable

- Legal domestic sales fell slightly amidst a 1.5% increase in average prices and an improving economic outlook<sup>(3)(4)(5)</sup>
- Outflows grew but remained a small proportion of LDS

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used  
 Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) 2014 Economist Intelligence Unit (5) 2014 Euromonitor

# The majority of inflows to Bulgaria are Illicit Whites brands

## Total inflows by country of origin - 2009-2014<sup>(1)</sup>

ND INFLOWSTO BULGARIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Illicit Whites with Duty Free labelling						1.21
Duty Free	2.07	2.19	1.23	1.28	1.95	0.90
Unspecified	0.77	1.68	1.05	0.47	0.36	0.09
United Arab Emirates	0.00	0.10	0.00	0.00	0.00	0.08
Serbia	0.25	0.29	0.20	0.17	0.09	0.07
Counterfeit					0.00	0.01
Other	0.40	0.67	0.36	0.31	0.26	0.22
<b>Total inflows</b>	<b>3.50</b>	<b>4.93</b>	<b>2.84</b>	<b>2.23</b>	<b>2.66</b>	<b>2.57</b>

### Overall non-domestic inflows declined, and Illicit Whites brands (including those with Duty Free labelling) accounted for approximately 60% of the inflow

- Some of the Illicit White brands which previously had unspecified labelling in 2012 and 2013 are now using Duty Free labelling

## Total outflows by destination country - 2009-2014<sup>(1)</sup>

OUTFLOWS FROM BULGARIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Germany	0.04	0.03	0.07	0.06	0.08	0.11
France	0.04	0.02	0.03	0.05	0.09	0.07
UK	0.09	0.03	0.06	0.08	0.03	0.05
Other	0.30	0.18	0.13	0.19	0.17	0.19
<b>Total outflows</b>	<b>0.47</b>	<b>0.27</b>	<b>0.29</b>	<b>0.38</b>	<b>0.36</b>	<b>0.41</b>

### Overall outflows increased but remained low as a proportion of total consumption

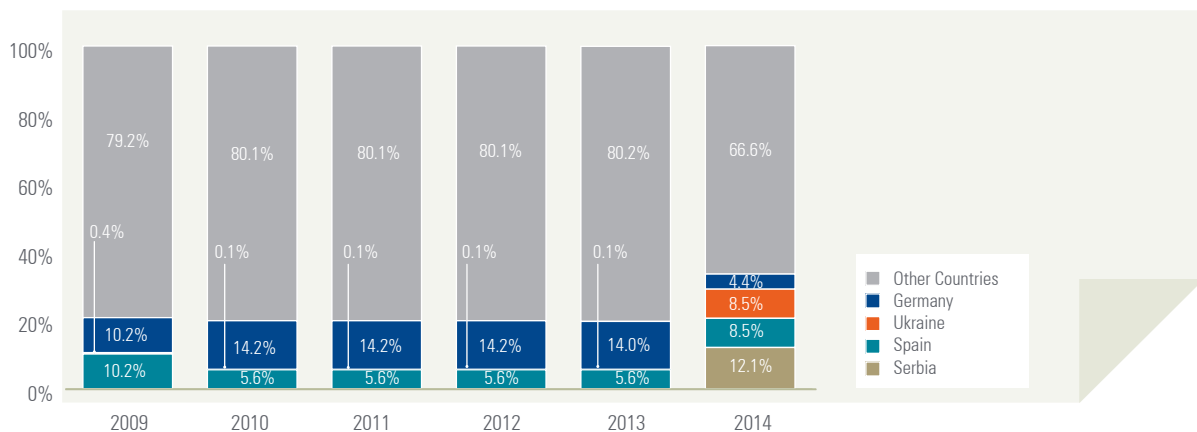
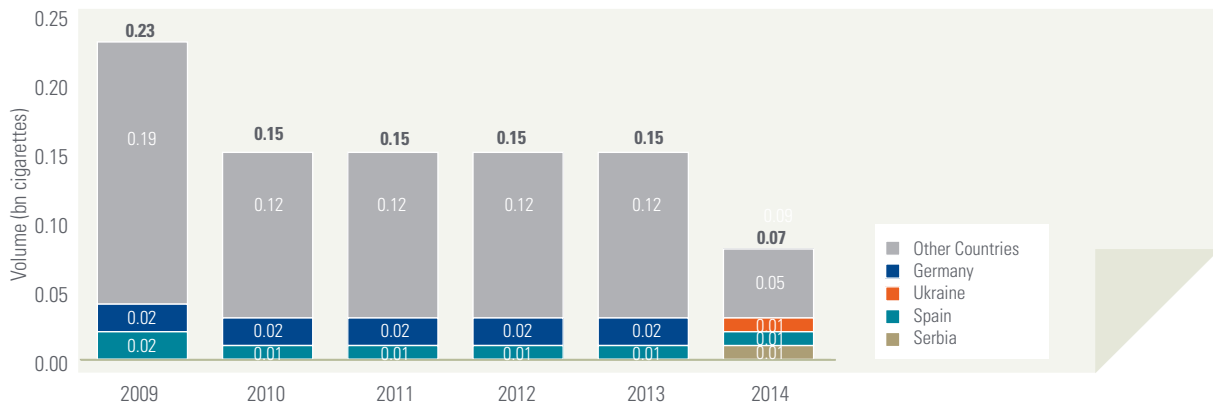
- Flows to Germany grew against a background of an increase in average price difference from €2.62 to €2.73 and increased travel flows from Bulgaria<sup>(2)(3)</sup>
- Travel flows to the UK increased and the average price difference between the UK and Bulgaria grew to €6.59 in 2014<sup>(2)(3)</sup>
- The decline in outflows to France may have been impacted by a decline in travel flows from Bulgaria in 2014<sup>(3)</sup>

Sources: (1) KPMG EU Flows Model (2) EC Excise Duty tables (Part III – Manufactured Tobacco) (3) KPMG analysis of UNWTO Factbook 2008-2013



# ND(L) volumes declined in 2014 as small non-EU inflows declined

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)(c)</sup>



BULGARIA



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**ND(L) decreased in Bulgaria by 55%, with most of the flows coming from nearby cheaper priced markets or popular tourist destinations**

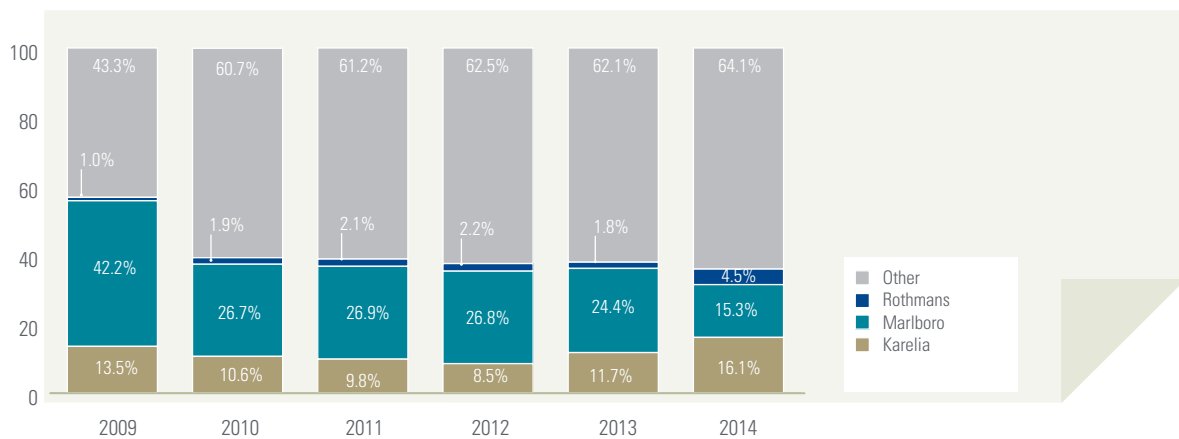
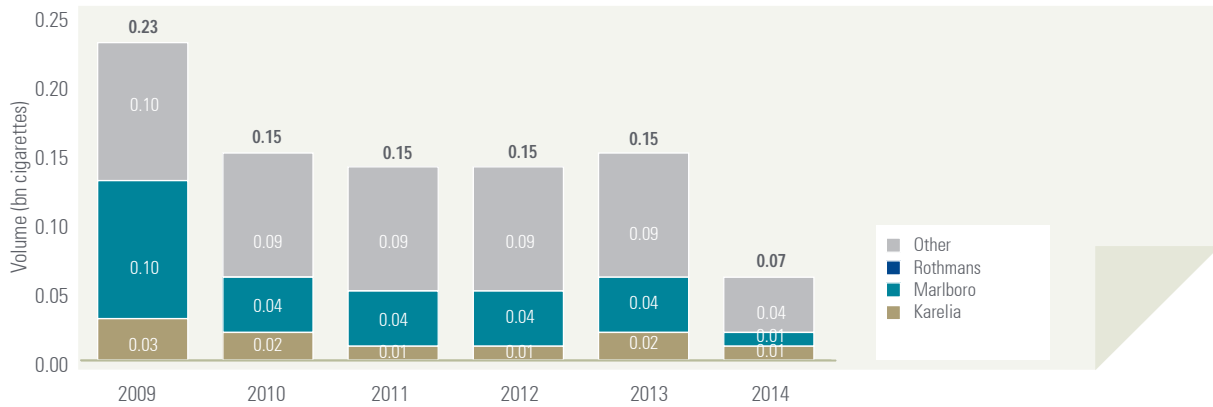
- Legal inflows from Serbia are low despite its proximity and lower prices
- Spain and Germany are both higher-priced markets than Bulgaria but are popular travel destinations for Bulgarians<sup>(1)</sup>

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix (c) The lowering of non-domestic (legal) for the first time since 2010 may be as a result of using border crossings data rather than consumer research, last conducted in 2010

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# NON-DOMESTIC LEGAL INFLOWS BY BRAND

**Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>**



BULGARIA



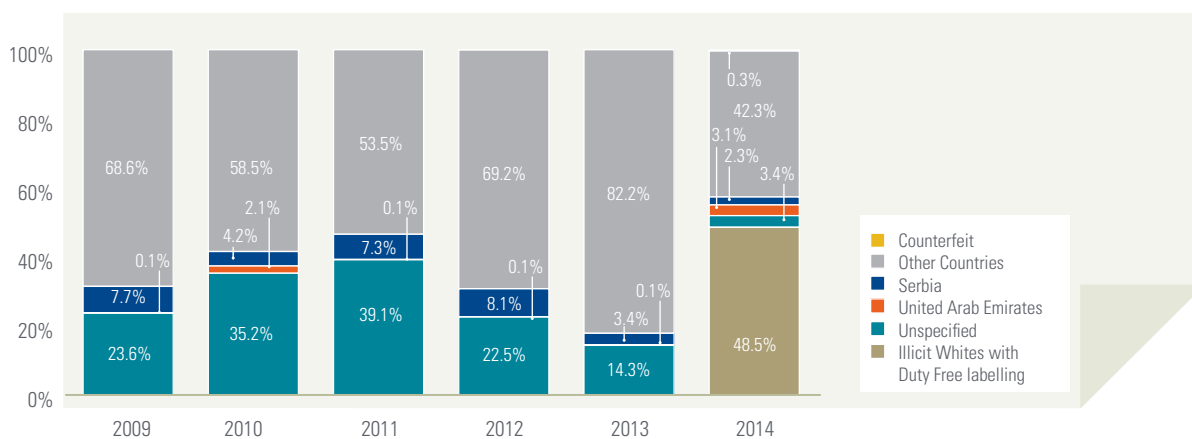
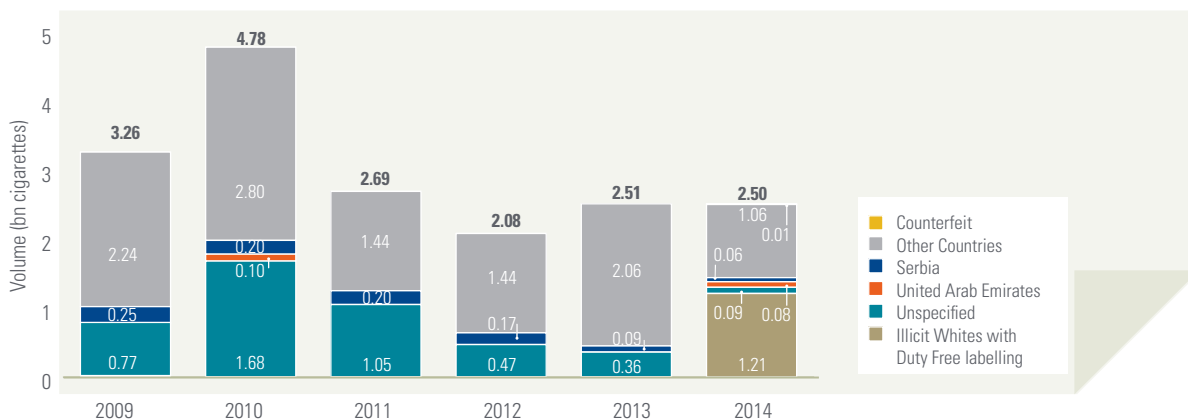
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# Illicit Whites brands accounted for the majority of the illicit inflow

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



BULGARIA



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### C&C remained stable between 2013 and 2014

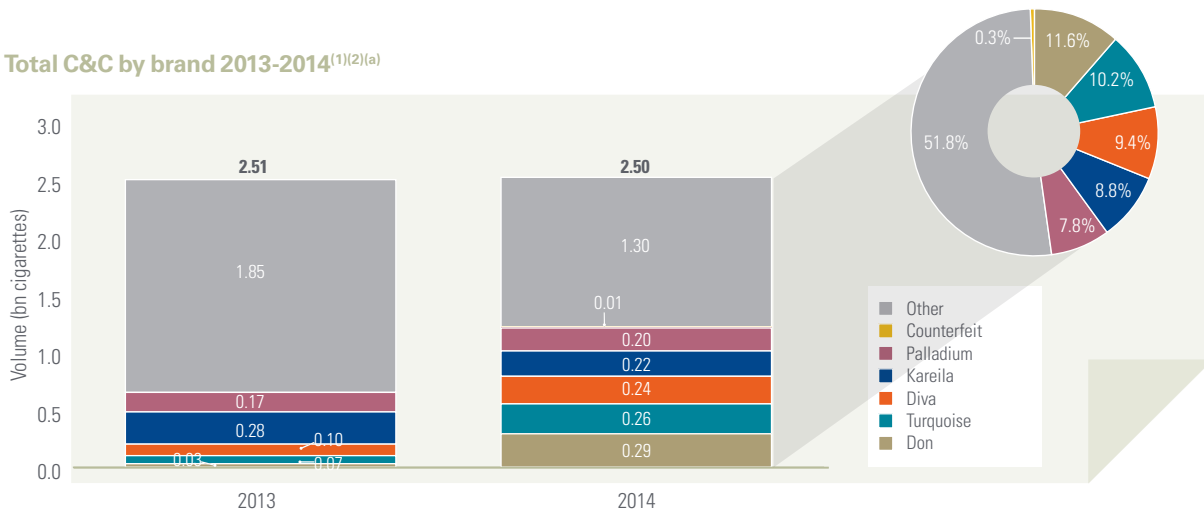
- Packs of unspecified origin fell in 2014 balanced by increased inflows of packs with Duty Free labelling
  - Both Don and Diva are trademarks owned by King's Tobacco and all packs bore Duty Free labelling
  - The Turquoise and Palladium trademarks were Illicit Whites with Duty Free labelling and without an identified trademark owner
- If the total volume of C&C had been consumed legally within the Bulgarian market, an additional tax revenue of approximately €247m would have been raised by the Bulgarian Treasury<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

## C&C INFLOWS BY BRAND

Total C&C by brand 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type - 2009-2014<sup>(1)(2)(a)</sup>

LABELLING OF ILLICITWHITES INFLOWS TO BULGARIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country Specific	0.26	0.52	0.57	0.64	1.27	0.04
Duty Free	0.04	0.10	0.10	0.05	0.08	1.21
Unspecified	0.28	1.11	0.82	0.40	0.29	0.07
<b>Total Illicit Whites</b>	<b>0.58</b>	<b>1.73</b>	<b>1.49</b>	<b>1.10</b>	<b>1.64</b>	<b>1.33</b>

BULGARIA



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Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

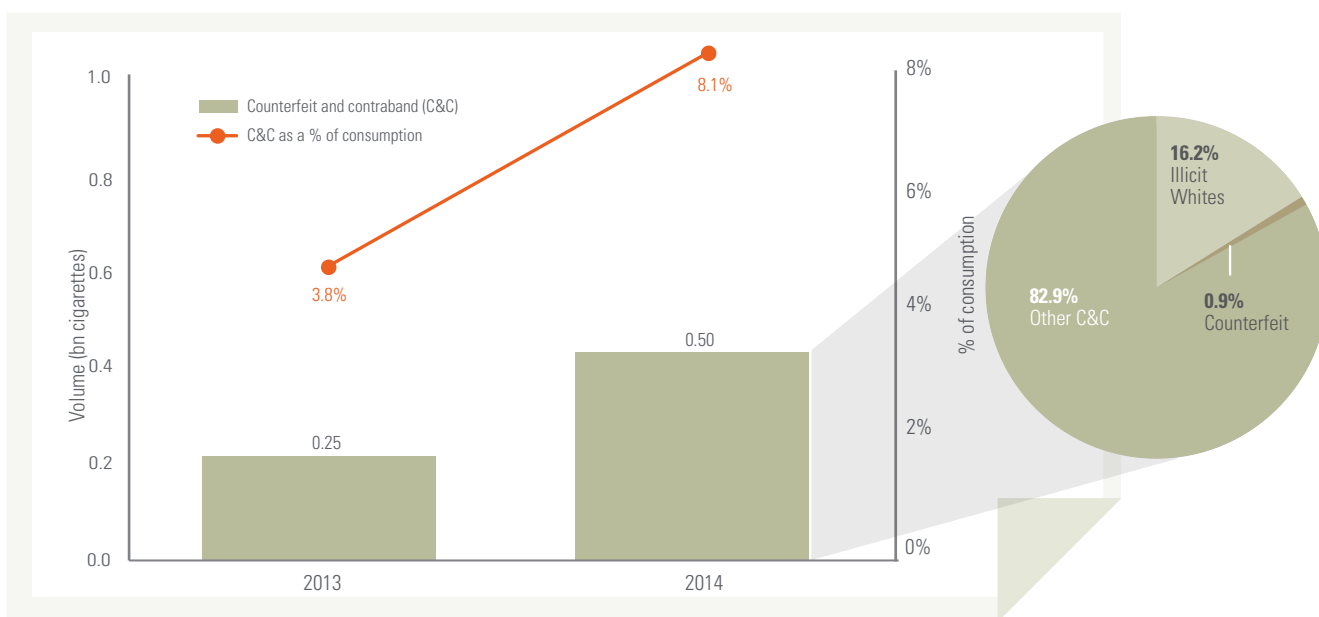
(2) KPMG analysis of data sources provided by manufacturers.

# CROATIA



C&C doubled as a proportion of total consumption in 2014

Manufactured cigarette C&C volumes and share of overall consumption - 2013-14

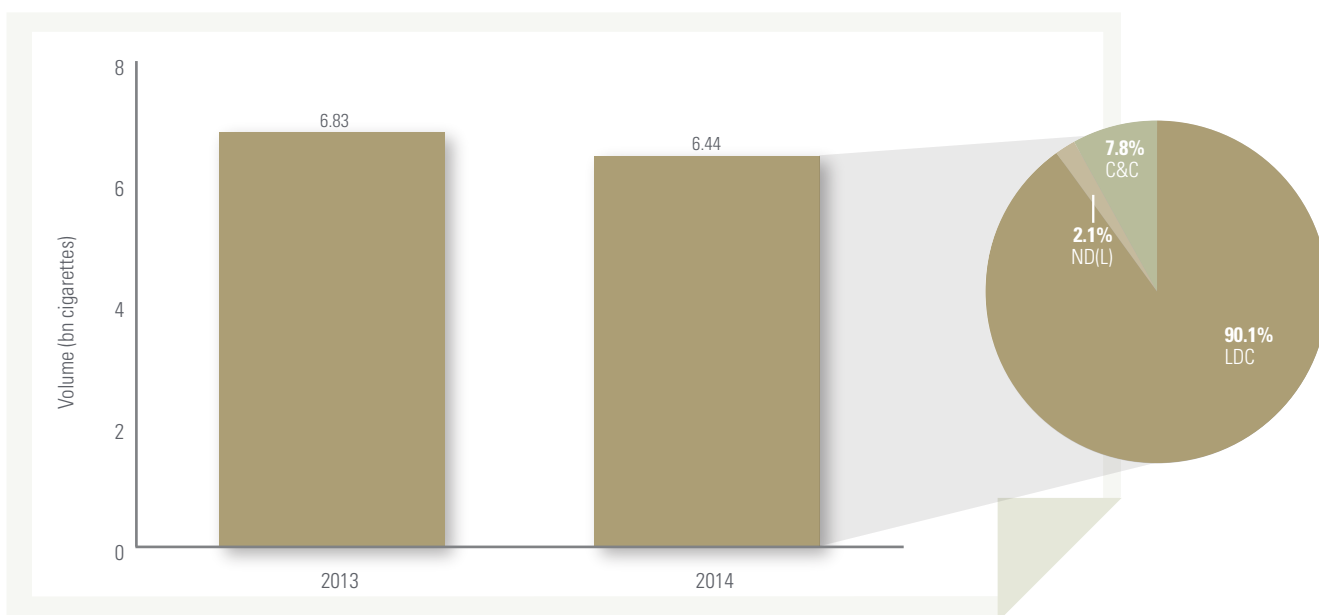


CROATIA



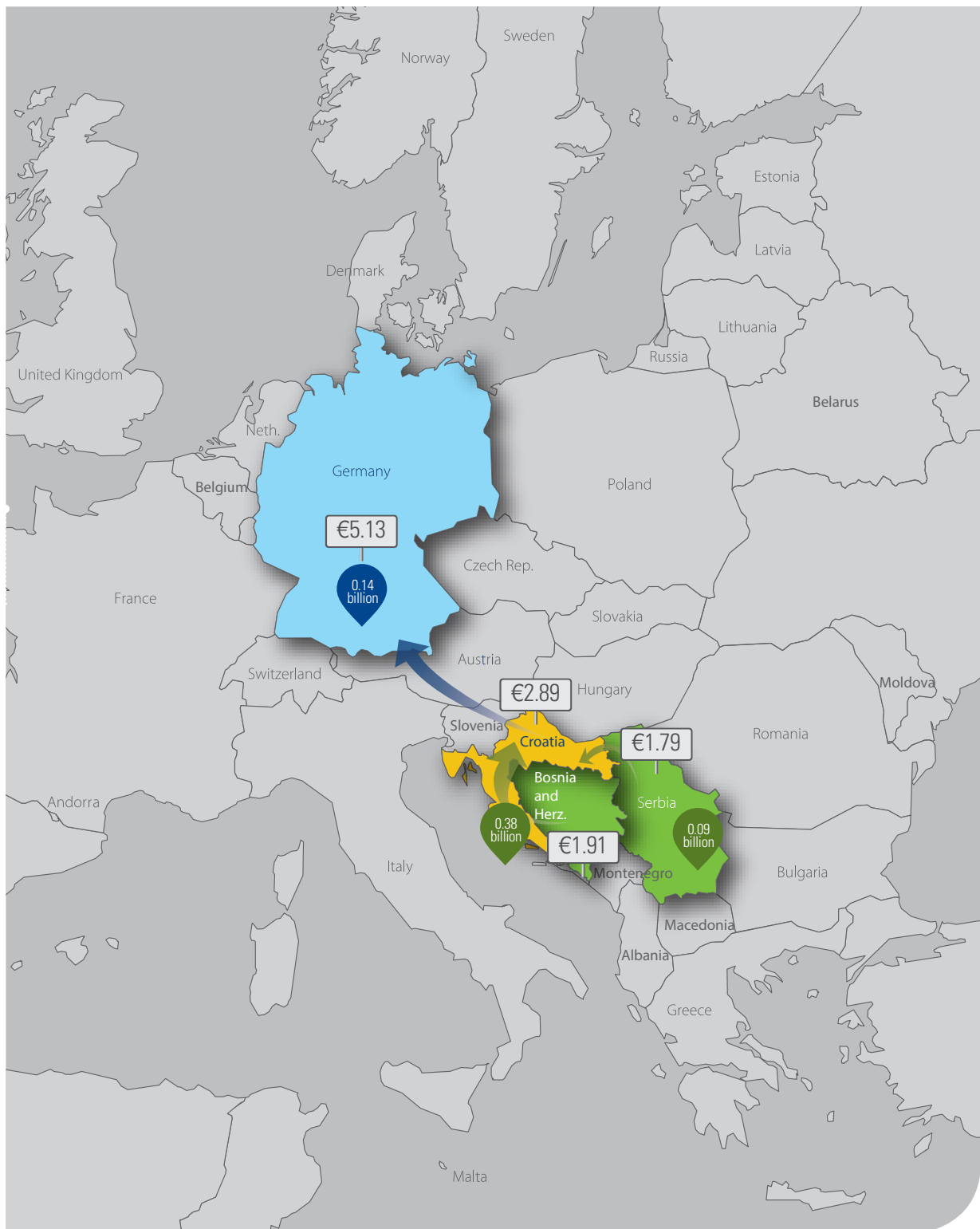
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Manufactured cigarette consumption - 2013-14





# KEY INFLOWS AND OUTFLOWS



CROATIA  
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Main outflow ■  
Main inflow ■

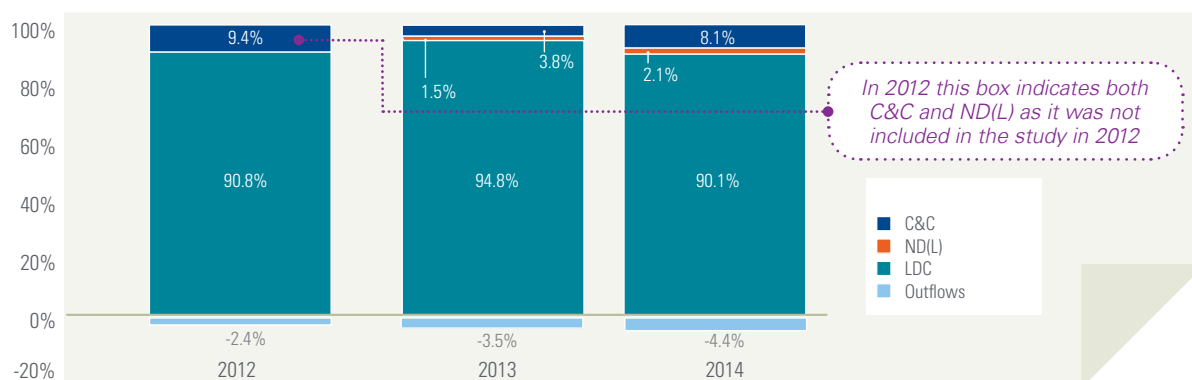
Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow.  
Source: (1) KPMG EU Flows Model.

# LDS declined and C&C increased against a background of price rises

## Total manufactured cigarette consumption – Croatia<sup>(1)(2)(a)(b)(c)</sup>

TOTAL CROATIA CONSUMPTION				
Billion cigarettes	2012	2013	2014	2013-14%
Legal domestic sales (LDS)	7.22	6.71	6.07	(9%)
Outflows	-0.18	-0.23	-0.26	13%
Legal domestic consumption (LDC)	7.04	6.47	5.81	(10%)
Non-domestic legal (ND(L))	n/a	0.10	0.13	33%
Counterfeit and contraband (C&C)	n/a	0.25	0.50	99%
Total non-domestic	0.71	0.35	0.64	80%
<b>Total consumption</b>	<b>7.76</b>	<b>6.83</b>	<b>6.44</b>	<b>(6%)</b>

## Share of Croatia cigarette consumption by type - 2012-2014<sup>(1)(2)</sup>



CROATIA



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### Legal domestic consumption declined by 10%

- Since EU accession in July 2013 prices rose by 14% in total<sup>(3)</sup>
- Weak economic conditions leading to falling GDP per capita also reflected falling legal domestic consumption and increasing C&C<sup>(4)</sup>

Notes: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis  
 (b) As Croatia was not in the EU in 2012 KPMG has used historic legal domestic sales data but did not report on 2012 volumes. Therefor the volumes reported for 2012 is an estimate based on historic data and not generated by the EU flows model (c) Non-domestic incidence for 2012 is not given as no consumer research was undertaken for Croatia before 2013

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) 2014 Economist Intelligence Unit

# Inflow volumes nearly doubled in 2014 due to increased flows from lower-priced neighbouring non-EU countries

### Total inflows by country of origin - 2012-2014<sup>(1)</sup>

ND INFLOWS TO CROATIA			
Billion cigarettes	2012	2013	2014
Bosnia And Herzegovina	0.46	0.20	0.38
Serbia	0.07	0.05	0.09
Illicit Whites with Duty Free labelling			0.04
Unspecified	n/a	0.00	0.04
Other	0.17	0.03	0.07
<b>Total inflows</b>	<b>0.71</b>	<b>0.35</b>	<b>0.64</b>

### Overall non-domestic inflows increased

- Flows from neighbouring Bosnia and Herzegovina made up 60% of the overall inflows driven by an increase in the average price difference from €0.80 to €0.98 per pack<sup>(2)</sup>

### Total outflows by destination country - 2012-2014<sup>(1)</sup>

OUTFLOWS FROM CROATIA			
Billion cigarettes	2012	2013	2014
Germany	0.07	0.09	0.14
Austria	0.03	0.03	0.03
Italy	0.03	0.02	0.03
Other	0.05	0.09	0.07
<b>Total outflows</b>	<b>0.18</b>	<b>0.23</b>	<b>0.26</b>

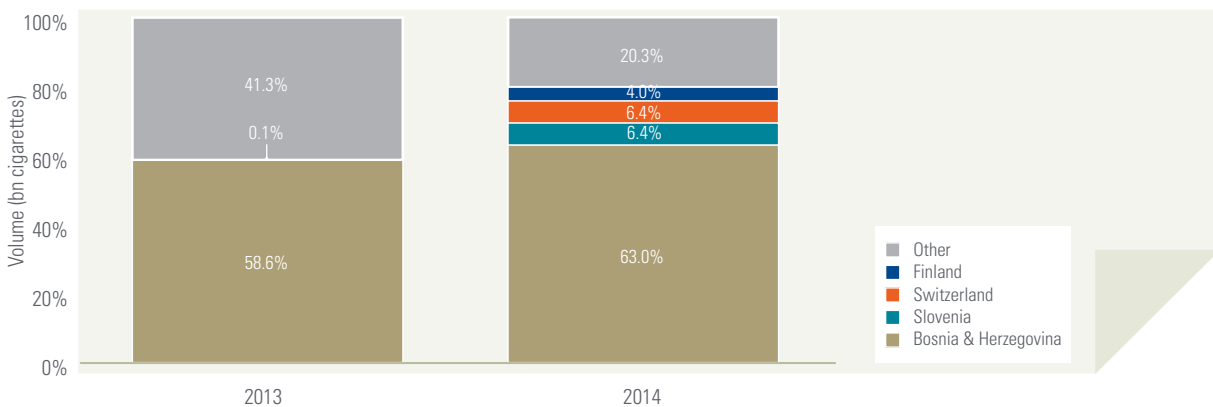
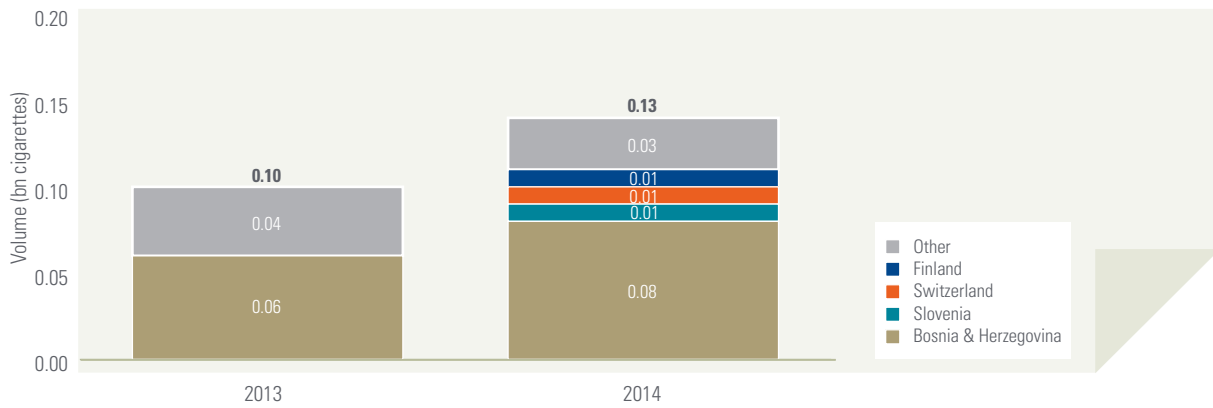
Overall non-domestic outflows grew by 13%, mainly driven by increasing tourist flows from Germany<sup>(3)</sup>



Sources: (1) KPMG EU Flows Model  
 (2) EC Excise Duty tables (Part III – Manufactured Tobacco)  
 (3) KPMG analysis of UNWTO Factbook 2008-2013

# Increased travel to neighbouring countries drove the increase in legal inflows

Total ND(L) by origin - 2013-14<sup>(1)(2)(a)(b)</sup>



CROATIA



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### Bosnia accounted for over 60% of all legal inflows

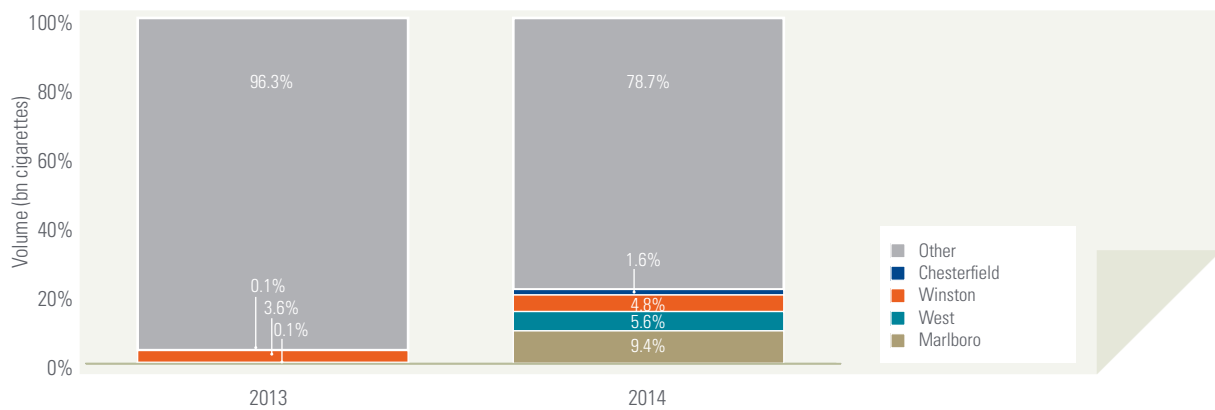
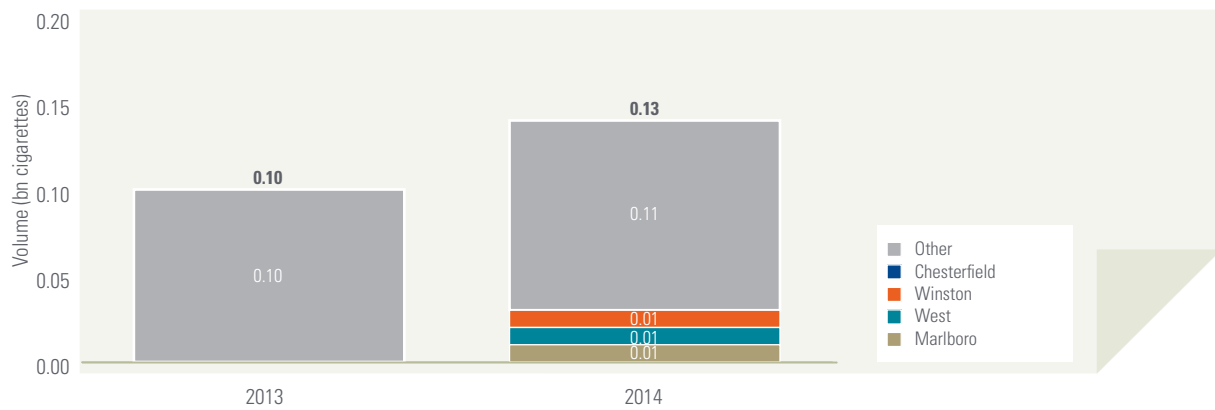
- Widening price differences and increased travel between the two countries drove the increase in legal inflows from Bosnia<sup>(1)(3)</sup>

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

# NON-DOMESTIC LEGAL INFLOWS

Total ND(L) by brand - 2013-14<sup>(1)(2)(a)(b)</sup>

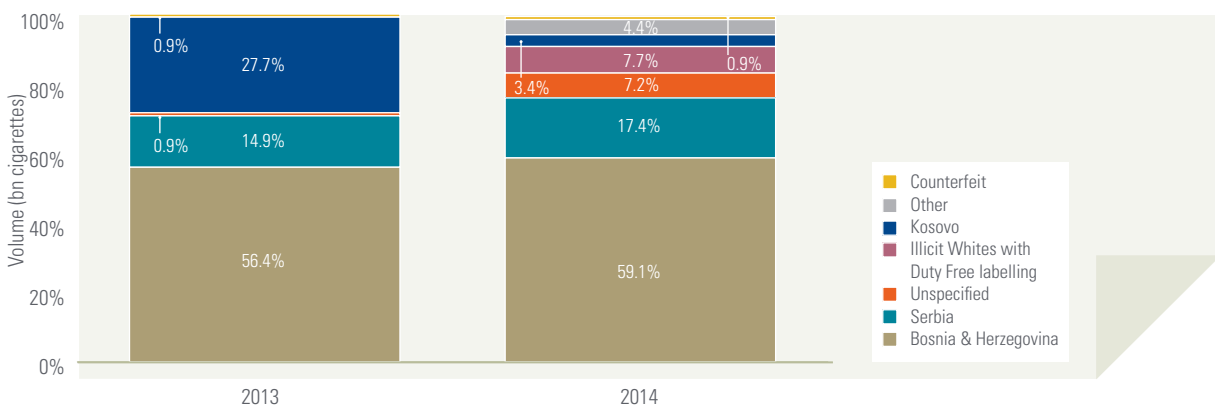
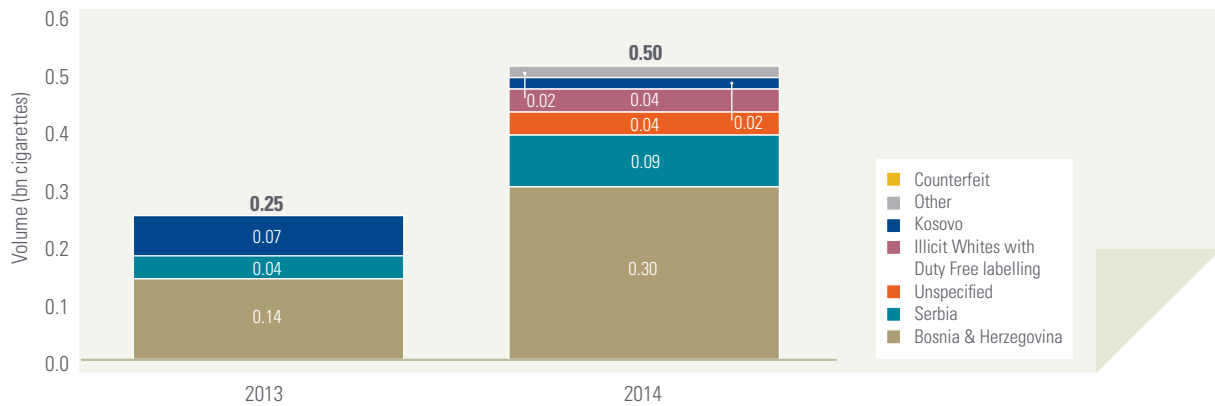


Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# C&C doubled in 2014 due to growth in volumes from neighbouring lower-priced non-EU markets

Total C&C by origin - 2013-2014<sup>(1)(2)(a)(b)</sup>



CROATIA



PROJECT SUN

## C&C volumes nearly doubled between 2013 and 2014, driven by an increase in cigarettes from Bosnia and Serbia

- Despite large travel flows in 2014 between Croatia and its non-EU neighbours, the legal limit of 40 cigarettes per land crossing restricted the volume that can be brought into Croatia legally
  - Walter Wolf was the most popular C&C brand, most of which came from Serbia and Bosnia
- Illicit Whites accounted for 16% of total C&C volumes, down from 67% in 2013
- If the total volume of C&C had been consumed legally within the Croatian market, an additional tax revenue of approximately €53m would have been raised by the Croatian Treasury<sup>(3)</sup>

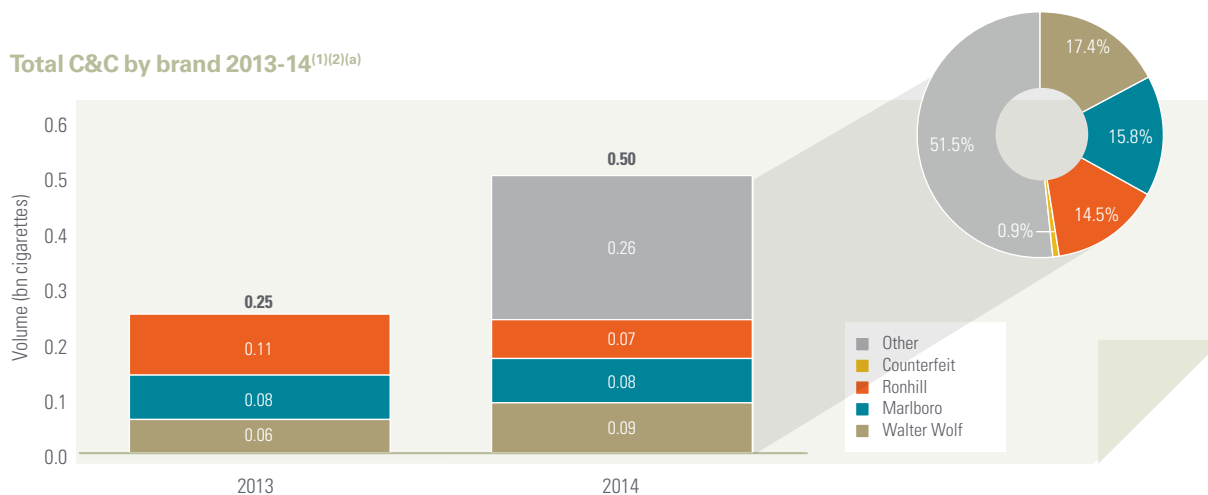
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)



## C&C INFLOWS

**Total C&C by brand 2013-14<sup>(1)(2)(a)</sup>**



**Breakdown of Illicit Whites by type 2013-2014<sup>(1)(2)(a)</sup>**

LABELLING OF ILLICIT WHITES INFLOWS TO CROATIA		
Billion cigarettes	2013	2014
Country Specific	0.15	0.04
Duty Free	0.02	0.04
Unspecified	0.00	0.00
<b>Total Illicit Whites</b>	<b>0.17</b>	<b>0.08</b>

CROATIA



PROJECT SUN

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

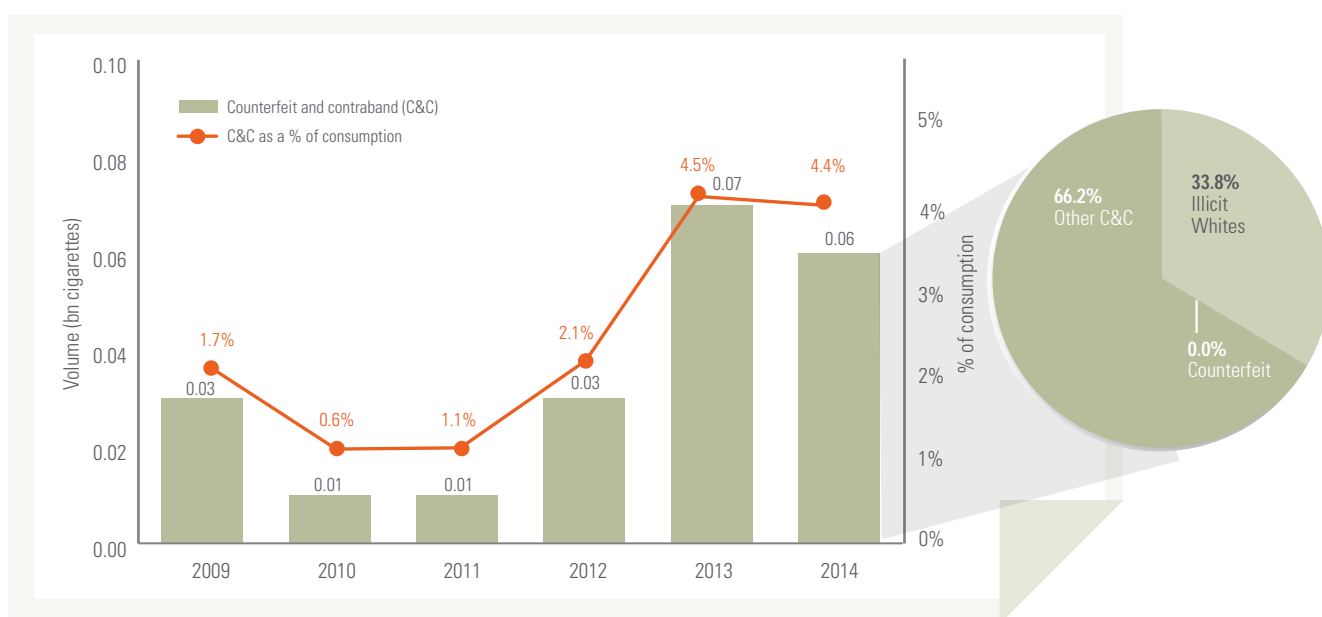
Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers

# CYPRUS



C&C remained relatively high

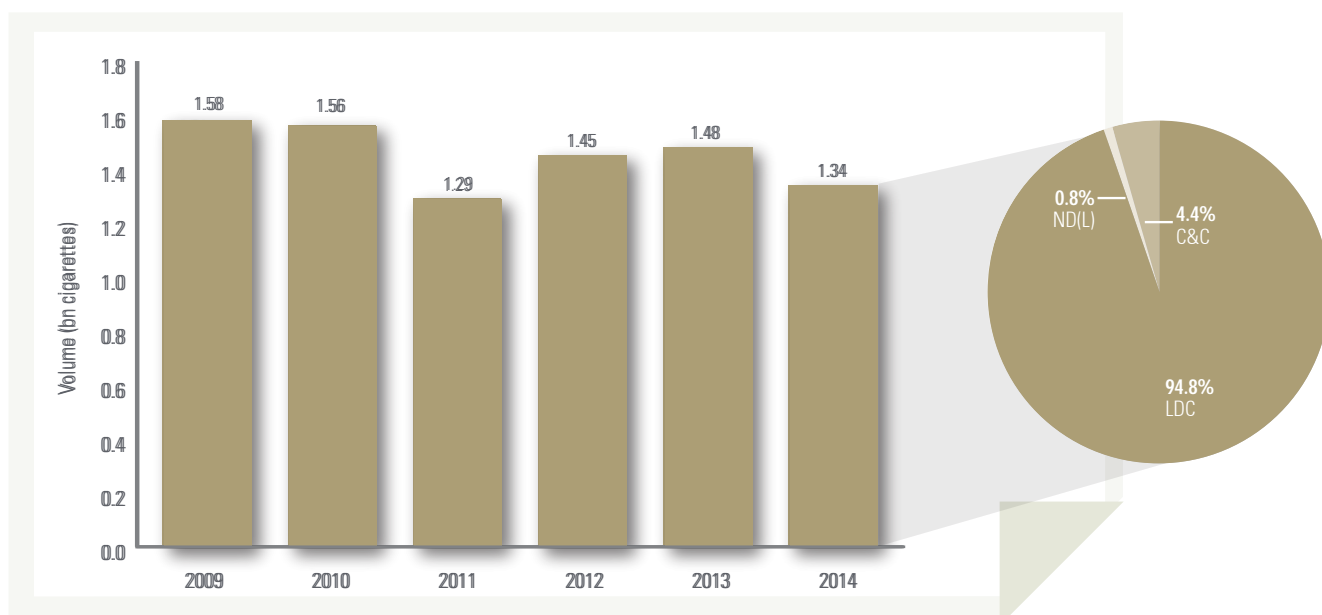
Manufactured cigarette C&C volumes and share of overall consumption 2009-14



CYPRUS

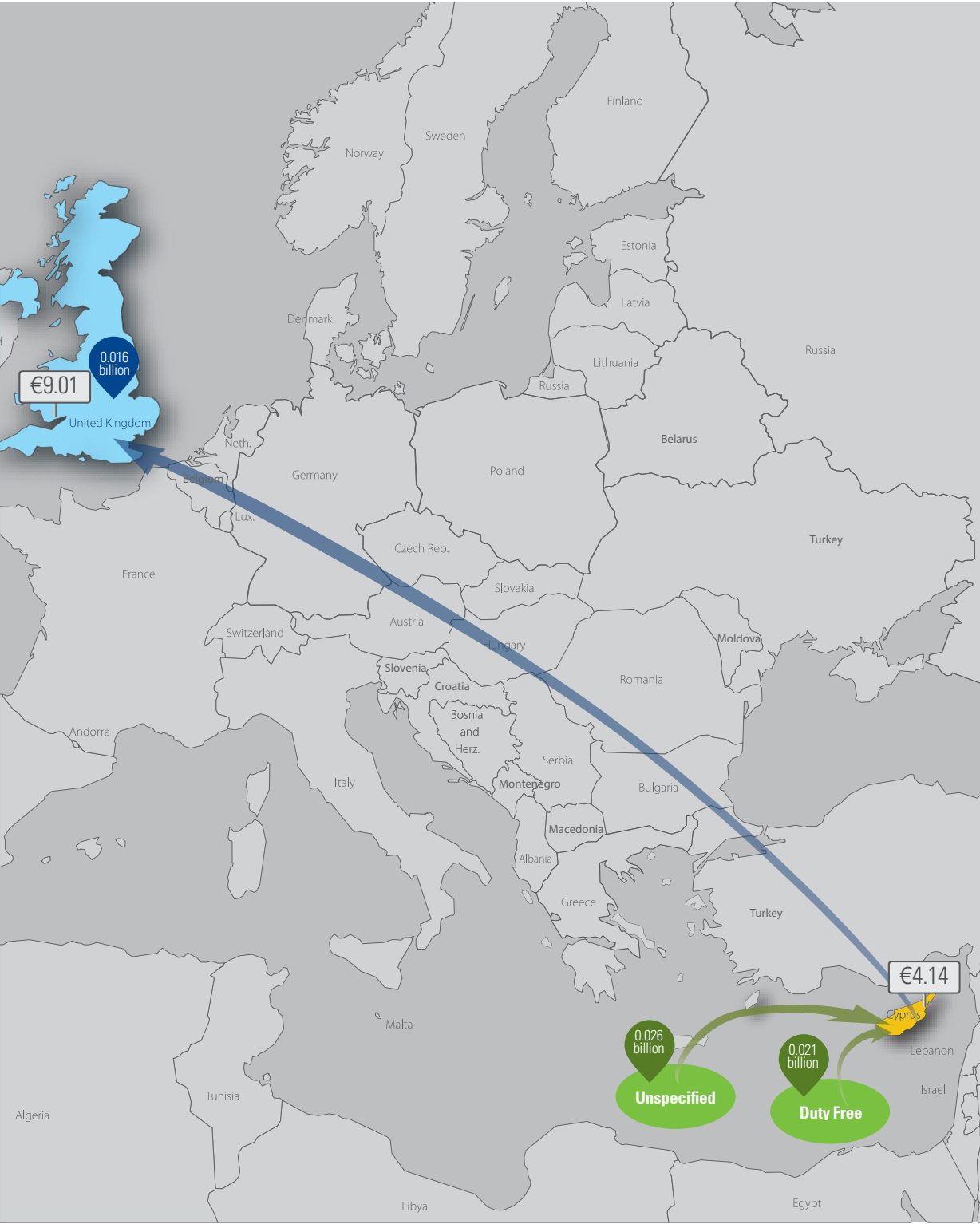


Manufactured cigarette consumption - 2009-14



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# KEY INFLOWS AND OUTFLOWS



Main outflow █  
Main inflow █

CYPRUS



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Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

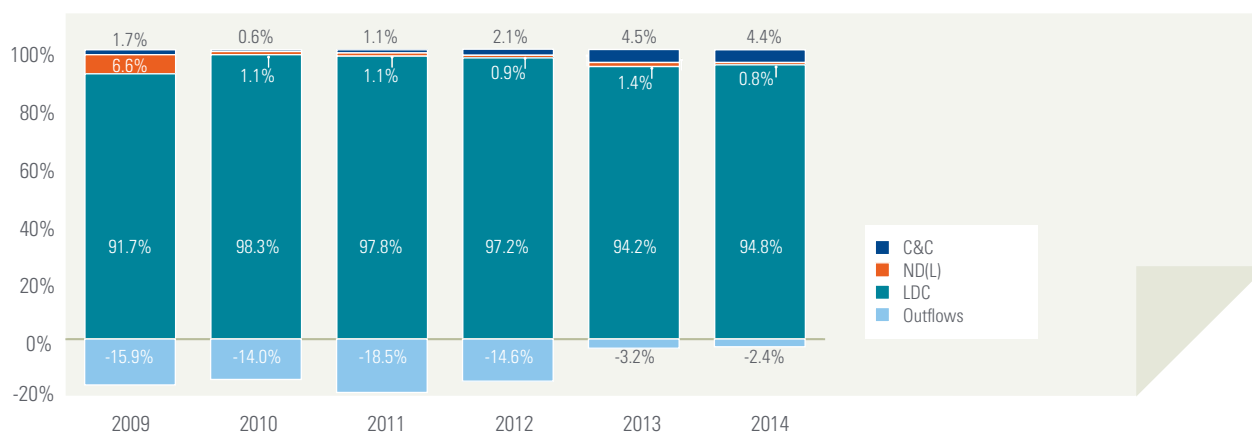
Source: (1) KPMG EU Flows Model

# Legal domestic consumption declined against a background of poor economic conditions

## Total manufactured cigarette consumption – Cyprus<sup>(1)(2)(a)</sup>

TOTAL CYPRUS CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	1.71	1.75	1.51	1.63	1.45	1.30	(10%)
Outflows	-0.25	-0.22	-0.24	-0.21	-0.05	-0.03	(32%)
Legal domestic consumption (LDC)	1.45	1.53	1.27	1.42	1.40	1.27	(9%)
Non-domestic legal (ND(L))	0.10	0.02	0.01	0.01	0.02	0.01	(49%)
Counterfeit and contraband (C&C)	0.03	0.01	0.01	0.03	0.07	0.06	(10%)
Total non-domestic	0.13	0.03	0.03	0.04	0.09	0.07	<b>(19%)</b>
<b>Total consumption</b>	<b>1.58</b>	<b>1.56</b>	<b>1.29</b>	<b>1.45</b>	<b>1.48</b>	<b>1.34</b>	<b>(10%)</b>

## Share of Cyprus cigarette consumption by type 2009-2014<sup>(1)(2)</sup>



### Legal domestic sales fell by 10% amidst unfavourable economic conditions

- Unemployment increased and GDP per capita declined in 2014<sup>(3)</sup>

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used  
 Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) DG ECFIN AMECO



# Packs with unspecified or Duty Free labelling accounted for approximately 70% of non domestic inflows

## Total inflows by country of origin 2009-2014<sup>(1)(a)</sup>

ND INFLOWS TO CYPRUS						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Unspecified	0.000	0.000	0.003	0.004	0.025	0.026
Duty Free	0.060	0.009	0.014	0.023	0.040	0.021
Russia	0.008	0.005	0.000	0.004	0.002	0.003
Romania	0.002	0.002	0.003	0.002	0.000	0.003
Other	0.062	0.011	0.009	0.010	0.019	0.016
<b>Total inflows</b>	<b>0.131</b>	<b>0.027</b>	<b>0.028</b>	<b>0.043</b>	<b>0.087</b>	<b>0.070</b>

### Overall non-domestic inflows declined by 19%

- The decline was driven by decreased inflows of Duty Free labelled packs
- The largest country inflow in 2014 was Russia. This increase may be due to a lower price and the presence of inbound visitors from Russia<sup>(2)(3)</sup>

OUTFLOWS FROM CYPRUS						
Billion cigarettes	2009	2010	2011	2012	2013	2014
UK	0.214	0.200	0.205	0.193	0.034	0.016
Luxembourg	0.000	0.000	0.000	0.000	0.000	0.004
France	0.007	0.000	0.000	0.005	0.002	0.002
Other	0.032	0.018	0.034	0.013	0.012	0.010
<b>Total outflows</b>	<b>0.252</b>	<b>0.218</b>	<b>0.239</b>	<b>0.211</b>	<b>0.048</b>	<b>0.032</b>

### Overall outflows continued to decline driven by reduced outflows to the UK

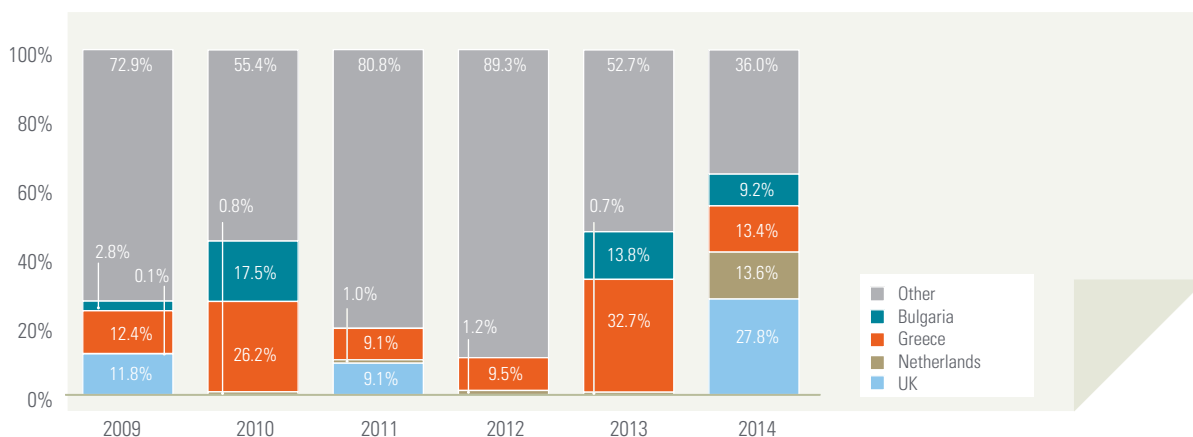
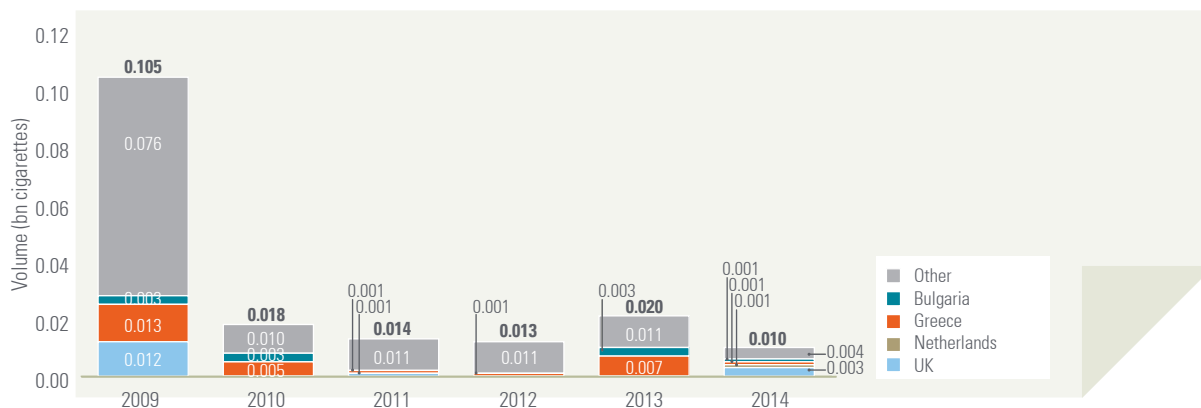
- Outflows to the UK historically accounted for 70% of the total outflows as Cyprus was a much lower-priced market and a popular holiday destination.
- The decrease in outflows was partially offset by increased outflows to Luxembourg, which may have been impacted by increased tourist flows to these more expensive markets<sup>(3)</sup>

Note: (a) The Duty Free inflow contains both "other" Duty Free product and Illicit Whites which have Duty Free labelling  
Sources: (1) KPMG EU Flows Model (2) EC Excise Duty tables (Part III – Manufactured Tobacco) (3) Cypriot Statistical Authority



# Legal inflows were consistent with tourist flows from higher-priced countries

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



CYPRUS



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### ND(L) decreased in Cyprus by 49%

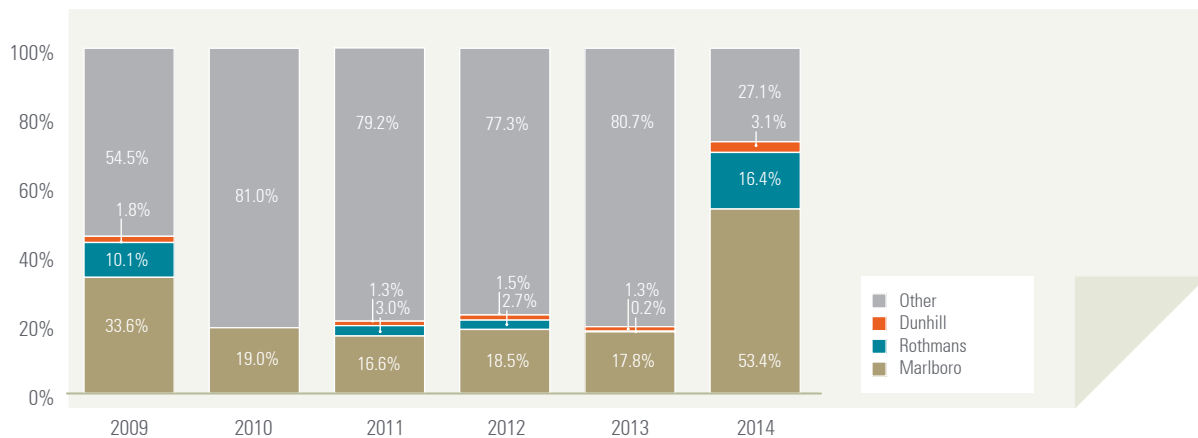
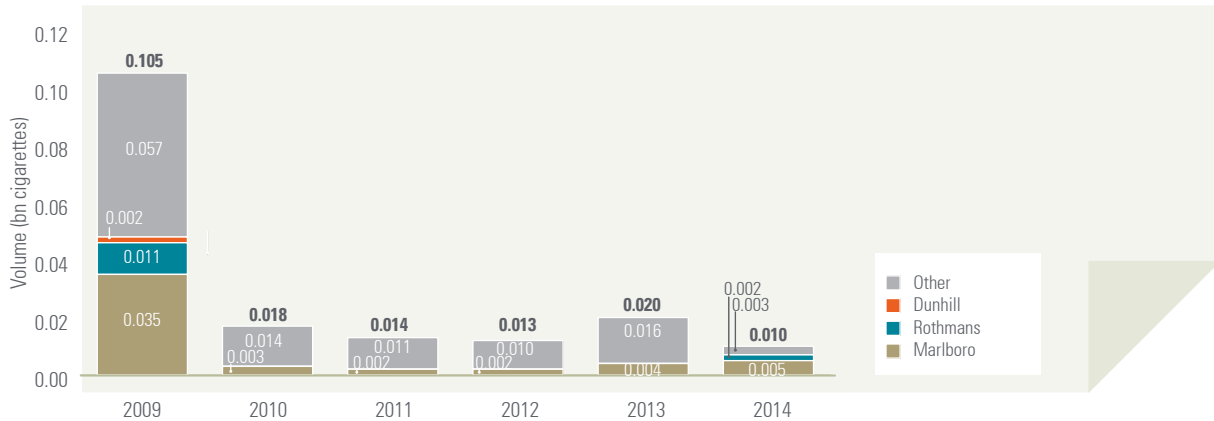
- The biggest decline came from Greece which may have been impacted by a 3.8% decline in tourism flows and price increases in Greece<sup>(3)</sup>
- Inflows from the UK and Netherlands are likely to be tourism-related and are categorised as 100% legal as they are higher-priced markets<sup>(4)</sup>
- Marlboro remained the largest ND(L) brand in 2014 and the UK, Netherlands and Greece each accounted for approximately a third of the legal Marlboro inflow

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) Cypriot Statistical Authority (4) EC Excise Duty tables (Part III – Manufactured Tobacco)

# NON-DOMESTIC LEGAL INFLOWS BY BRAND

**Total ND(L) by brand 2009-2014**<sup>(1)(2)(a)(b)</sup>



CYPRUS



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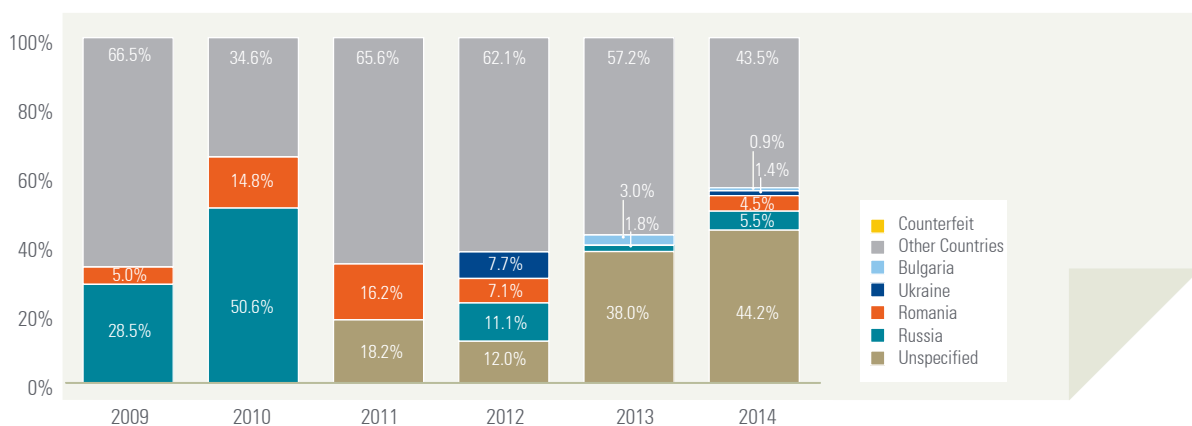
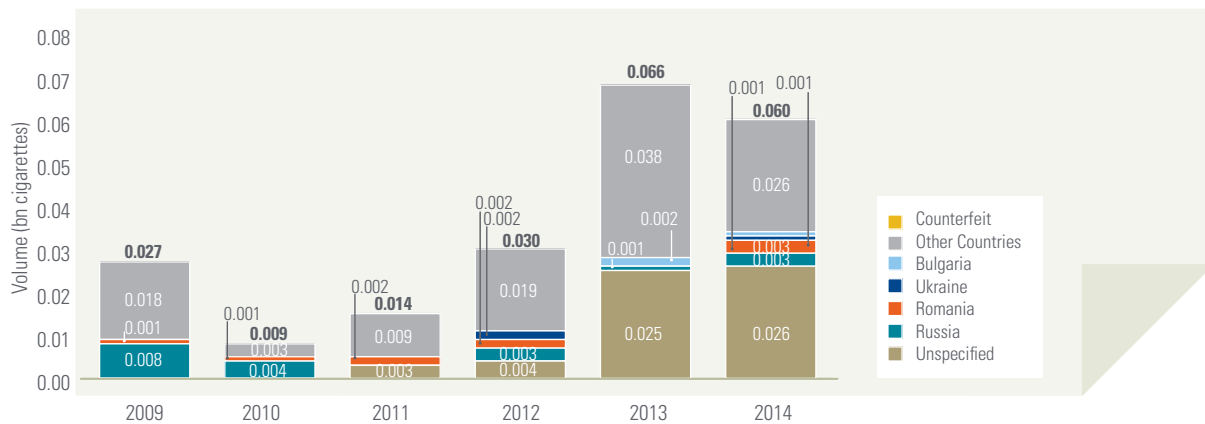
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers



# C&C remained at the same historically high share of consumption in 2014

Total C&C by origin 2009-2014<sup>(1)(2)(a)</sup>



CYPRUS



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## C&C consumption remained at historically high levels compared with 2009 to 2012

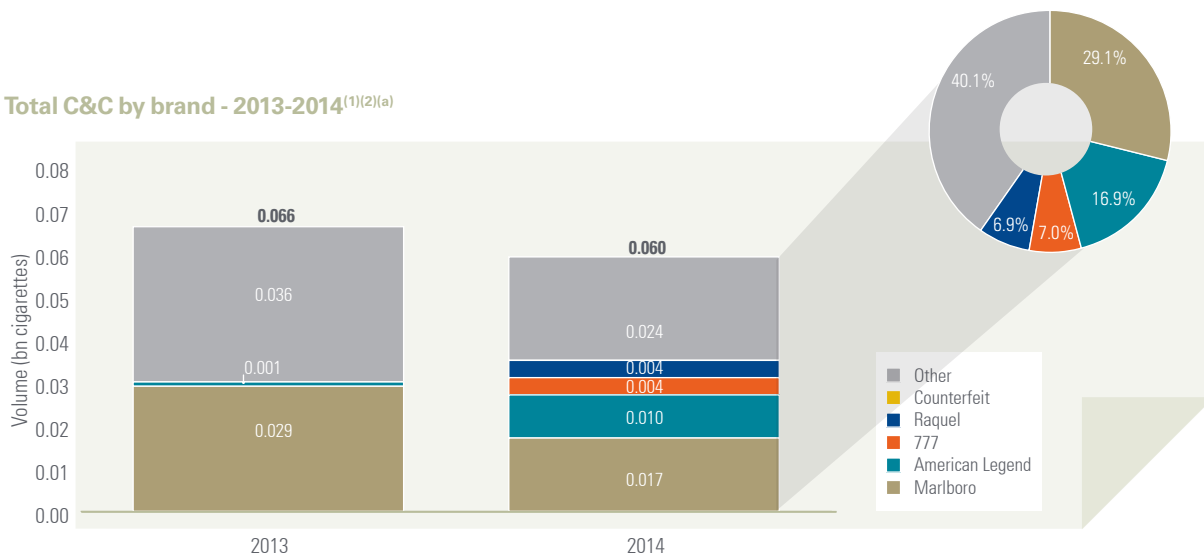
- The largest volume of C&C came from packs of Illicit Whites of unspecified origin
  - 34% of this inflow came from the American Legend trademark which became the second largest contraband brand in 2014
- Illicit Whites brands made up over 30% of C&C in 2014
- If the total volume of C&C had been consumed legally within the Cyprus market, the Cypriot Treasury would have raised an additional tax revenue of approximately €9m<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
 (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

## C&C INFLOWS BY BRAND

Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type - 2009-2014<sup>(1)(2)(a)</sup>

LABELLING OF ILLICIT WHITES INFLOWS TO CYPRUS						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	0.000	0.002	0.005	0.006	0.006	0.004
Duty Free	0.000	0.000	0.000	0.001	0.000	0.000
Unspecified	0.000	0.000	0.000	0.000	0.002	0.022
<b>Total Illicit Whites</b>	<b>0.002</b>	<b>0.002</b>	<b>0.005</b>	<b>0.007</b>	<b>0.009</b>	<b>0.026</b>

CYPRUS



PROJECT SUN

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

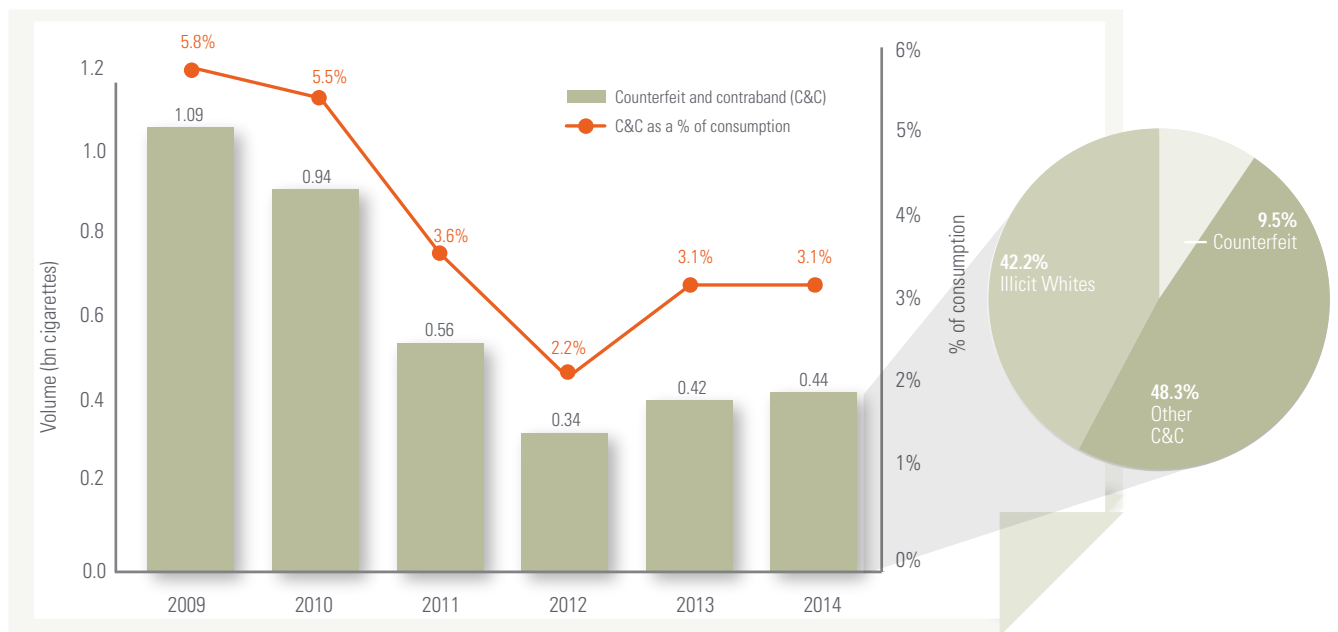
(2) KPMG analysis of data sources provided by manufacturers

# CZECH REPUBLIC



C&C remained low as a proportion of total consumption

Manufactured cigarette C&C volumes and share of overall consumption - 2009-14

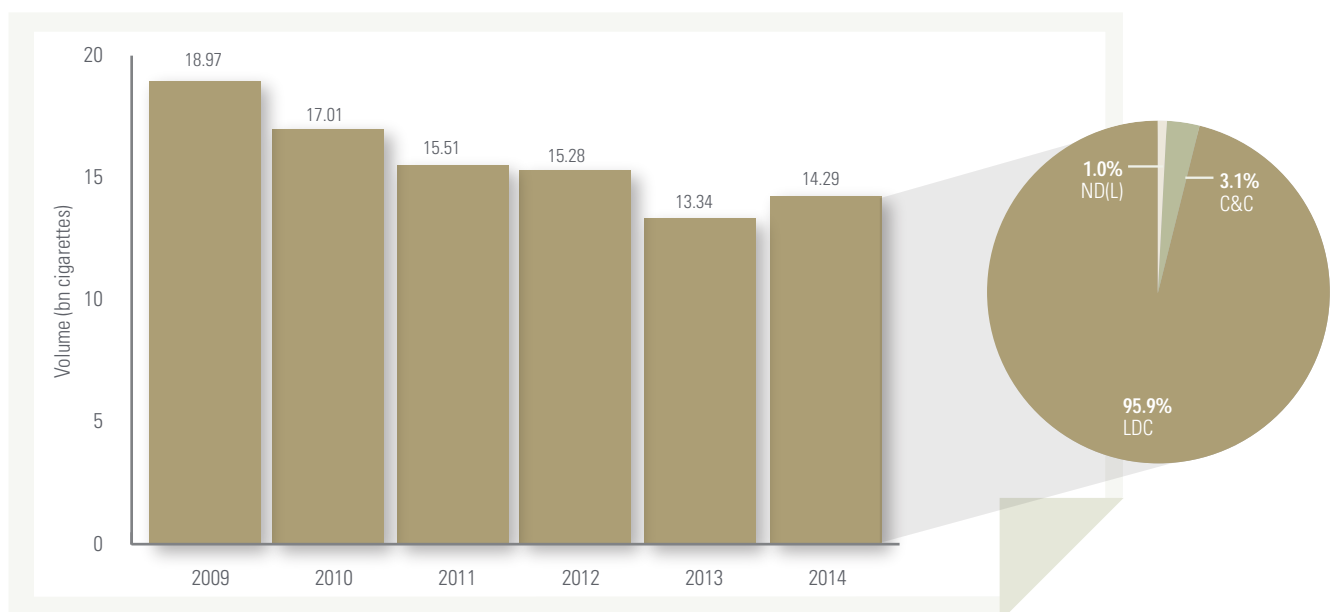


CZECH REPUBLIC



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Manufactured cigarette consumption - 2009-14



# KEY INFLOWS AND OUTFLOWS



CZECH REPUBLIC



PROJECT SUN

Main outflow

Main inflow

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

Source: (1) KPMG EU Flows Model

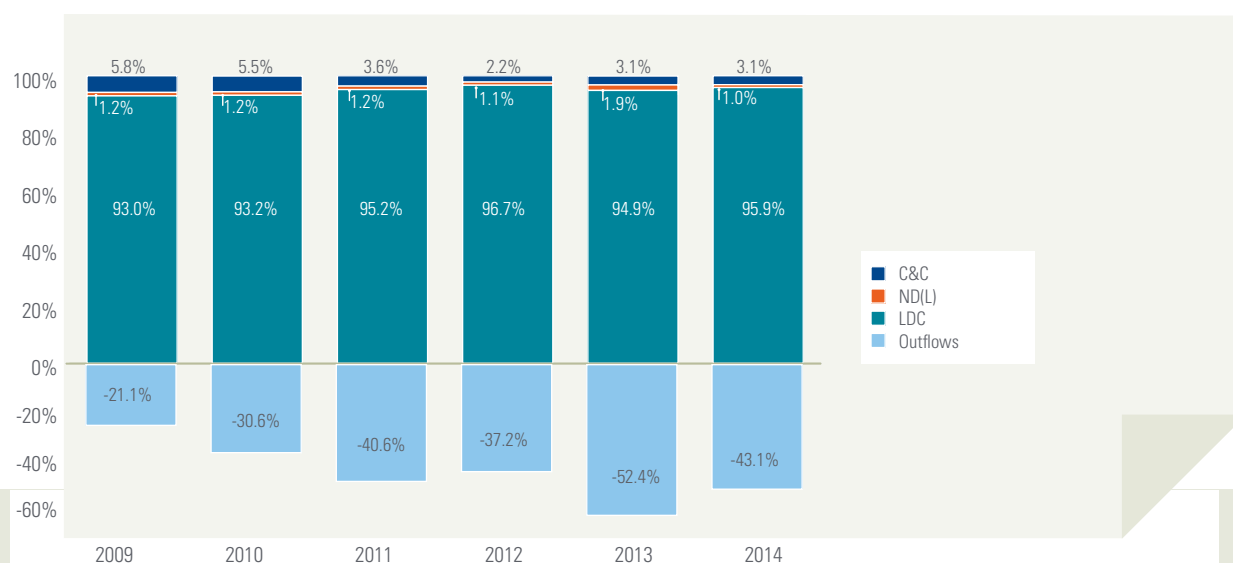
# Outflows remained a large proportion of legal domestic sales

The large fluctuations in outflows, predominantly to Germany have impacted the legal domestic consumption. In 2014 an enhanced pack collection was used in Germany which resulted in a lower volume of Czech packs identified, which contributed to a lower outflow to Germany.

Total manufactured cigarette consumption – Czech Republic<sup>(1)(2)(a)</sup>

TOTAL CZECH REPUBLIC CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	21.65	21.06	21.06	20.46	19.65	19.87	1%
Outflows	-4.00	-5.21	-6.30	-5.68	-6.99	-6.16	n/a
Legal domestic consumption (LDC)	17.65	15.85	14.76	14.78	12.67	13.71	8%
Non-domestic legal (ND(L))	0.23	0.21	0.19	0.16	0.26	0.14	(44%)
Counterfeit and contraband (C&C)	1.09	0.94	0.56	0.34	0.42	0.44	5%
Total non-domestic	1.32	1.15	0.75	0.50	0.68	0.58	(14%)
<b>Total consumption</b>	<b>18.97</b>	<b>17.01</b>	<b>15.51</b>	<b>15.28</b>	<b>13.34</b>	<b>14.29</b>	<b>7%</b>

Share of Czech Republic cigarette consumption by type – 2009-2014<sup>(1)(2)</sup>



**Legal domestic sales in the Czech Republic remained stable in 2014, whilst outflows decreased**

- The decline in outflows was influenced by a change of methodology in the Germany pack collection in 2014
- Average cigarette prices in local currency grew by 3.7% in 2014, but larger increases in neighbouring countries may have contributed to the 14% decline in non-domestic volumes<sup>(3)</sup>

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used  
 Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) EC Excise Duty tables (Part III – Manufactured Tobacco)



# InfloWS declined mainly due to falling volumes from Ukraine

## Total inflows by country of origin – 2009-2014<sup>(1)</sup>

ND INFLOWSTO CZECH REPUBLIC						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Belarus	0.03	0.04	0.11	0.05	0.10	0.13
Duty Free	0.12	0.21	0.14	0.12	0.15	0.11
Illicit Whites with Duty Free labelling						0.07
Poland	0.09	0.06	0.03	0.01	0.05	0.05
Russia	0.12	0.07	0.06	0.05	0.03	0.03
Ukraine	0.71	0.51	0.25	0.16	0.11	0.03
Slovakia	0.05	0.03	0.02	0.02	0.02	0.02
Other	0.20	0.23	0.14	0.10	0.22	0.13
<b>Total inflows</b>	<b>1.32</b>	<b>1.15</b>	<b>0.75</b>	<b>0.50</b>	<b>0.68</b>	<b>0.58</b>

### Overall non-domestic inflows declined by 14% primarily as a result of a decline in inflows from Ukraine

- Despite an increase in the price difference with Ukraine, the fall in inflows may have been impacted by heightened border security due to regional tensions<sup>(2)</sup>
- Flows from Belarus have continued to grow driven by significant price differences between Czech and Belarus product<sup>(2)</sup>

## Total outflows by destination country – 2009-2014<sup>(1)</sup>

OUTFLOWS FROM CZECH REPUBLIC						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Germany	3.53	4.66	5.69	5.01	6.14	5.45
Austria	0.23	0.25	0.47	0.47	0.61	0.47
UK	0.07	0.03	0.04	0.06	0.06	0.10
Other	0.17	0.27	0.10	0.15	0.17	0.14
<b>Total outflows</b>	<b>4.00</b>	<b>5.21</b>	<b>6.30</b>	<b>5.68</b>	<b>6.99</b>	<b>6.16</b>

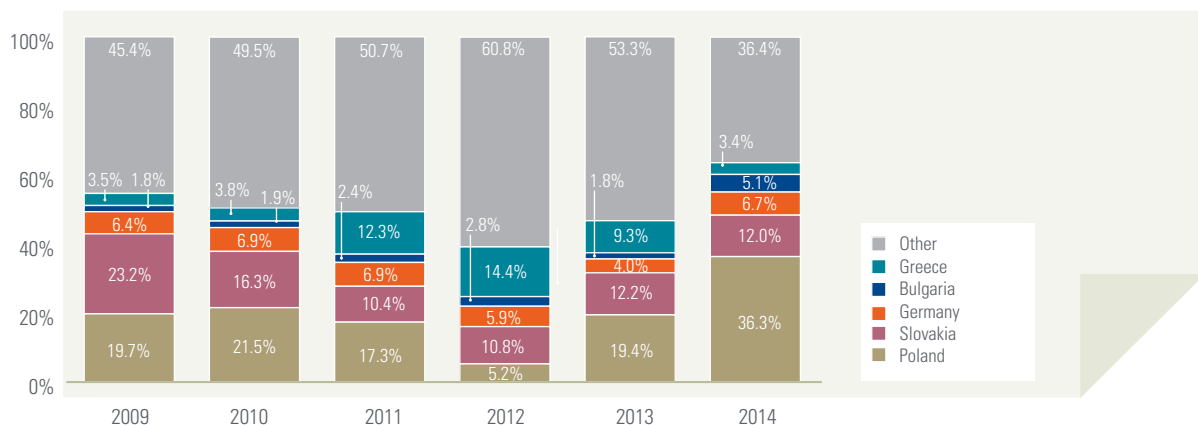
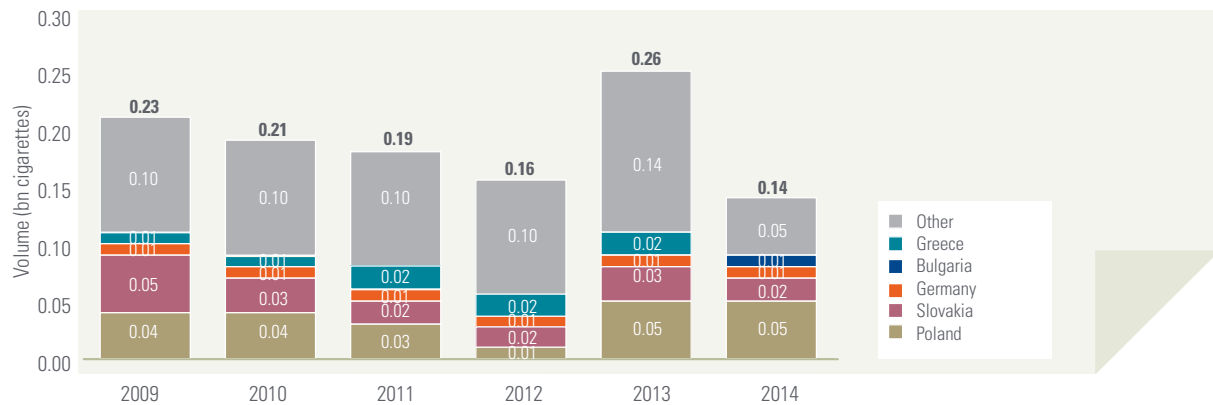
**Overall non-domestic outflows declined due to a change in pack collection methodology in Germany. Travel retail data showed an 11% increase in sales in shops on the border belt, reflected by the growth in price difference from €2.13 to €2.29<sup>(2)(3)</sup>**

Sources: (1) KPMG EU Flows Model (2) EC Excise Duty tables (Part III – Manufactured Tobacco) (3) Nielsen POS data provided by manufacturers



# ND(L) flows from neighbouring countries declined as prices in the Czech Republic remained stable

Total ND(L) by origin – 2009-2014<sup>(1)(2)(a)(b)</sup>



CZECH REPUBLIC



PROJECT SUN

- Flows of manufactured cigarettes declined from Poland, Slovakia and Germany, all of which are higher priced than the Czech Republic. These flows were assumed to be legal
  - A large proportion of the L&M inflow came from Poland where it is the largest domestic brand
  - Marlboro was the largest ND(L) brand in 2013, but declined by more than half in 2014 as a result of declines in flows from Germany and Slovakia

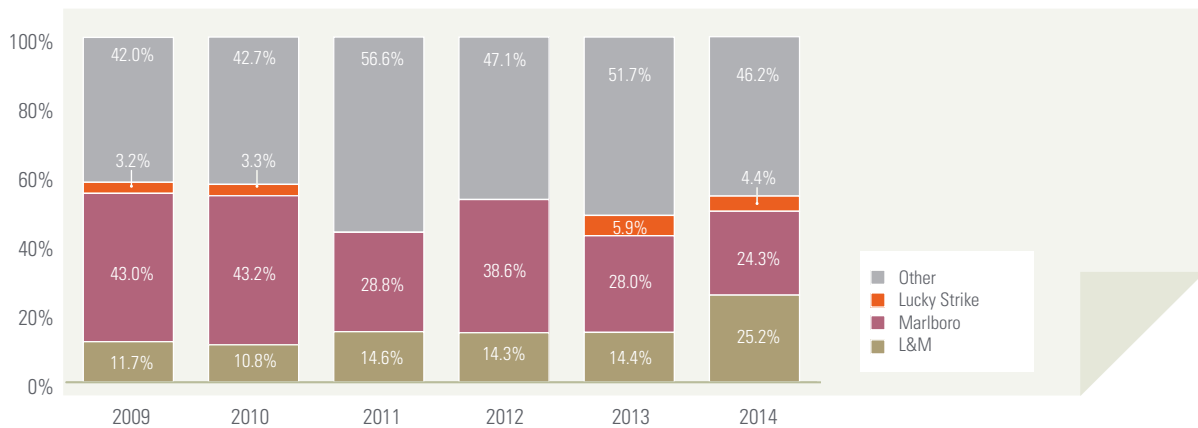
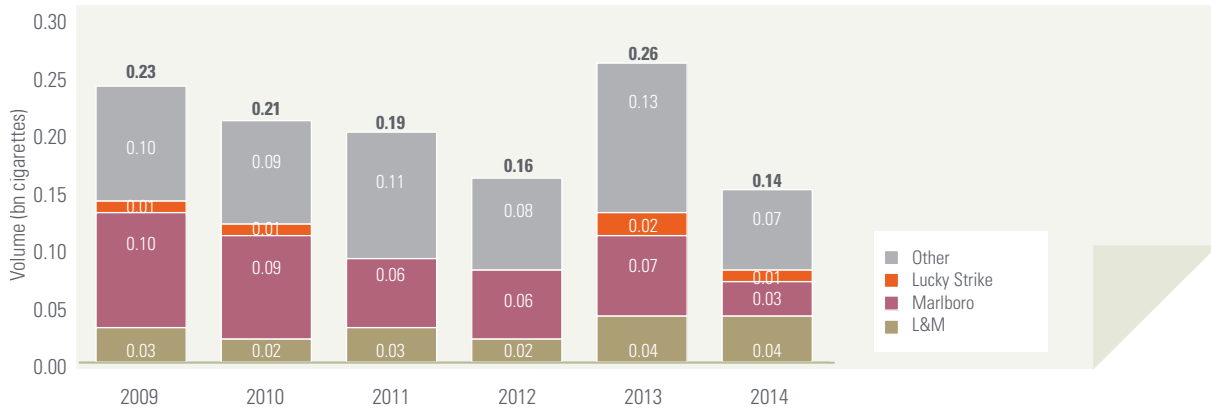
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

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# NON-DOMESTIC LEGAL INFLOWS BY BRAND

**Total ND(L) by brand – 2009-2014**<sup>(1)(2)(a)(b)</sup>



CZECH REPUBLIC



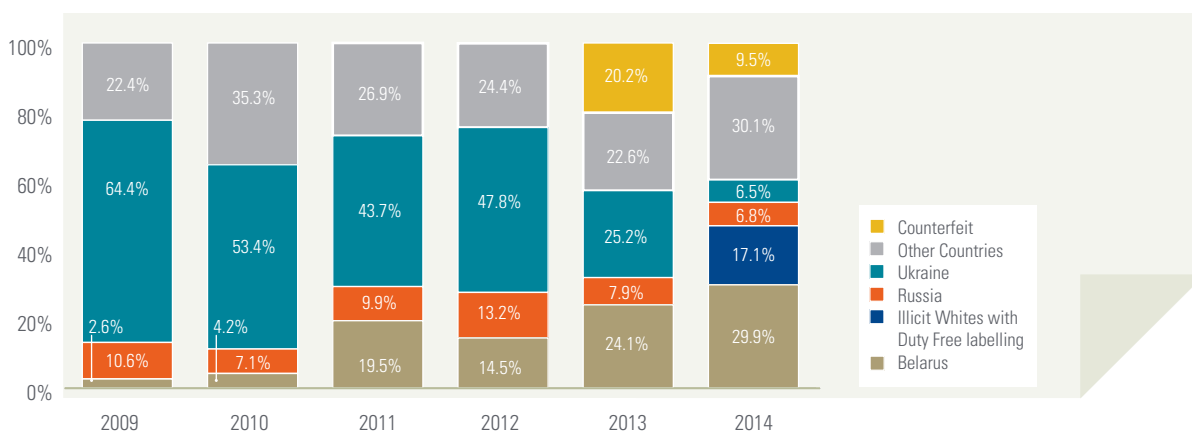
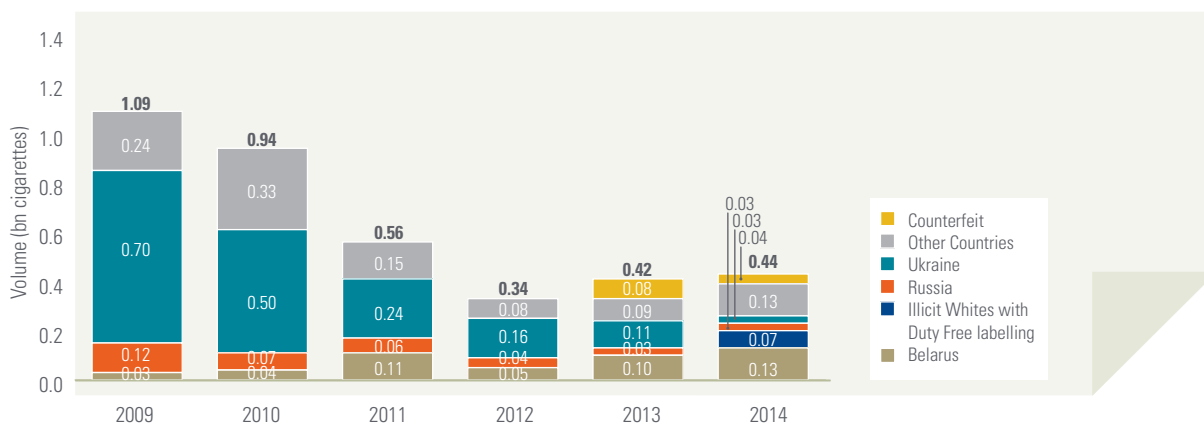
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**Notes:** (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows. (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

**Sources:** (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers.

# Belarus became an increasingly important source of illicit product

Total C&C by origin – 2009-2014<sup>(1)(2)(a)</sup>



CZECH REPUBLIC



PROJECT SUN

### Whilst overall C&C volumes remained stable, inflows from Illicit Whites brands increased

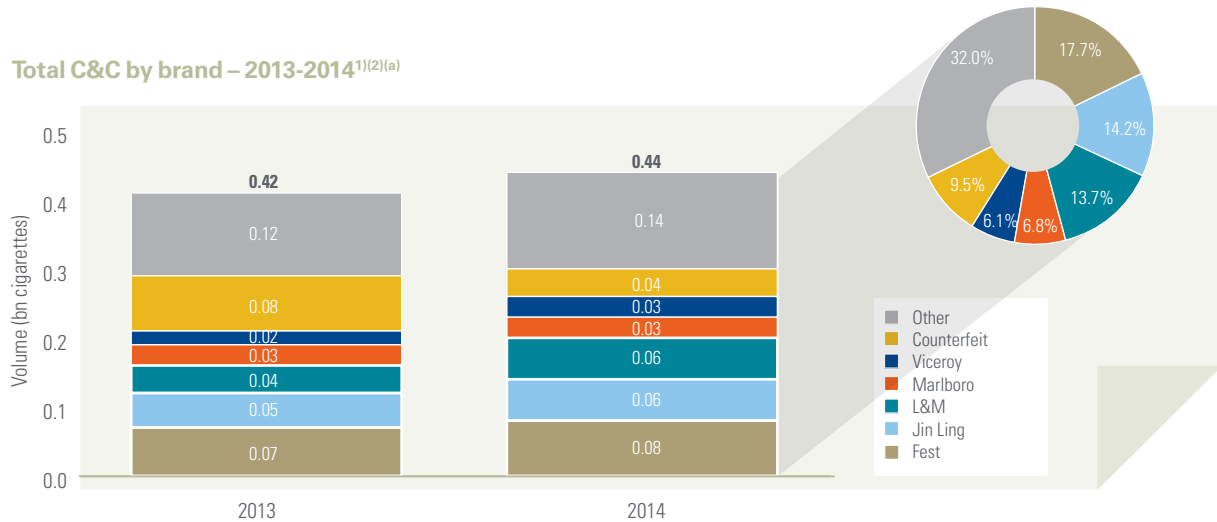
- Illicit Whites brands increased as a proportion of total C&C volumes and accounted for 42% of total C&C volumes in 2014, up from 35% in 2013
- As a result of low outbound tourism to Belarus, all inflows were allocated to C&C
  - The majority of the Belarus inflow came from brands with trademarks owned by Grodno Tobacco
- Over 80% of Illicit Whites with Duty Free labelling were packs of Jin Ling, a trademark owned by the Baltic Tobacco Factory
- If these cigarettes had been purchased legally in the Czech Republic the tax revenue gained would have been approximately €48m<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
 (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

## C&C INFLOWS BY BRAND

Total C&C by brand – 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type – 2009-2014<sup>(1)(2)(a)</sup>

LABELLING OF ILLICITWHITES INFLOWS TO CZECH REPUBLIC						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	0.11	0.07	0.12	0.05	0.09	0.11
Duty Free	0.00	0.01	0.02	0.04	0.05	0.07
Unspecified	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Illicit Whites</b>	<b>0.12</b>	<b>0.08</b>	<b>0.14</b>	<b>0.09</b>	<b>0.15</b>	<b>0.18</b>

CZECH REPUBLIC



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Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

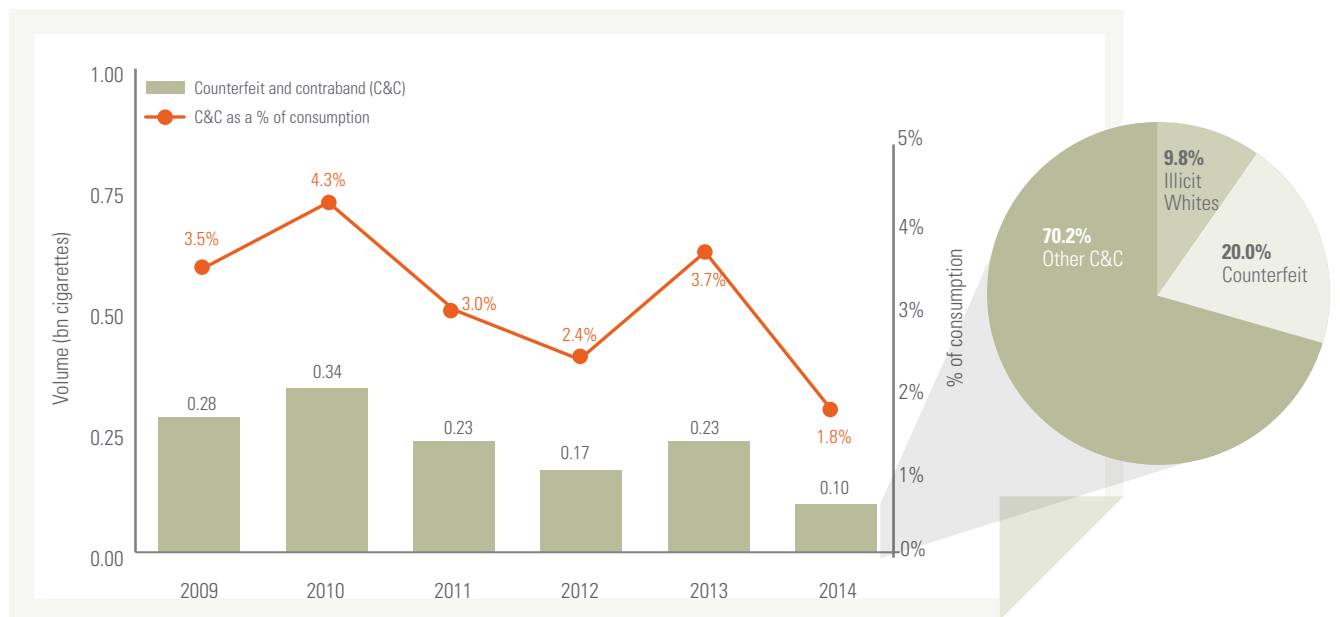
Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

(2) KPMG analysis of data sources provided by manufacturers



Denmark's C&C volume as a proportion of total consumption is one of the lowest in Europe

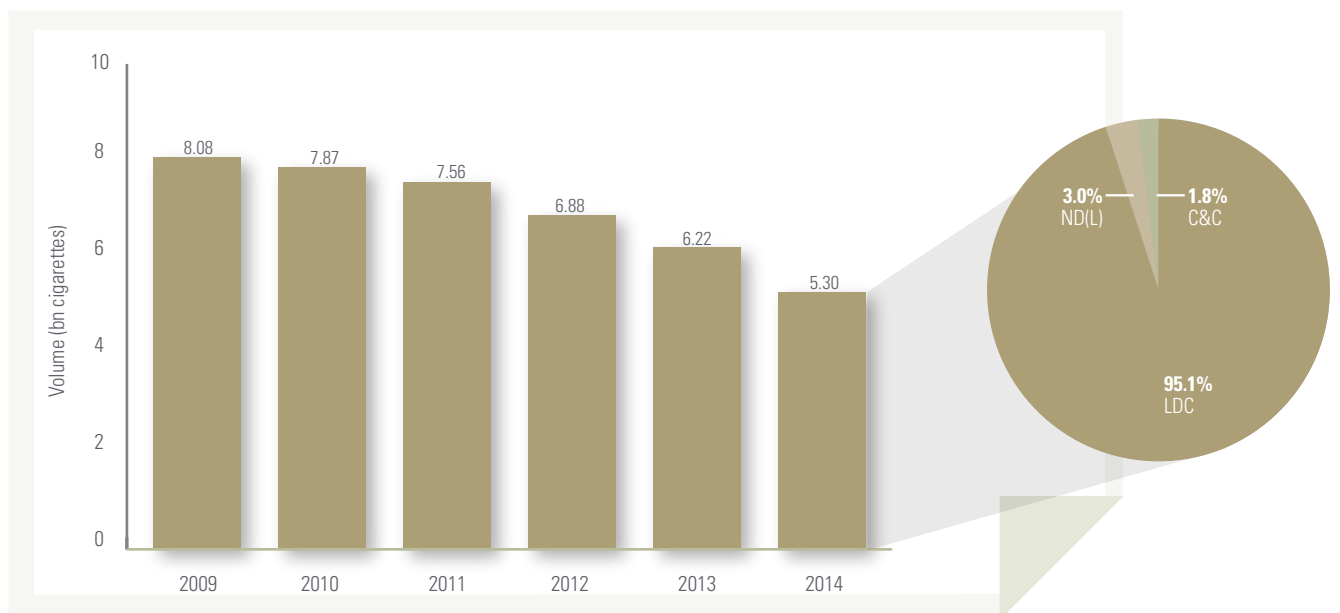
Manufactured cigarette C&C volumes and share of overall consumption 2009-14



DENMARK

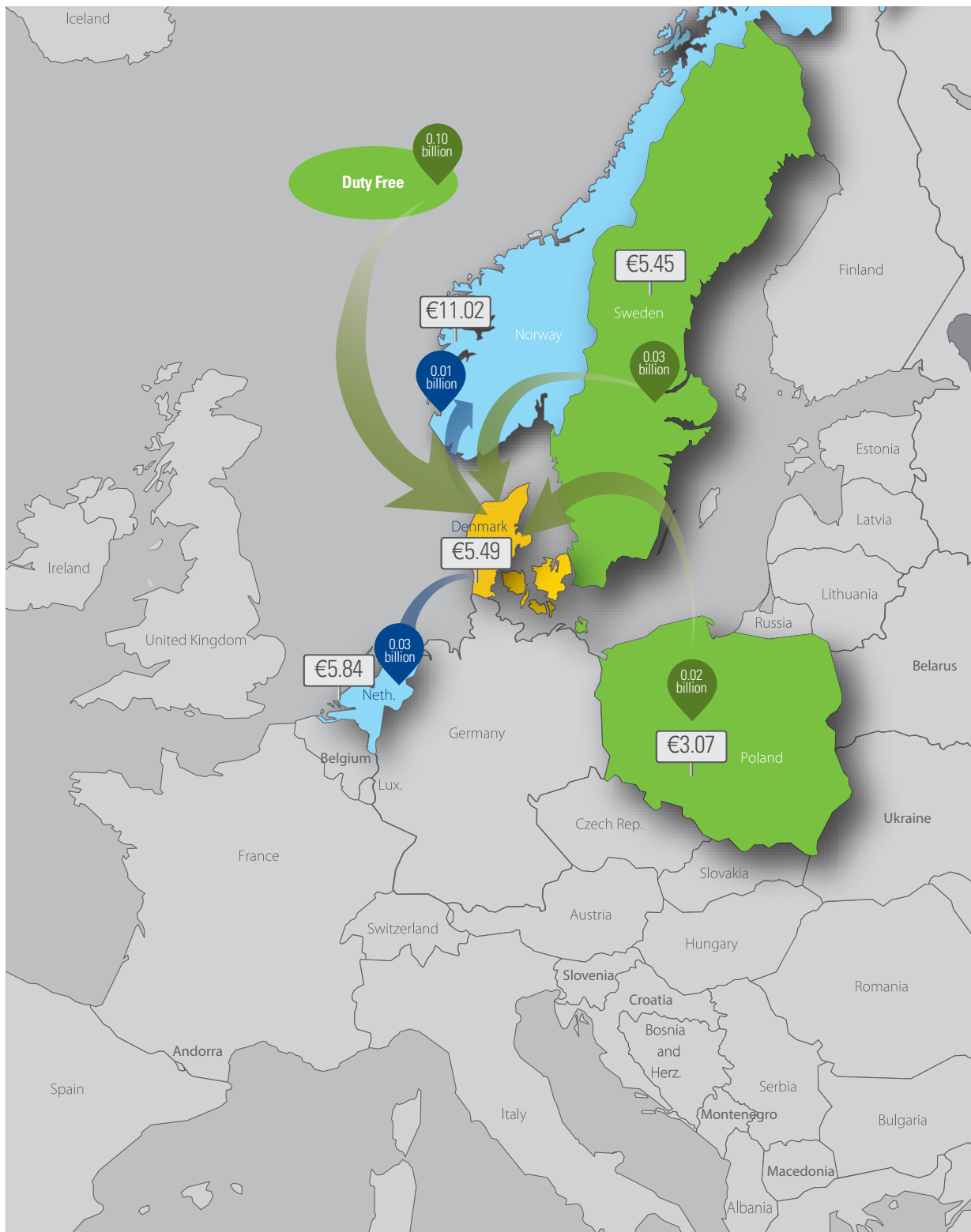


Manufactured cigarette consumption 2009-14



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# KEY INFLOWS AND OUTFLOWS



DENMARK



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Main outflow

Main inflow

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

Source: (1) KPMG EU Flows Model

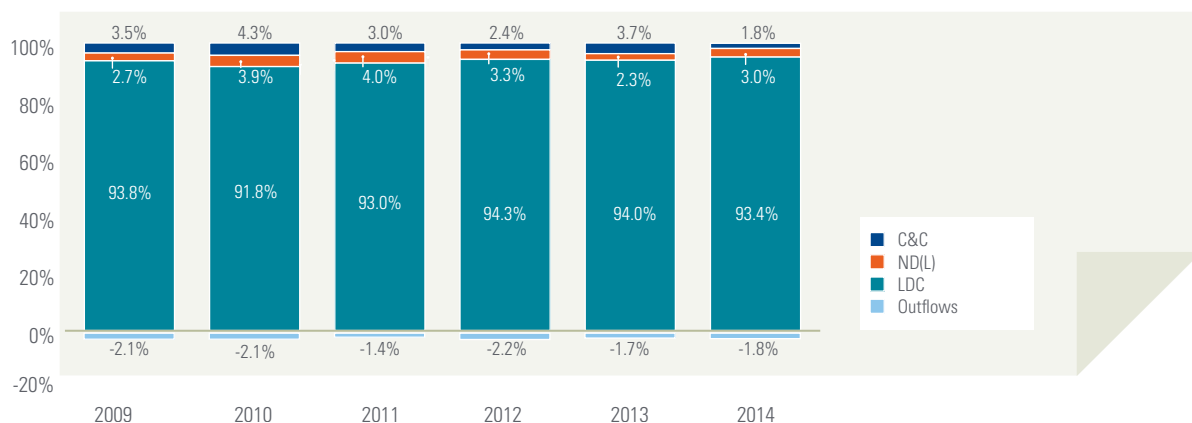
# C&C declined against a background of improving economic conditions

Comparison of 2013 and 2014 data is not applicable, given that 2013's sales data included the extra trade demand prior to excise increases. LDS decline was likely to be closer to 1% according to industry estimates.

## Total manufactured cigarette consumption – Denmark<sup>(1)(2)(a)</sup>

TOTAL DENMARK CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14%
Legal domestic sales (LDS)	7.75	7.39	7.13	6.64	5.95	5.05	n/a
Outflows	-0.17	-0.17	-0.10	-0.15	-0.10	-0.10	(7%)
Legal domestic consumption (LDC)	7.58	7.22	7.03	6.48	5.85	4.95	(15%)
Non-domestic legal (ND(L))	0.22	0.31	0.30	0.23	0.14	0.16	12%
Counterfeit and contraband (C&C)	0.28	0.34	0.23	0.17	0.23	0.10	(57%)
Total non-domestic	0.50	0.65	0.53	0.39	0.37	0.25	(32%)
<b>Total consumption</b>	<b>8.08</b>	<b>7.87</b>	<b>7.56</b>	<b>6.88</b>	<b>6.22</b>	<b>5.30</b>	<b>n/a</b>

## Share of Denmark cigarette consumption by type - 2009-2014<sup>(1)(2)</sup>



DENMARK



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### Total manufactured cigarette consumption declined as consumers appeared to switch from C&C to other forms of consumption

- E-cigarettes entered the market
- Sales of legal OTP increased at 1-3% per year, which demonstrates that consumers may be switching to cheaper products<sup>(3)</sup>

### Positive economic conditions may have impacted the decline in C&C, as GDP per capita grew and unemployment fell in 2014<sup>(4)</sup>

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used  
 Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) NMA (4) 2014 Economist Intelligence Unit

# Declining inflows driven by a fall in volumes of Duty Free labelled cigarettes

**Total inflows by country of origin 2009-2014<sup>(1)(a)</sup>**

Despite large travel volumes between Germany and Denmark, the price differential reduced to €0.35 in 2014, which may reduce the incentive to travel to purchase cigarettes

ND INFLOWSTO DENMARK						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Duty Free	0.21	0.20	0.14	0.13	0.16	0.10
Sweden	0.05	0.17	0.11	0.04	0.04	0.03
Poland	0.03	0.03	0.03	0.02	0.04	0.02
Bulgaria	0.01	0.00	0.00	0.01	0.00	0.01
Germany	0.04	0.03	0.05	0.06	0.02	0.01
Lithuania	0.02	0.01	0.01	0.01	0.01	0.01
Other	0.14	0.22	0.19	0.13	0.10	0.09
<b>Total inflows</b>	<b>0.50</b>	<b>0.65</b>	<b>0.53</b>	<b>0.39</b>	<b>0.37</b>	<b>0.25</b>

- Neighbouring Sweden remained the largest country specific inflow, though volumes declined as price differences narrowed. Swedish prices were €0.79 more expensive at the start of the year but €0.04 cheaper by the end of 2014<sup>(3)</sup>
- Other inflows may be impacted by migrant workers from Central and Eastern Europe living in Denmark
- Other estimates for inflows to Denmark exist, with the Danish Treasury estimating total inflows of approximately 0.6bn cigarettes in 2012 and 2013. It has, however, indicated that border trade may be decreasing<sup>(2)</sup>

**Total outflows by destination country - 2009-2014<sup>(1)</sup>**

OUTFLOWS FROM DENMARK						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Netherlands	0.01	0.05	0.02	0.02	0.02	0.03
Sweden	0.03	0.05	0.01	0.03	0.01	0.01
Norway						0.01
Germany	0.04	0.04	0.03	0.03	0.01	0.01
Other	0.09	0.04	0.04	0.08	0.05	0.03
<b>Total outflows</b>	<b>0.17</b>	<b>0.17</b>	<b>0.10</b>	<b>0.15</b>	<b>0.10</b>	<b>0.10</b>

**Outflows remained stable at 0.1bn cigarettes in 2014, with the largest flows reflecting travel volumes**

Note: (a) The Duty Free inflow contains both "other" Duty Free product and Illicit Whites which have Duty Free labelling

Sources: (1) KPMG EU Flows Model

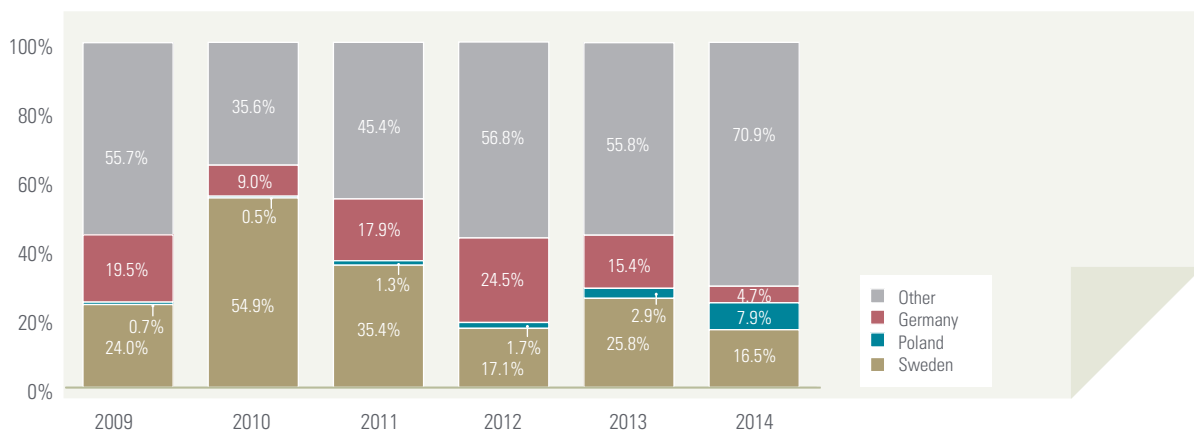
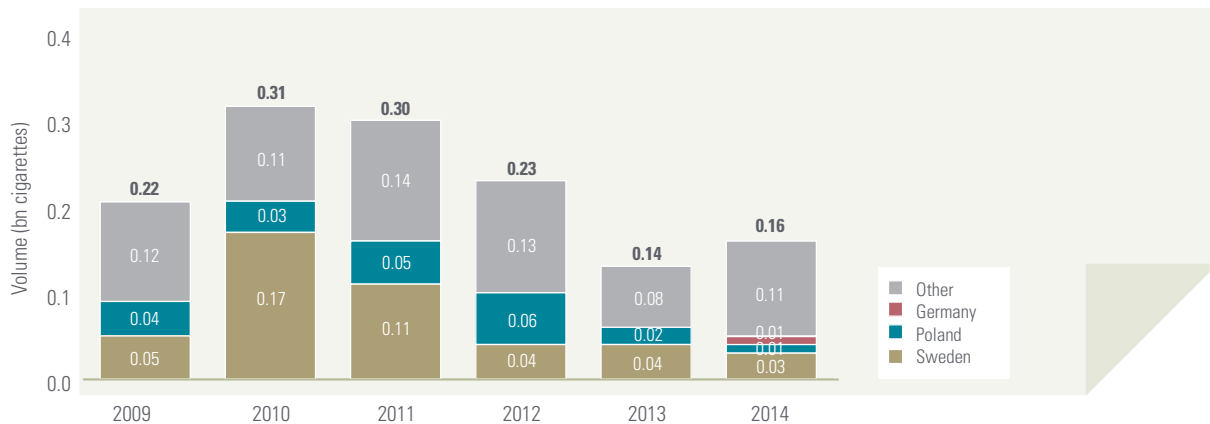
(2) Ministry of Taxation, Status over Grænsehandel, 2014

(3) EC Excise Duty tables (Part III - Manufactured Tobacco)



# Total ND(L) inflow increased, with neighbouring Sweden the main source

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



DENMARK



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## ND(L) increased in Denmark by 12%, which may be driven by increasing domestic prices

- Flows from Sweden continued to decline concurrent with a decline in travel flows between the two countries<sup>(1)</sup>
  - The majority of flows of Prince and Marlboro come from Sweden, accounting for 17% and 25% of the total flows for each of these brands respectively
- Increasing flows from Poland may be driven by increasing price differences and travel<sup>(3)</sup>

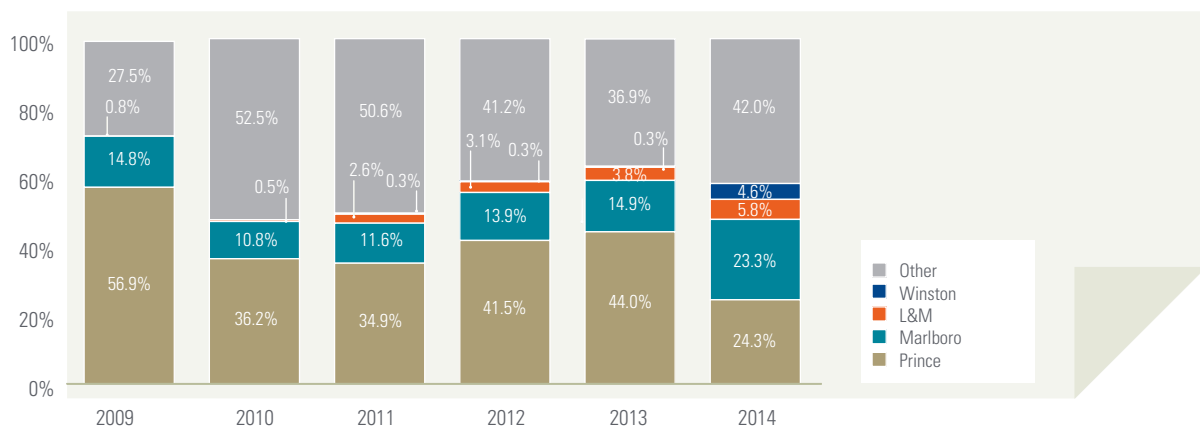
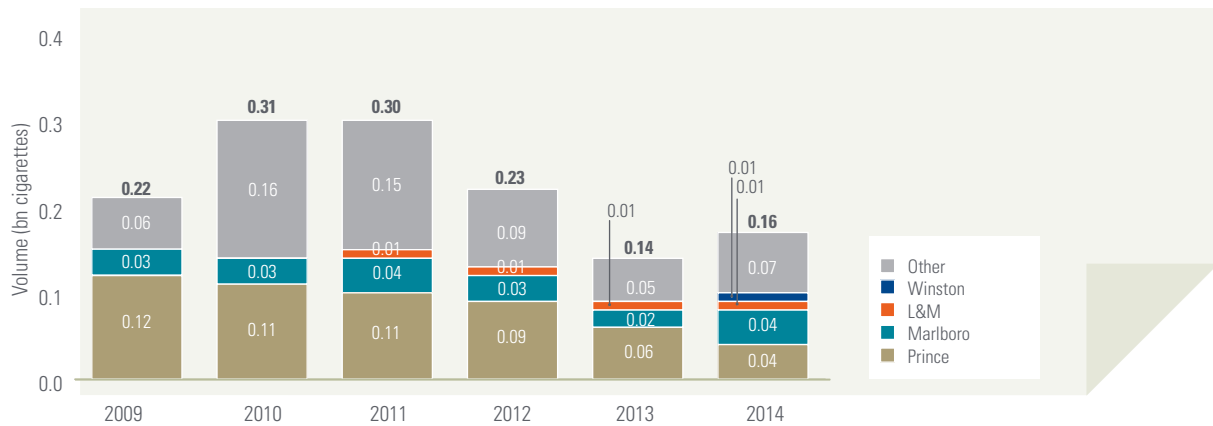
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)



# NON-DOMESTIC LEGAL INFLOWS BY BRAND

Total ND(L) by brand 2009-2014<sup>(1)(2)(a)(b)</sup>



DENMARK



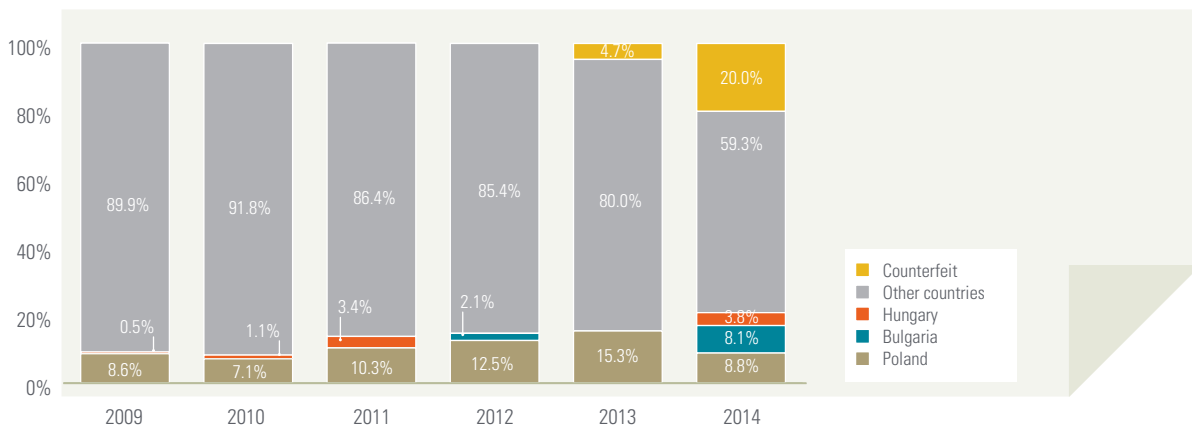
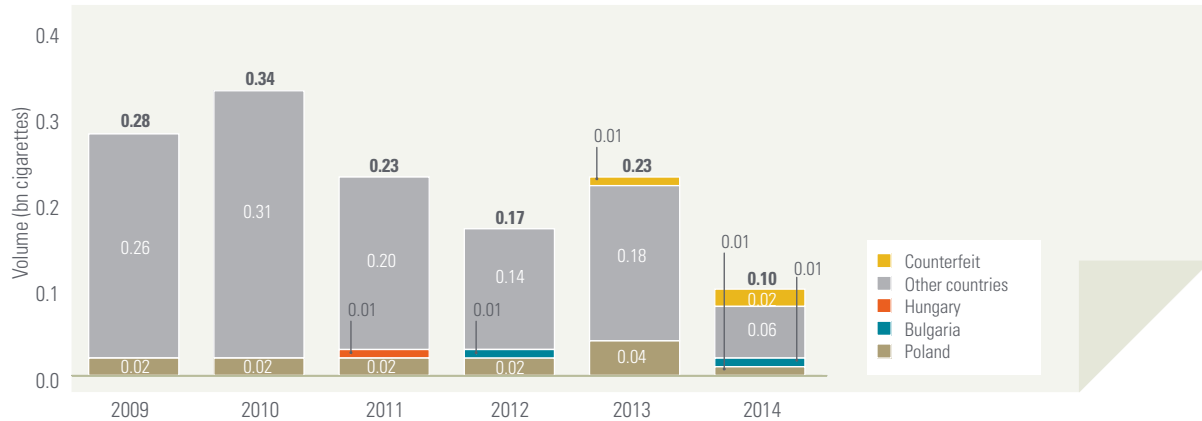
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# C&C volumes declined in 2014

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



DENMARK



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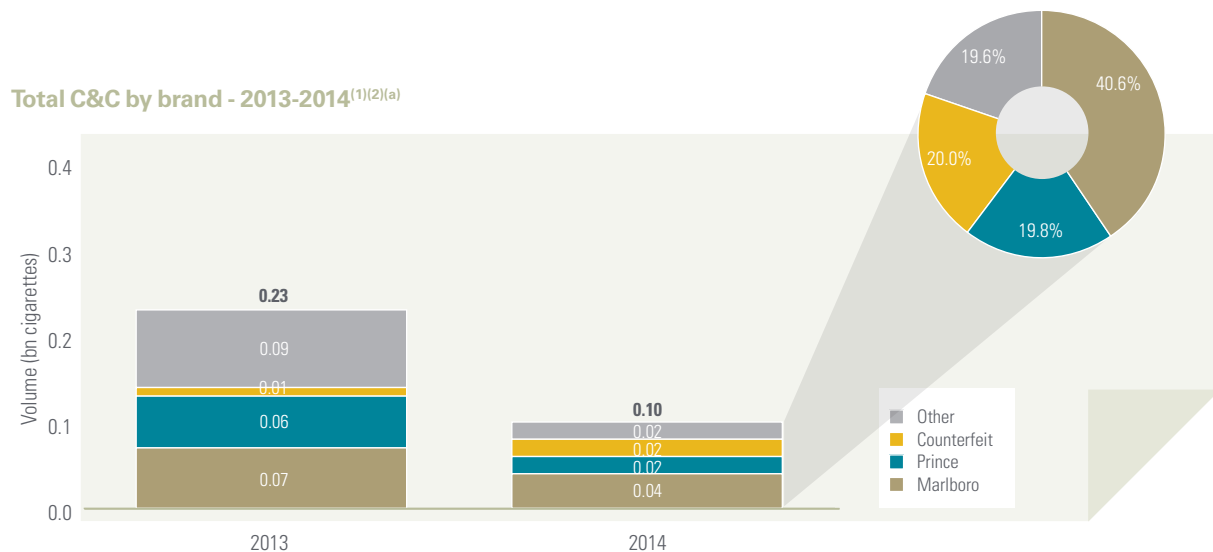
**C&C declined by over 57% between 2013 and 2014 to 0.1bn cigarettes**

- C&C inflows were, in the main from Eastern European countries where the number of border crossings did not support the volume of packs identified in Denmark
- If the total volume of C&C had been consumed legally within the Danish market, an additional tax revenue of approximately €21m (DKK157m) would have been raised by the Danish Treasury<sup>(3)</sup>
- Prince and Marlboro were the only brands to be counterfeited. All counterfeit packs identified bore Duty Free or Swedish Health warnings

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2)KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

# C&C INFLOWS BY BRAND



DENMARK



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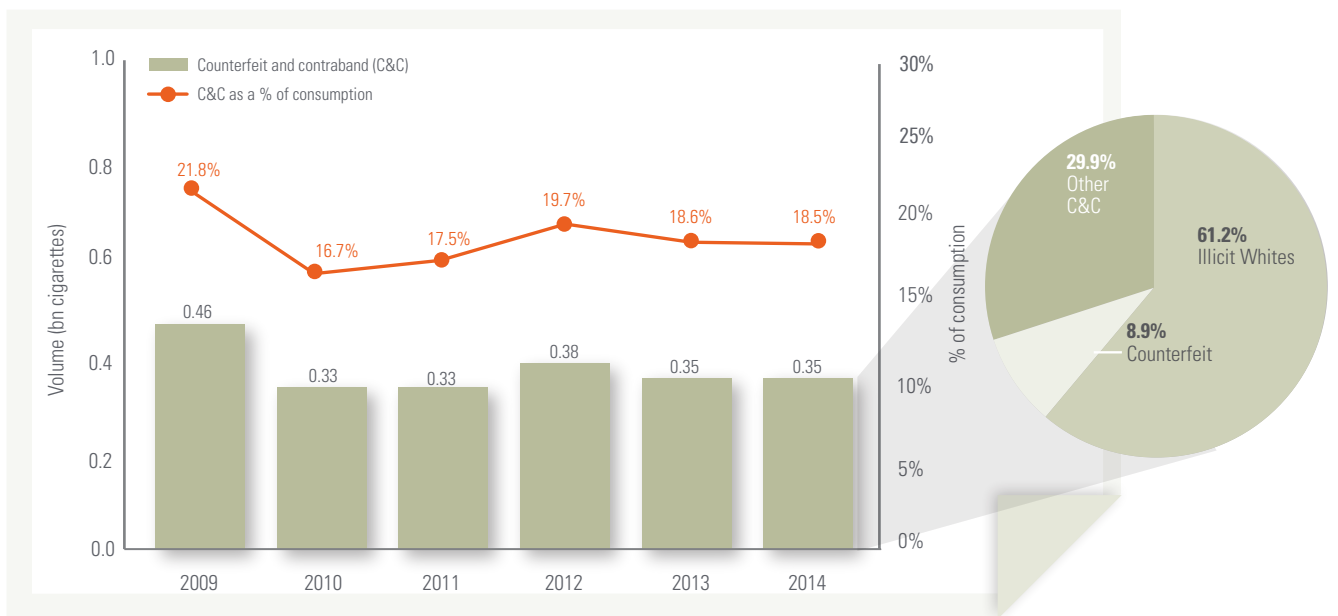
Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers



Illicit Whites brand flows accounted for over 60% of C&C consumption

Manufactured cigarette C&C volumes and share of overall consumption 2009-14

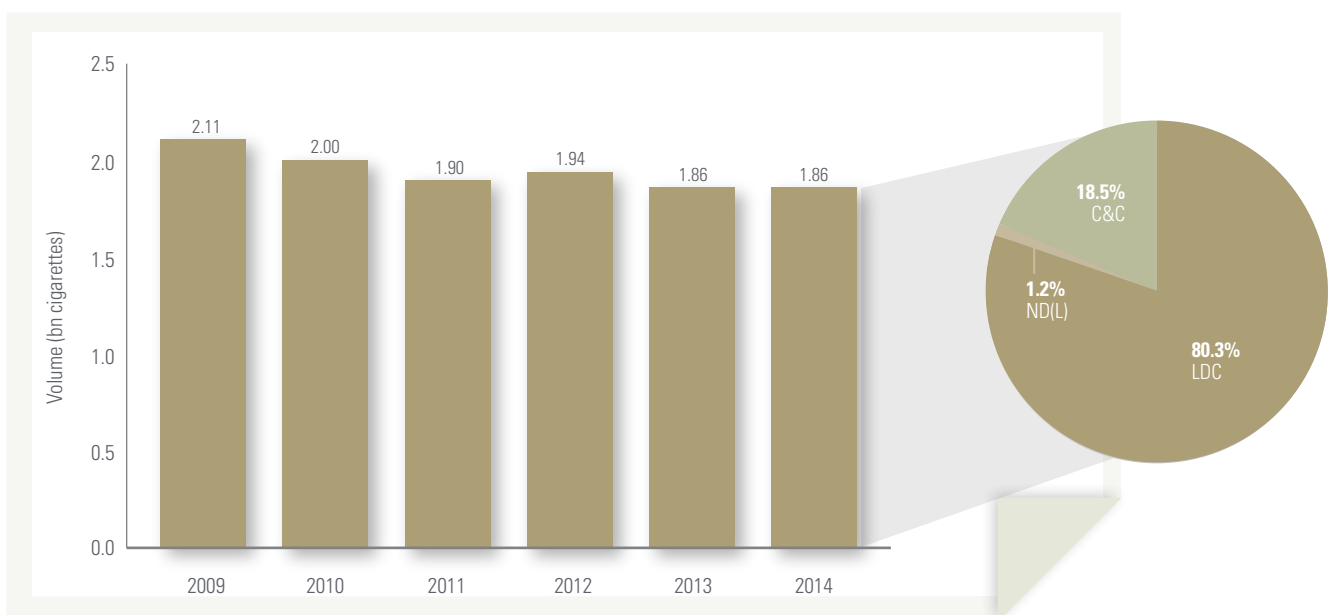


ESTONIA

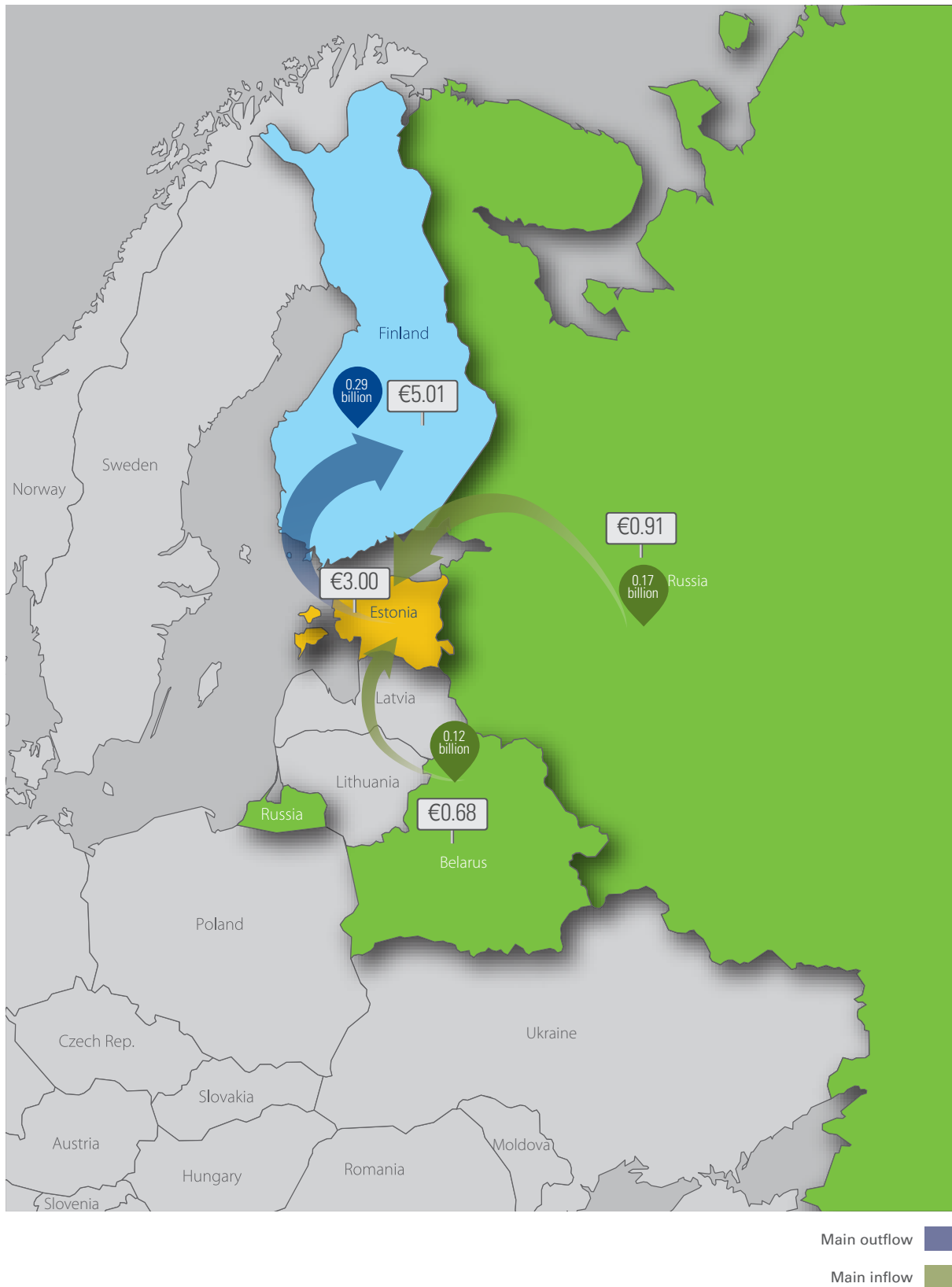


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Manufactured cigarette consumption 2009-14



# KEY INFLOWS AND OUTFLOWS



ESTONIA

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Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

Source: (1) KPMG EU Flows Model

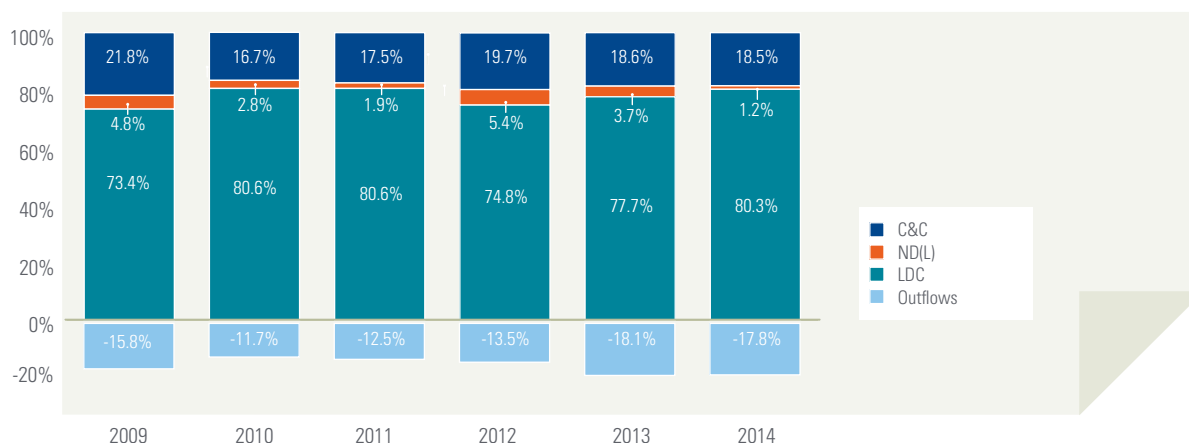
# Total cigarette consumption remained stable in 2014

Note: 2012 and 2013 Legal Domestic Sales have been re-stated with flows of 1.81bn in 2012 and 1.82bn in 2013, resulting in a growth in 2014 of 0.5%

## Total manufactured cigarette consumption – Estonia<sup>(1)(2)(a)</sup>

TOTAL ESTONIA CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	1.89	1.85	1.77	1.71	1.78	1.83	n/a
Outflows	-0.33	-0.24	-0.24	-0.26	-0.34	-0.33	(1%)
Legal domestic consumption (LDC)	1.55	1.61	1.53	1.45	1.44	1.50	4%
Non-domestic legal (ND(L))	0.10	0.06	0.04	0.10	0.07	0.02	(69%)
Counterfeit and contraband (C&C)	0.46	0.33	0.33	0.38	0.35	0.35	0%
Total non-domestic	0.56	0.39	0.37	0.49	0.41	0.37	(11%)
<b>Total consumption</b>	<b>2.11</b>	<b>2.00</b>	<b>1.90</b>	<b>1.94</b>	<b>1.86</b>	<b>1.86</b>	<b>n/a</b>

## Share of Estonia cigarette consumption by type 2009-2014<sup>(1)(2)</sup>



### Increased legal domestic sales were balanced by a fall in non-domestic volumes

- LDS grew despite a 6.8% increase in average prices<sup>(3)</sup>
  - The loose tobacco market declined in 2014 which may have reversed the trend of consumers switching from manufactured cigarettes<sup>(4)</sup>
  - Improved economic conditions may have also contributed to legal domestic sales growth, with rising GDP and personal disposable income and falling unemployment<sup>(5)(6)</sup>
- ND(L) volumes decreased whilst C&C inflows remained flat

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) Nielsen (5) 2014 Economist Intelligence Unit (6) 2014 Euromonitor

## InfloWS were mainly from the neighbouring lower-priced markets of Russia and Belarus

### Total inflows by country of origin - 2009-2014<sup>(1)(a)</sup>

ND INFLOWS TO ESTONIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Russia	0.51	0.36	0.30	0.38	0.25	0.17
Belarus	0.00	0.00	0.03	0.05	0.11	0.12
Latvia	0.00	0.00	0.00	0.00	0.00	0.01
Finland	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.05	0.02	0.03	0.05	0.04	0.07
<b>Total inflows</b>	<b>0.56</b>	<b>0.39</b>	<b>0.37</b>	<b>0.49</b>	<b>0.41</b>	<b>0.37</b>

- Russian inflows declined sharply in 2014, impacted by smaller price differences and increased enforcement on the Russian border (due to heightened border security between NATO countries and Russia)<sup>(b)</sup>
- Belarusian inflows grew, possibly impacted by higher price differences which increased from €2.17 in 2013 to €2.32 in 2014<sup>(2)</sup>

### Total outflows by destination country - 2009-2014<sup>(1)</sup>

OUTFLOWS FROM ESTONIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Finland	0.27	0.21	0.20	0.21	0.32	0.29
Norway						0.01
France	0.03	0.01	0.00	0.01	0.00	0.01
Other	0.04	0.02	0.03	0.05	0.02	0.03
<b>Total outflows</b>	<b>0.33</b>	<b>0.24</b>	<b>0.24</b>	<b>0.26</b>	<b>0.34</b>	<b>0.33</b>

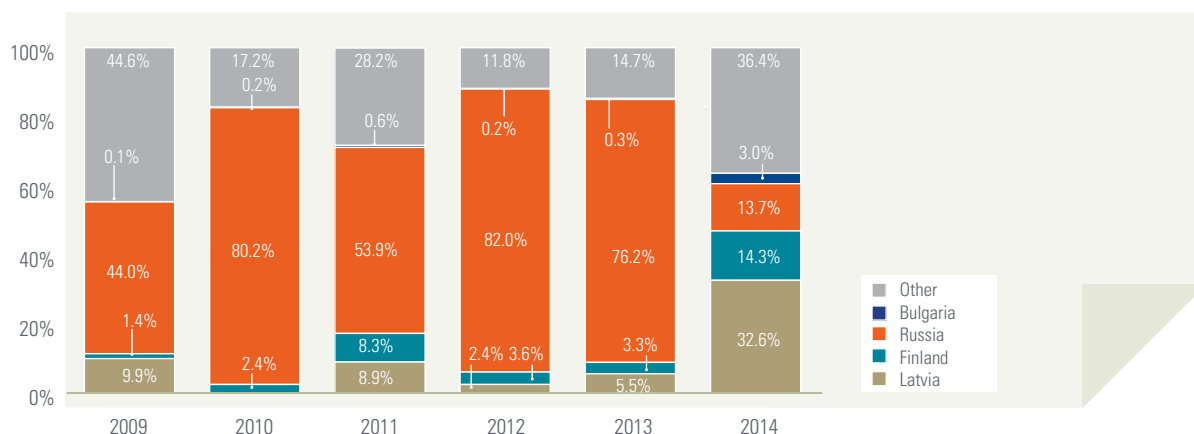
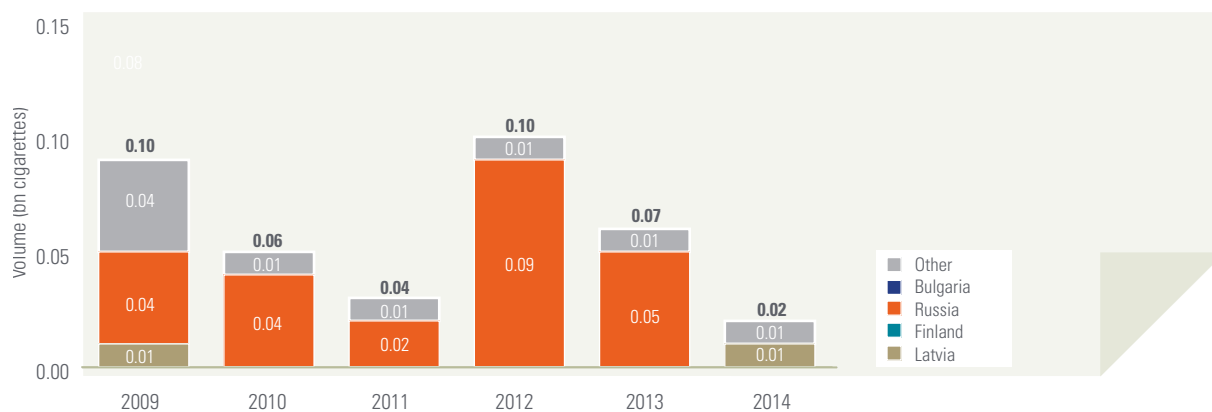
The majority of outflows were to Finland in 2014 where average price differences of €2.01 per packet of 20<sup>(2)</sup> and high visitor numbers between each country<sup>(3)</sup> impacted the overall flows

Notes: (a) The Duty Free inflow contains both "other" Duty Free product and Illicit Whites which have Duty Free labelling  
(b) Since the devaluation of the Rouble the price difference between Russia and Estonia had increased to €2.09 by the end of 2014

Sources: (1) KPMG EU Flows Model (2) EC Excise Duty tables (Part III – Manufactured Tobacco) (3) KPMG analysis of UNWTO Factbook 2008-2013

# ND(L) inflows continued their downward trend driven by a sharp fall in legal inflows from Russia

Total ND(L) by origin 2009 - 2014<sup>(1)(2)(a)(b)</sup>



ESTONIA

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**ND(L) inflows to Estonia decreased by 69%, driven by lower levels of non-domestic inflows from Russia**

- ND(L) volumes declined from Russia possibly as a result of the availability of cheaper cigarettes from Belarus
- Despite a large percentage increase in growth in ND(L) inflows with the neighbouring Latvian market, low price differences resulted in a relatively low volume of cross-border sales<sup>(3)</sup>

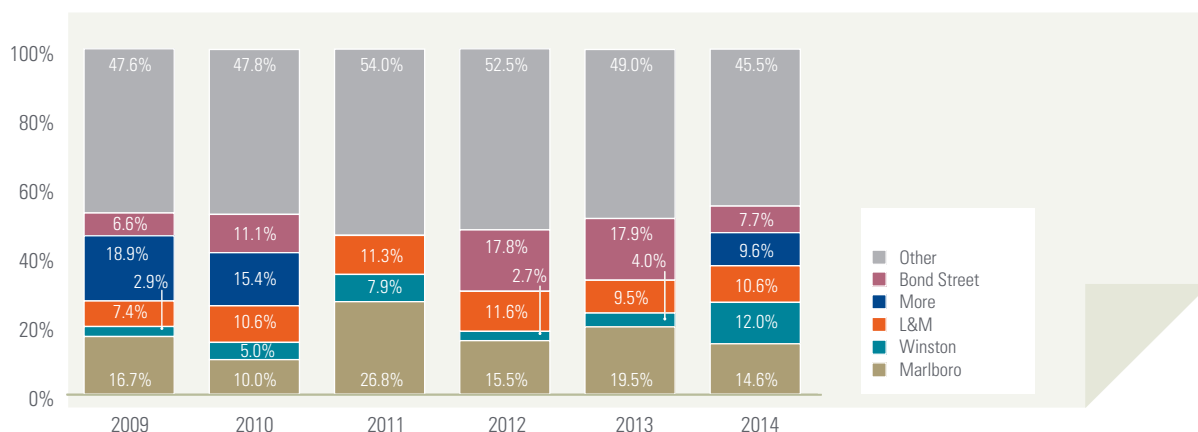
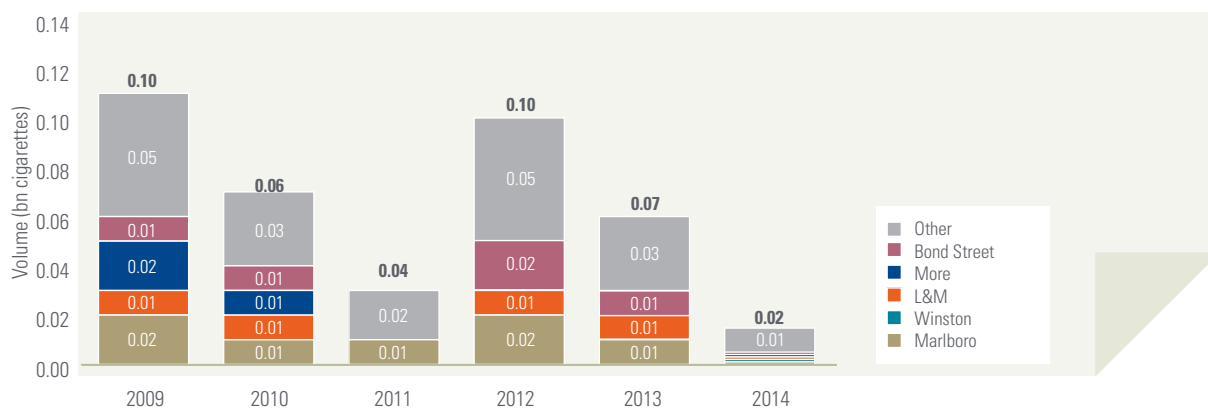
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)



# NON-DOMESTIC LEGAL INFLOWS BY BRAND

**Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>**



ESTONIA

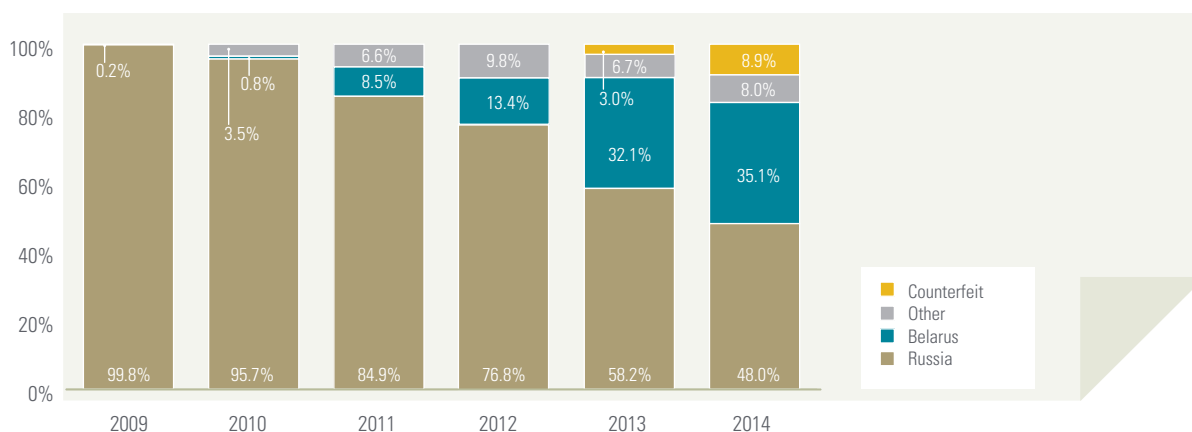
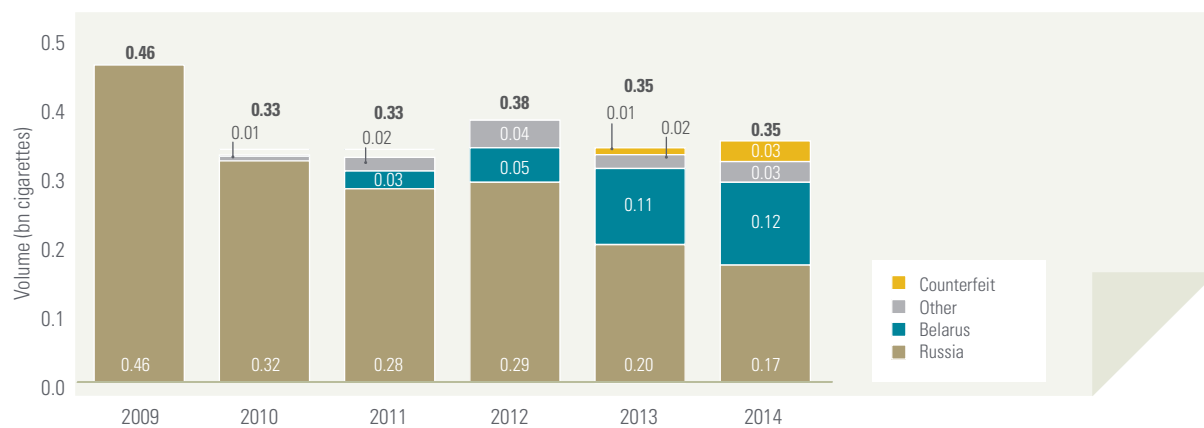
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# Estonia continued to see large Illicit Whites brand inflows from Russia and Belarus

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



ESTONIA

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## C&C remained stable between 2013 and 2014, with declines in Russian inflows offset by increased inflows from Belarus

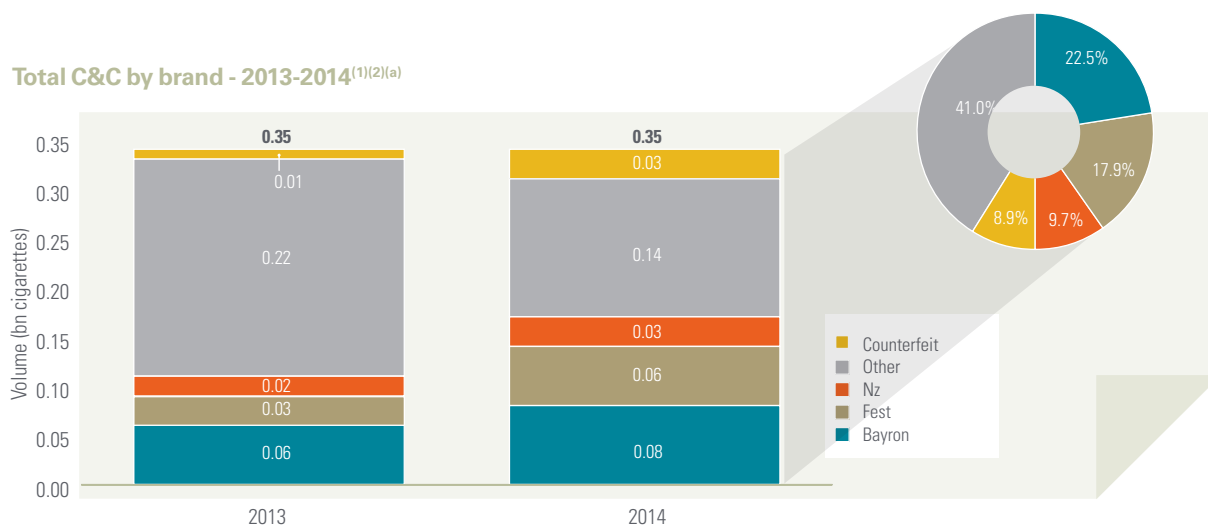
- Declines in Russian C&C were most likely impacted by a mixture of increased customs enforcement and reduced differences
  - Bayron, the largest Illicit Whites brand, had Russian labelling
- Increased price differences with Belarus may have increased C&C inflows
  - Over 90% of the Belarusian inflow came Fest, NZ and Premier all trademarks owned by Grodno Tobacco
  - The government has stated its intention to make tackling the illicit tobacco trade a high priority<sup>(3)</sup>
- If the total volume of C&C consumed in the Estonian market had been purchased legally, the Estonian Treasury would have raised approximately €41m in additional tax revenues<sup>(4)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows.

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) Maritime Transport & Agencies 2013 – 2016 Strategic Plan (4) EC Excise Duty tables (Part III – Manufactured Tobacco)

## C&C INFLOWS BY BRAND

Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type 2009-2014<sup>(1)(2)(a)</sup>

LABELLING OF ILLICIT WHITES INFLOWS TO ESTONIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	0.07	0.05	0.08	0.12	0.19	0.21
Duty Free	0.00	0.00	0.00	0.00	0.00	0.00
Unspecified	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Illicit Whites</b>	<b>0.07</b>	<b>0.05</b>	<b>0.08</b>	<b>0.12</b>	<b>0.19</b>	<b>0.21</b>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

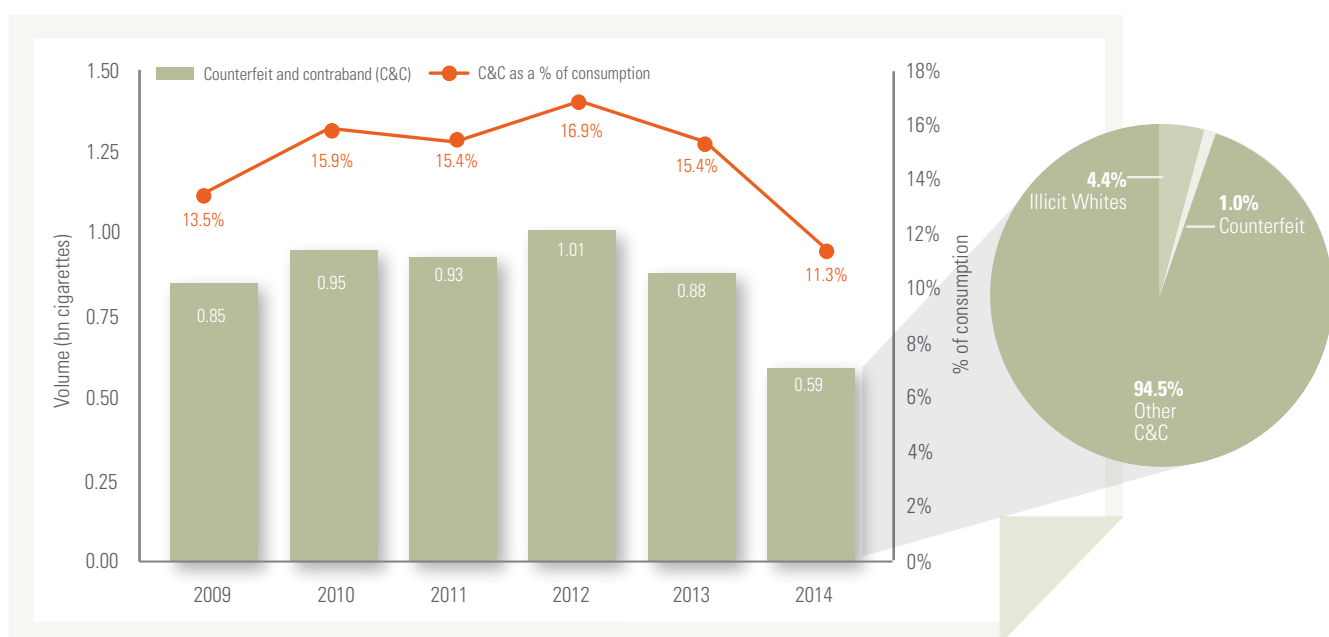
Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

(2) KPMG analysis of data sources provided by manufacturers

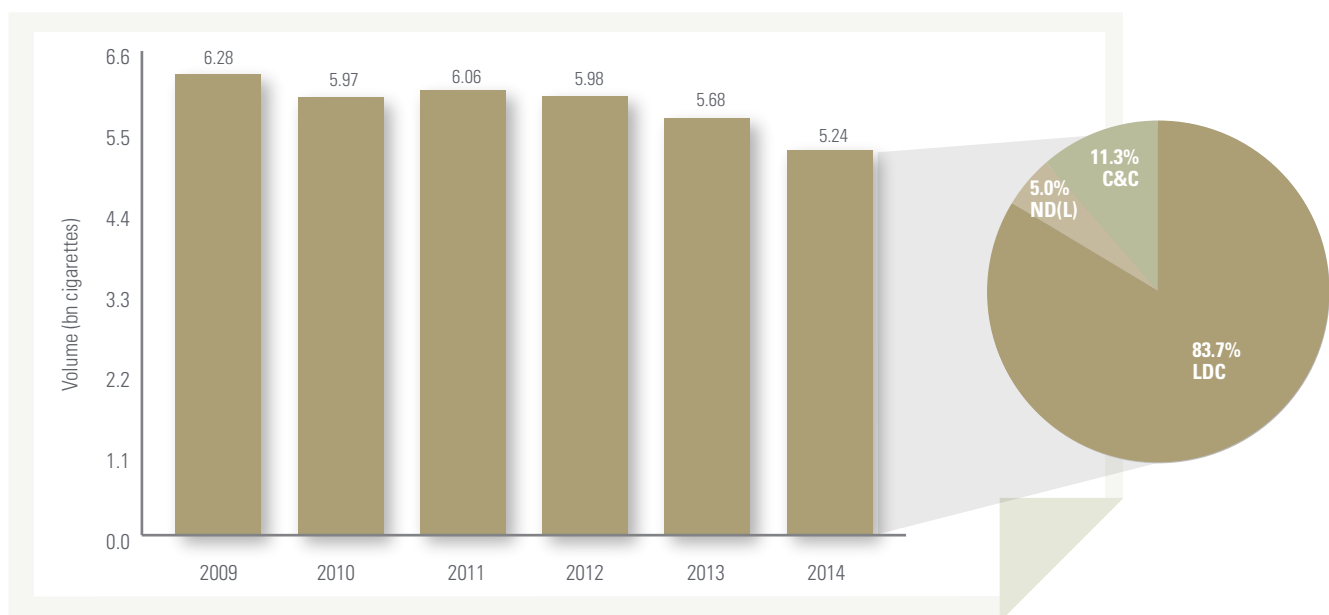


## C&C from Russia declined due to increased border security

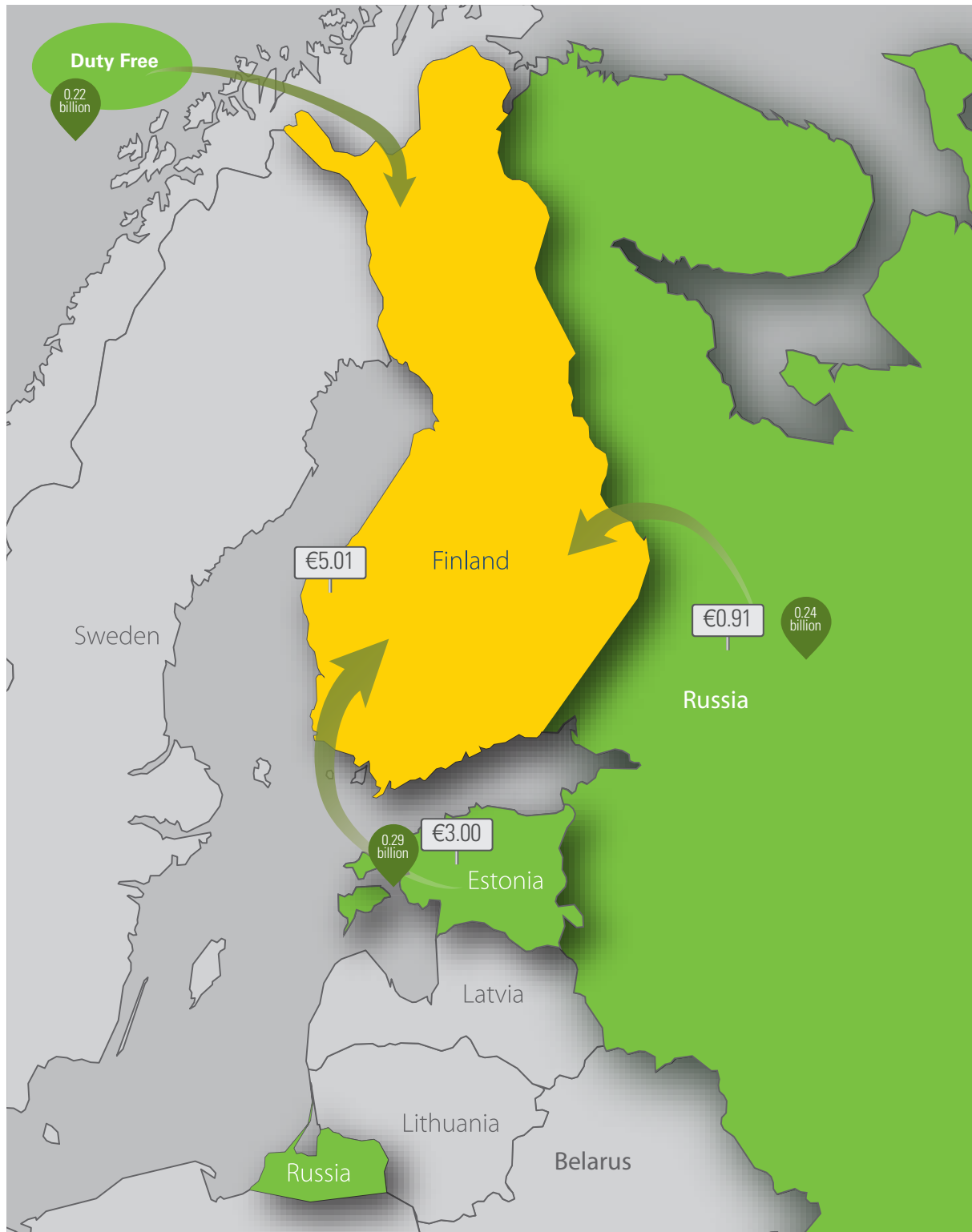
Manufactured cigarette C&C volumes and share of overall consumption 2009-14



Manufactured cigarette consumption 2009-14



# KEY INFLOWS AND OUTFLOWS



Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

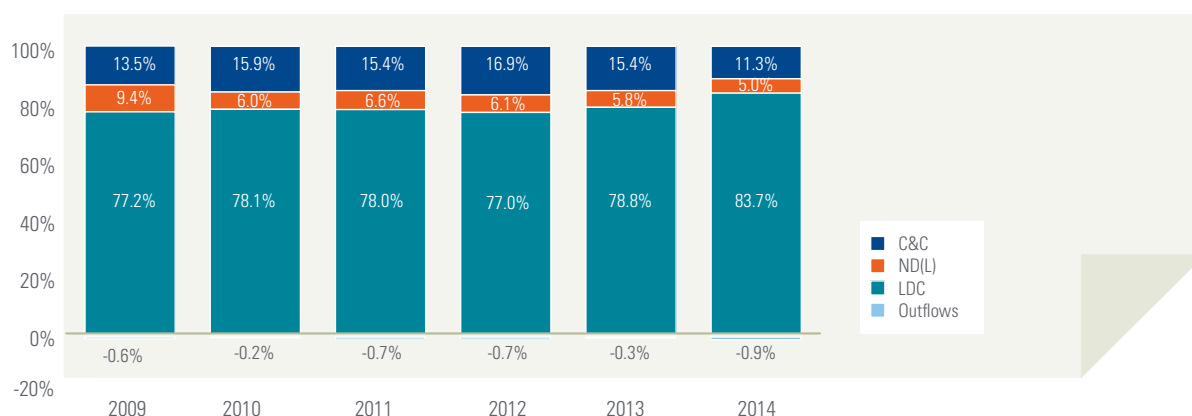
Source: (1) KPMG EU Flows Model

# Total cigarette consumption declined in Finland

## Total manufactured cigarette consumption - Finland<sup>(1)(2)(a)</sup>

TOTAL FINLAND CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	4.88	4.68	4.76	4.65	4.49	4.43	(1%)
Outflows	-0.04	-0.01	-0.04	-0.04	-0.02	-0.05	>100%
Legal domestic consumption (LDC)	4.85	4.67	4.72	4.61	4.47	4.39	(2%)
Non-domestic legal (ND(L))	0.59	0.36	0.40	0.36	0.33	0.26	(20%)
Counterfeit and contraband (C&C)	0.85	0.95	0.93	1.01	0.88	0.59	(32%)
Total non-domestic	1.43	1.31	1.34	1.37	1.20	0.86	(29%)
<b>Total consumption</b>	<b>6.28</b>	<b>5.97</b>	<b>6.06</b>	<b>5.98</b>	<b>5.68</b>	<b>5.24</b>	<b>(8%)</b>

## Share of Finland cigarette consumption by type - 2009-2014<sup>(1)(2)</sup>



**Legal domestic sales declined marginally in 2014 against a background of average price rises of 3.5%<sup>(3)</sup>**

**Non-domestic incidence decreased to 16.3% in 2014, mainly as a result of reduced flows from Russia**

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used  
 Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

## Non-domestic inflows declined in 2014 driven by declining volumes from Russia

### Total inflows by country of origin 2009-2014 <sup>(1)(a)</sup>

ND INFLOWSTO FINLAND						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Estonia	0.27	0.21	0.20	0.21	0.32	0.29
Russia	0.83	0.68	0.79	0.82	0.43	0.24
Duty Free	0.21	0.30	0.26	0.21	0.28	0.22
Belarus	0.00	0.00	0.00	0.01	0.01	0.01
Ukraine	0.00	0.01	0.00	0.02	0.02	0.01
Counterfeit					0.00	0.01
Other	0.12	0.10	0.09	0.11	0.14	0.08
<b>Total inflows</b>	<b>1.43</b>	<b>1.31</b>	<b>1.34</b>	<b>1.37</b>	<b>1.20</b>	<b>0.86</b>

### Overall non-domestic inflows declined by 29% in 2014 as Estonia replaced Russia as the largest source of non-domestic product

- Russian inflows decreased against a background of declining trade and travel flows following the imposition of EU sanctions on Russia. Russian border crossings decreased by 12% in 2014 compared to the prior year<sup>(2)</sup>
- Estonia is a popular holiday destination for Finns, who travel by ferry and take advantage of the price difference of €2.00 per pack of 20 to purchase cigarettes<sup>(3)</sup>

### Total outflows by destination country – 2009-2014<sup>(1)</sup>

OUTFLOWS FROM FINLAND						
Billion cigarettes	2009	2010	2011	2012	2013	2014
UK	0.02	0.00	0.00	0.01	0.00	0.01
France	0.00	0.00	0.00	0.00	0.00	0.01
Netherlands	0.00	0.00	0.01	0.01	0.00	0.01
Other	0.01	0.01	0.02	0.02	0.01	0.03
<b>Total outflows</b>	<b>0.04</b>	<b>0.01</b>	<b>0.04</b>	<b>0.04</b>	<b>0.02</b>	<b>0.05</b>

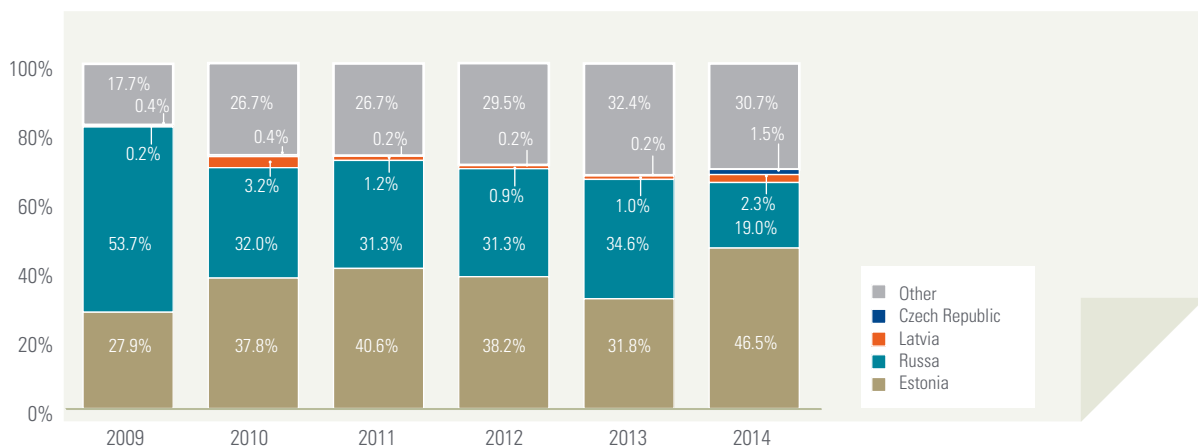
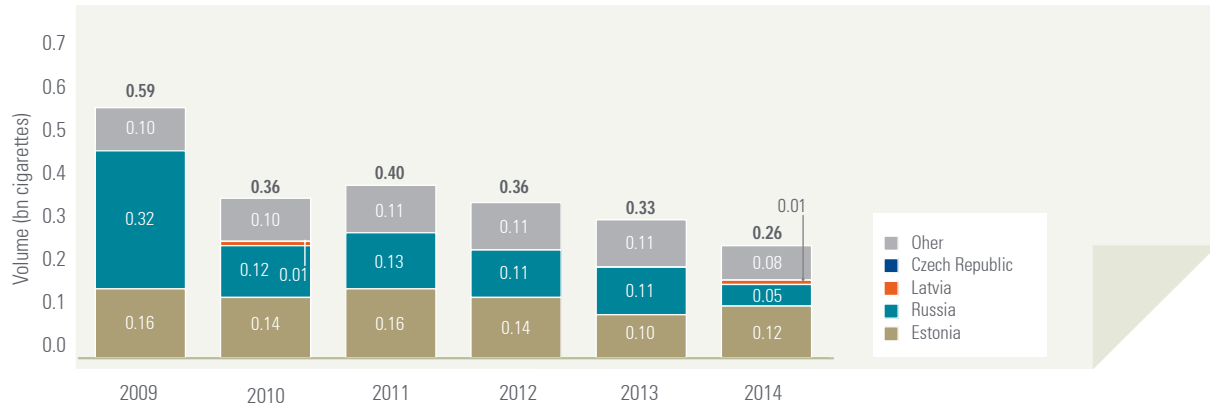
**Outflows from Finland were reflected by popular travel destinations**

Note: (a) The Duty Free inflow contains both "other" Duty Free product and Illicit Whites which have Duty Free labelling  
Sources: (1) KPMG EU Flows Model (2) Finnish Border Guard (3) EC Excise Duty tables (Part III – Manufactured Tobacco)



# ND(L) was impacted by lower flows from Russia

Total ND(L) by origin 2009-2014<sup>(1)(2)(a)(b)</sup>



**Despite the decline in Russian inflows, Estonia and Russia accounted for 66% of legal inflows**

- The decline in Russian market variants drove the fall in ND(L)
- Travel flows from Finland to Estonia increased by 4.5% supporting an increase in ND(L) flows from Estonia<sup>(1)</sup>

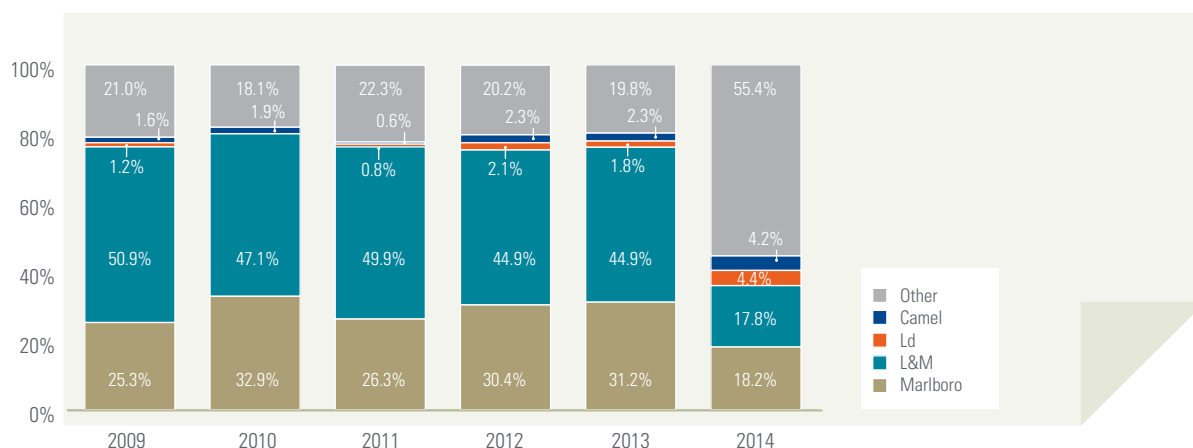
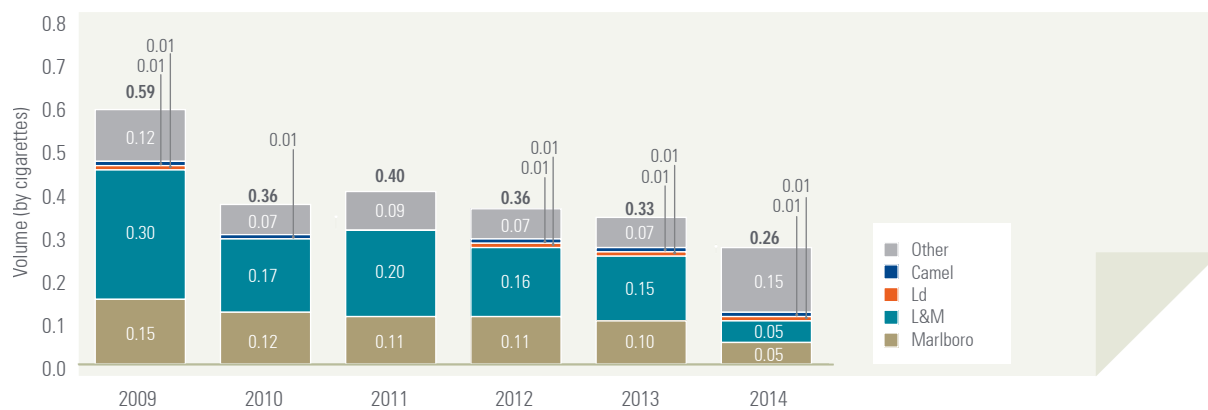
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers



# NON-DOMESTIC LEGAL INFLOWS BY BRAND

Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>

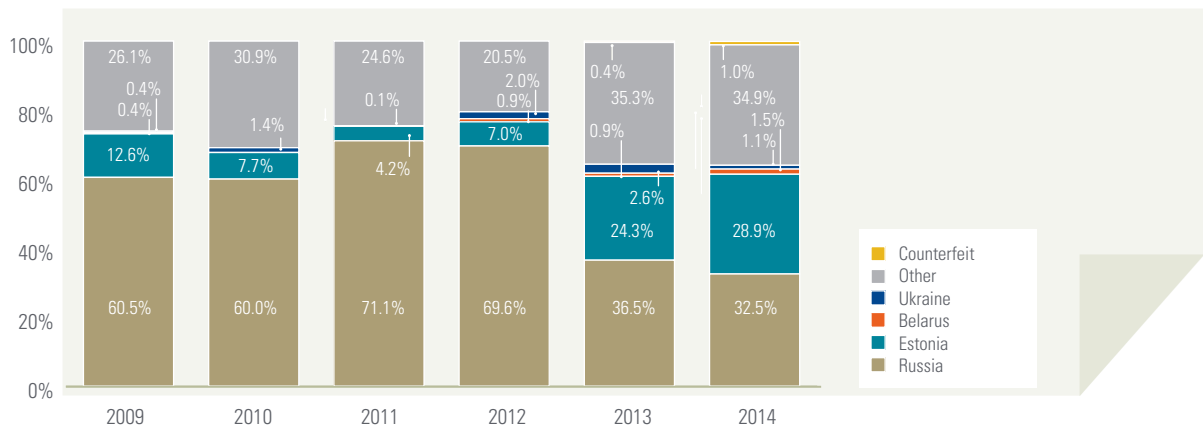
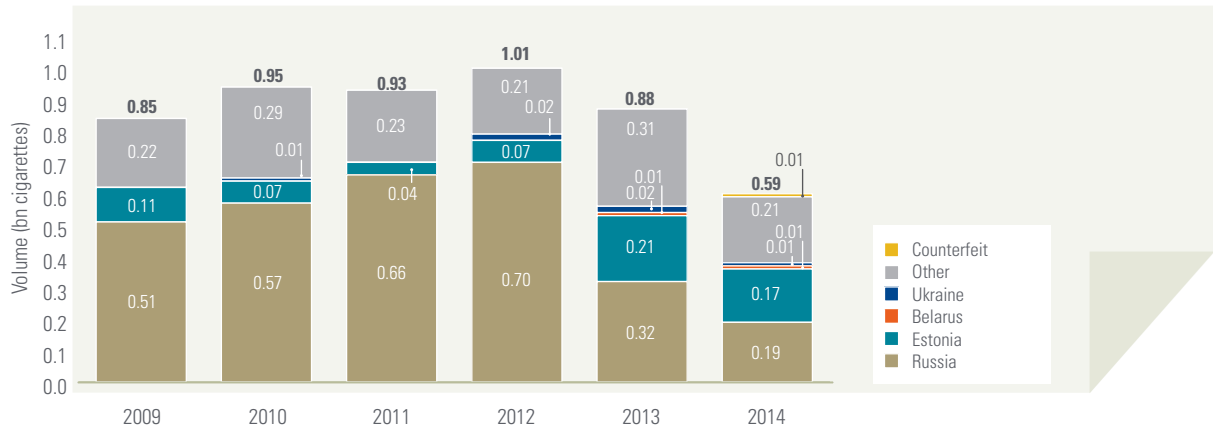


Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers

# Estonia and Russia remained the main sources of illicit inflows

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



FINLAND  
+  
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**Both Russian and Estonian illicit inflows declined but maintained their combined share of C&C volumes**

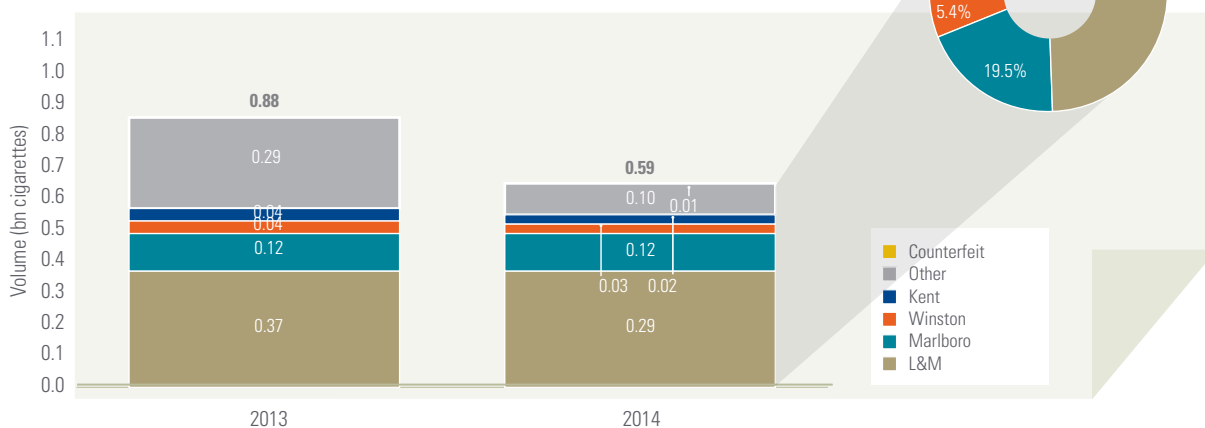
- C&C inflows from Russia and Estonia accounted for more than 60% of the total C&C consumption in Finland in 2014
  - Flows of L&M came from both Russia and Estonia
- If the total volume of C&C had been purchased legally in Finland, an additional tax revenue of approximately €123m would have been raised by the Finland Treasury<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

# C&C INFLOWS BY BRAND

**Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>**



Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

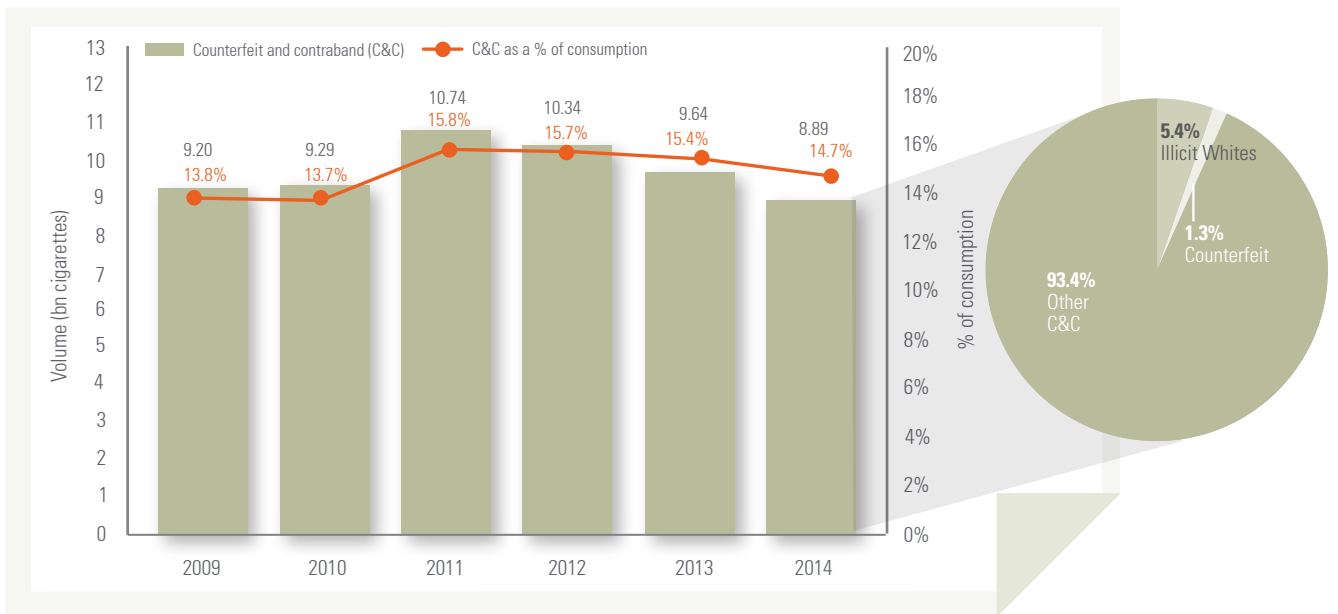
(2) KPMG analysis of data sources provided by manufacturers

# FRANCE



France became the largest C&C market by volume in 2014

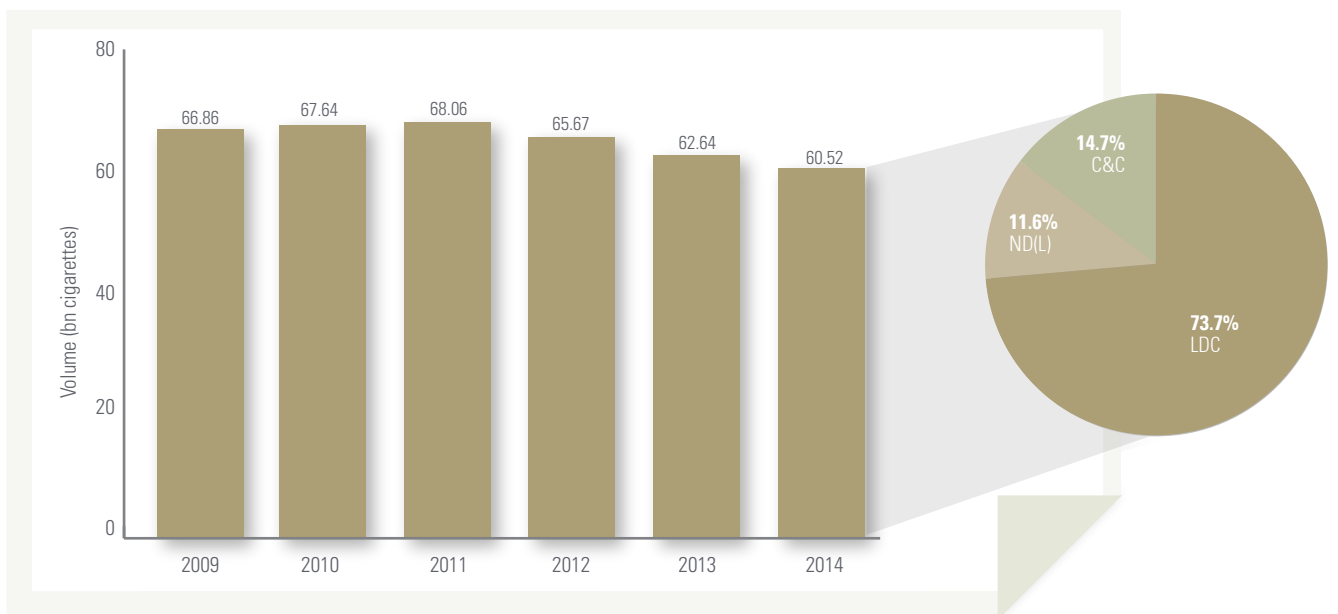
Manufactured cigarette C&C volumes and share of overall consumption - 2009-14



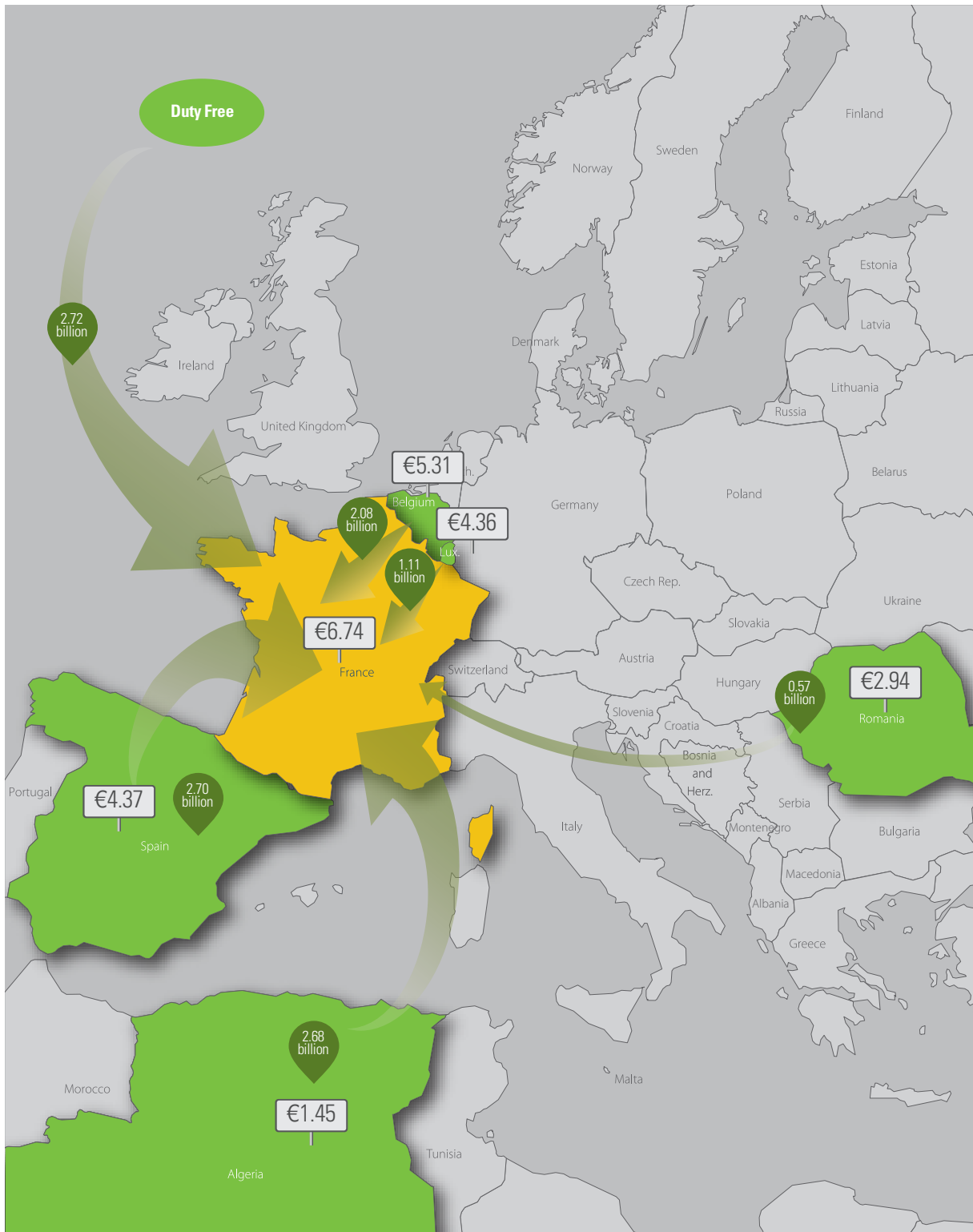
FRANCE



Manufactured cigarette consumption - 2009-14



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FRANCE

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Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

Source: (1) KPMG EU Flows Model

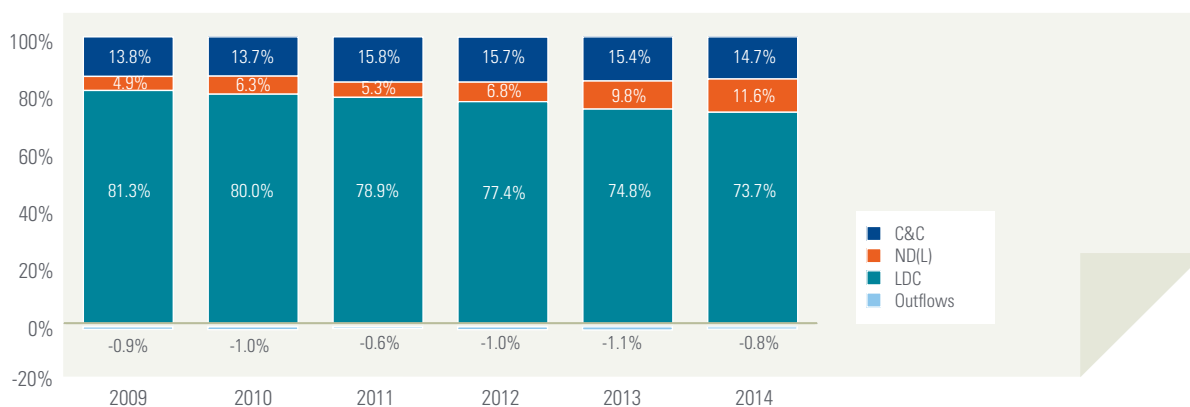
## MANUFACTURED CIGARETTE CONSUMPTION

Consumption in France has decreased against a background of successive price rises whilst C&C volumes are the highest in the EU

### Total manufactured cigarette consumption – France<sup>(1)(2)(a)</sup>

TOTAL FRANCE CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	54.99	54.80	54.11	51.46	47.53	45.08	(5%)
Outflows	-0.61	-0.68	-0.42	-0.63	-0.66	-0.47	(29%)
Legal domestic consumption (LDC)	54.38	54.11	53.69	50.83	46.87	44.61	(5%)
Non-domestic legal (ND(L))	3.29	4.24	3.63	4.50	6.13	7.02	15%
Counterfeit and contraband (C&C)	9.20	9.29	10.74	10.34	9.64	8.89	(8%)
Total non-domestic	12.49	13.53	14.37	14.84	15.77	15.91	1%
<b>Total consumption</b>	<b>66.86</b>	<b>67.64</b>	<b>68.06</b>	<b>65.67</b>	<b>62.64</b>	<b>60.52</b>	<b>(3%)</b>

### Share of France cigarette consumption by type – 2009-2014<sup>(1)(2)</sup>



#### Legal domestic sales fell, having been impacted by price rises and slow economic growth<sup>(3)(4)</sup>

- Average prices grew from €6.50 to €6.74 in 2014, an increase of €0.24<sup>(5)</sup>

Consumption of non-domestic product consisted of cross-border shopping, especially in regions closer to lower priced markets, as well as C&C from non-EU countries

These factors have resulted in illicit cigarette consumption accounting for 14.7% of the market in 2014, a decline of 0.7 percentage points

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a cigarettes basis. Prior to this a packs basis was used  
Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) 2014 Economist Intelligence Unit (4) 2014 Euromonitor (5) EC Excise Duty tables (Part III – Manufactured Tobacco)

# InfloWS were flat overall but increased from Algeria

Note: 2014 Spanish inflow may not be comparable to previous years due to additional data being made available which suggests previous years' inflows may have been under-represented

Total inflows by country of origin – 2009-2014<sup>(1)(a)</sup>

ND INFLOWSTO FRANCE						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Duty Free	2.20	3.70	3.91	3.13	2.62	2.72
Spain	2.40	2.08	1.57	2.33	1.84	2.70
Algeria	0.80	1.00	1.12	1.08	2.00	2.68
Belgium	0.48	0.43	0.90	1.01	2.00	2.08
Luxembourg	0.58	0.52	0.73	1.11	1.08	1.11
Romania	0.62	0.32	0.57	0.62	0.66	0.57
Other	5.43	5.47	5.57	5.55	5.56	4.05
<b>Total inflows</b>	<b>12.49</b>	<b>13.53</b>	<b>14.37</b>	<b>14.84</b>	<b>15.77</b>	<b>15.91</b>

The high volume of inflows from neighbouring lower-priced EU countries was reflective of the high intra-EU personal allowance in France of 2,000 cigarettes per trip. This was reduced in September 2014 to 800

- Inflows from EU countries may also have increased as a result of higher price rises for OTP compared to manufactured cigarettes<sup>(2)</sup>
- The largest non-EU inflow was from Algeria which continued to grow
- Cigarettes with unspecified labelling declined by 480 million, mainly as a result of a decline in Illicit White brands

Total outflows by destination country – 2009-2014<sup>(1)</sup>

OUTFLOWS FROM FRANCE						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Netherlands	0.08	0.35	0.13	0.16	0.14	0.13
Belgium	0.16	0.07	0.06	0.09	0.29	0.07
Italy	0.04	0.10	0.08	0.14	0.07	0.05
Other	0.33	0.16	0.14	0.24	0.16	0.22
<b>Total outflows</b>	<b>0.61</b>	<b>0.68</b>	<b>0.42</b>	<b>0.63</b>	<b>0.66</b>	<b>0.47</b>

Average prices in France are generally higher than those in neighbouring markets and consequently outflows are relatively small and generated by French tourists in other countries

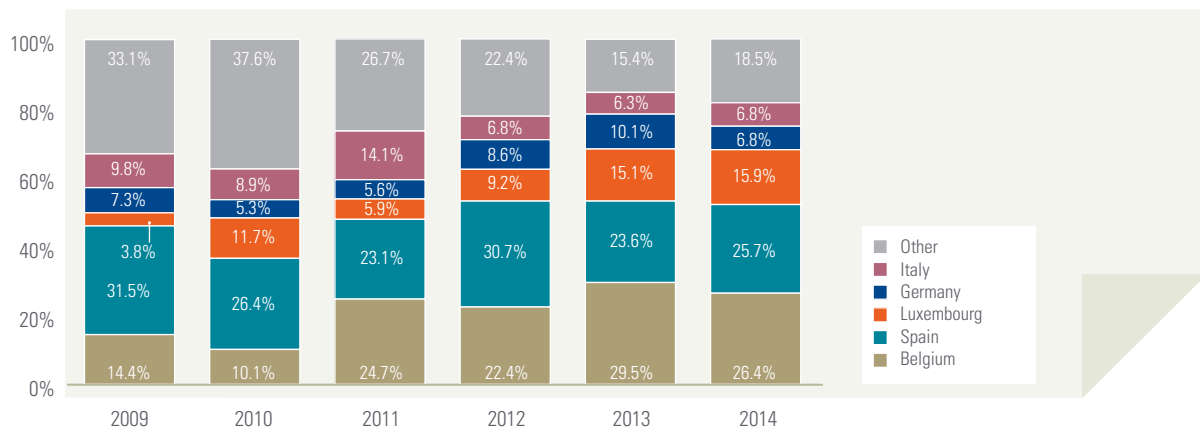
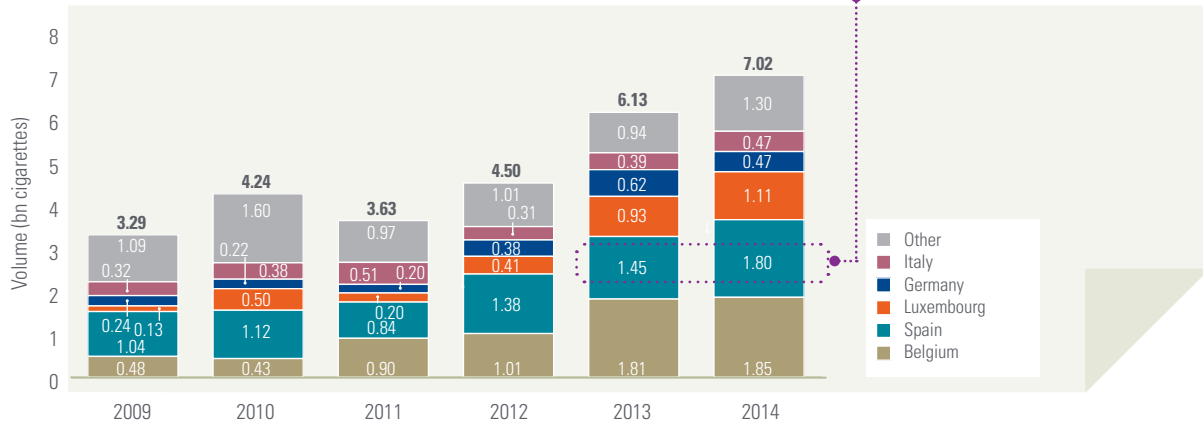
Note: (a) The Duty Free inflow contains both "other" Duty Free product and Illicit Whites which have Duty Free labelling  
Sources: (1) KPMG EU Flows Model (2) EC Excise Duty tables (Part III – Manufactured Tobacco)



# Non-domestic legal volumes grew driven by increased travel flows with neighbouring countries

Total ND(L) by origin – 2009-2014<sup>(1)(2)(a)(b)</sup>

Note: 2014 Spanish inflow may not be comparable to previous years due to additional data being made available which suggests previous years' inflows may have been under-represented



FRANCE



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## ND(L) volumes grew driven by increased inflows from Belgium, Spain and Luxembourg

- There are approximately 40 million land crossings from France to Spain each year and the number of tourists from France to Spain grew by 6% in 2014, supporting a high volume of tourist flows and cross-border shopping<sup>(1)</sup>
  - Key brands from Spain included Marlboro and Winston
- Belgium continued to be a large source of ND(L) inflows due to the proximity of major French population centres to the Belgian border such as Lille, resulting in high cross-border shopping
  - Flows of News came predominantly from Belgium
- Similarly the number of border crossings between France and Luxembourg supports a high volume of cross-border shopping, mainly from commuters

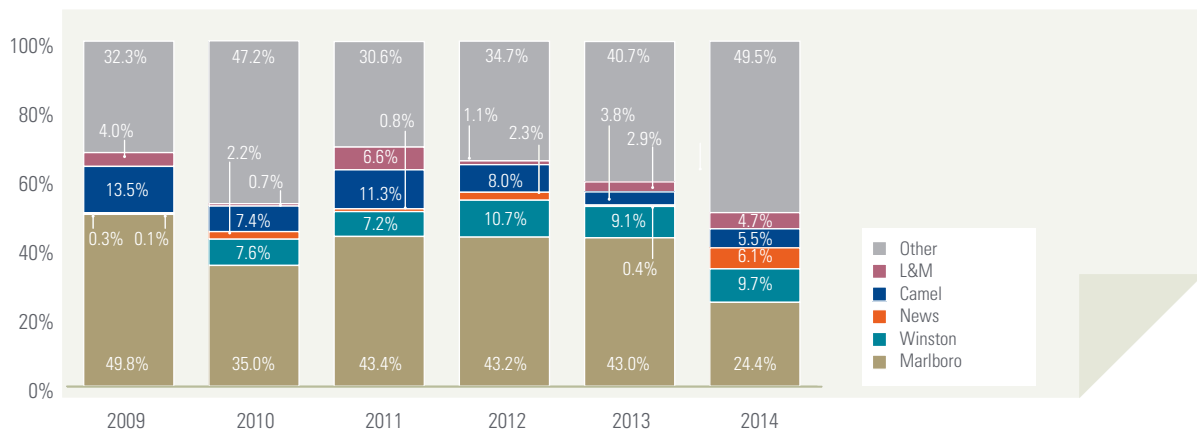
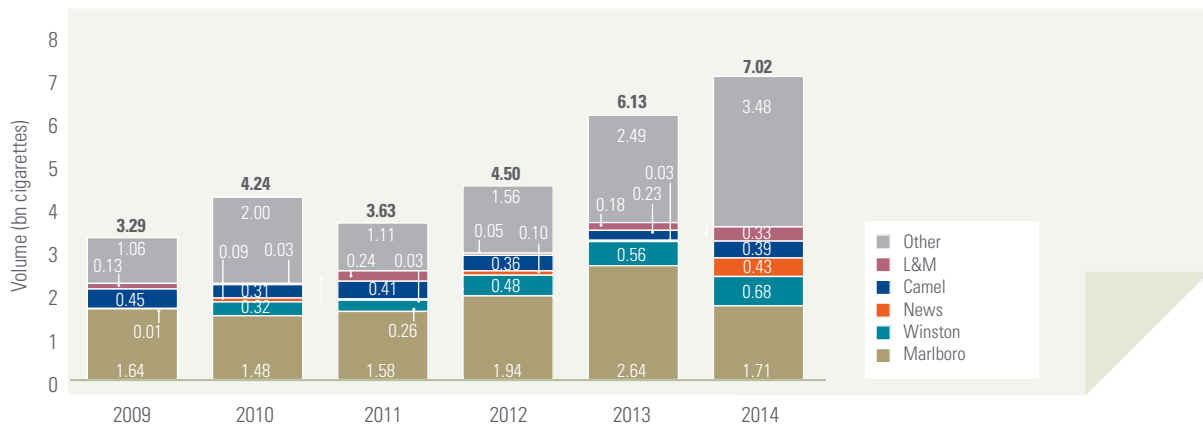
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows. (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers



# NON-DOMESTIC LEGAL INFLOWS BY BRAND

Total ND(L) by brand – 2009-2014<sup>(1)(2)(a)(b)</sup>



FRANCE

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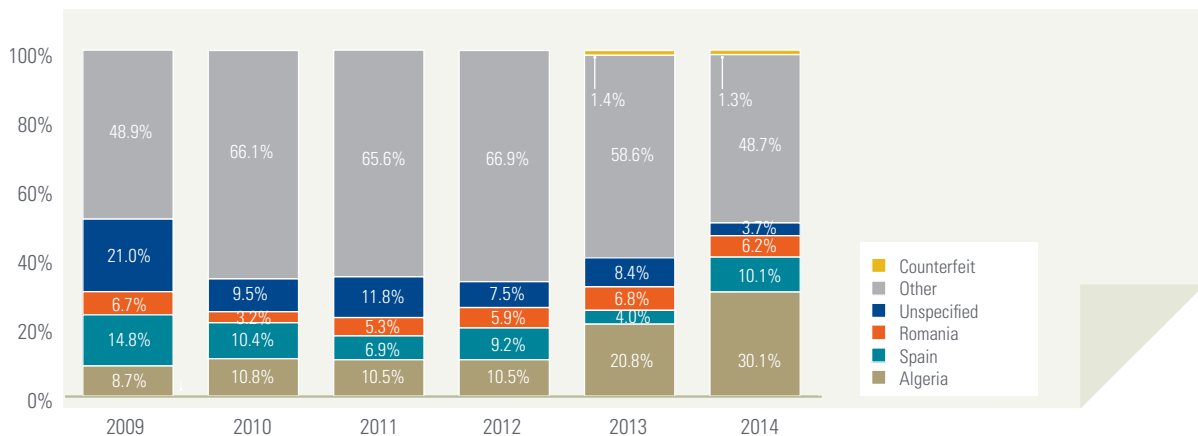
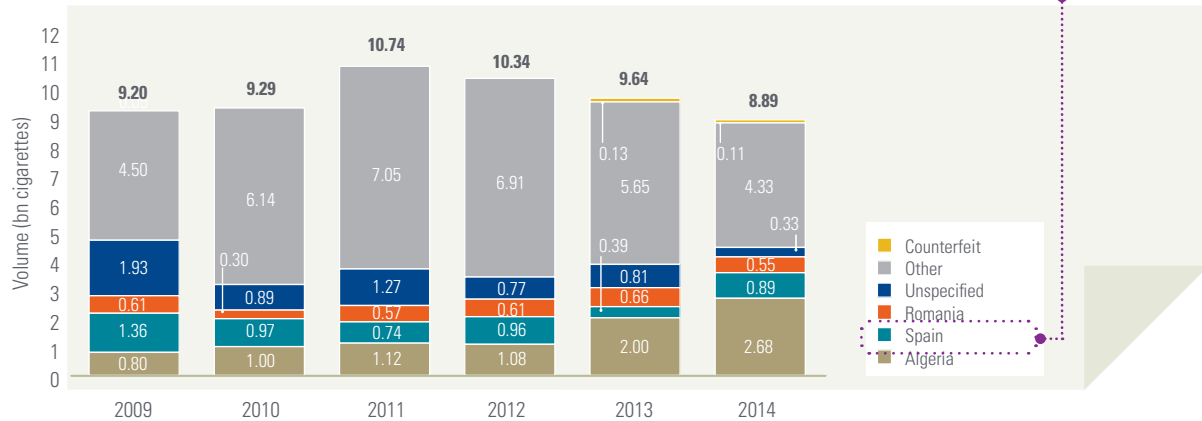
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows. (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers

# Growth in Algerian C&C was offset by declines in unspecified market variants

Note: 2014 Spanish inflow may not be comparable to previous years due to additional data being made available which suggests previous years' inflows may have been under-represented

Total C&C by origin – 2009-2014<sup>(1)(2)(a)</sup>



FRANCE



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## C&C volumes decreased 8%, with Illicit White inflows declining 54%

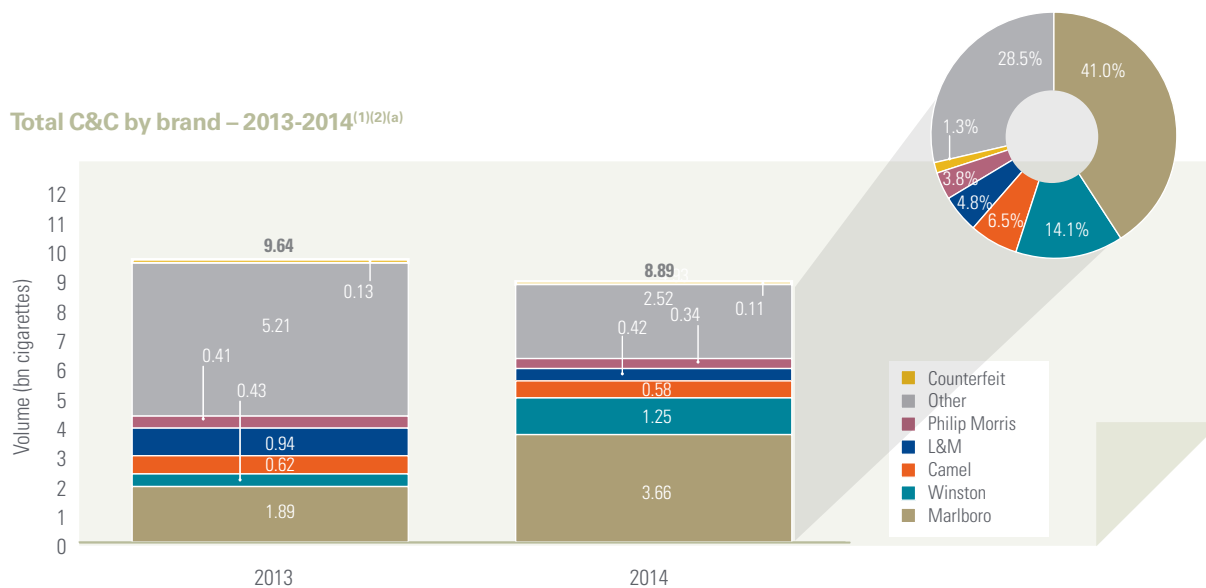
- High volumes of cigarettes from Algeria were found above that supported by travel flows and the Duty Free allowance
  - The growth in C&C from Algeria is also reflected in recent press about the increased visibility of illicit activity in Paris and Marseille<sup>(4)(5)</sup>
  - Over 90% of Algerian cigarettes bore the Marlboro trademark
- Flows with unspecified labelling (mainly Illicit Whites brands) also declined by 480 million cigarettes
  - American Legend accounted for most of this, declining by 450m cigarettes to 240m in 2014. Most of the American Legend packs were of unspecified origin
- If these cigarettes had been purchased legally in France the tax revenue gained would have been approximately €2.4 billion<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) La Nouvelle République, Un inspecteur principal des Douanes membre du réseau, Mar 2014 (5) La Provence, Marché parallèle du tabac : la traque des revendeurs, à Marseille, grâce à une brigade spécialisée, Feb 2015

## C&C INFLOWS BY BRAND

Total C&C by brand – 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type – 2009-2014<sup>(1)(2)(a)</sup>

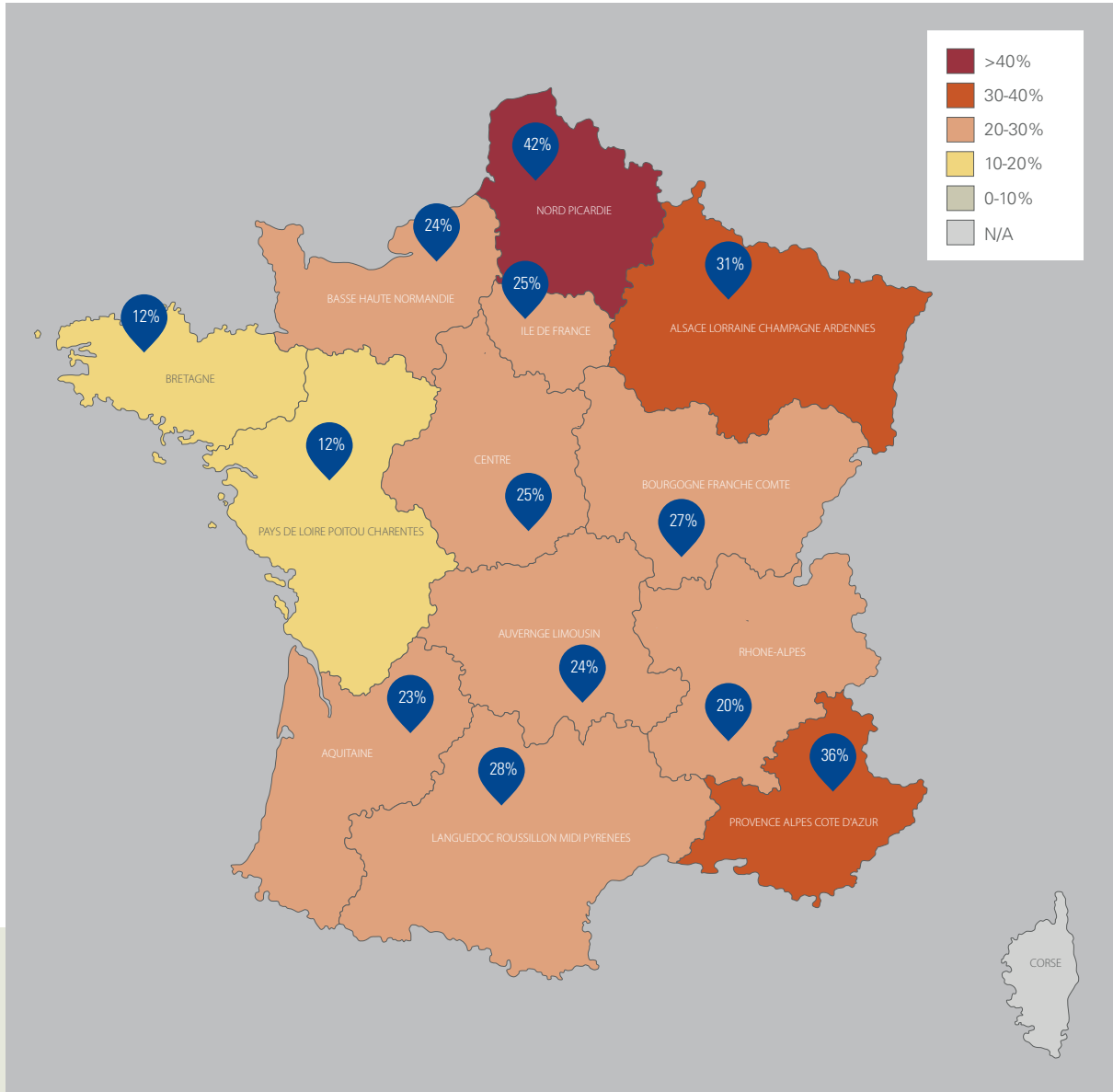
LABELLING OF ILLICIT WHITES INFLOWS TO FRANCE						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	0.07	0.11	0.18	0.33	0.25	0.19
Duty Free	0.06	0.07	0.01	0.02	0.04	0.03
Unspecified	1.87	0.85	1.20	0.73	0.75	0.25
<b>Total Illicit Whites</b>	<b>2.00</b>	<b>1.03</b>	<b>1.39</b>	<b>1.08</b>	<b>1.03</b>	<b>0.48</b>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# Non-domestic incidence heat map

Empty Pack Survey regional non-domestic incidence – 2014<sup>(1)</sup>



FRANCE



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Source: (1) Independent agency Empty Pack Surveys, 2014



FRANCE



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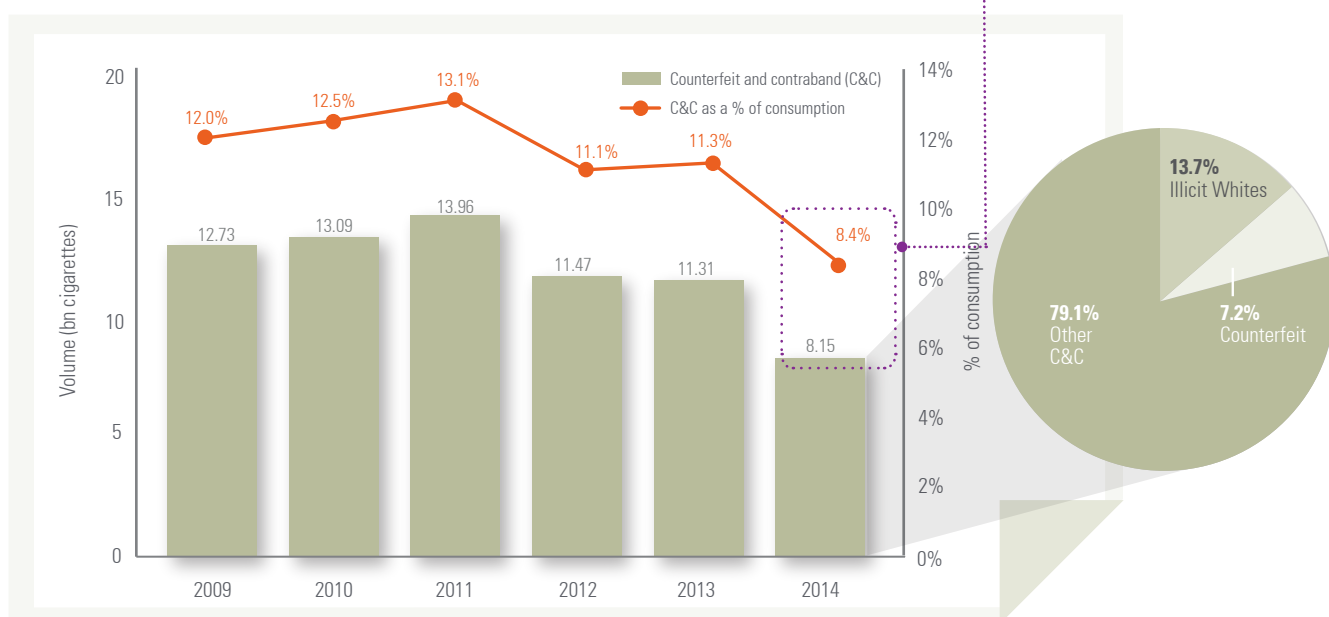
# GERMANY



Both legal and illicit levels of non-domestic product in Germany come from lower priced markets east of Germany

*Approximately two thirds of the decline in total non-domestic is as a result of a new pack collection methodology. This new approach is explained in the appendix.*

**Manufactured cigarette C&C volumes and share of overall consumption - 2009-14**

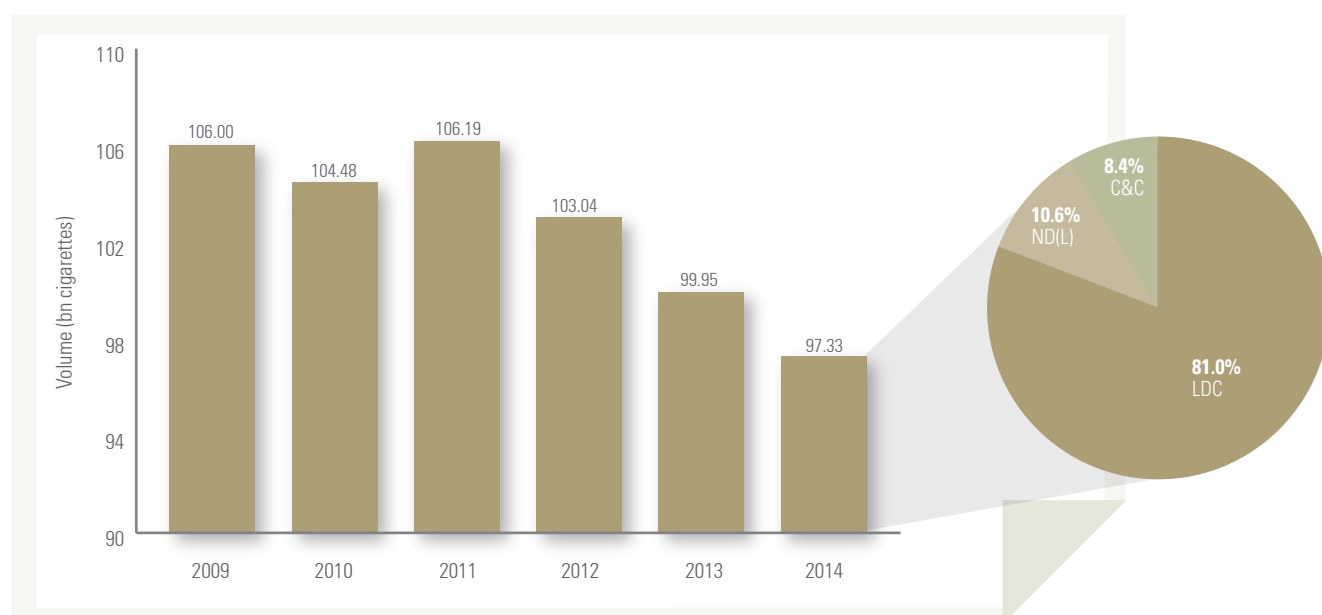


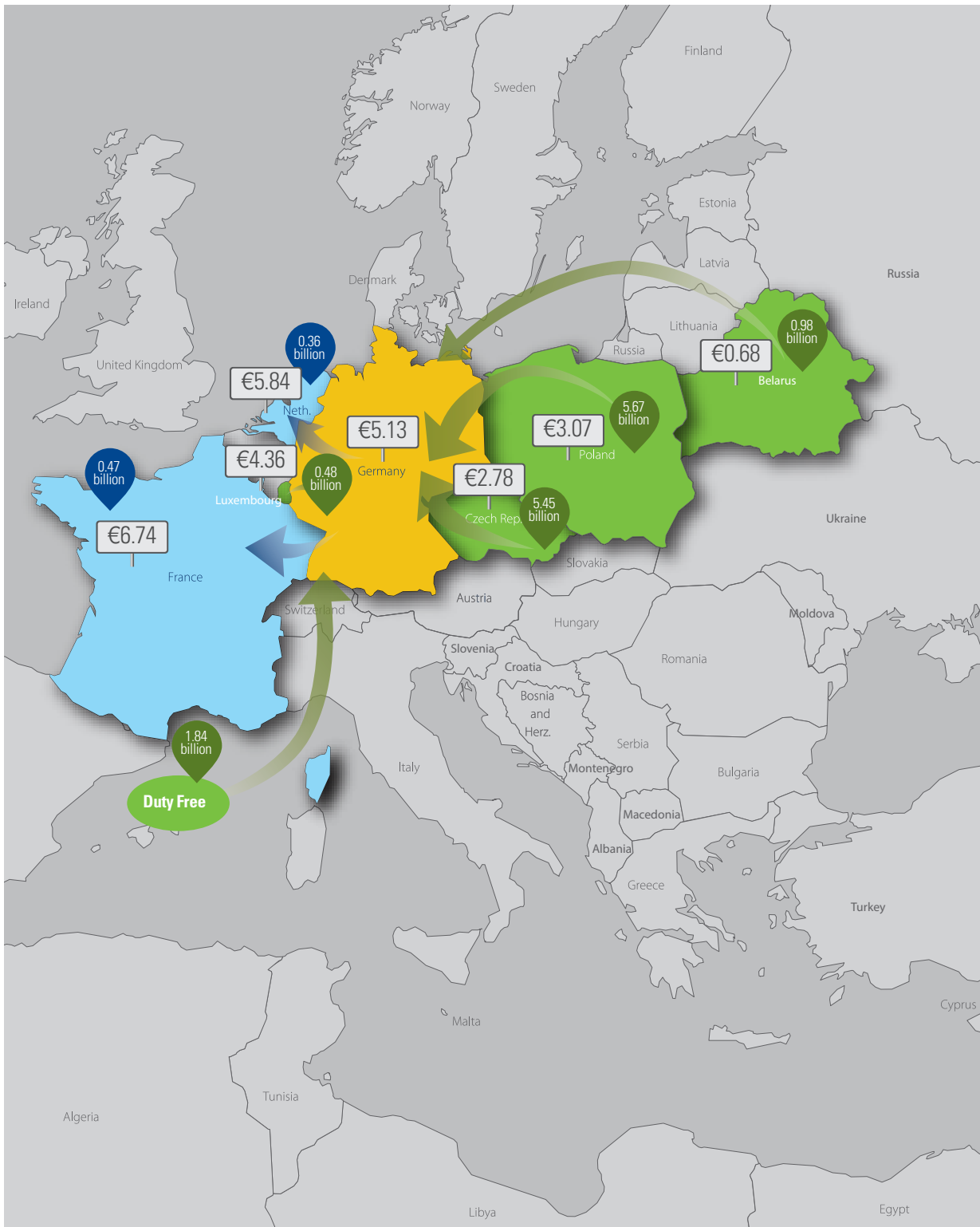
GERMANY



PROJECT SUN

**Manufactured cigarette consumption - 2009-14**





GERMANY

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Main outflow

Main inflow

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

Source: (1) KPMG EU Flows Model

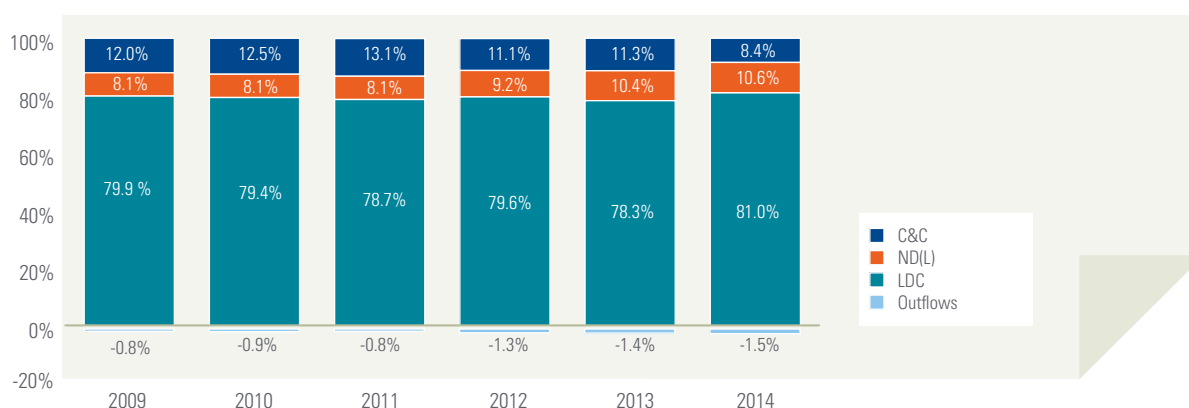
# Legal domestic sales grew in 2014 against a background of improving economic conditions and increased migration

Approximately two thirds of the decline in total non-domestic is as a result of a new pack collection methodology. This new approach is explained in the appendix.

Total manufactured cigarette consumption – Germany<sup>(1)(2)(a)(b)</sup>

TOTAL GERMANY CONSUMPTION						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Legal domestic sales (LDS)	85.49	83.91	84.47	83.44	79.63	80.35
Outflows	-0.84	-0.95	-0.86	-1.37	-1.42	-1.49
Legal domestic consumption (LDC)	84.65	82.96	83.60	82.07	78.21	78.86
Non-domestic legal (ND(L))	8.62	8.43	8.62	9.50	10.43	10.32
Counterfeit and contraband (C&C)	12.73	13.09	13.96	11.47	11.31	8.15
Total non-domestic	21.35	21.52	22.58	20.98	21.73	18.47
<b>Total consumption</b>	<b>106.00</b>	<b>104.48</b>	<b>106.19</b>	<b>103.04</b>	<b>99.95</b>	<b>97.33</b>

Share of Germany manufactured cigarette consumption by type -2009-2014<sup>(1)(2)</sup>



GERMANY



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### Legal domestic sales in Germany grew for the first time since 2011

- A variety of geo-political factors may have impacted legal domestic sales in Germany, including the better weather in 2014, a net increase of 420k migrants and improved economic conditions<sup>(3)</sup>
- In addition, fewer consumers appear to have switched to loose tobacco<sup>(4)</sup>

### With a decline in C&C, despite being the largest manufactured cigarette market in Europe, in 2014 Germany was only the second largest C&C market, after France

There was a change in the pack collection methodology in Germany which has impacted the size of the non-domestic market. An appendix to this report evaluates the impact of this change

Notes: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used (b) In 2014 the methodology used to size the non-domestic market was enhanced. Whilst this method is thought to be more comprehensive, it is expected to report lower inflows to Germany. For more information please see Appendix

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) Federal Statistics Office of Germany, Migration Statistics, accessed February 2015 (4) Fine Cut tobacco In Market Sales data, 2014



# Many of the inflows to Germany were from cross-border shopping in lower-priced neighbouring countries

Approximately two thirds of the decline in total non-domestic is as a result of a new pack collection methodology. This new approach is explained in the appendix.

**Total inflows by country of origin - 2009-2014<sup>(1)(a)(b)</sup>**

ND INFLOWS TO GERMANY						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Poland	7.54	7.49	8.64	8.54	7.54	5.67
Czech Republic	3.53	4.66	5.69	5.01	6.14	5.45
Duty Free	1.61	1.68	1.53	1.70	1.99	1.84
Belarus	0.18	0.43	0.61	0.64	0.96	0.98
Luxembourg	0.80	0.38	0.41	0.46	0.45	0.48
Austria	0.18	0.33	0.28	0.18	0.62	0.27
Other	7.52	6.55	5.42	4.45	4.03	3.79
<b>Total inflows</b>	<b>21.35</b>	<b>21.52</b>	<b>22.58</b>	<b>20.98</b>	<b>21.73</b>	<b>18.47</b>

### As a proportion of total inflows, flows from the Czech Republic have increased compared with Poland

- In 2014, a higher proportion of inflows from the Czech Republic possibly reflected the fact that prices in Poland continued to grow more quickly<sup>(2)</sup>
- The decline in consumption of Polish cigarettes is also supported by sales data from point-of-sale locations in Poland showing an 8% decline<sup>(3)</sup>

**Total outflows by destination country - 2009-2014<sup>(1)</sup>**

OUTFLOWS FROM GERMANY						
Billion cigarettes	2009	2010	2011	2012	2013	2014
France	0.24	0.22	0.21	0.52	0.62	0.47
Netherlands	0.13	0.35	0.25	0.33	0.33	0.36
Switzerland						0.17
Other	0.47	0.37	0.41	0.52	0.46	0.50
<b>Total outflows</b>	<b>0.84</b>	<b>0.95</b>	<b>0.86</b>	<b>1.37</b>	<b>1.42</b>	<b>1.49</b>

### Outflows from Germany are mainly to the more expensive neighbouring markets of France and Netherlands and have been broadly stable

- Switzerland was included in the study for the first time

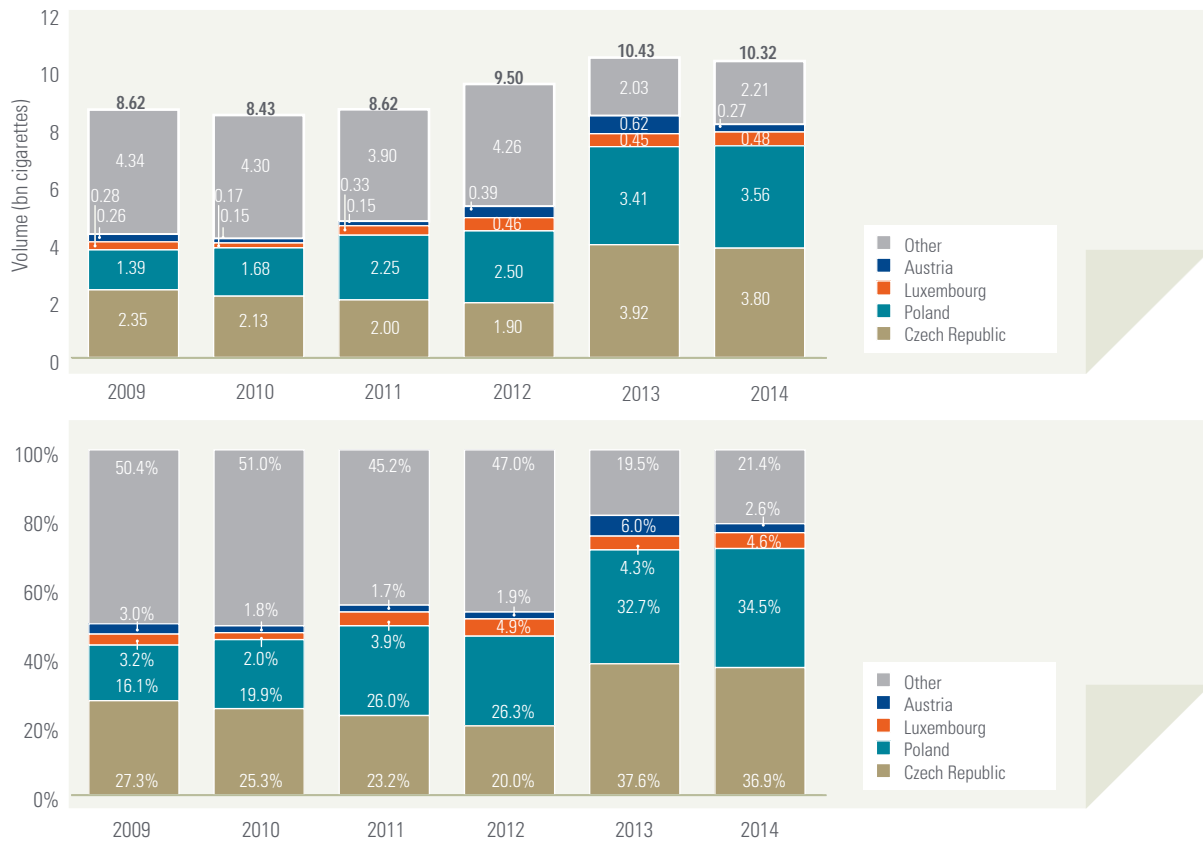
Notes: (a) The Duty Free inflow contains both "other" Duty Free labelled product and Illicit Whites which have Duty Free labelling (b) Please note the comparison with prior years is not possible due to the change in methodology discussed in the appendix

Sources: (1) KPMG EU Flows Model (2) EC Excise Duty tables (Part III – Manufactured Tobacco) (3) Nielsen offtake data



ND(L) remained flat, reflecting similarly flat overall travel volumes between Germany and the Czech Republic and Poland

Total ND(L) by origin 2009 - 2014<sup>(1)(2)(a)</sup>



GERMANY



PROJECT SUN

**ND(L) flows from Poland and the Czech Republic reflect border crossings from Germany to each country**

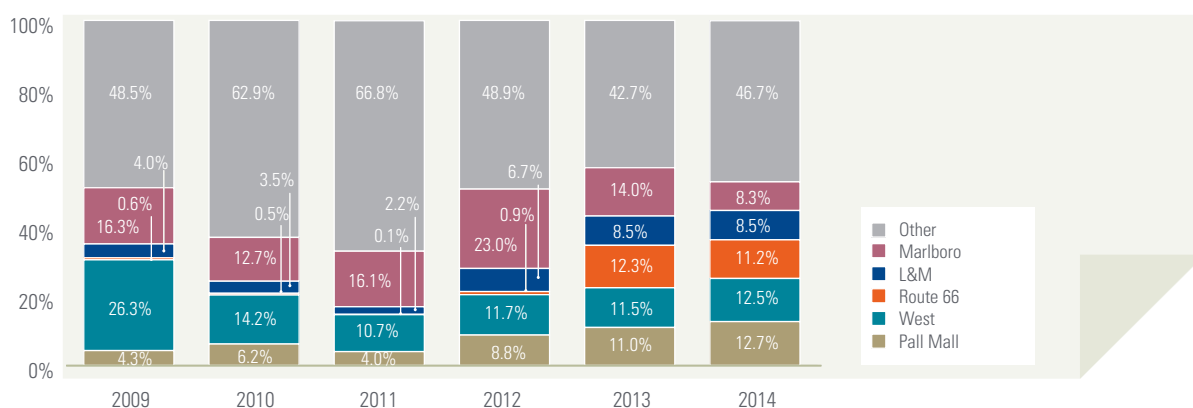
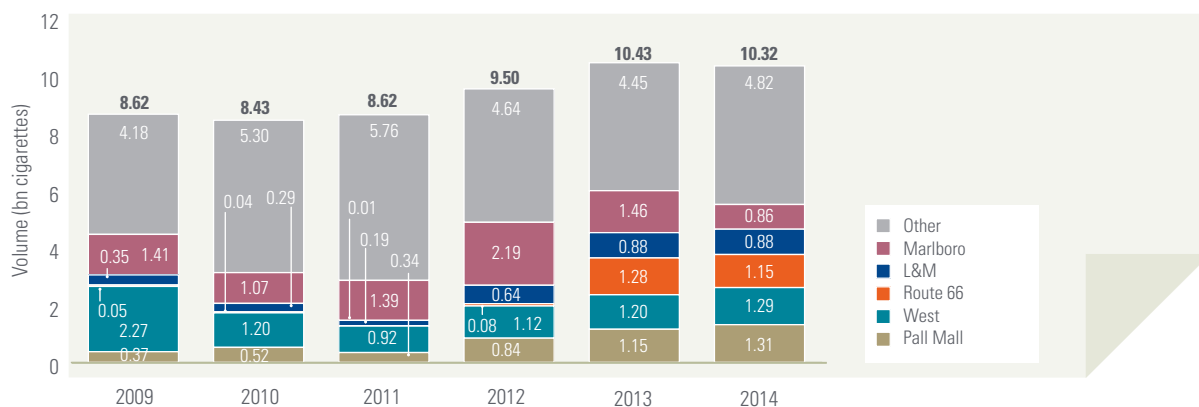
- Border crossings between Germany and Poland and the Czech Republic are estimated to number 32 million and 40 million respectively per year, reflecting high volumes of flows from these countries
- Our analysis showed 63% of the total flow from Poland and 70% of the total flow from the Czech Republic was ND(L) in 2014
  - Route 66, West and Pall Mall came from Poland and Czech Republic
- Flows from Luxembourg and Austria to Germany are considered to be 100% legal as the number of border crossings between these countries supported the overall volume identified. However, some consumers may still exceed their legal allowance

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows.

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
 (2) KPMG analysis of data sources provided by manufacturers

# NON-DOMESTIC LEGAL INFLOWS BY BRAND

Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>



GERMANY



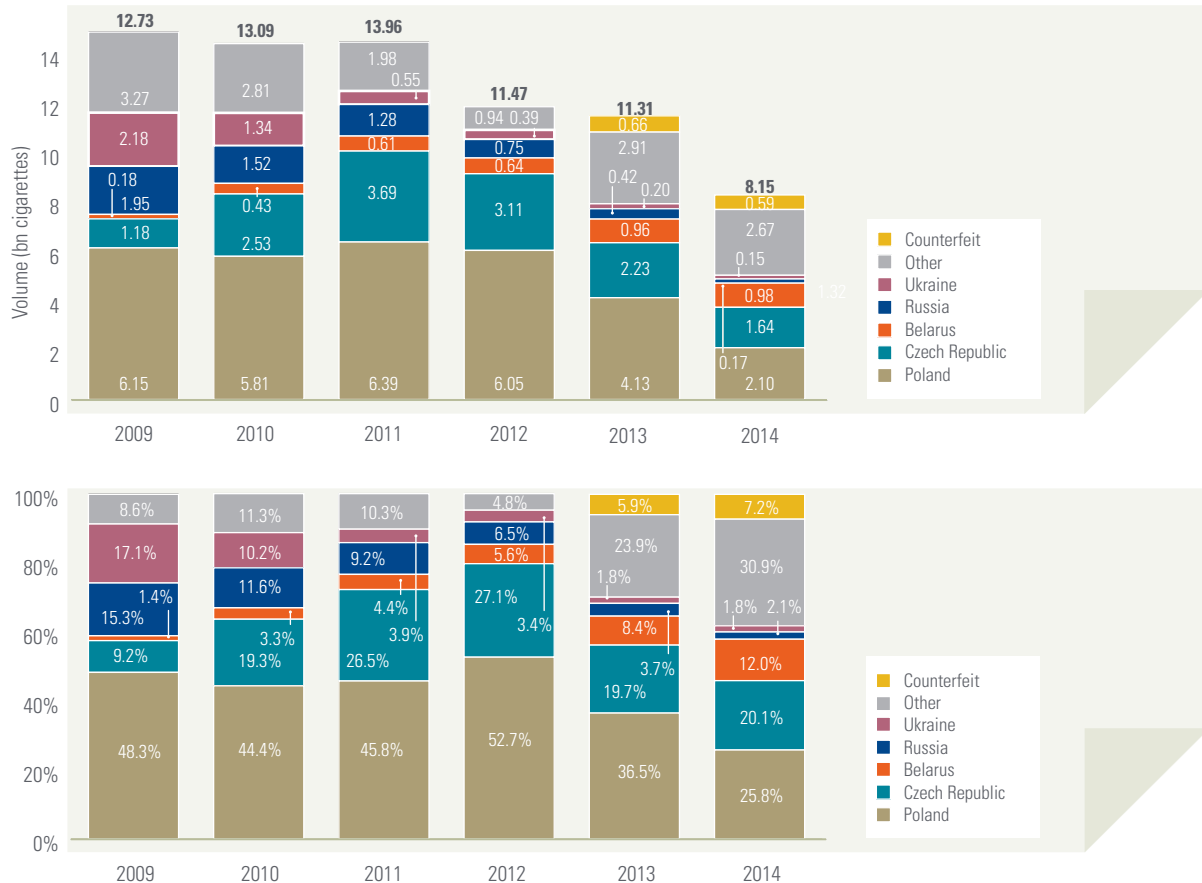
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows. b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers

# The proportion of C&C from Czech Republic and Poland accounted for almost 46% of consumption

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



GERMANY



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### C&C came from the lower priced markets of Poland, Czech Republic and Belarus

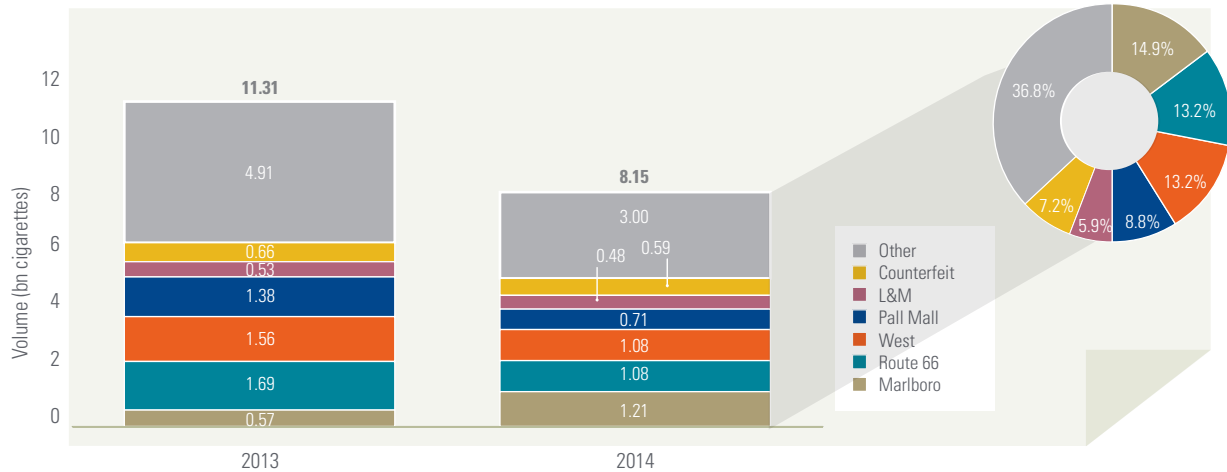
- Total volumes from Poland and Czech Republic are not supported by traveller volumes, meaning that some consumers are likely to be exceeding their legal allowance
- As a result of low outbound tourism to Belarus, all inflows from this market are allocated to C&C
- The share of Illicit Whites brand flows with trademarks owned by Grodno Tobacco Company increased to 7% of overall C&C, with the largest brand, Fest accounting for 0.47 billion cigarettes
- A large volume of counterfeit product also had Duty Free labelling
- If these cigarettes had been purchased legally in Germany the tax revenue gained would have been approximately €1.5 billion<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows.

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

## C&C INFLOWS BY BRAND

Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type - 2009-2014<sup>(1)(a)</sup>

LABELLING OF ILLICIT WHITES INFLOWS TO GERMANY						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country Specific	1.89	1.29	1.35	0.90	1.31	0.85
Duty Free	0.00	0.00	0.01	0.03	0.07	0.23
Unspecified	0.12	0.02	0.04	0.00	0.01	0.04
<b>Total Illicit Whites</b>	<b>2.01</b>	<b>1.32</b>	<b>1.40</b>	<b>0.93</b>	<b>1.39</b>	<b>1.12</b>

GERMANY

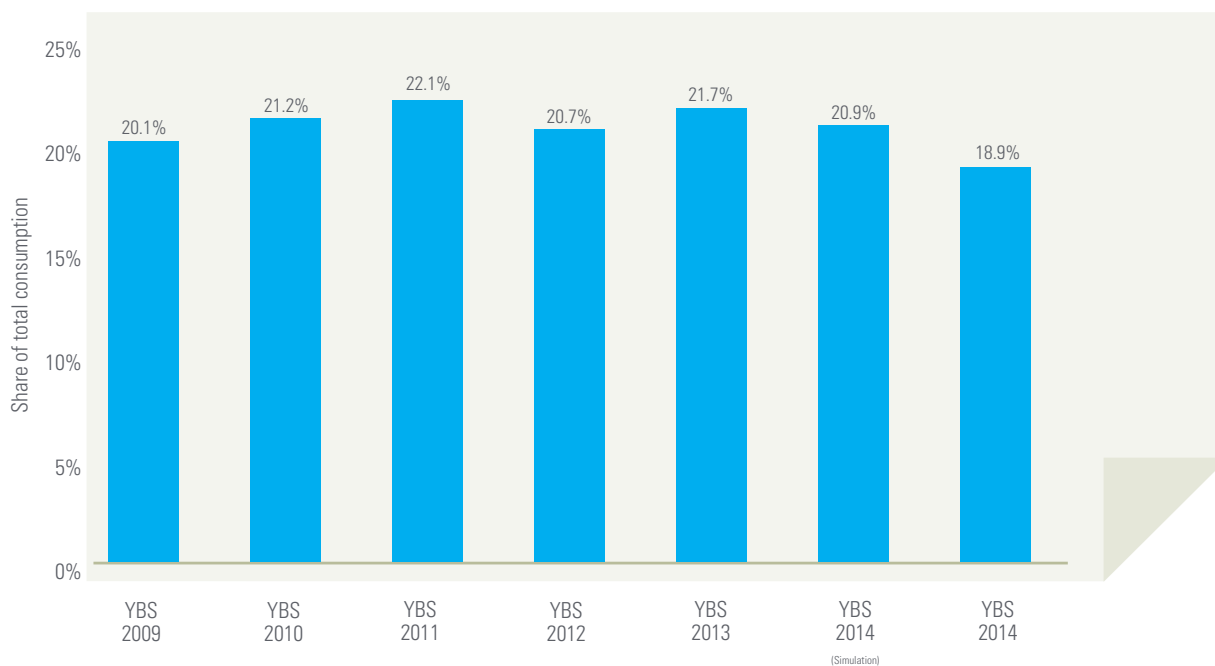


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Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows  
 Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 national visitor number statistics and EU flows model  
 (2) KPMG analysis of data sources provided by manufacturers

# Comparison of methodology

Germany Pack Collection 2009-2014<sup>(1)(2)(a)</sup>



## In 2014 a change was made to the methodology of the Empty Pack Survey which has reduced the reported level of non-domestic consumption in Germany

- Until 2014 the Yellow Bag Survey was conducted using cigarette packs collected at waste recycling centres
- The number of waste recycling centres which offered to sort cigarettes packs reduced from 26 to 20, combined with the location of the remaining waste recycling centres meant that some parts of Germany were not being represented by the survey
- In 2014 a street collection was undertaken in parts of Germany that were not covered by the waste recycling centres with the aim to ensure that 100% of Germany was represented by the survey
- The results of the street collection and packs collected at waste recycling centres were weighted to reflect the population sizes in the areas sampled and combined
- As the waste recycling centres where packs collected reduced in 2014 compared to 2013 it is difficult to compare the impact of the difference in methodology:
  - A simulation was done by PMI on the existing waste recycling centres, re-weighting the centres in regions where the collections had been stopped<sup>(a)</sup>
  - The results were 20.9% compared to 18.9% reported in the new survey approach
- Therefore the change in approach is estimated to have caused a 2 percentage point reduction in the level of non-domestic compared to the approach taken in 2013. Therefore limited comparisons are made between years in this report

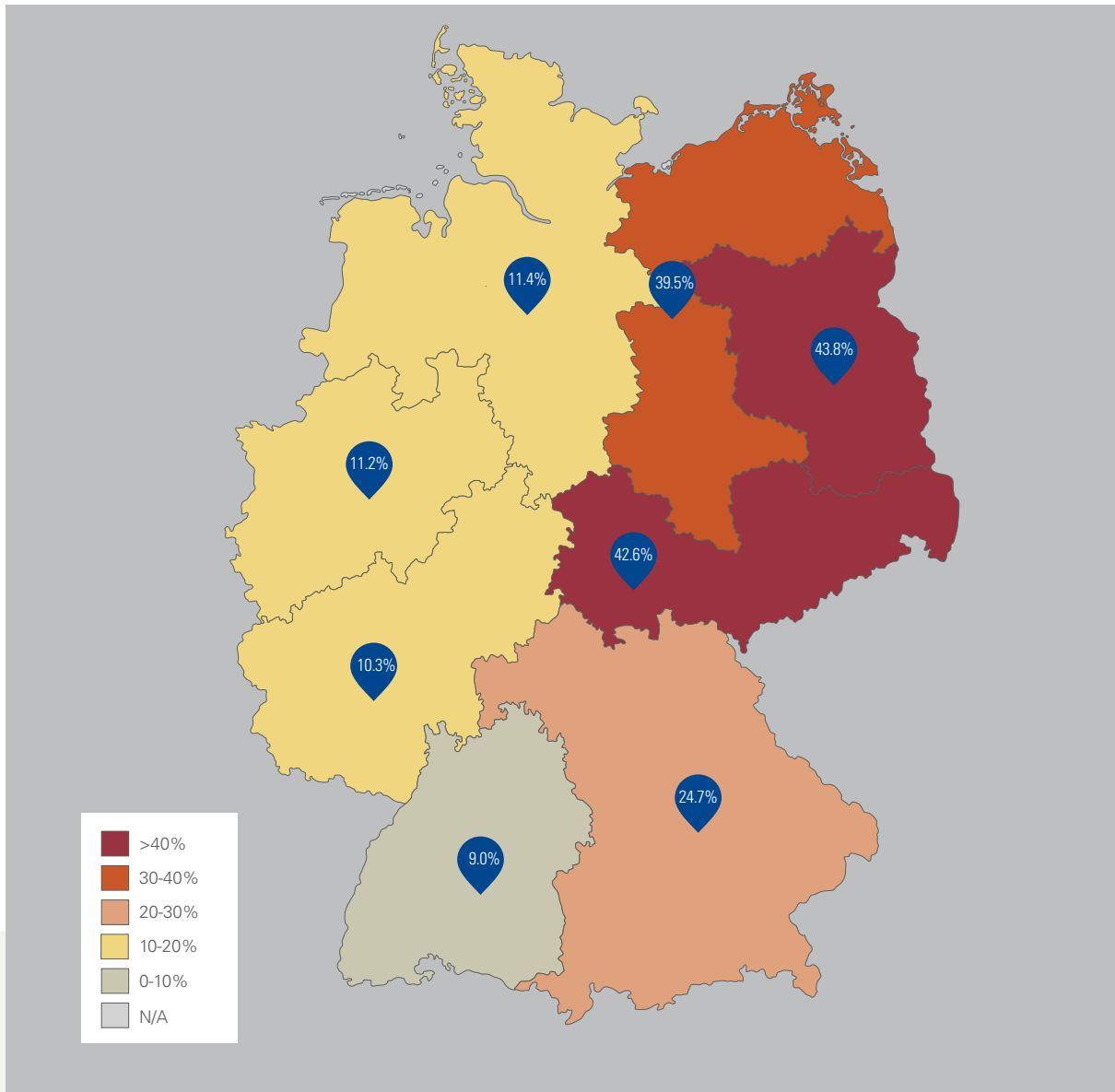
Note: (a) The EPS 2014 results were simulated by PMI based on the non-domestic incidence identified at each waste recycling centre and weighted according to the number of smokers in each region.

Sources: (1) EPS 2009-2014 conducted by Ipsos (2) EPS simulation of previous method provided by PMI



# Non-domestic incidence heat map

Germany Yellow Bag Survey regional non-domestic incidence<sup>(1)</sup>



GERMANY



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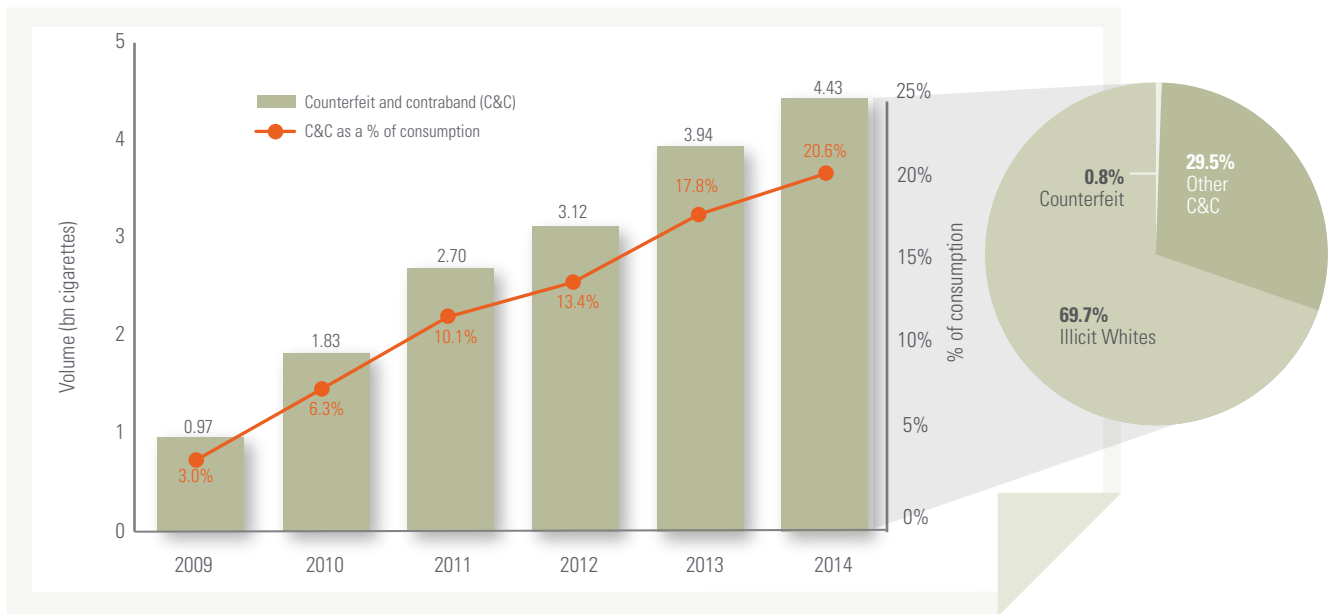
Source: (1) Yellow Bag Surveys, 2014

# GREECE



C&C volumes continue to increase, driven by Illicit Whites brand flows

Manufactured cigarette C&C volumes and share of overall consumption - 2009-14

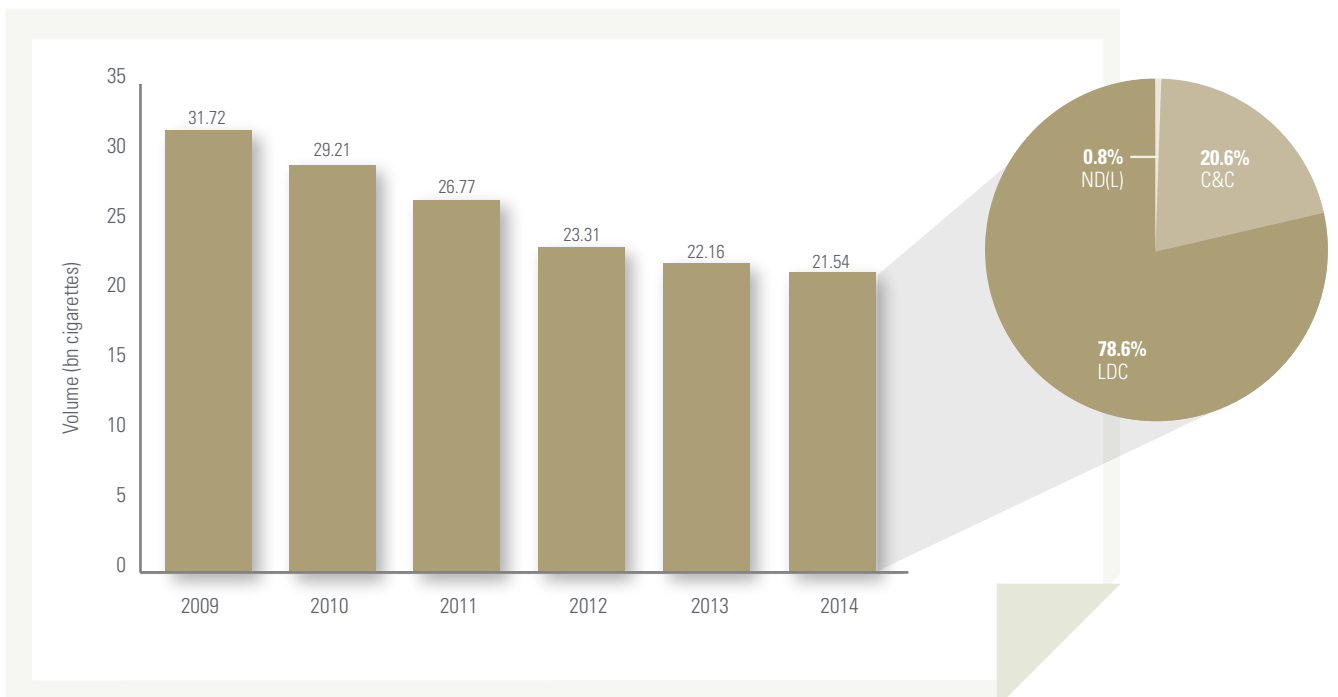


GREECE



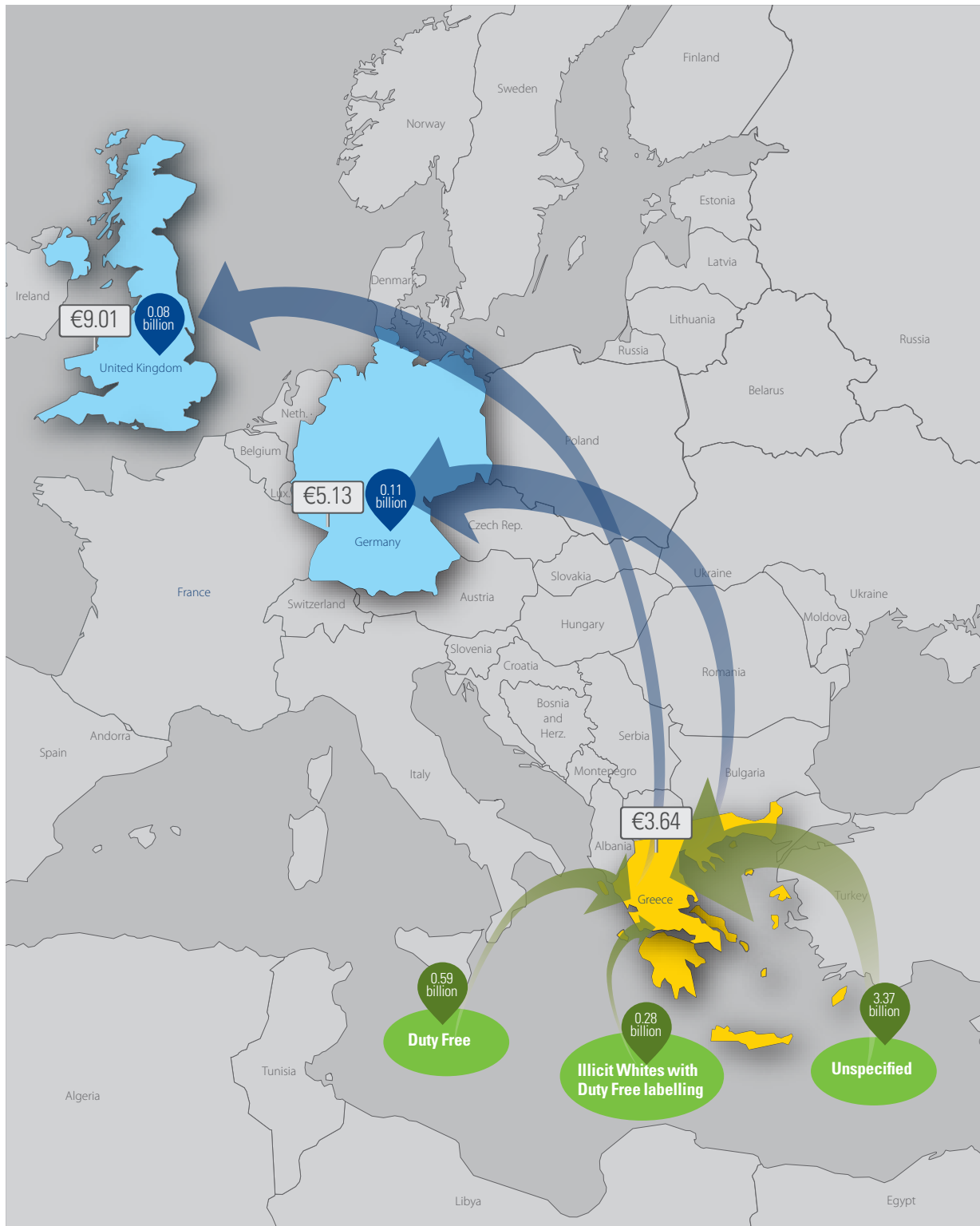
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Manufactured cigarette consumption - 2009-14





# KEY INFLOWS AND OUTFLOWS



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Main outflow

Main inflow

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

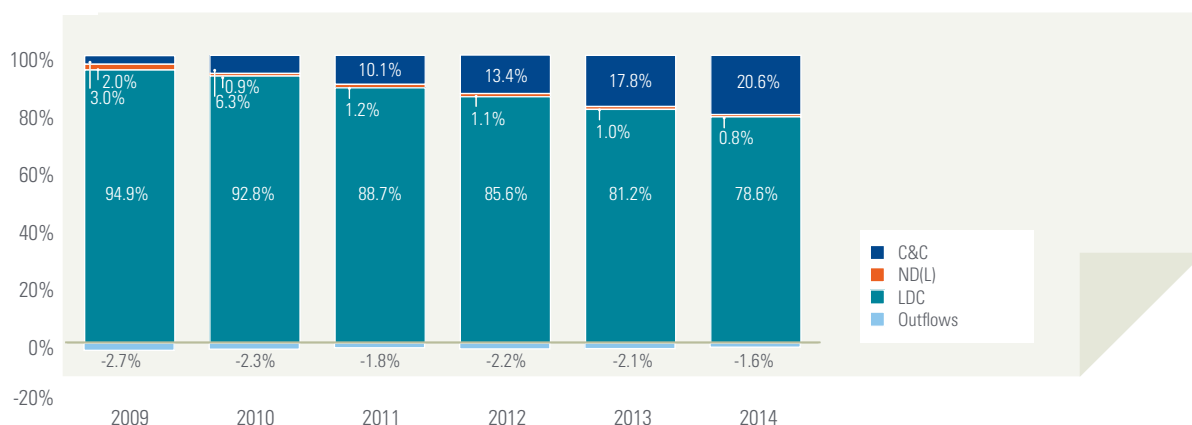
Source: (1) KPMG EU Flows Model

# Legal domestic sales fell in Greece, partially offset by increases in C&C

## Total manufactured cigarette consumption - Greece <sup>(1)(2)(a)</sup>

TOTAL GREECE CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	30.97	27.78	24.24	20.45	18.46	17.27	(6%)
Outflows	-0.85	-0.66	-0.50	-0.50	-0.47	-0.33	(29%)
Legal domestic consumption (LDC)	30.11	27.12	23.75	19.94	17.99	16.93	(6%)
Non-domestic legal (ND(L))	0.64	0.26	0.32	0.25	0.23	0.18	(21%)
Counterfeit and contraband (C&C)	0.97	1.83	2.70	3.12	3.94	4.43	12%
Total non-domestic	1.61	2.09	3.02	3.37	4.17	4.61	11%
<b>Total consumption</b>	<b>31.72</b>	<b>29.21</b>	<b>26.77</b>	<b>23.31</b>	<b>22.16</b>	<b>21.54</b>	<b>(3%)</b>

## Share of Greece cigarette consumption by type - 2009-2014 <sup>(1)(2)</sup>



GREECE



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### Legal domestic sales in Greece have continued their long-term decline, despite an improving economic backdrop

- Although both GDP per capita grew and unemployment fell, price rises of 5% are likely to have impacted affordability <sup>(3)(4)(5)</sup>

### The decline in LDS may indicate a degree of switching to Illicit Whites and OTP

- Industry surveys suggest that OTP consumption increased from 14.3% to 14.8% of total consumption between 2013 and 2014 <sup>(6)</sup>
- Illicit OTP tobacco consumption is an additional potential source of revenue loss for the Greek treasury. Potential revenue losses due to illicit OTP or bulk tobacco have not been included in this report

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) 2014 Economist Intelligence Unit (5) 2014 Euromonitor (6) JTI Tracker

# Inflows of packs of unspecified origin continued to increase

## Total inflows by country of origin - 2009-2014<sup>(1)</sup>

ND INFLOWS TO GREECE						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Unspecified Illicit Whites	0.02	0.20	0.81	2.07	2.43	2.37
Unspecified	0.27	0.32	0.40	0.05	0.64	1.00
Duty Free	0.66	0.81	0.92	0.33	0.48	0.59
Illicit Whites with Duty Free labelling	0.20	0.18	0.20	0.43	0.29	0.28
Albania	0.03	0.07	0.06	0.08	0.08	0.08
Macedonia	0.00	0.01	0.01	0.02	0.02	0.05
Georgia	0.03	0.09	0.07	0.04	0.04	0.05
Counterfeit					0.02	0.03
Other	0.40	0.41	0.56	0.34	0.16	0.16
<b>Total inflows</b>	<b>1.61</b>	<b>2.09</b>	<b>3.02</b>	<b>3.37</b>	<b>4.17</b>	<b>4.61</b>

### Inflows to Greece increased from all main destinations in 2014

- Packs of unspecified origin and Duty Free labelled cigarettes, mainly Illicit Whites brands, remained the main sources of non-domestic cigarettes

## Total outflows by destination country - 2009-2014<sup>(1)</sup>

OUTFLOWS FROM GREECE						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Germany	0.26	0.19	0.17	0.18	0.15	0.11
UK	0.28	0.16	0.12	0.16	0.11	0.08
Belgium	0.01	0.00	0.00	0.01	0.00	0.03
Italy	0.08	0.08	0.05	0.02	0.02	0.03
Netherlands	0.04	0.02	0.03	0.03	0.03	0.02
France	0.09	0.12	0.04	0.07	0.12	0.02
Other	0.09	0.08	0.07	0.04	0.03	0.04
<b>Total outflows</b>	<b>0.85</b>	<b>0.66</b>	<b>0.50</b>	<b>0.50</b>	<b>0.47</b>	<b>0.33</b>

**Outflows are reflective of cigarettes identified through pack collections in other markets. For Greece, outflows tended to follow tourist source countries.**

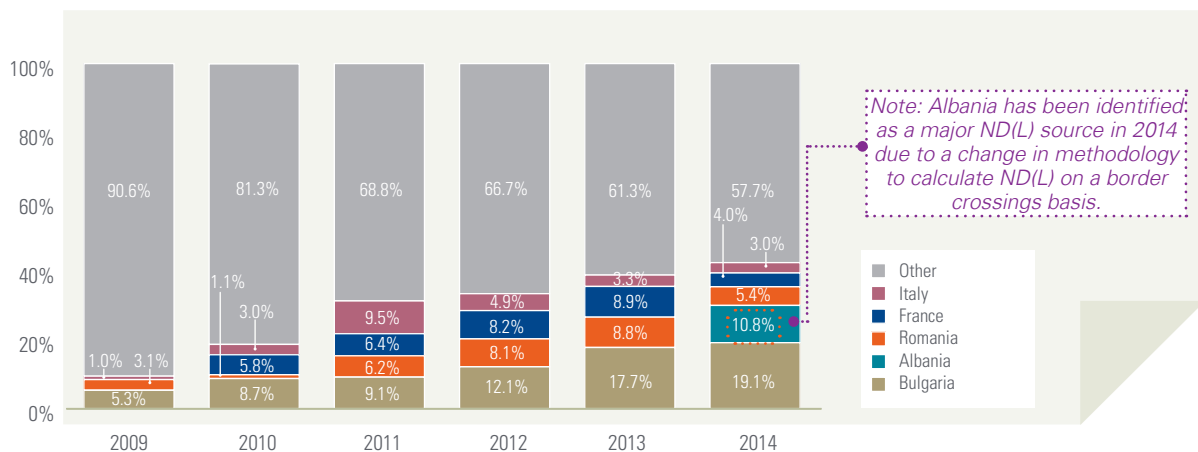
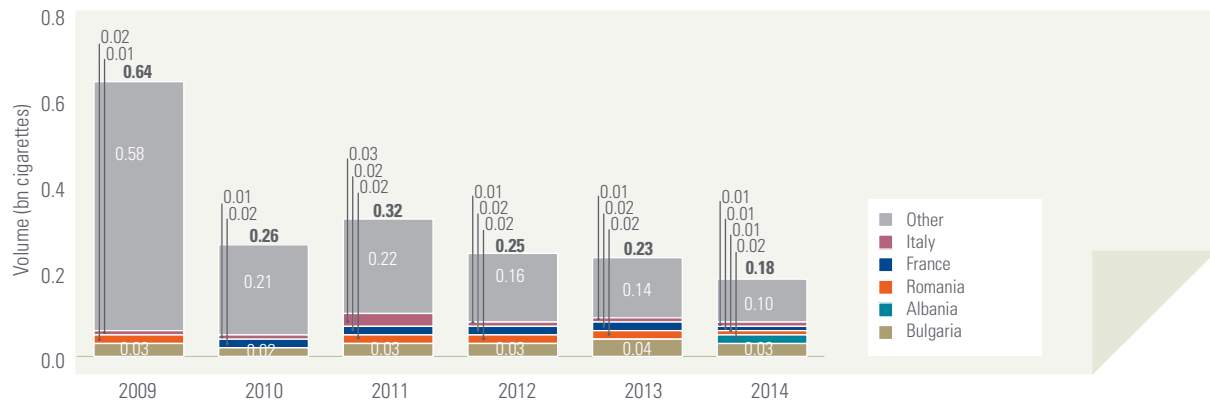
- Greek outflows did not include any Duty Free product

Source: (1) KPMG EU Flows Model



# Non-domestic legal inflows remained low

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



Note: Albania has been identified as a major ND(L) source in 2014 due to a change in methodology to calculate ND(L) on a border crossings basis.

GREECE



### Inflows from the cheaper markets of Bulgaria and Albania were reflected by visitor numbers

- In 2014, high price differences of €1.23 per pack of 20 between Greece and Bulgaria and high travel volumes mean that almost all Bulgarian inflow is classified as legal<sup>(1)(3)</sup>
- Whilst price differences between Greece and Albania were high, purchasers were restricted to 200 cigarettes. Given low traveller volumes only 23% of the flow was ND(L)<sup>(4)</sup>

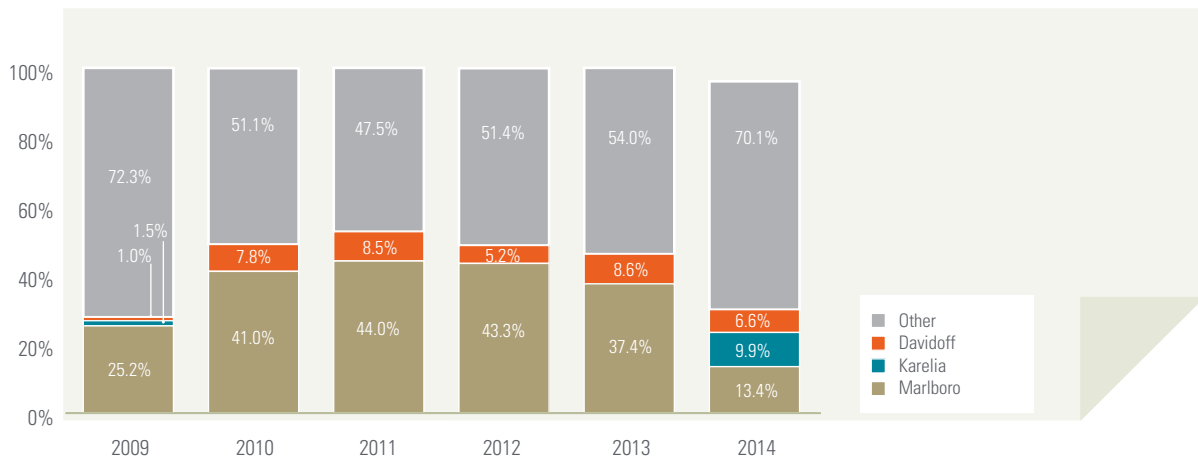
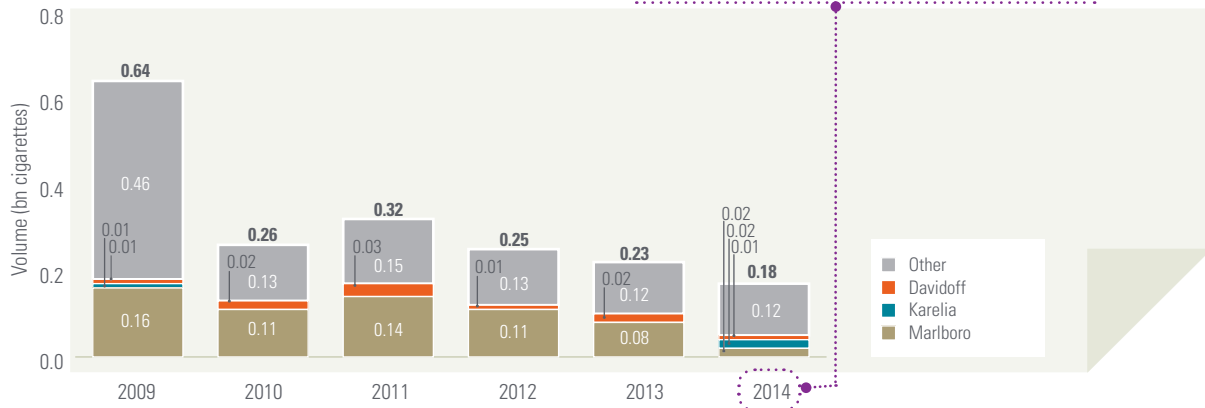
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) Tax tables provided by manufacturers

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# NON-DOMESTIC LEGAL INFLOWS BY BRAND

Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>



GREECE



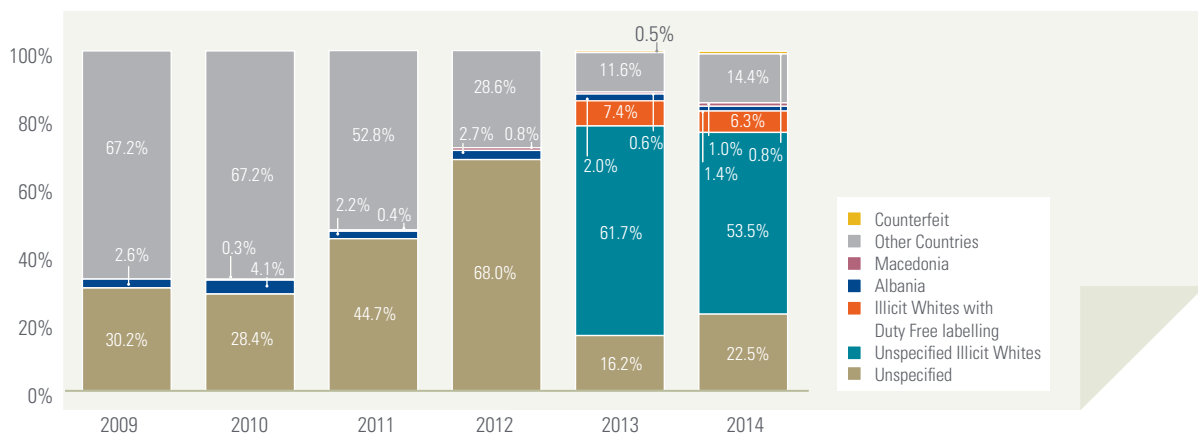
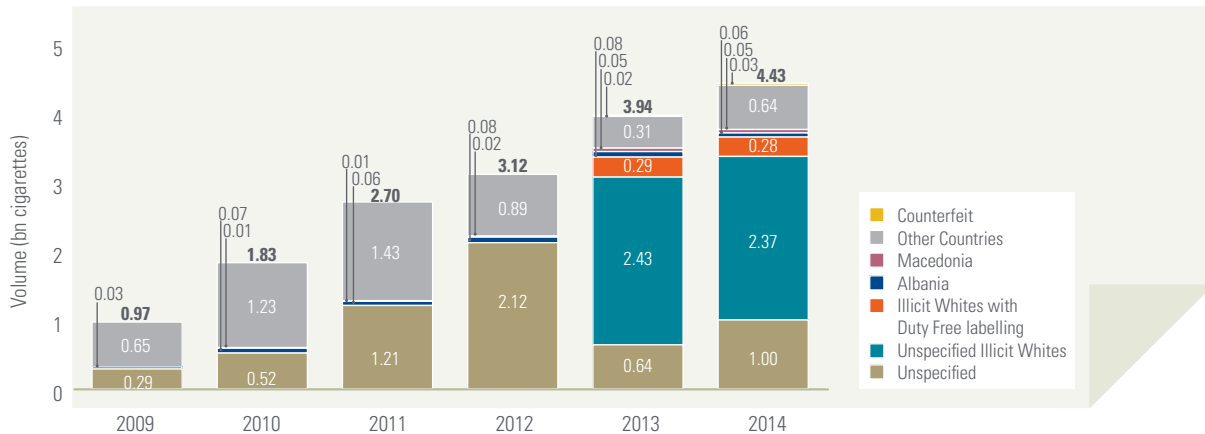
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# C&C flows continued to increase, driven by Illicit Whites brand flows

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



GREECE



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## C&C increased by 12% between 2013 and 2014, driven by an increase in packs of unspecified origin and labelled as Duty Free

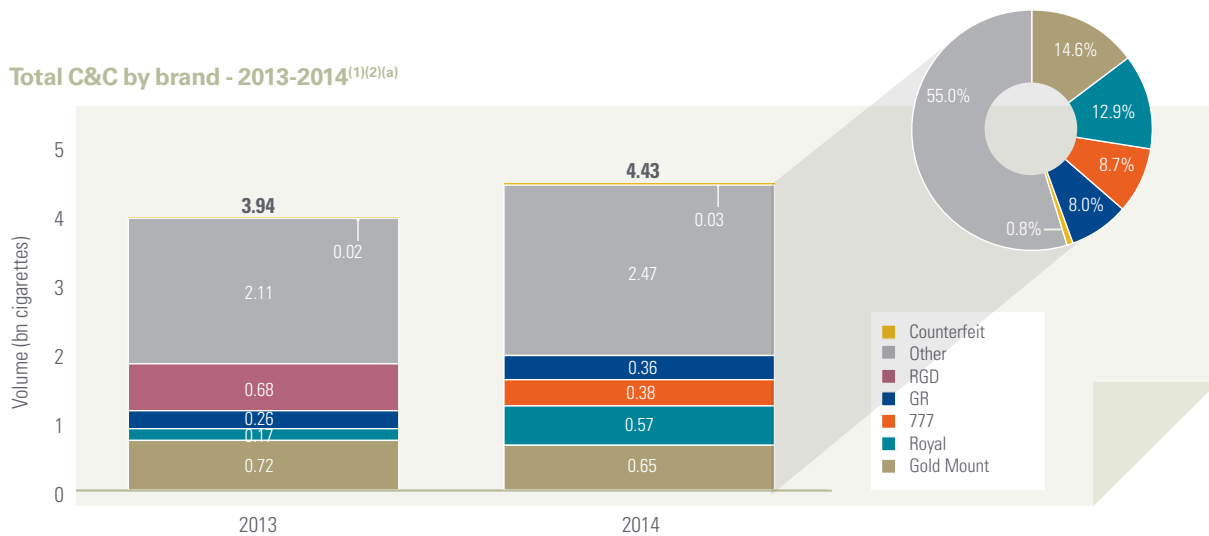
- Around half of the combined packs with unspecified origin or labelled as Duty Free were Illicit Whites brand flows
  - The largest brands were Gold Mount, Royal and 777
- Local manufacturer Sekap is the trademark owner of the GR cigarette brand, however large volumes were identified without any Greek tax stamps and unspecified labelling
- If the total volume of C&C had been purchased legally within the Greek market, an additional tax revenue of approximately €666m would have been raised by the Greek Treasury<sup>(3)</sup>
- Greece is also thought to be a major transit country for illicit cigarettes, with large shipments from other markets passing through the ports of Piraeus and Thessaloniki into other EU markets<sup>(4)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) Transcrime, European Outlook on the Illicit Trade in Tobacco Products, 2015

## C&C INFLOWS BY BRAND

Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type - 2009-2014<sup>(1)(2)(a)</sup>

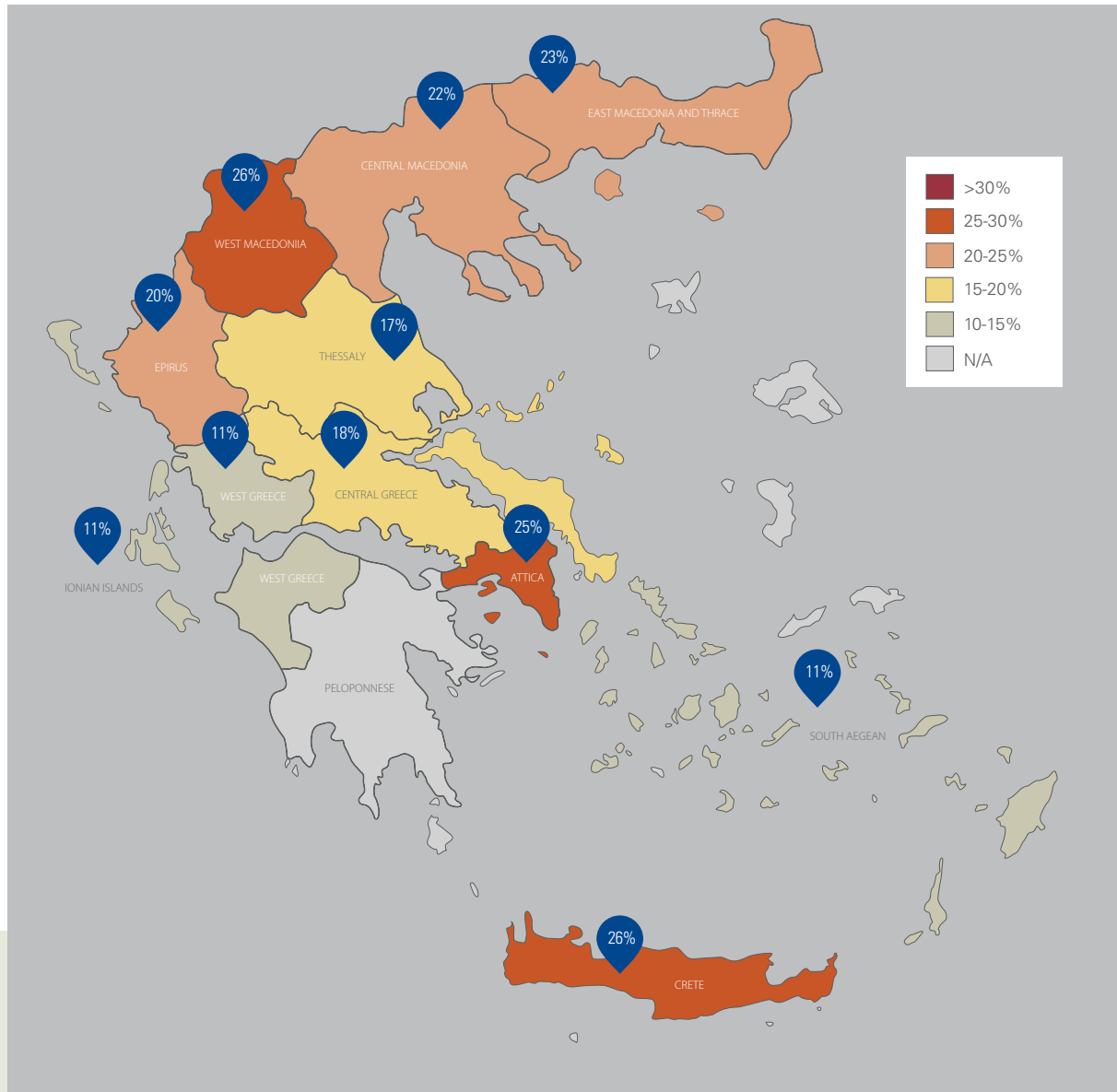
LABELLING OF ILLICIT WHITES INFLOWS TO GREECE						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	0.02	0.07	0.07	0.13	0.05	0.44
Duty Free	0.20	0.18	0.20	0.43	0.29	0.28
Unspecified	0.02	0.20	0.81	2.07	2.43	2.37
<b>Total Illicit Whites</b>	<b>0.24</b>	<b>0.46</b>	<b>1.08</b>	<b>2.63</b>	<b>2.76</b>	<b>3.09</b>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers

# Non-domestic incidence heat map

Empty Pack Survey regional non-domestic incidence – 2014<sup>(1)</sup>



GREECE



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Source: (1) Independent agency Empty Pack Surveys, 2014





GREECE



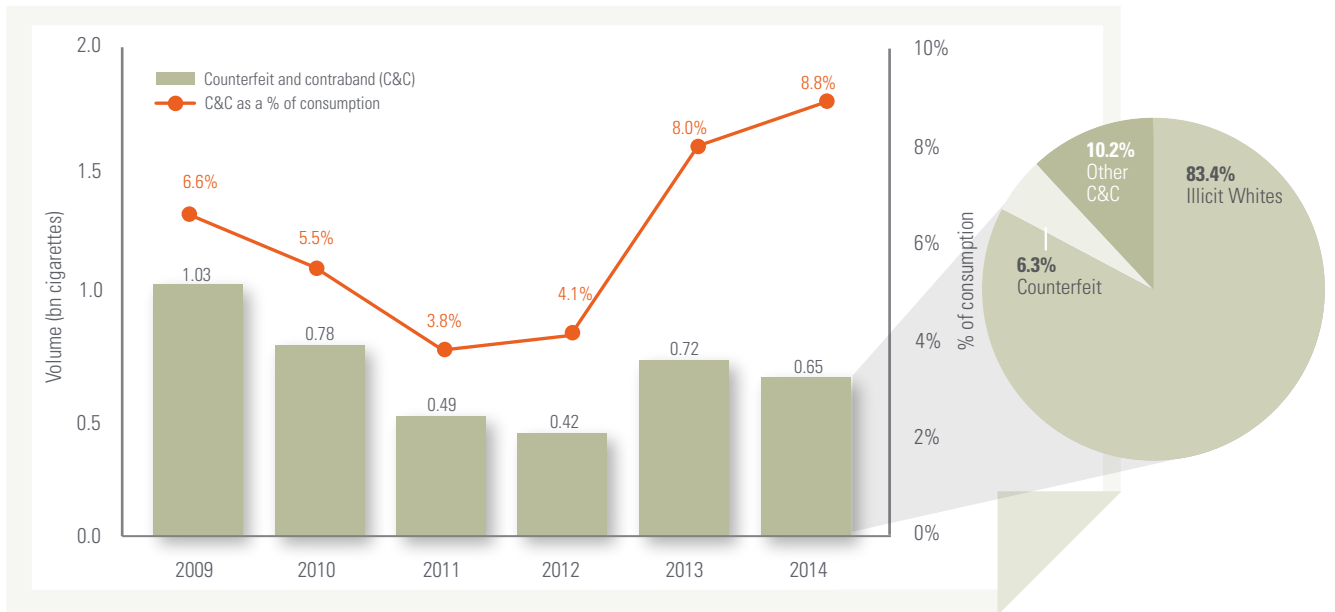
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# HUNGARY



Consumption fell as increased regulations impacted legal domestic sales

Manufactured cigarette C&C volumes and share of overall consumption 2009-14

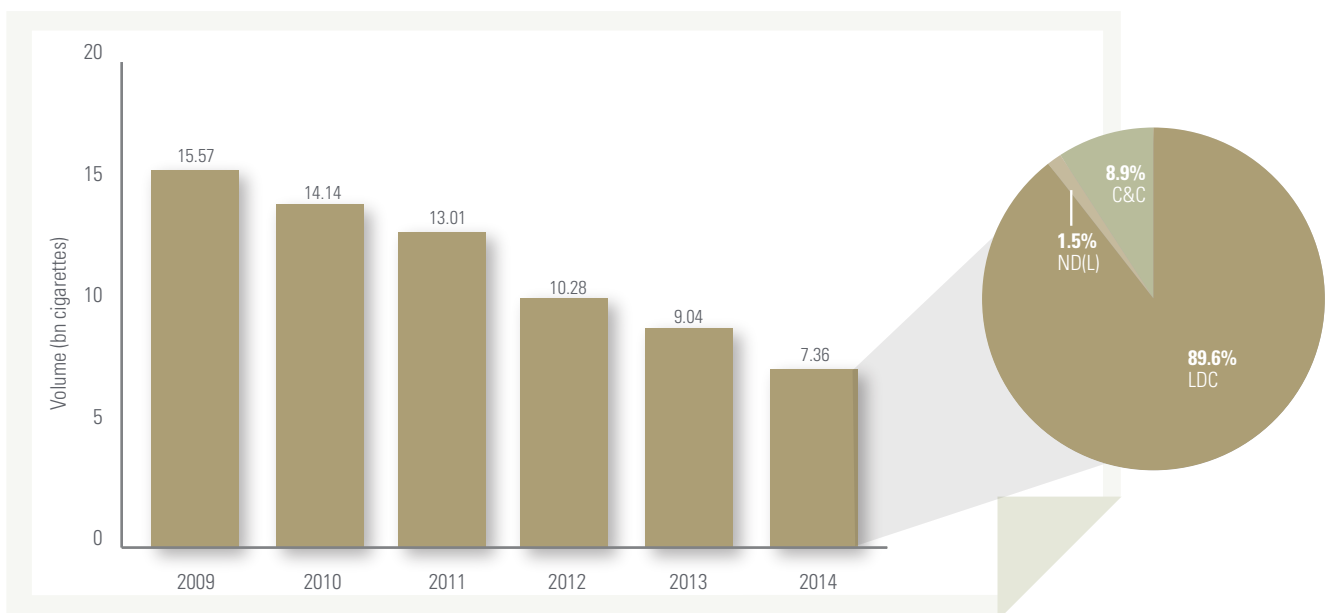


HUNGARY

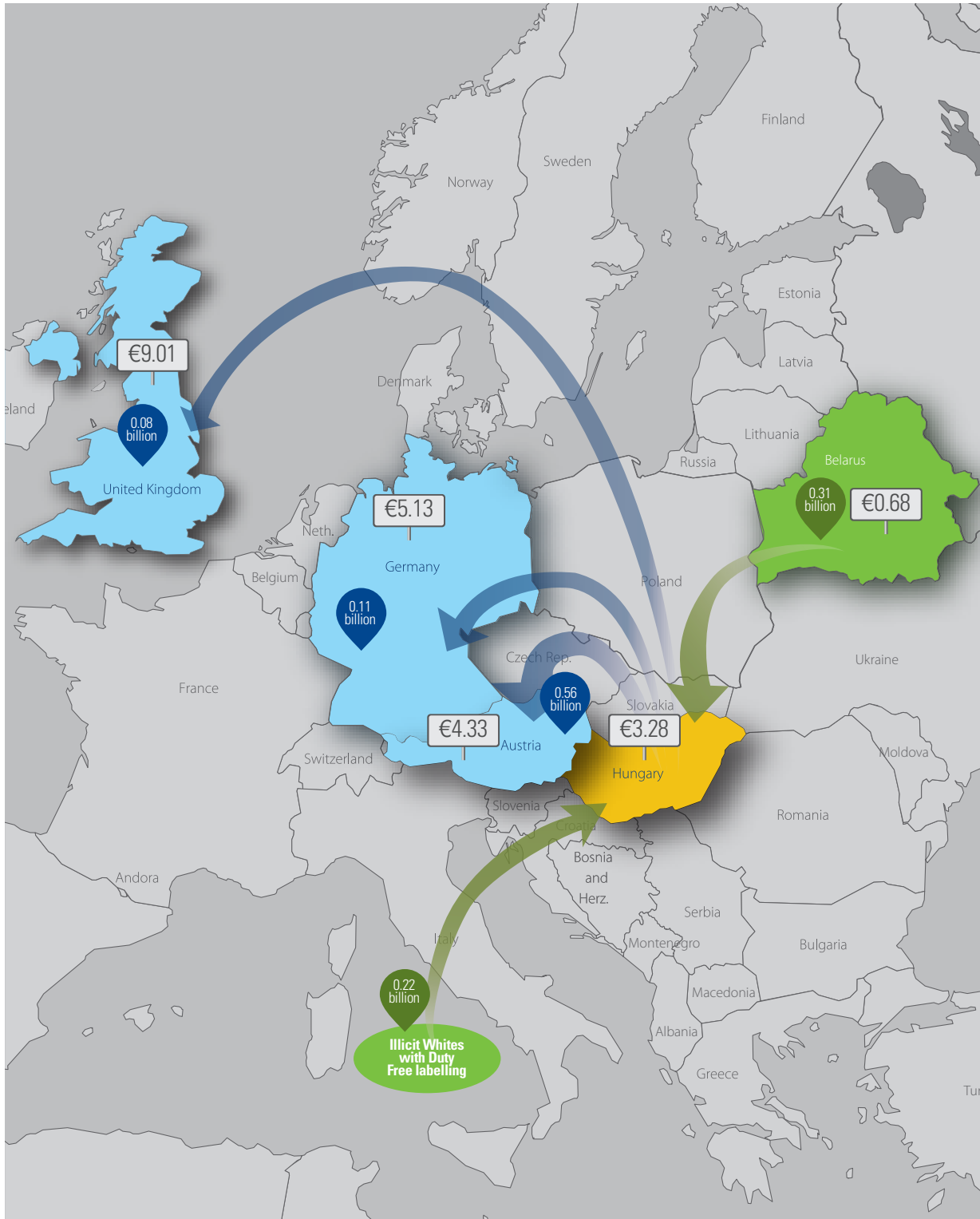


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Manufactured cigarette consumption 2009-14



# KEY INFLOWS AND OUTFLOWS



HUNGARY  
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Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

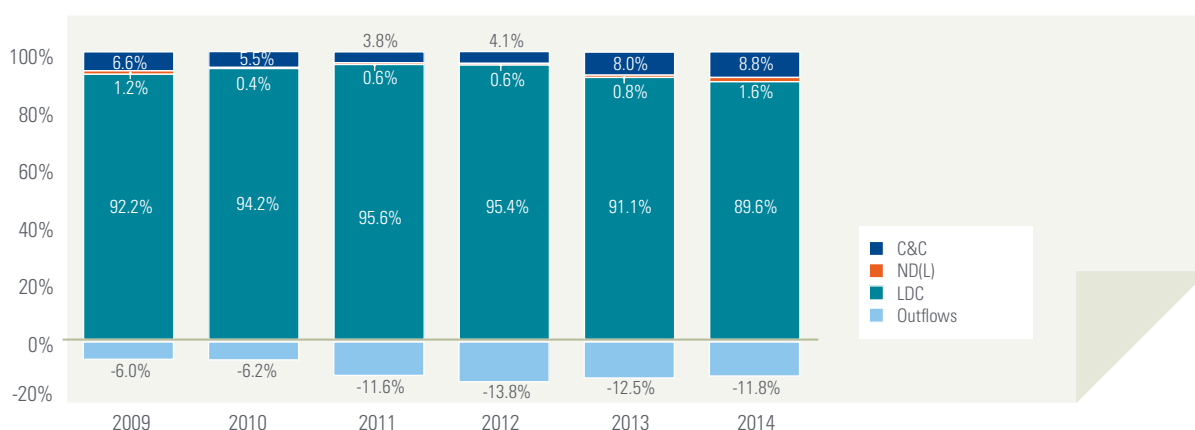
Source: (1) KPMG EU Flows Model

# Legal domestic sales continued to decline against a background of regulatory change

## Total manufactured cigarette consumption – Hungary<sup>(1)(2)(3)(a)</sup>

TOTAL HUNGARY CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	15.30	14.18	13.94	11.21	9.36	7.47	(20%)
Outflows	-0.93	-0.87	-1.50	-1.41	-1.13	-0.87	(23%)
Legal domestic consumption (LDC)	14.36	13.31	12.44	9.80	8.24	6.60	(20%)
Non-domestic legal (ND(L))	0.18	0.05	0.08	0.06	0.08	0.11	52%
Counterfeit and contraband (C&C)	1.03	0.78	0.49	0.42	0.72	0.65	(10%)
Total non-domestic	1.21	0.83	0.57	0.48	0.80	0.76	(4%)
<b>Total consumption</b>	<b>15.57</b>	<b>14.14</b>	<b>13.01</b>	<b>10.28</b>	<b>9.04</b>	<b>7.36</b>	<b>(19%)</b>

## Share of Hungary cigarette consumption by type 2009-2014<sup>(1)(2)</sup>



### Total consumption of manufactured cigarettes declined by 19% driven by declining legal domestic sales

- Major changes to the tobacco industry in Hungary, initially implemented in July 2013 have continued to have an impact on the legal domestic sales market<sup>(4)(5)</sup>
  - The implementation of a state-run retail monopoly of tobacconists resulted in a reduction in the number of tobacco outlets
  - Simultaneously, Hungary experienced some of the highest price rises in the EU in both 2013 and 2014, rising 11% each year<sup>(6)</sup>

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers

(2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

(3) National Tax and Customs Administration (4) European Releases for consumption of fine cut tobacco, 2002-2012

(5) Hungary's tobacco law: Leaked tape causes outrage, BBC News, July 2013 (6) EC Excise Duty tables (Part III – Manufactured Tobacco)



## Outflow declined as the price gap narrowed between Hungary and neighbouring countries

### Total inflows by country of origin 2009-2014<sup>(1)</sup>

ND INFLOWSTO HUNGARY						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Belarus	0.00	0.00	0.00	0.07	0.35	0.31
Illicit Whites with Duty Free labelling						0.22
Duty Free	0.12	0.01	0.01	0.03	0.16	0.03
Ukraine	0.81	0.46	0.25	0.13	0.07	0.04
Serbia	0.12	0.19	0.10	0.14	0.06	0.03
Other	0.13	0.13	0.17	0.09	0.13	0.12
<b>Total inflows</b>	<b>1.21</b>	<b>0.83</b>	<b>0.57</b>	<b>0.48</b>	<b>0.80</b>	<b>0.76</b>

### Flows from Belarus and Illicit Whites with Duty Free labelling accounted for 70% of inflows

- Belarus remained the largest inflow to Hungary all of which was Illicit Whites

### Total outflows by destination country - 2009-2014<sup>(1)</sup>

OUTFLOWS FROM HUNGARY						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Austria	0.48	0.48	0.99	0.99	0.71	0.56
Germany	0.16	0.17	0.21	0.20	0.22	0.11
UK	0.10	0.02	0.09	0.12	0.03	0.08
Other	0.19	0.20	0.21	0.10	0.16	0.12
<b>Total outflows</b>	<b>0.93</b>	<b>0.87</b>	<b>1.50</b>	<b>1.41</b>	<b>1.13</b>	<b>0.87</b>

### Outflows were mainly a result of cross border shopping (in the case of Austria) and tourism

- Outflows declined as prices narrowed, from €1.22 to €1.05 to Austria and €2.04 to €1.86 to Germany<sup>(2)</sup>
- Travel flows from Hungary to the UK increased which may have impacted the growth in outflows<sup>(3)</sup>

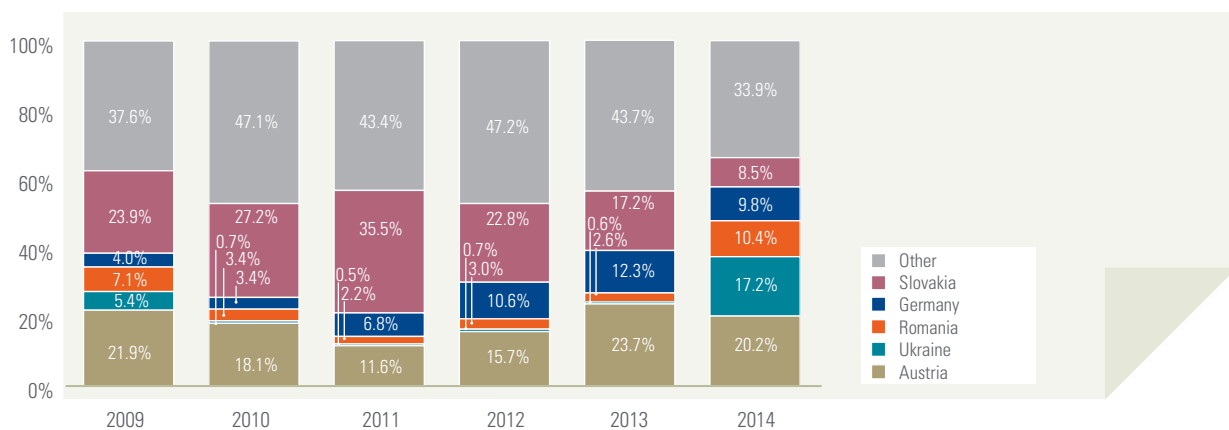
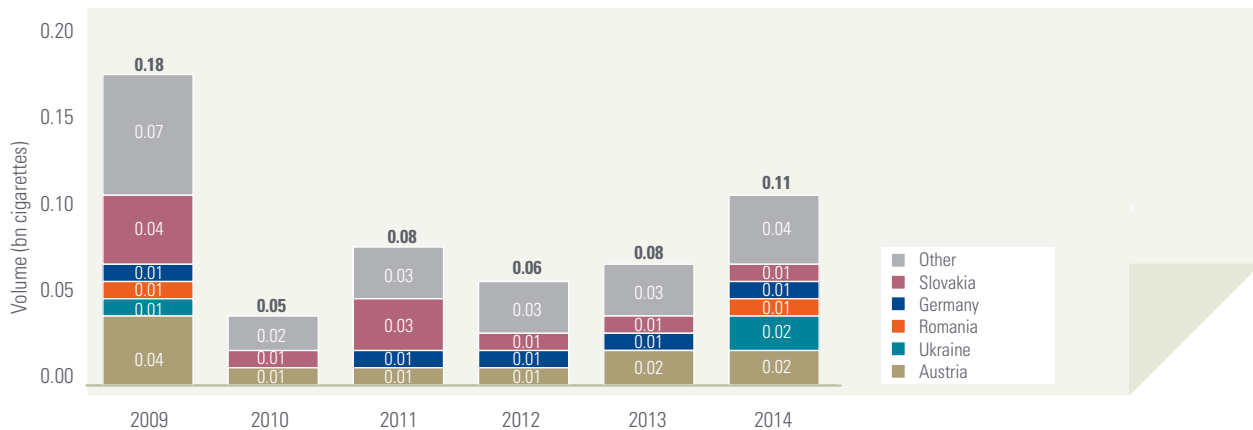
Sources: (1) KPMG EU Flows Model (2) EC Excise Duty tables (Part III – Manufactured Tobacco) (3) KPMG analysis of UNWTO Factbook 2008-2013



## NON-DOMESTIC LEGAL INFLOW BY COUNTRY

The majority of legal inflows come from neighbouring countries and Germany

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



HUNGARY



PROJECT SUN

**Legal inflows represent a small proportion of the overall market and mostly arise from cross-border travel**

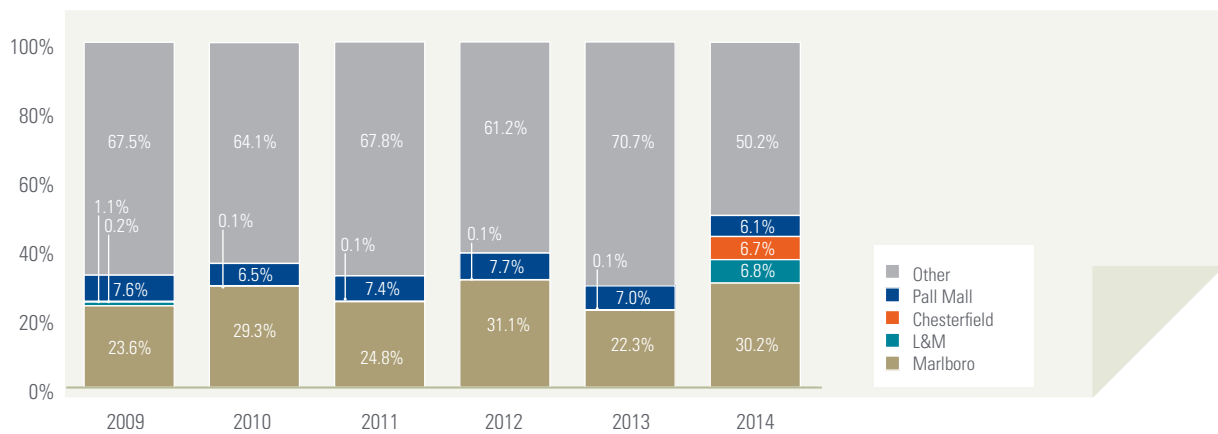
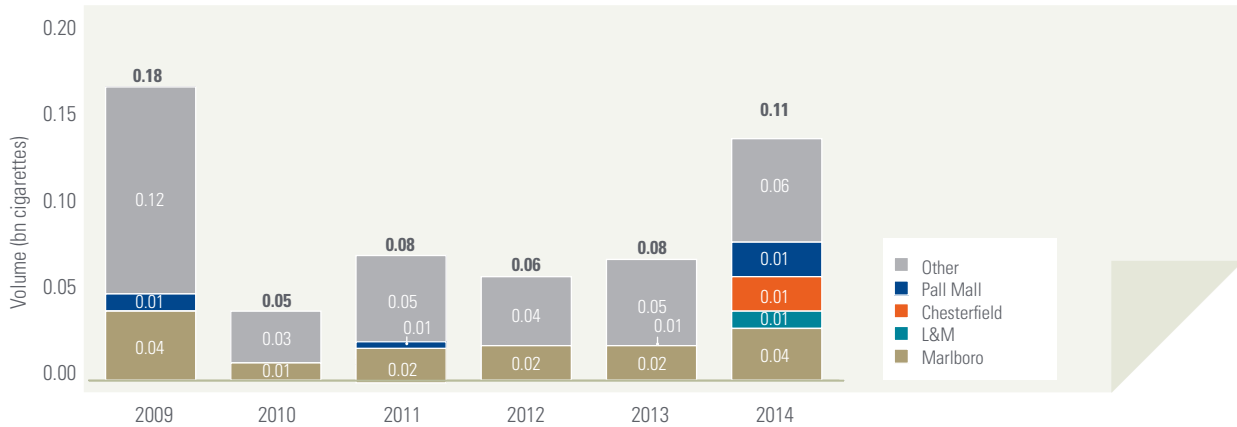
- The brand split is representative of the international brands consumed in Hungary

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows. (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers

# NON-DOMESTIC LEGAL INFLOW BY BRAND

Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>



HUNGARY



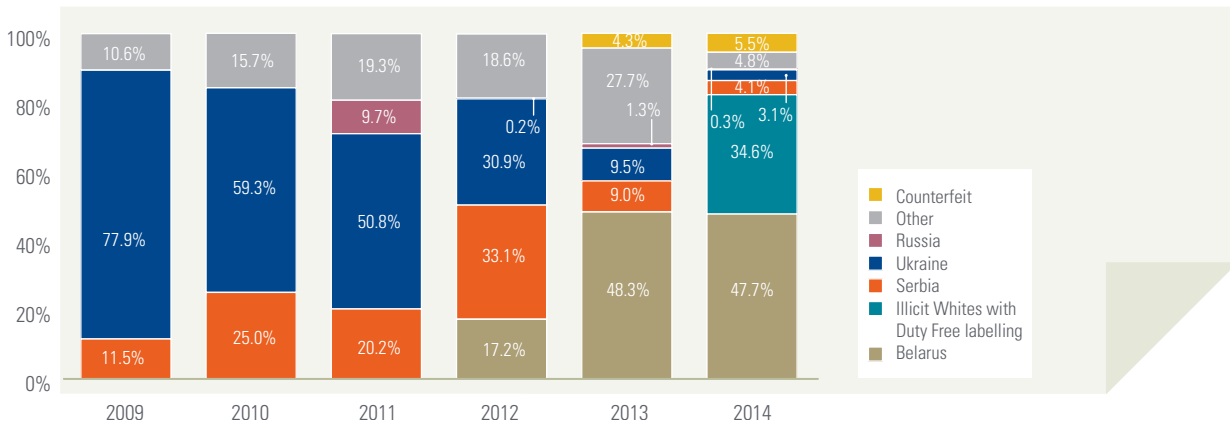
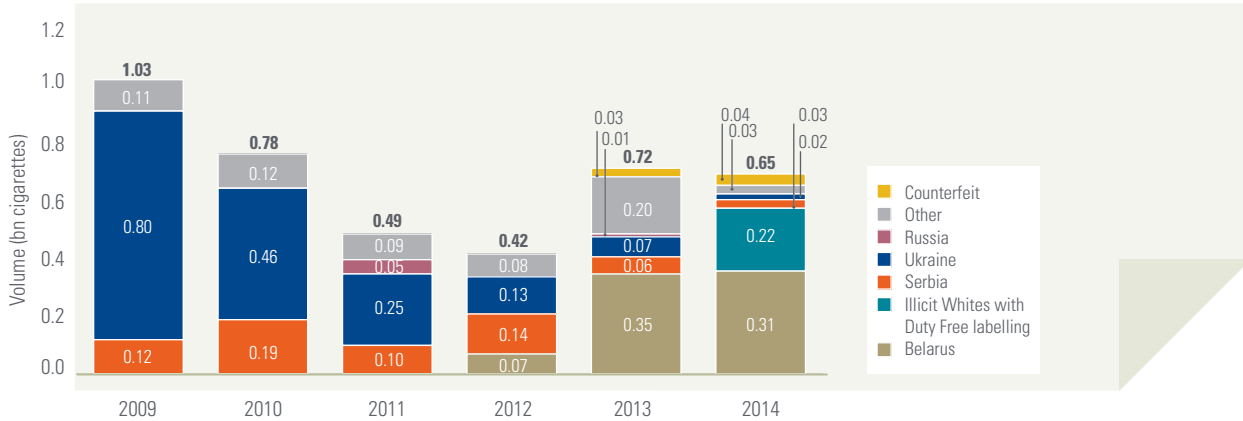
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# Illicit Whites accounted for most of the C&C inflow

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



HUNGARY



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**Illicit Whites continued to grow as a proportion of illicit consumption, representing 83% of C&C in 2014**

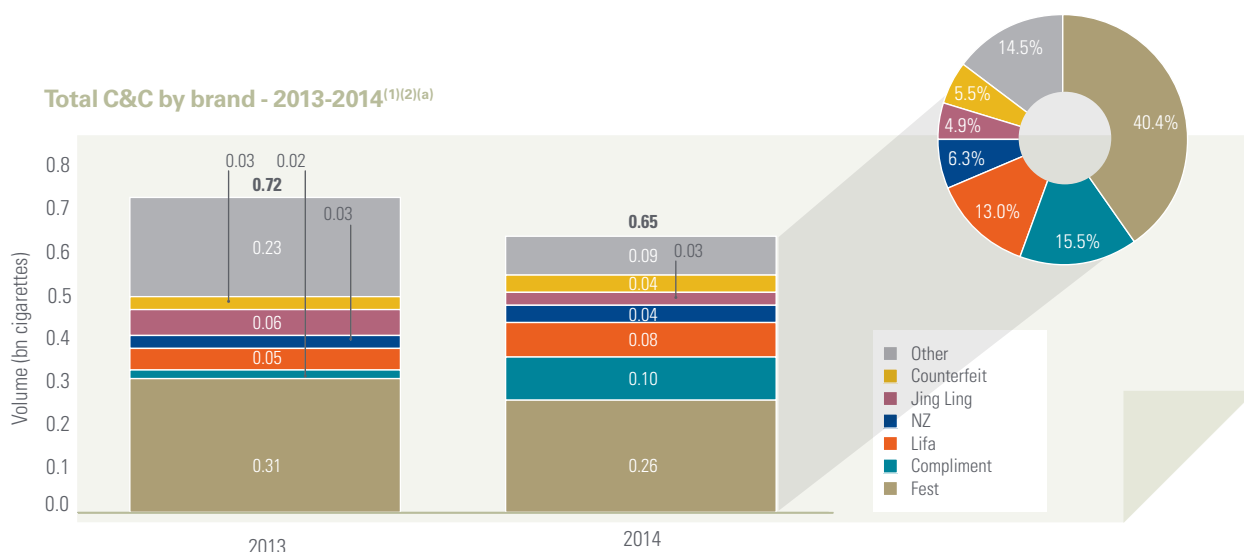
- The inflow from Belarus came from Illicit Whites brands with trademarks owned by Grodno Tobacco. Fest accounted for the majority of the inflow
- The majority of the Illicit Whites flow with Duty Free labelling came from Compliment, Lifa and Jin Ling. All three are trademarks owned by the Baltic Tobacco Factory
- If the total volume of C&C had been consumed legally within the Hungarian market, an additional tax revenue of approximately €100m would have been raised by the Hungarian Treasury<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows  
 Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)



# C&C INFLOWS BY BRAND

**Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>**



**Breakdown of Illicit Whites by type 2009-2014<sup>(1)(2)(a)</sup>**

LABELLING OF ILLICIT WHITES INFLOWS TO HUNGARY						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	0.01	0.04	0.01	0.11	0.37	0.31
Duty Free	0.01	0.00	0.00	0.01	0.14	0.22
Unspecified	0.03	0.02	0.00	0.00	0.01	0.00
<b>Total Illicit Whites</b>	<b>0.04</b>	<b>0.06</b>	<b>0.01</b>	<b>0.12</b>	<b>0.52</b>	<b>0.54</b>

HUNGARY



PROJECT SUN

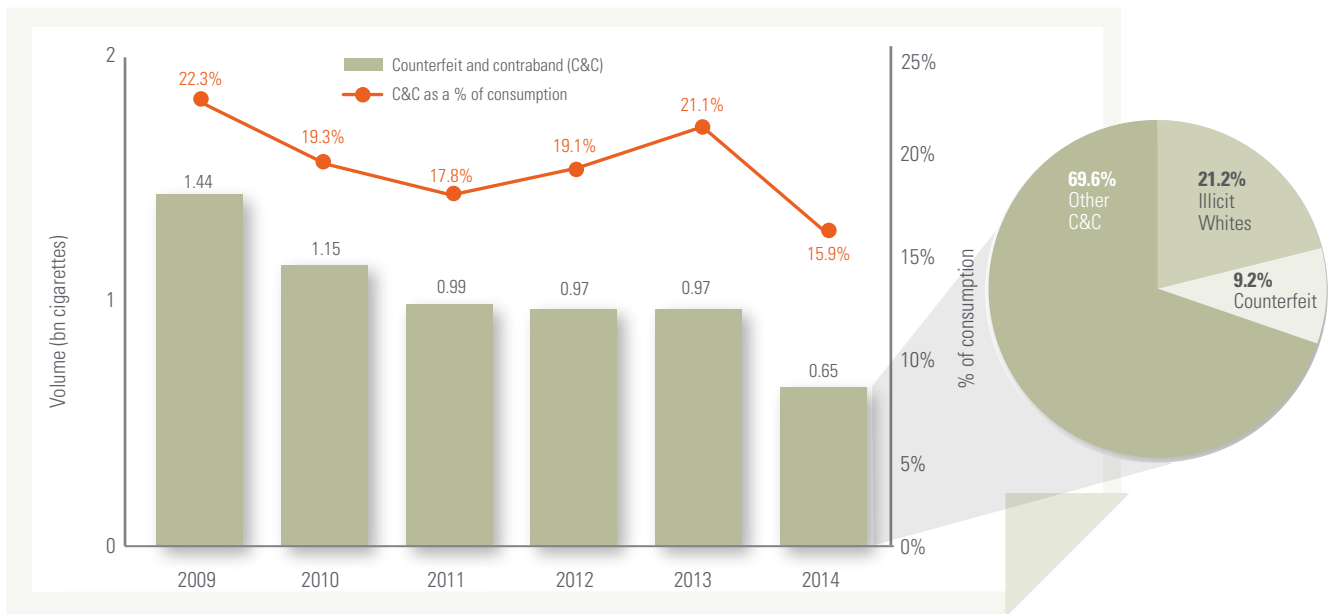
Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows  
 Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# IRELAND



C&C in Ireland fell by 33%

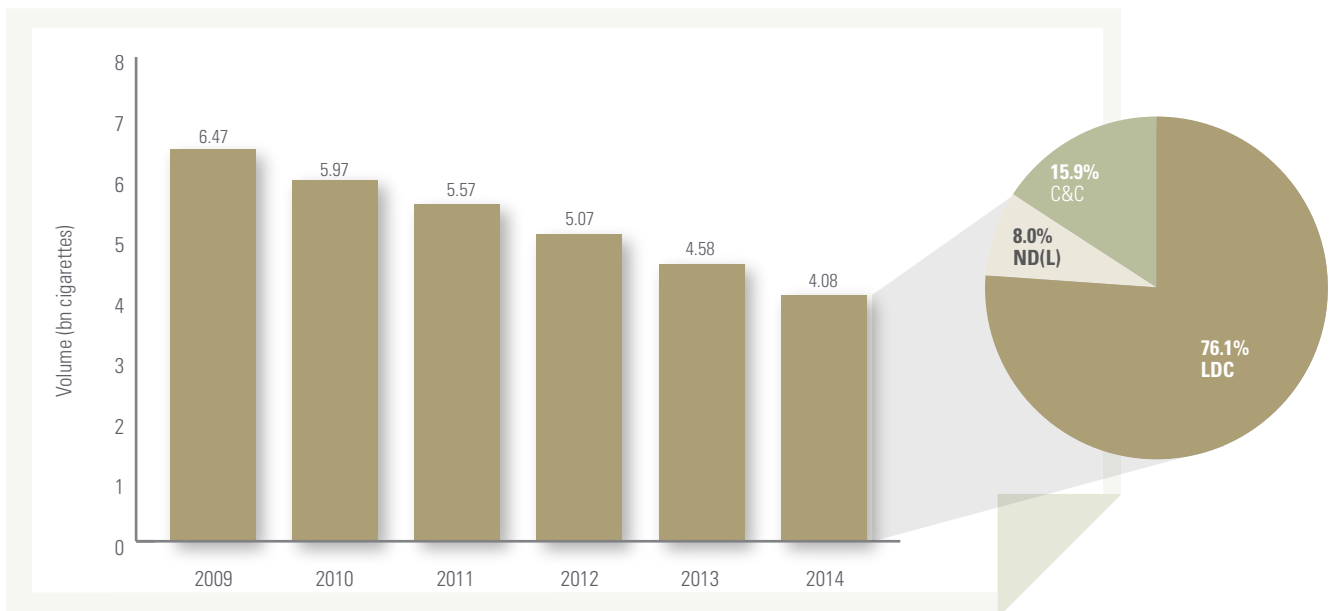
Manufactured cigarette C&C volumes and share of overall consumption - 2009-14



IRELAND

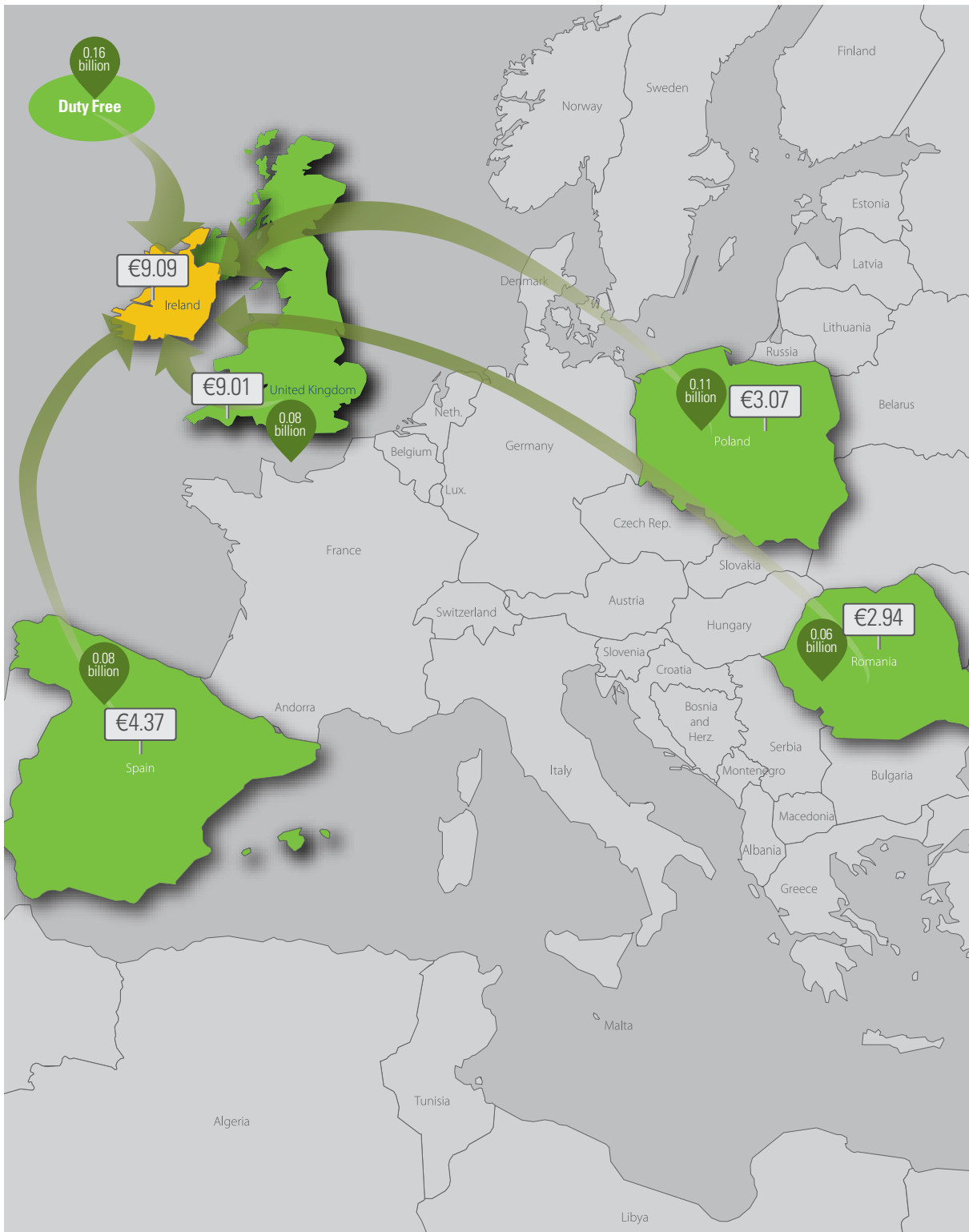


Manufactured cigarette consumption - 2009-14



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# KEY INFLOWS AND OUTFLOWS



IRELAND  
 PROJECT SUN

Main outflow  
 Main inflow

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

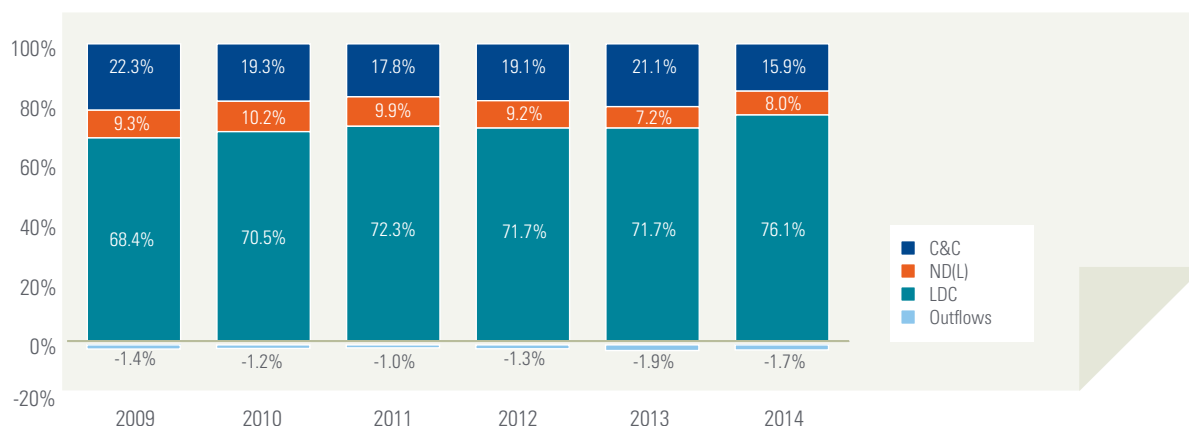
Source: (1) KPMG EU Flows Model

# Decreasing C&C from Eastern EU was the main driver of consumption decline

## Total manufactured cigarette consumption – Ireland<sup>(1)(2)(a)</sup>

TOTAL IRELAND CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14%
Legal domestic sales (LDS)	4.52	4.28	4.09	3.70	3.37	3.18	(6%)
Outflows	-0.09	-0.07	-0.06	-0.07	-0.09	-0.07	(18%)
Legal domestic consumption (LDC)	4.43	4.21	4.03	3.63	3.28	3.11	(5%)
Non-domestic legal (ND(L))	0.60	0.61	0.55	0.47	0.33	0.33	(2%)
Counterfeit and contraband (C&C)	1.44	1.15	0.99	0.97	0.97	0.65	(33%)
Total non-domestic	2.04	1.76	1.54	1.43	1.30	0.97	(25%)
<b>Total consumption</b>	<b>6.47</b>	<b>5.97</b>	<b>5.57</b>	<b>5.07</b>	<b>4.58</b>	<b>4.08</b>	<b>(11%)</b>

## Share of Ireland cigarette consumption by type 2009-2014<sup>(1)(2)</sup>



### Both legal domestic sales and non-domestic consumption declined in volume terms in 2014

- Despite favourable economic conditions of falling unemployment and rising GDP per capita in 2014, legal domestic sales fell by 6%<sup>(3)</sup>
- An increase in tax of €0.40 in October may have impacted LDS towards the end of the year<sup>(4)</sup>

### A 25% decline in non-domestic manufactured cigarettes may indicate that consumers are switching to cheaper alternatives

- Despite declining manufactured cigarette consumption, consumer research indicated that smoking prevalence has remained stable in 2014<sup>(5)</sup>
  - Irish RYO sales volumes grew by 8% to 390 tonnes between 2013 and 2014<sup>(6)</sup>
  - Irish Revenue reported an increase of over 100% in seizures of RYO tobacco in 2014 versus 2013<sup>(6)</sup>

Note: (a) In 2012 and 2013 non-domestic incidence is stated on a cigarettes basis. Prior to this a packs basis was used

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) 2014 Economist Intelligence Unit (4) EC Excise Duty tables (Part III – Manufactured Tobacco) (5) Irish TMA (6) Irish Examiner, Price to Blame as Seizures of Illegal Cigarettes Soar, January 2015

## InfloWS declined from both the east of the EU and Duty Free

### Total inflows by country of origin - 2009-2014<sup>(1)(a)</sup>

ND INFLOWS TO IRELAND						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Duty Free	0.11	0.11	0.16	0.19	0.24	0.16
Poland	0.14	0.22	0.19	0.19	0.16	0.11
Spain	0.37	0.25	0.15	0.14	0.07	0.08
UK	0.35	0.20	0.24	0.14	0.06	0.08
Romania	0.08	0.05	0.06	0.10	0.09	0.06
Unspecified	0.12	0.05	0.08	0.06	0.10	0.06
Other	0.85	0.88	0.65	0.63	0.58	0.44
<b>Total inflows</b>	<b>2.04</b>	<b>1.76</b>	<b>1.54</b>	<b>1.43</b>	<b>1.30</b>	<b>0.97</b>

- Overall non-domestic inflows declined by 25% with much of the decline coming from Duty Free labelled products
- Inflows from Poland and Romania, much cheaper priced markets, also declined

### Total outflows by destination country - 2009-2014<sup>(1)</sup>

OUTFLOWS FROM IRELAND						
Billion cigarettes	2009	2010	2011	2012	2013	2014
UK	0.05	0.02	0.03	0.05	0.06	0.05
Netherlands	0.02	0.02	0.01	0.00	0.02	0.01
France	0.01	0.02	0.00	0.00	0.00	0.01
Other	0.01	0.01	0.01	0.01	0.01	0.00
<b>Total outflows</b>	<b>0.09</b>	<b>0.07</b>	<b>0.06</b>	<b>0.07</b>	<b>0.09</b>	<b>0.07</b>

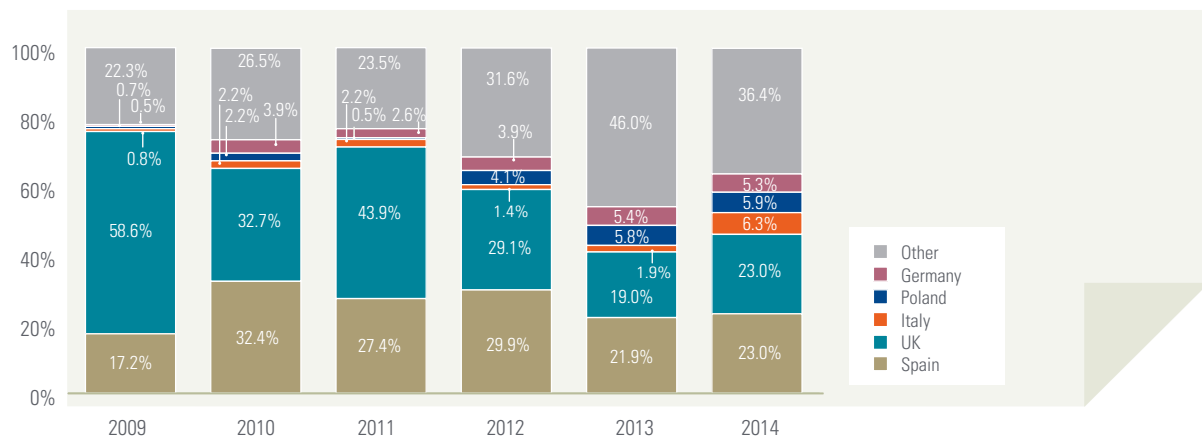
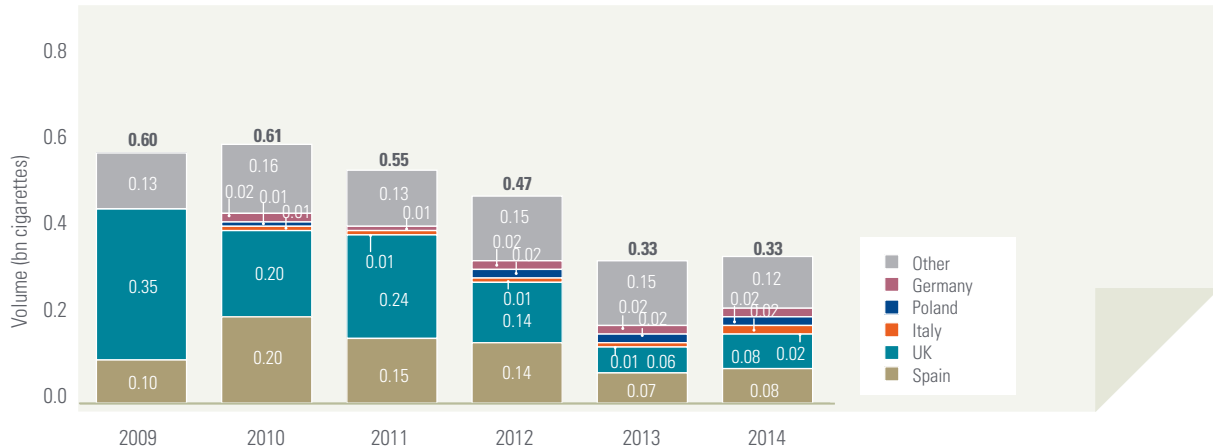
**As the most expensive market in Europe outflows from Ireland are minimal, and declined by 5% in 2014**

Note: (a) The Duty Free inflow contains both "other" Duty Free product and Illicit Whites which have Duty Free labelling  
 Source: (1) KPMG EU Flows Model.



# ND(L) remained stable in Ireland in 2014

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



IRELAND

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## ND(L) remained stable in Ireland in 2014

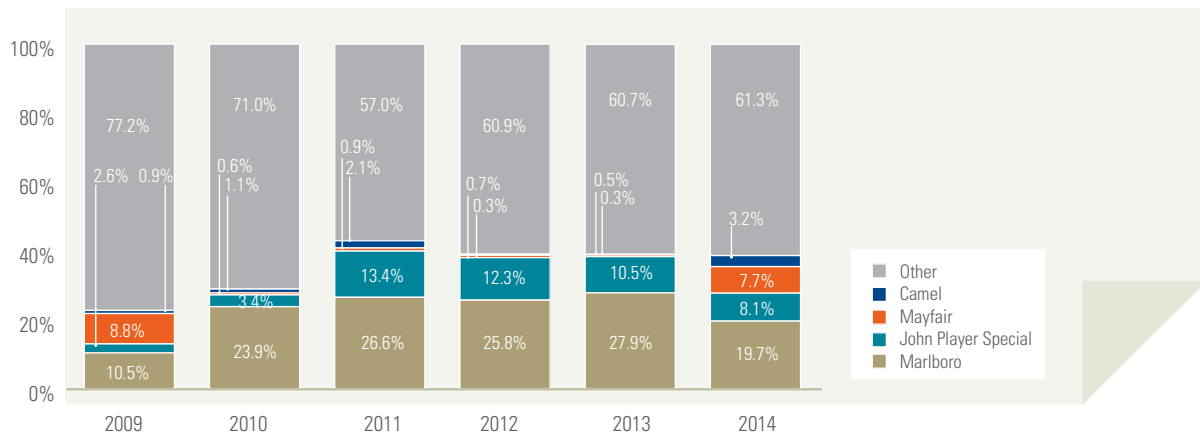
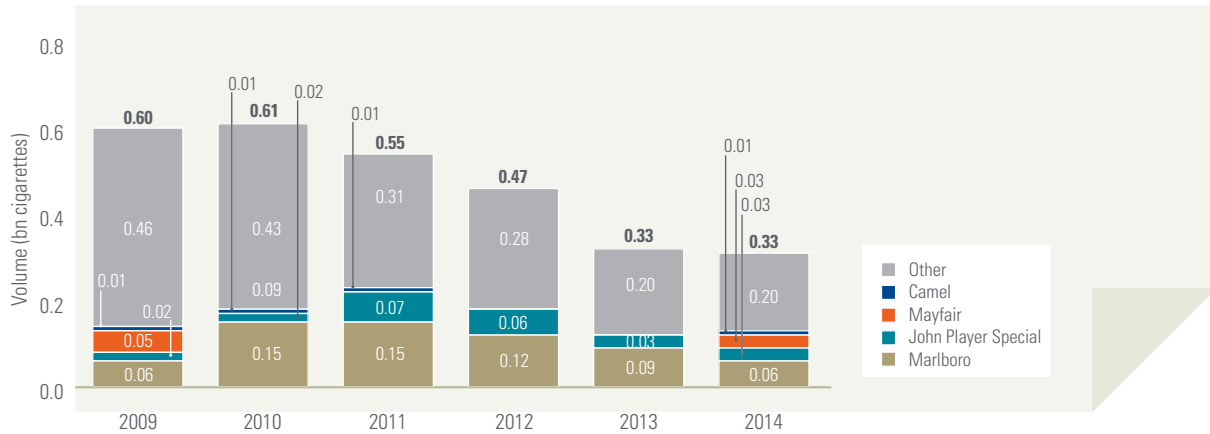
- In 2014 the legal flows from the UK to Ireland increased despite stable traveller numbers<sup>(1)</sup>
  - The price of other items such as food, clothing or petrol may be driving cross border shopping and therefore cigarette inflows from the UK
  - It is assumed that all inflows from the UK to Ireland are legal
  - Mayfair was the largest UK brand
- Inflows from popular destinations such as Spain, UK, Italy and Germany continued to dominate the legal inflows
  - 75% of Marlboro came from Spain, Italy and Germany

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# NON-DOMESTIC LEGAL INFLOWS BY BRAND

Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>



IRELAND



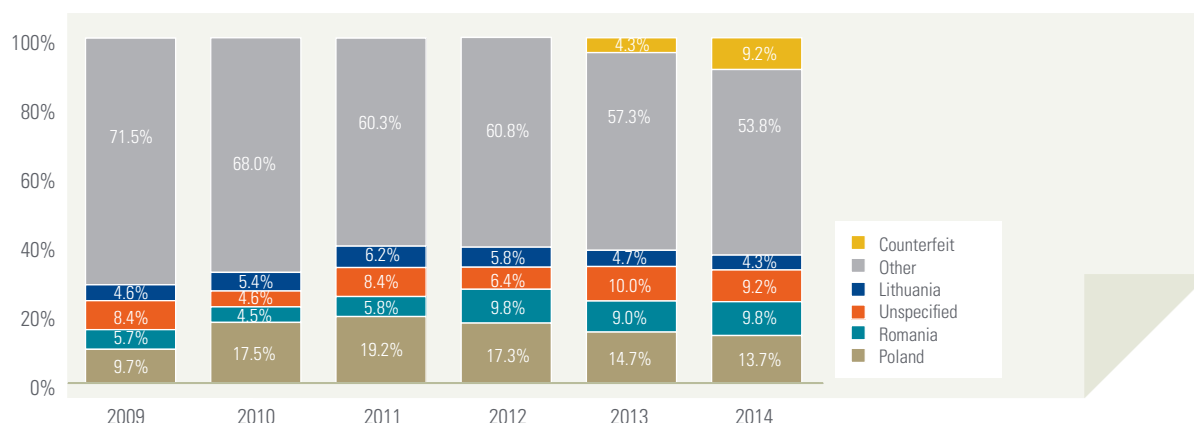
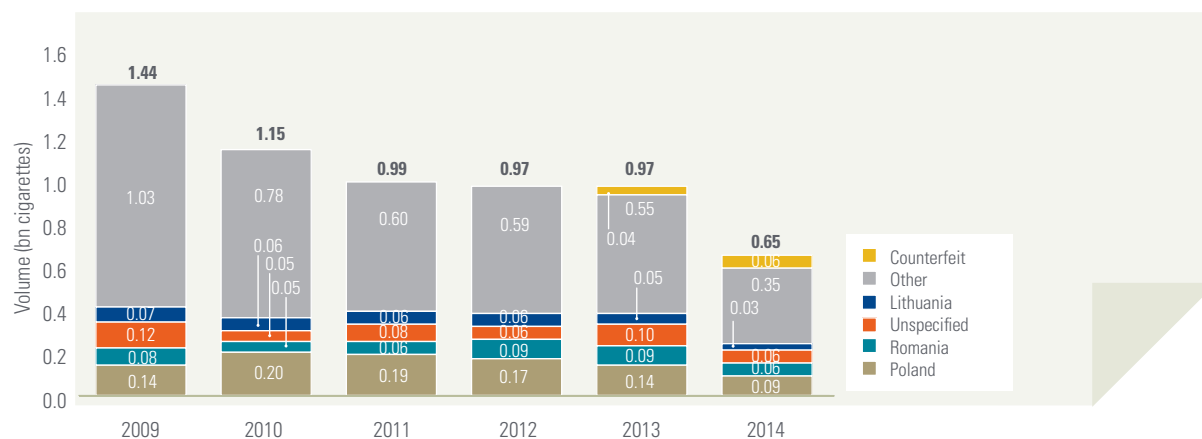
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers

# C&C declined, driven by lower volumes of both Illicit Whites and contraband from Eastern Europe

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



IRELAND



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## C&C declined by over 33% between 2013 and 2014, driven by a decline across almost all major inflow markets

- C&C from lower priced countries such as Poland and Romania declined
- Increased seizures activity by Irish Revenue may have had an impact on the C&C volume decline
  - In 2014 Irish Revenue reported a 29% increase in seizures of manufactured cigarettes to 53m<sup>(4)</sup>
- If the total volume of C&C had been consumed legally within the Irish market, an additional tax revenue of approximately €238m would have been raised by the Irish Treasury<sup>(3)</sup>

## Illicit Whites brands accounted for 21% of C&C volumes in 2014, a small decrease from 24% in 2013

- The four most common Illicit Whites are Golden Seagies, Mg, Excellence and Don
- These brands accounted for almost half of Illicit White volumes in 2014
- The two most common Illicit Whites from 2013, Email and Gold Classic, reduced their total volume from 0.09bn in 2013 to less than 0.01bn in 2014

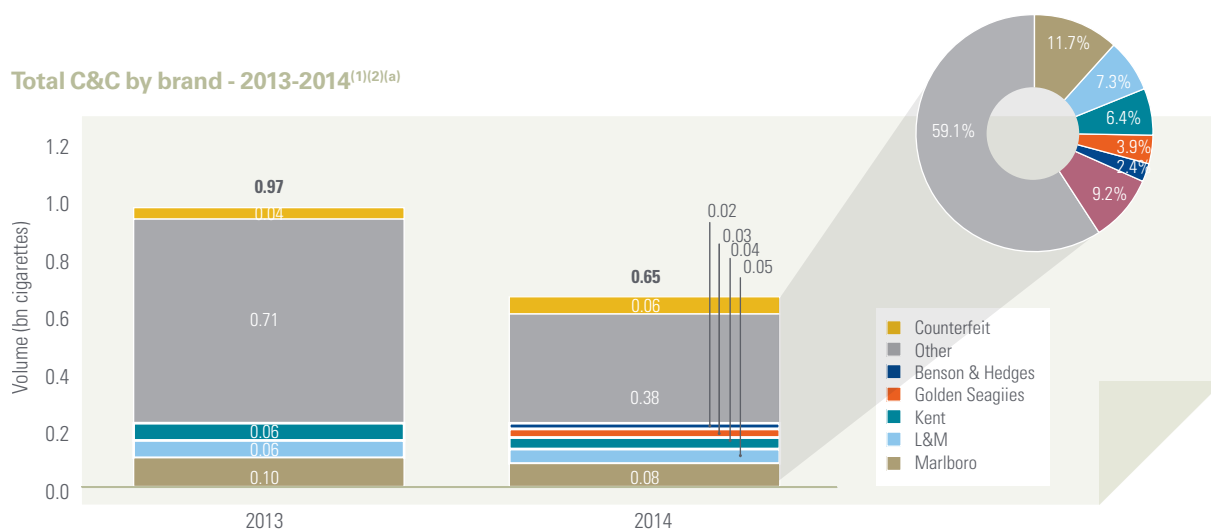
Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) Irish Examiner, Price to Blame as Seizures of Illegal Cigarettes Soar, January 2015



## C&C INFLOWS BY BRAND

Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type - 2009-2014<sup>(1)</sup>

LABELLING OF ILLICIT WHITES INFLOWS TO IRELAND						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	0.00	0.00	0.01	0.03	0.07	0.05
Duty Free	0.04	0.10	0.07	0.07	0.07	0.03
Unspecified	0.06	0.02	0.08	0.05	0.09	0.06
<b>Total Illicit Whites</b>	<b>0.09</b>	<b>0.13</b>	<b>0.16</b>	<b>0.15</b>	<b>0.23</b>	<b>0.14</b>

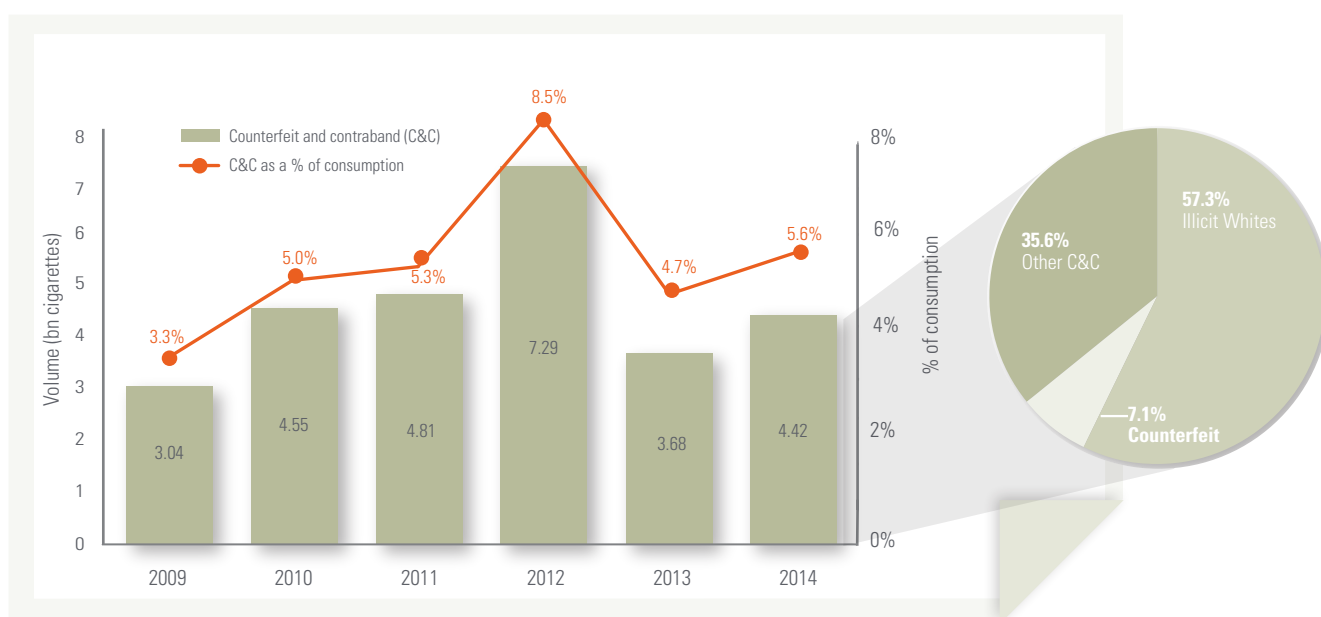
Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers



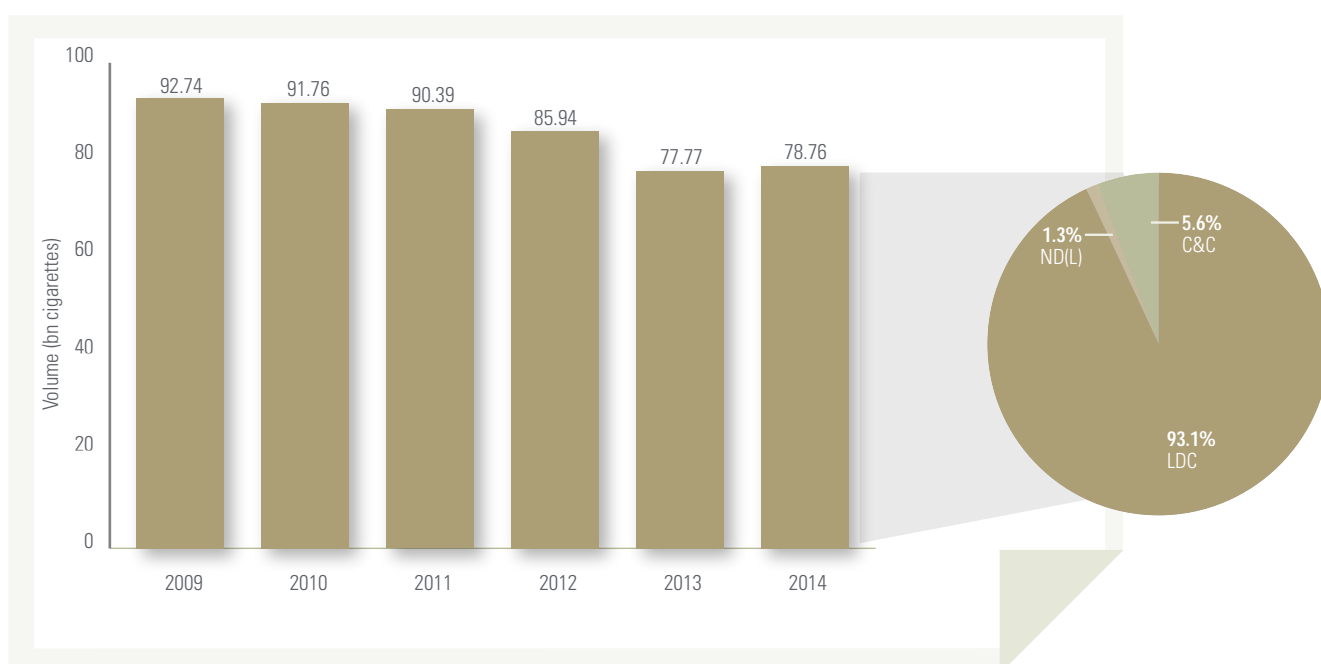
## Illicit Whites brand flows increased C&C volumes in 2014

Manufactured cigarette C&C volumes and share of overall consumption - 2009-14



ITALY

Manufactured cigarette consumption - 2009-14





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# KEY INFLOWS AND OUTFLOWS



ITALY  
  
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Main outflow   
 Main inflow 

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow (b) Many of the Illicit Whites brand flows with Duty Free labelling which were manufactured in Italy for export

Source: (1) KPMG EU Flows Model

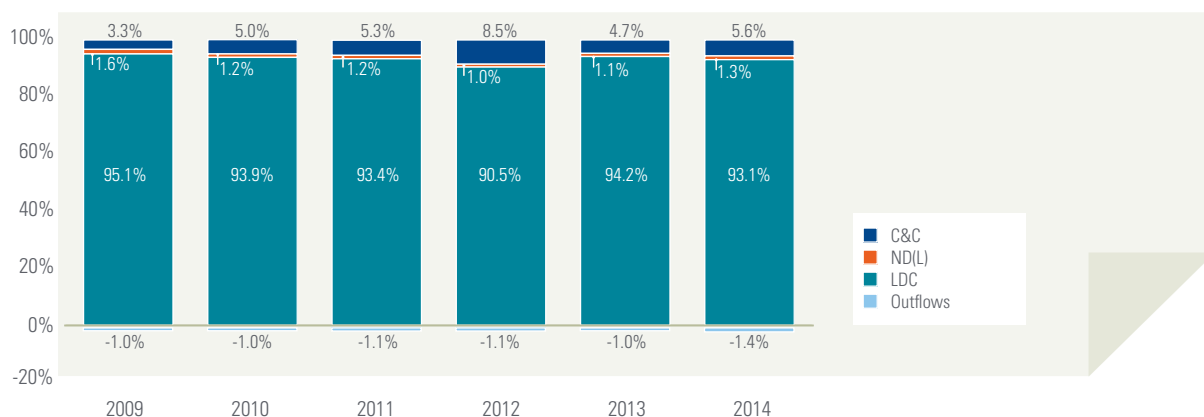
# Total consumption grew, halting previous years' declines

Note: Outflows to Switzerland were included in the study for the first time. Excluding this impact 2014 outflows were 0.96bn, a 23% increase from 2013

Total manufactured cigarette consumption – Italy<sup>(1)(2)(3)(a)</sup>

TOTAL ITALY CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	89.16	87.05	85.47	78.74	74.04	74.44	1%
Outflows	-0.92	-0.93	-1.01	-0.93	-0.78	-1.08	38%
Legal domestic consumption (LDC)	88.24	86.12	84.46	77.81	73.25	73.36	0%
Non-domestic legal (ND(L))	1.46	1.09	1.12	0.84	0.84	0.99	17%
Counterfeit and contraband (C&C)	3.04	4.55	4.81	7.29	3.68	4.42	20%
Total non-domestic	4.50	5.64	5.93	8.13	4.52	5.41	20%
<b>Total consumption</b>	<b>92.74</b>	<b>91.76</b>	<b>90.39</b>	<b>85.94</b>	<b>77.77</b>	<b>78.76</b>	<b>1%</b>

Share of Italy manufactured cigarette consumption by type - 2009-2014<sup>(1)(2)(3)</sup>



### Legal domestic sales grew in 2014 for the first time since 2009

- Average prices fell by €0.06 in 2014 from €4.58 to €4.52<sup>(4)</sup>
- Retail sales of e-cigarettes fell in 2014 after a period of high adoption; consumers may have switched back to manufactured cigarettes or switched to purchasing e-cigarettes online<sup>(5)(6)</sup>

### Both illicit and legal inflows increased

- Increased C&C volumes may have been driven by the economic crisis. GDP and personal disposable income fell slightly and unemployment increased by half a percentage point.<sup>(7)(8)</sup> Youth unemployment reached 44% by the end of 2014<sup>(9)</sup>
- Increased ND(L) volumes were driven by increased tourist flows from Spain and favourable prices compared to Switzerland resulting in cross-border shopping<sup>(2)(4)</sup>

Note: (a) Non-domestic incidence is stated on a sticks basis

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers

(2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

(3) Logista (4) EC Excise Duty tables (Part III – Manufactured Tobacco) (5) Unioncamere (6) Fiesel Confesercenti

(7) 2014 Economist Intelligence Unit (8) 2014 Euromonitor (9) Istat

# Non-domestic growth was driven by Illicit Whites brand flows

Note: Duty Free inflows before 2014 will have also included Illicit Whites brands with Duty Free labelling

## Total inflows by country of origin - 2009-2014<sup>(1)</sup>

ND INFLOWS TO ITALY						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Illicit Whites with Duty Free labelling	0.01	0.09	0.19	0.62	0.50	1.70
Duty Free	0.94	0.98	0.95	1.52	0.91	0.86
Unspecified	0.02	0.14	0.68	0.89	0.55	0.67
Belarus	0.01	0.01	0.04	0.76	0.50	0.19
Slovenia	0.13	0.09	0.21	0.10	0.19	0.15
Switzerland	0.09	0.20	0.27	0.08	0.05	0.13
Ukraine	0.92	1.61	1.52	1.83	0.32	0.12
Other	2.39	2.51	2.08	2.31	1.50	1.58
<b>Total inflows</b>	<b>4.50</b>	<b>5.64</b>	<b>5.93</b>	<b>8.13</b>	<b>4.52</b>	<b>5.41</b>

### The increase in non-domestic inflows was driven by a large increase in Duty Free labelled packs

- Illicit Whites brand flows accounted for 46% of total inflows to Italy and increased by 1.17 billion cigarettes from 2013
- Illicit Whites with Duty Free labelling accounted for over 30% of all non-domestic volumes, in particular Yesmoke, 821 and Email
- In addition, Illicit Whites with unspecified labelling, mainly represented by American Legend, also grew

## Total outflows by destination country – 2009-2014<sup>(1)</sup>

OUTFLOWS FROM ITALY						
Billion cigarettes	2009	2010	2011	2012	2013	2014
France	0.32	0.38	0.51	0.31	0.39	0.47
Netherlands	0.06	0.21	0.18	0.17	0.13	0.13
Switzerland						0.12
Other	0.54	0.34	0.32	0.45	0.26	0.35
<b>Total outflows</b>	<b>0.92</b>	<b>0.93</b>	<b>1.01</b>	<b>0.93</b>	<b>0.78</b>	<b>1.08</b>

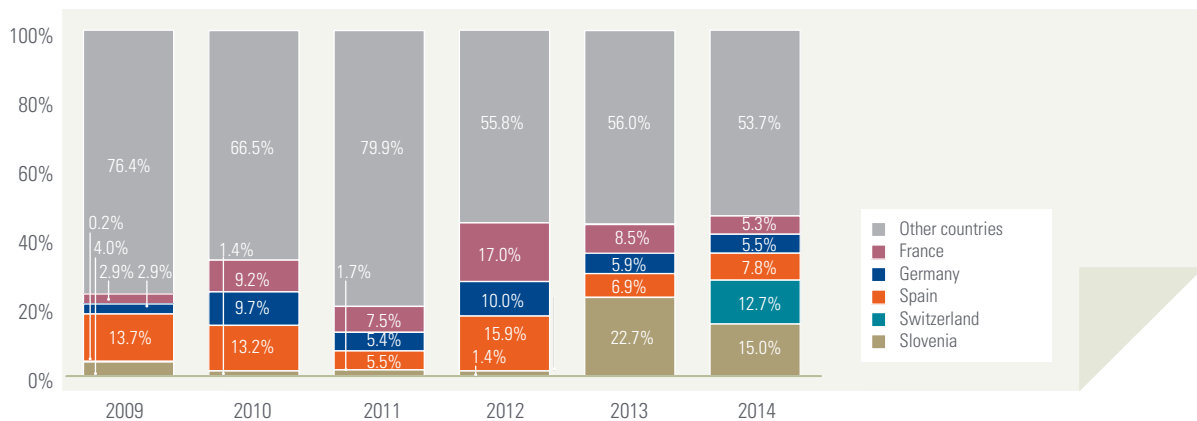
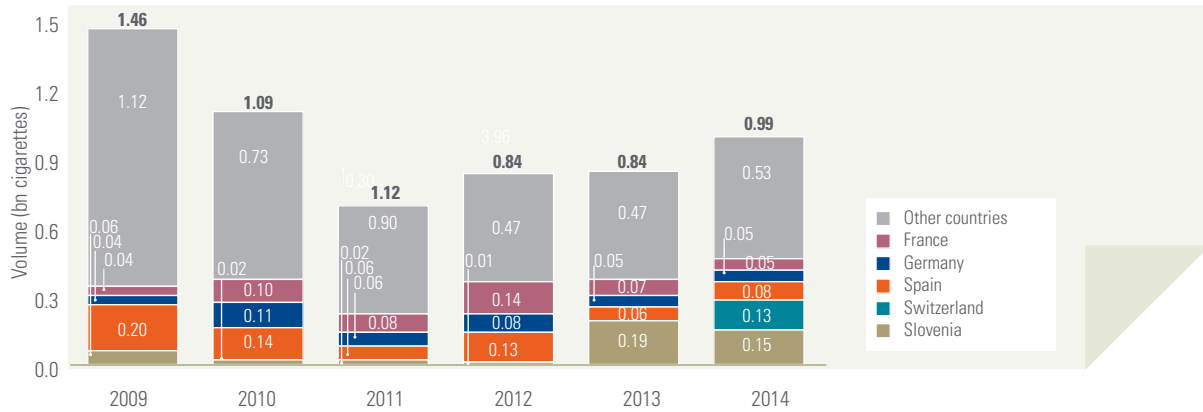
**Outflows mainly go to higher priced neighbouring markets. Switzerland was included in the study for the first time in 2014**

Sources: (1) KPMG EU Flows Model



# ND(L) inflows grew reflecting higher tourist volumes

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



ITALY



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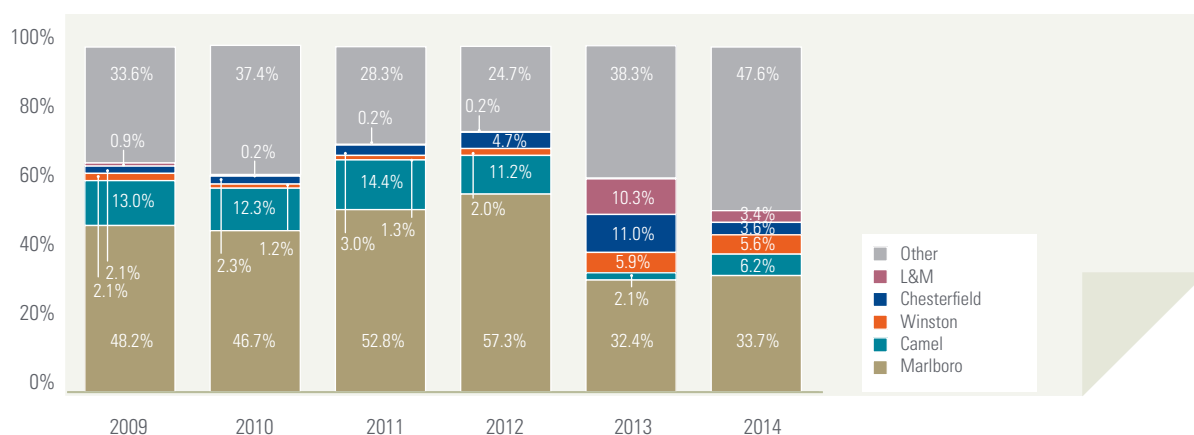
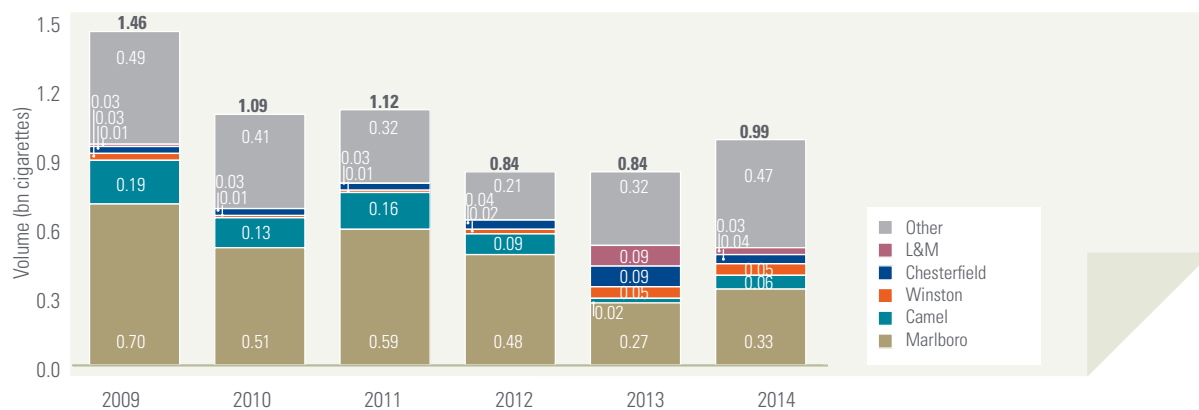
- ND(L) growth was driven by increased volumes from Switzerland and Spain
- Despite a 23% decline, Slovenia remained the largest source of ND(L) inflows driven by cross-border shopping, especially in Trieste
- A price difference which fell from €1.31 to €1.11 may explain some of the decline in Slovenian inflows<sup>(3)</sup>
  - Marlboro was the largest brand from Slovenia

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

# NON-DOMESTIC LEGAL INFLOWS BY BRAND

**Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>**



ITALY



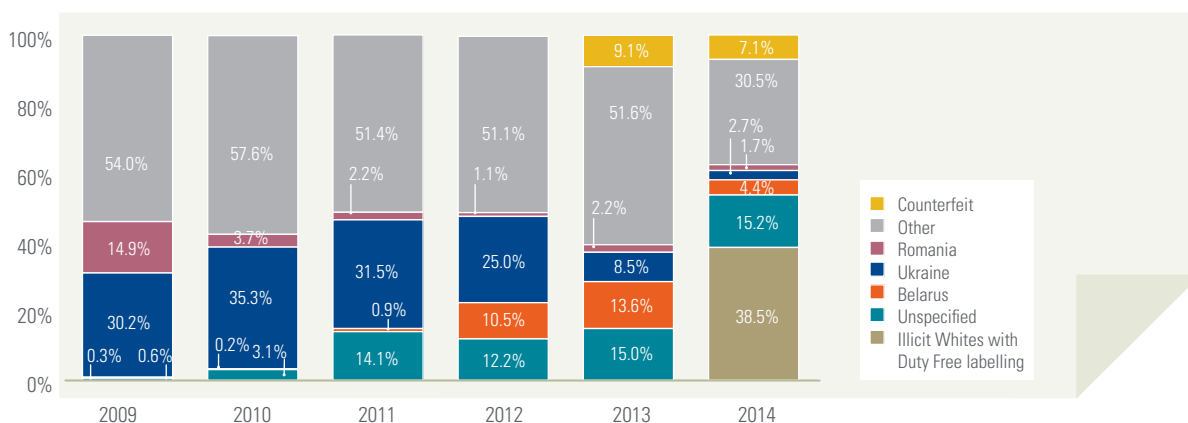
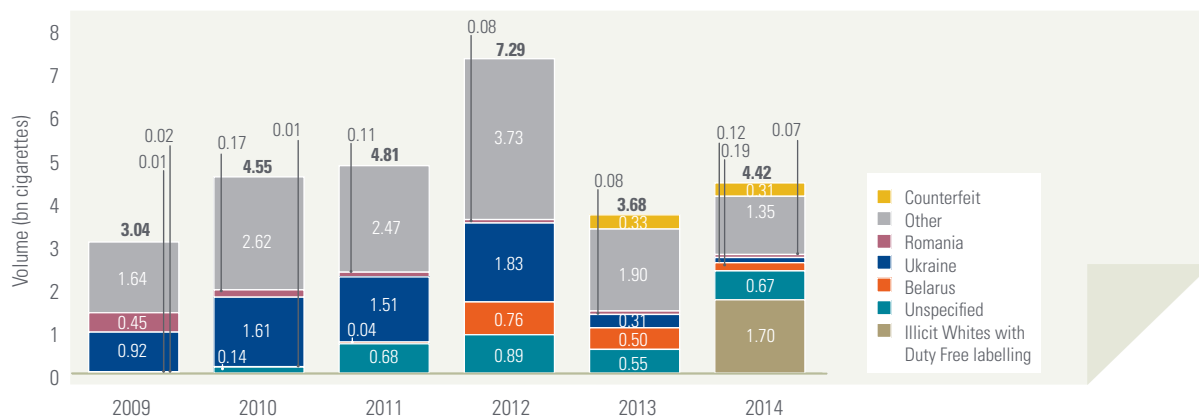
PROJECT SUN

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# Illicit Whites brand flows accounted for over half the C&C inflow

Total C&C by origin – 2009-2014<sup>(1)(2)(a)</sup>



ITALY



## C&C volumes increased by 20% driven by Illicit Whites, which almost doubled in 2014, now accounting for 57% of total C&C

- Illicit Whites brand flows continued to drive C&C consumption in 2014. Of these:
  - Brand flows with Duty Free labelling such as Email, 821 and Yesmoke constituted the greatest part of the illicit inflow
    - Products with Duty Free labelling of brands with trademarks owned by Manifattura Italiana Tabacco (MIT) and Yesmoke S.r.l. were common, especially in the south of Italy and Naples. Italian law enforcement moved against these companies in Q4 2014<sup>(3)(4)</sup>
  - Brand flows with unspecified labelling, such as American Legend and Jin Ling, were also common, especially in Sicily<sup>(5)</sup>
  - Brand flows from Eastern Europe such as Minsk, Fest and NZ continued to have a strong presence in Naples
- Of the counterfeit packs identified, almost 80% had Ukrainian labelling. Marlboro accounted for over half of the counterfeit packs found in the Empty Pack Surveys
- If the total volume of C&C consumed in the Italian market had been purchased legally in Italy the tax revenue gained would have been approximately €770 million<sup>(6)</sup>

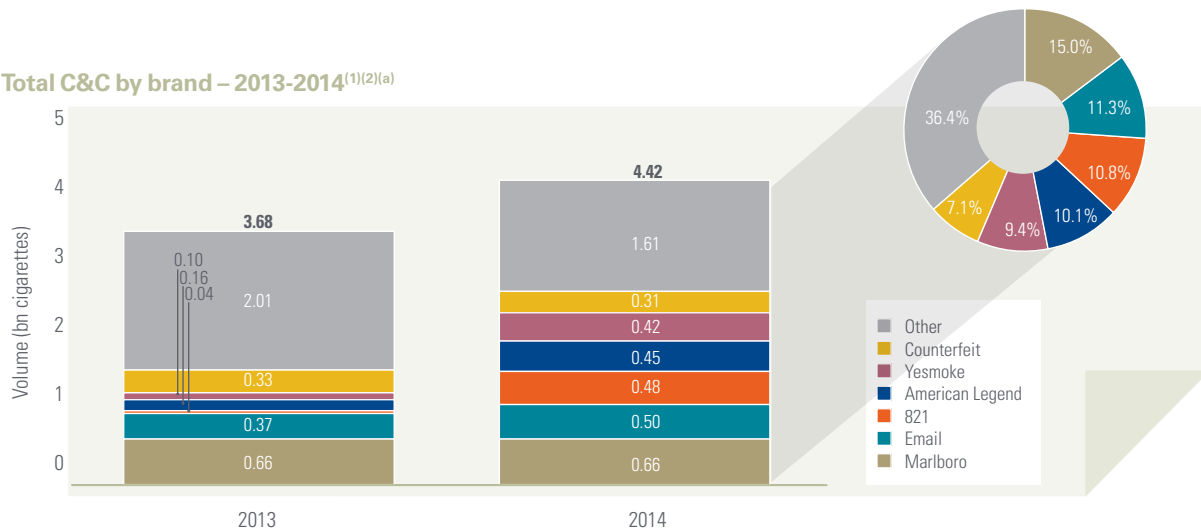
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Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows  
 Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) La Repubblica, La finanza contro Yesmoke, fabbrica di sigarette raccontata in un film, 27 Nov 2014 (4) Il Resto del Carlino, Contrabbando sigarette, Mit nel mirino, 16 Dec 2014 (5) KPMG EU Flows Model and analysis of data sources provided by manufacturers (6) EC Excise Duty tables (Part III – Manufactured Tobacco)



## C&C INFLOWS BY BRAND

Total C&C by brand – 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type – 2009-2014<sup>(1)</sup>

LABELLING OF ILLICIT WHITES INFLOWS TO ITALY						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country Specific	0.11	0.24	0.29	0.55	0.44	0.18
Duty Free	0.01	0.09	0.19	0.62	0.50	1.74
Unspecified	0.00	0.05	0.39	0.68	0.36	0.61
<b>Total Illicit Whites</b>	<b>0.12</b>	<b>0.39</b>	<b>0.87</b>	<b>1.84</b>	<b>1.30</b>	<b>2.53</b>

ITALY



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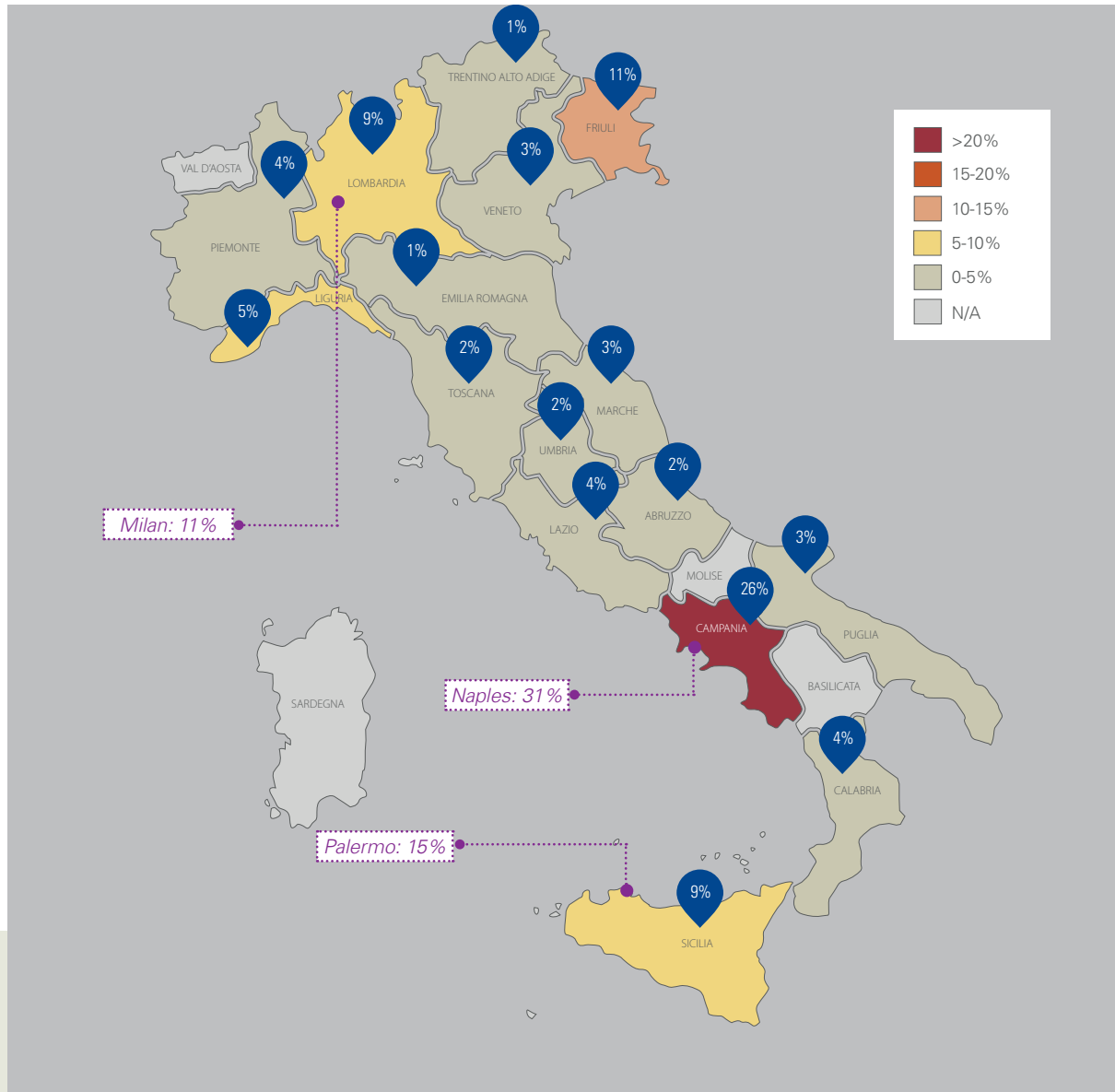
Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

(2) KPMG analysis of data sources provided by manufacturers

# Non-domestic incidence heat map

Empty Pack Survey regional non-domestic incidence – 2014<sup>(1)</sup>



ITALY



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Source: (1) Independent agency Empty Pack Surveys, 2014



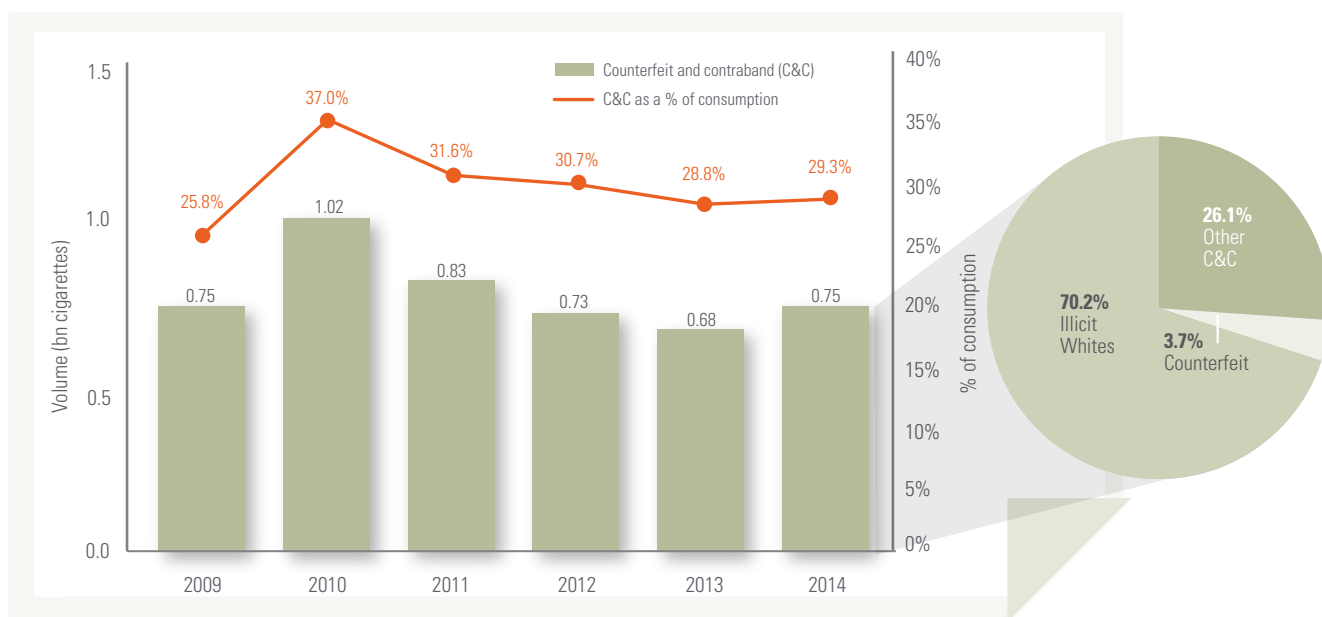
ITALY

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Latvia has the highest proportion of C&C consumption in the EU

Manufactured cigarette C&C volumes and share of overall consumption - 2009-14

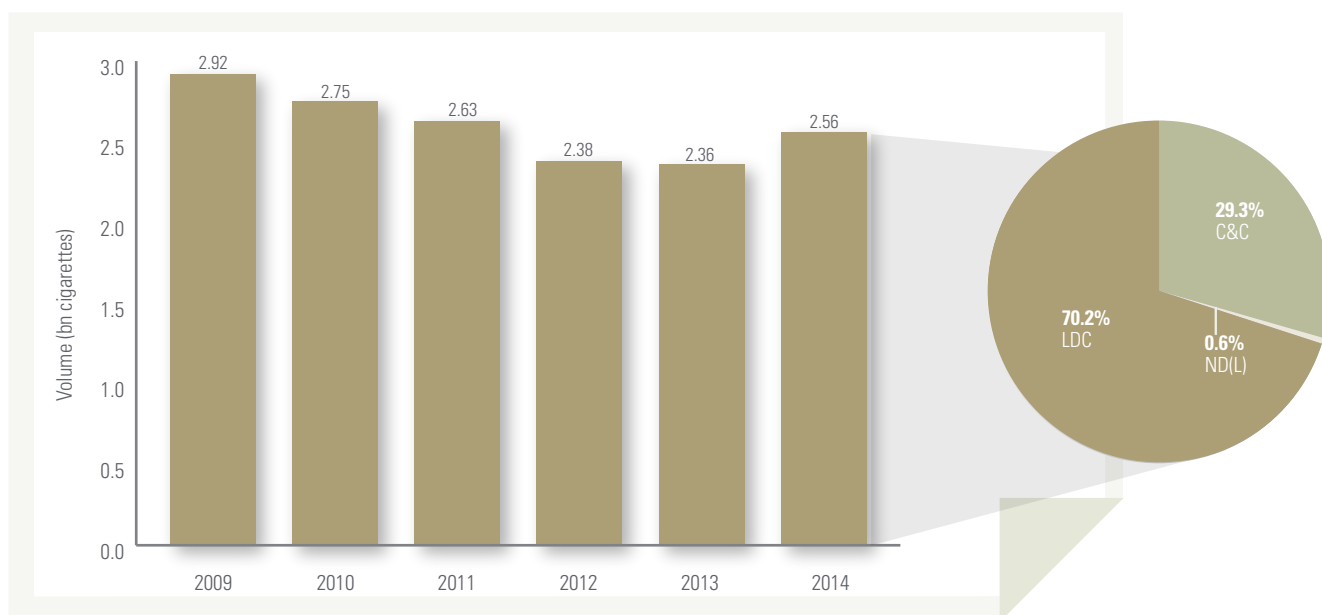


LATVIA



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Manufactured cigarette consumption - 2009-14



# KEY INFLOWS AND OUTFLOWS



LATVIA  
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Main outflow  
Main inflow

*Note:* (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow.  
*Source:* (1) KPMG EU Flows Model.

## MANUFACTURED CIGARETTE CONSUMPTION

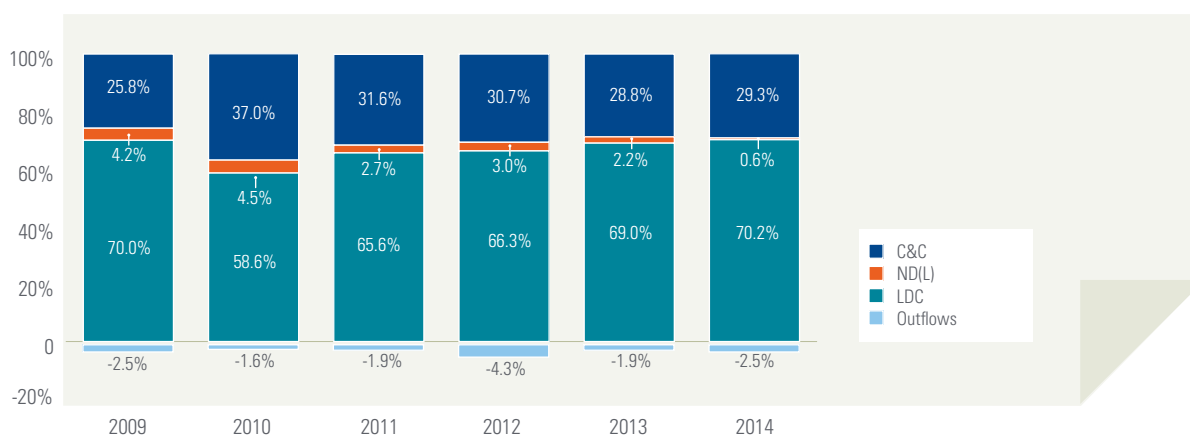
# Total consumption increase was driven by a rise in C&C inflows

Note: 2013 Legal Domestic Sales has since been restated to 1.83bn, which represents a 2013-14 growth of 1.8%

### Total manufactured cigarette consumption – Latvia<sup>(1)(2) (3)(a)(b)</sup>

TOTAL LATVIA CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	2.12	1.65	1.77	1.68	1.67	1.86	n/a
Outflows	-0.07	-0.04	-0.05	-0.10	-0.05	-0.06	39%
Legal domestic consumption (LDC)	2.04	1.61	1.72	1.57	1.63	1.80	10%
Non-domestic legal (ND(L))	0.12	0.12	0.07	0.07	0.05	0.01	(72%)
Counterfeit and contraband (C&C)	0.75	1.02	0.83	0.73	0.68	0.75	10%
Total non-domestic	0.88	1.14	0.90	0.80	0.73	0.76	4%
<b>Total consumption</b>	<b>2.92</b>	<b>2.75</b>	<b>2.63</b>	<b>2.38</b>	<b>2.36</b>	<b>2.56</b>	<b>n/a</b>

### Share of Latvia cigarette consumption by type - 2009-2014<sup>(1)(2)(3)</sup>



### Both legal domestic sales and non-domestic inflows grew in 2014, against a background of improving economic conditions in Latvia and price increases

- Legal domestic sales grew despite a 8.5% increase in average price per pack<sup>(4)</sup>
  - Improved economic conditions may have contributed to legal domestic sales growth with rising GDP and personal disposable income and falling unemployment<sup>(5)(6)</sup>
- Almost all non-domestic flows were attributed to C&C from non-EU countries

Notes: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used  
(b) Timing of Empty Pack Surveys may miss seasonal variations in outflows due to tourism and emigrants visiting home. This may under- or over-weight outflows

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Fact book 2008-2013 and national visitor number statistics and EU flows model (3) State Revenue Service (4) EC Excise Duty tables (Part III – Manufactured Tobacco) (5) 2014 Economist Intelligence Unit (6) 2014 Euromonitor

## Non-domestic inflows were 30% of consumption, largely from neighbouring Belarus and Russia

### Total inflows by country of origin - 2009-2014<sup>(1)</sup>

ND INFLOWS TO LATVIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Belarus	0.10	0.24	0.23	0.33	0.42	0.51
Russia	0.72	0.86	0.64	0.43	0.30	0.21
Duty Free	0.01	0.01	0.01	0.01	0.00	0.01
Lithuania	0.02	0.01	0.00	0.00	0.00	0.00
Other	0.03	0.02	0.02	0.02	0.01	0.04
<b>Total inflows</b>	<b>0.88</b>	<b>1.14</b>	<b>0.90</b>	<b>0.80</b>	<b>0.73</b>	<b>0.76</b>

### Overall non-domestic inflows increased as cigarettes from Belarus offset cigarettes from Russia

- Russian inflows declined because of lower price differences for much of the year and increased border checks and enforcement on the Russian border due to heightened border security between NATO countries and Russia<sup>(2)(a)</sup>
- Belarusian inflows grew which may have been impacted by a higher price difference, which grew from €1.96 to €2.14, and increased Customs focus on the Russian border

### Total outflows by destination country - 2009-2014<sup>(1)</sup>

OUTFLOWS FROM LATVIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
UK	0.02	0.01	0.02	0.04	0.01	0.01
Ireland	0.02	0.02	0.01	0.01	0.01	0.01
Estonia	0.00	0.00	0.00	0.00	0.00	0.01
Other	0.03	0.02	0.02	0.05	0.03	0.04
<b>Total Outflows</b>	<b>0.07</b>	<b>0.04</b>	<b>0.05</b>	<b>0.10</b>	<b>0.05</b>	<b>0.06</b>

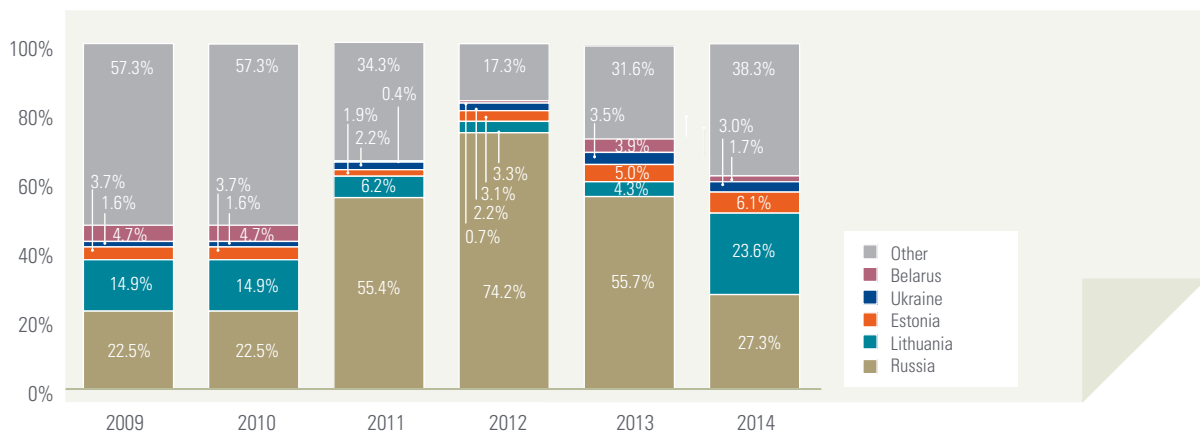
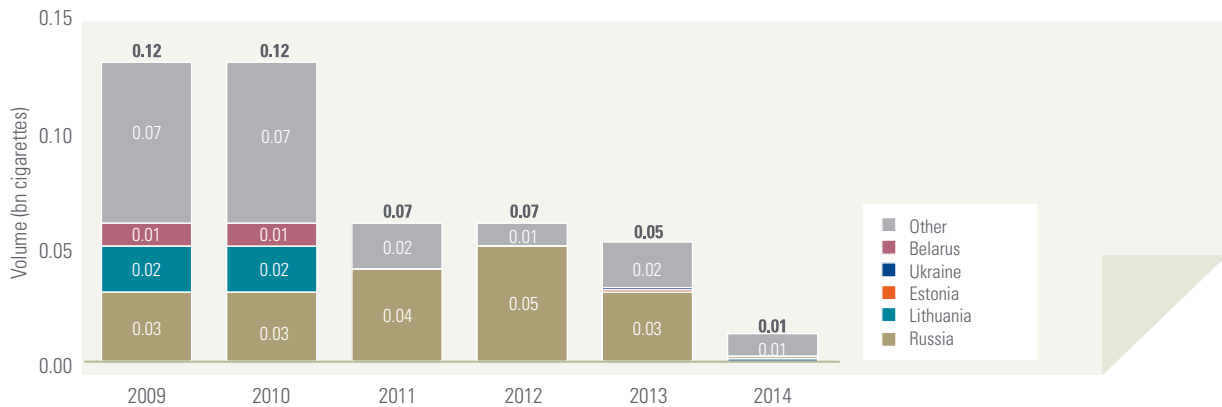
- The UK and Ireland remain the main destinations of Latvian outflows, accounting for almost one third of the total. This is likely due to the number of Latvian emigrants living in these countries

Note: (a) Note that the impact of the Rouble's depreciation was not felt until October 2014 when prices between Latvia and Russia increased significantly

Sources: (1) KPMG EU Flows Model (2) EC Excise Duty tables (Part III – Manufactured Tobacco)

# ND(L) inflows were mainly from surrounding cheaper markets

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



LATVIA



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**ND(L) inflows declined by over 70% and represented 0.6% of total consumption**

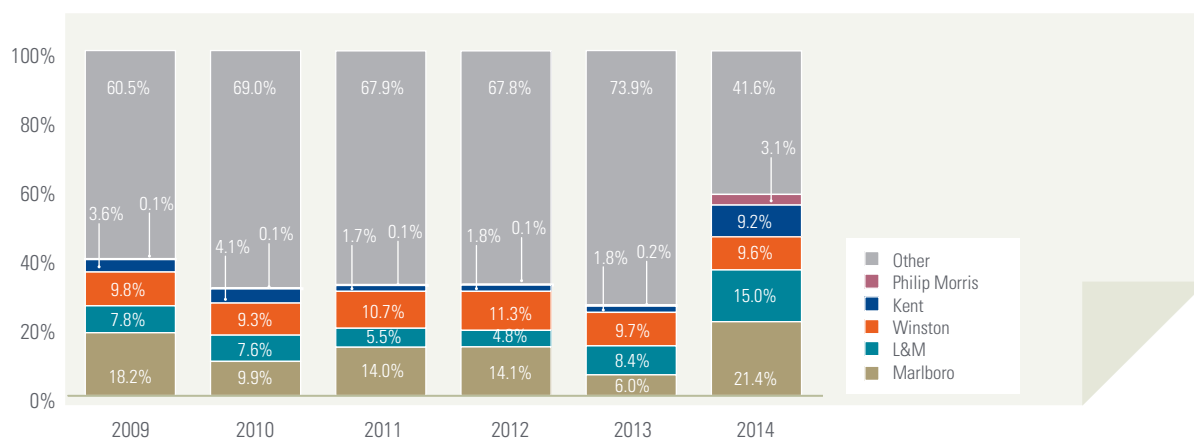
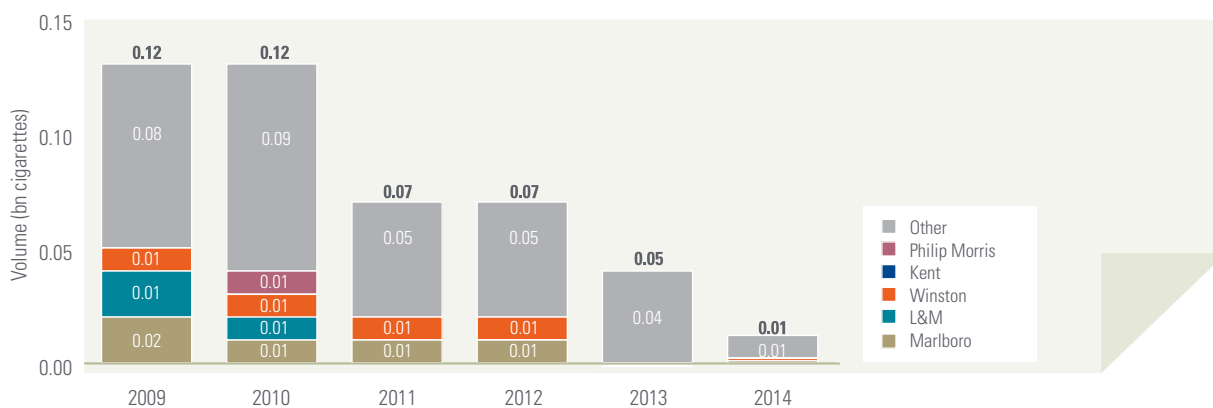
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers



# NON-DOMESTIC LEGAL INFLOWS BY BRAND

**Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>**



LATVIA



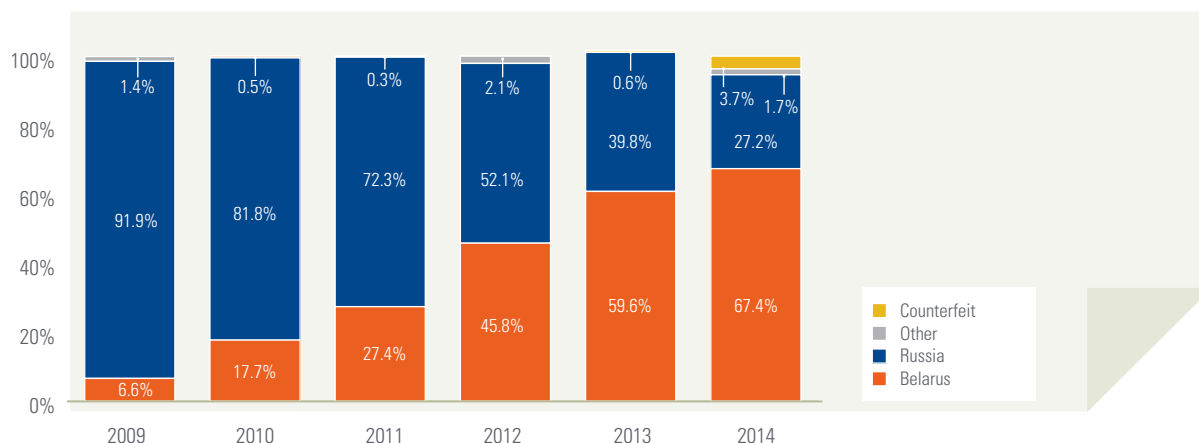
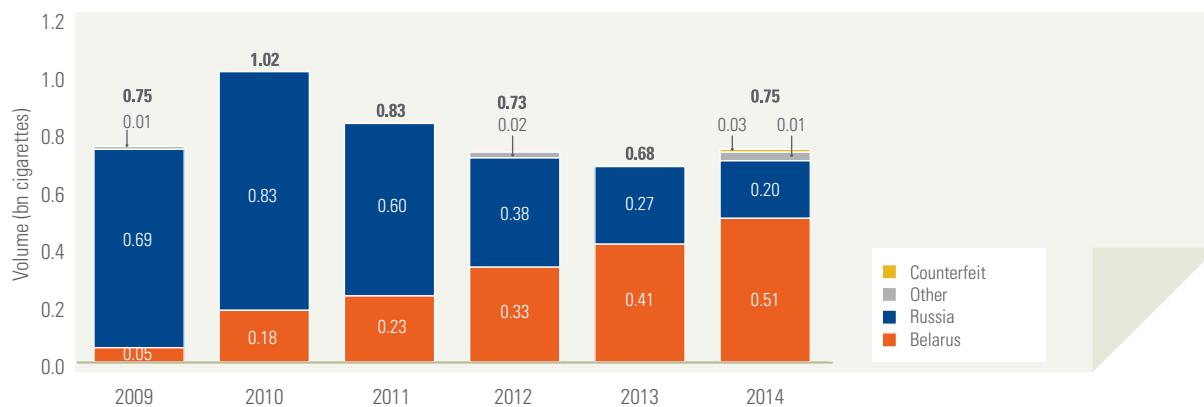
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# C&C increased largely due to Belarusian inflows

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



LATVIA



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## Cheaper prices and less focus on border security resulted in a higher proportion of C&C from Belarus compared to Russia

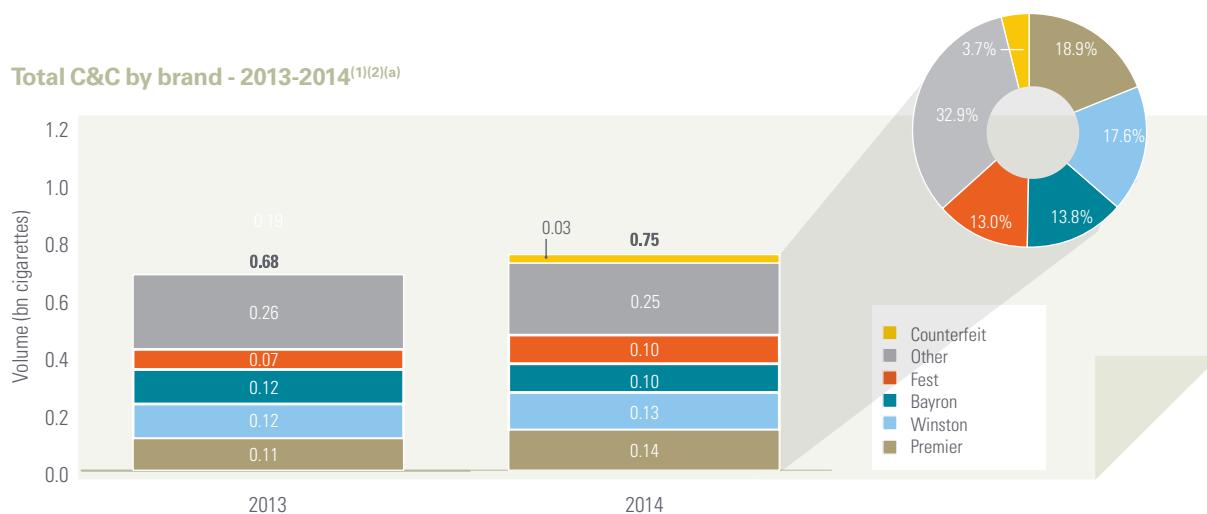
- Illicit Belarusian inflows grew 22%
  - Illicit Whites brands with trademarks owned by the Grodno Tobacco accounted for almost half of the total C&C inflow, including Premier, Fest and NZ
  - Contraband Winston volumes increased by 13% driven by increased inflows from Belarus, which accounted for over 90% of the total inflow of Winston packs
- Illicit Russian inflows declined 26%
  - Half of the C&C from Russia was Illicit White brands such as Bayron, who's trademark is owned by Baltic Tobacco Factory<sup>(1)</sup>
- If the total volume of C&C consumed in the Latvian market had been purchased legally, the Latvian Treasury would have raised approximately €80m in additional tax revenues<sup>(2)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

## C&C INFLOWS BY BRAND

Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type 2009-2014<sup>(1)(2)(a)</sup>

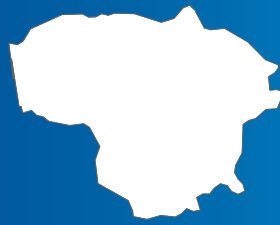
LABELLING OF ILLICITWHITES INFLOWS TO LATVIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	0.20	0.27	0.36	0.40	0.50	0.52
Duty Free	0.00	0.00	0.00	0.00	0.00	0.00
Unspecified	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Illicit Whites</b>	<b>0.20</b>	<b>0.27</b>	<b>0.36</b>	<b>0.40</b>	<b>0.50</b>	<b>0.53</b>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows.

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

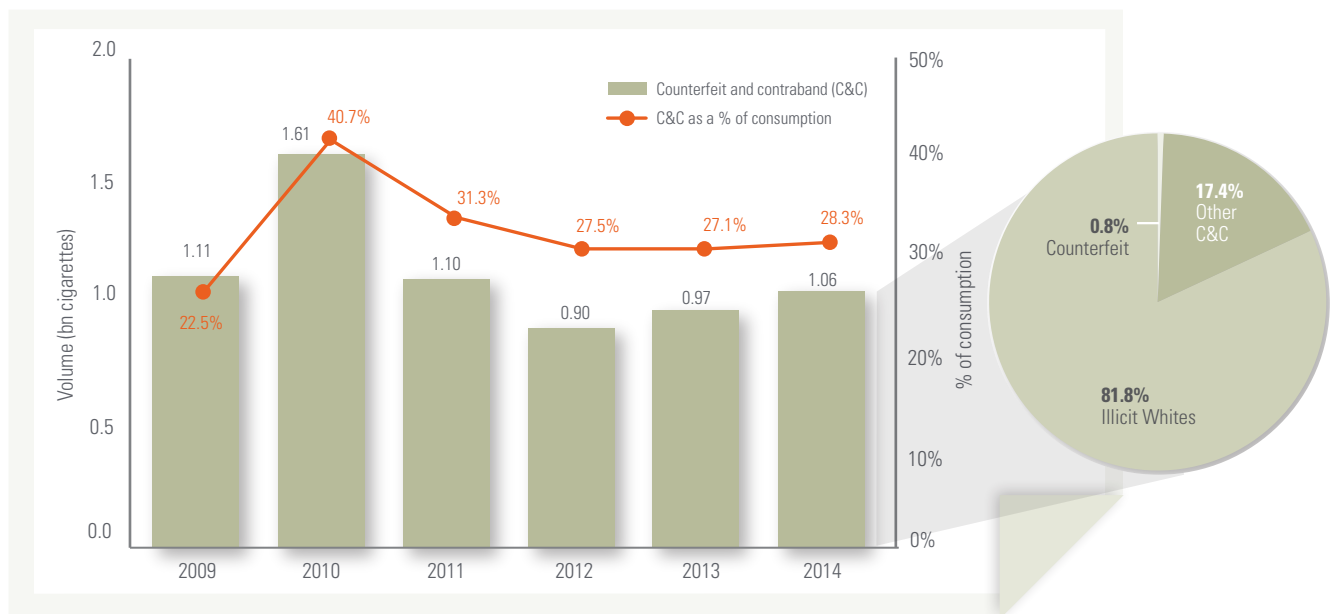
(2) KPMG analysis of data sources provided by manufacturers

# LITHUANIA



## Illicit inflows from non-EU countries remained high

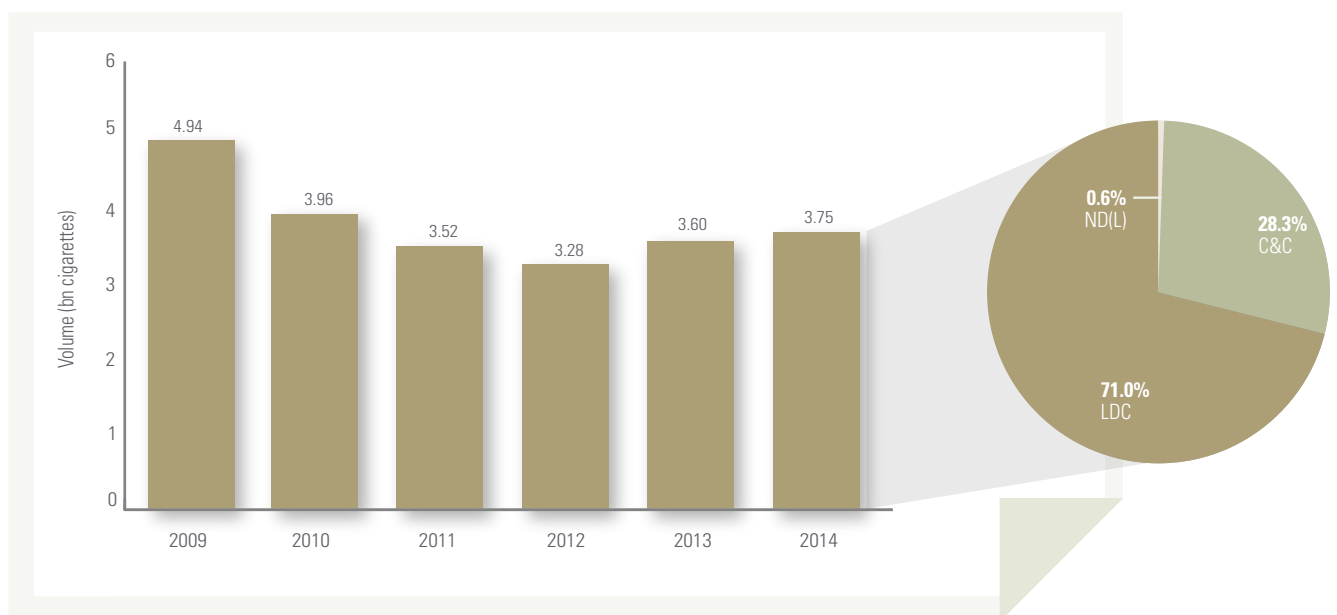
Manufactured cigarette C&C volumes and share of overall consumption-2009-14



LITHUANIA

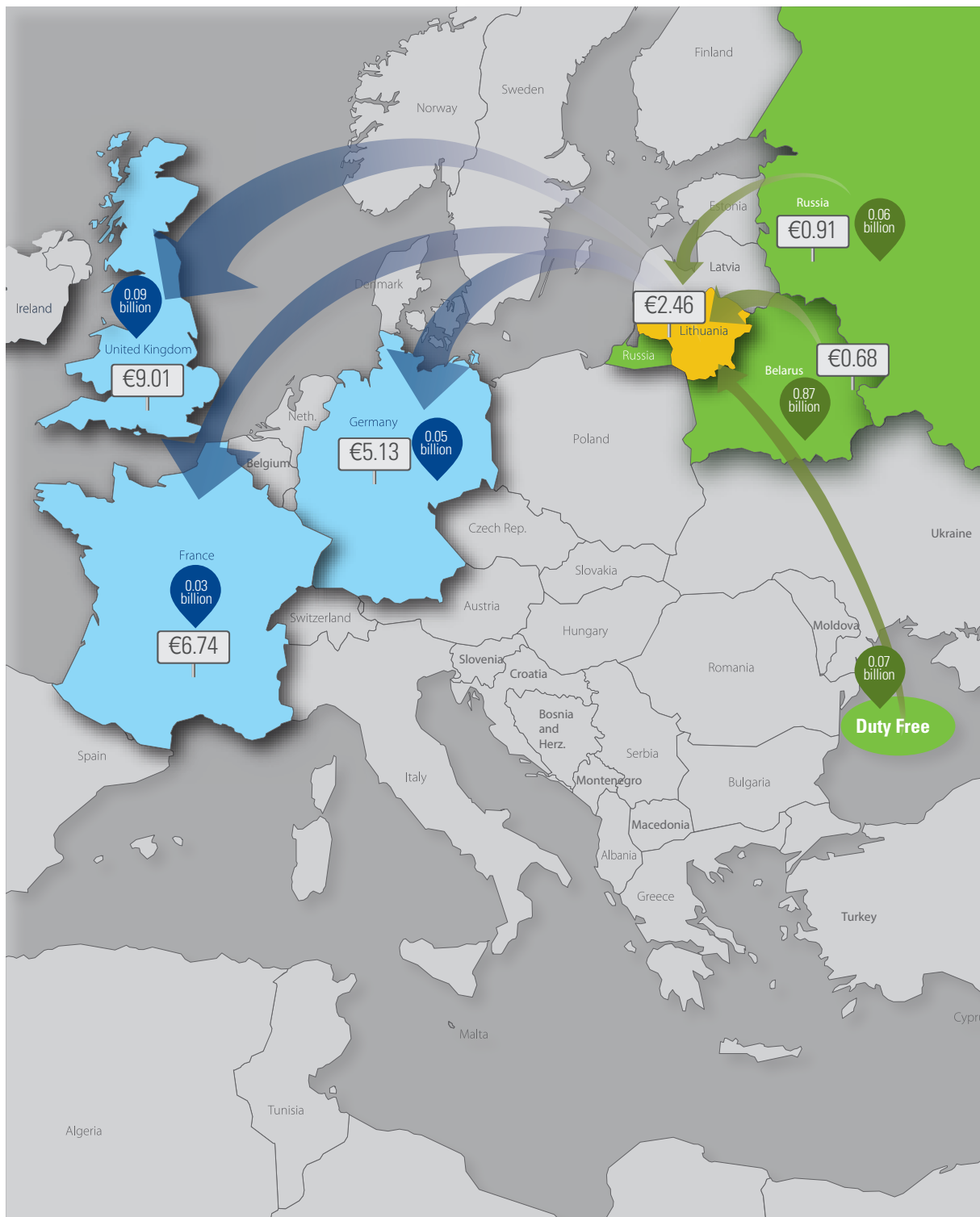


Manufactured cigarette consumption-2009-14



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# KEY INFLOWS AND OUTFLOWS



LITHUANIA  
PROJECT SUN

Main outflow █  
Main inflow █

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

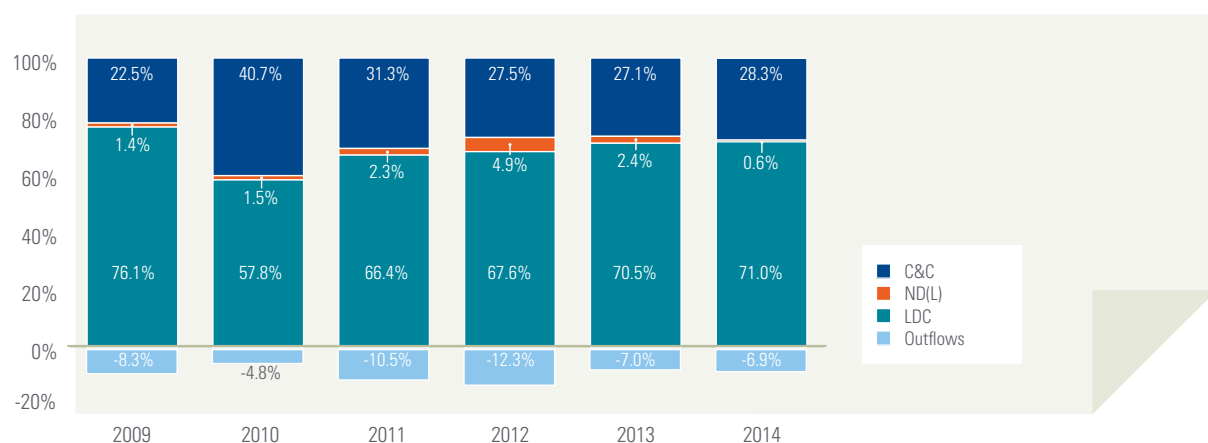
Source: (1) KPMG EU Flows Model

# Legal domestic sales increased, resulting in rising cigarette consumption

## Total manufactured cigarette consumption – Lithuania<sup>(1)(2)(3)(a)(b)(c)</sup>

TOTAL LITHUANIA CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	4.17	2.48	2.70	2.62	2.79	2.92	5%
Outflows	-0.41	-0.19	-0.37	-0.40	-0.25	-0.26	2%
Legal domestic consumption (LDC)	3.76	2.29	2.34	2.22	2.54	2.66	5%
Non-domestic legal (ND(L))	0.07	0.06	0.08	0.16	0.09	0.02	(73%)
Counterfeit and contraband (C&C)	1.11	1.61	1.10	0.90	0.97	1.06	9%
Total non-domestic	1.18	1.67	1.18	1.06	1.06	1.09	2%
<b>Total consumption</b>	<b>4.94</b>	<b>3.96</b>	<b>3.52</b>	<b>3.28</b>	<b>3.60</b>	<b>3.75</b>	<b>4%</b>

## Share of Lithuanian cigarette consumption by type - 2009-2014<sup>(1)(2)(3)</sup>



LITHUANIA



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### The upward trend in consumption was driven by an increase in legal domestic sales

- Legal domestic sales grew despite a 3.3% increase in average pack price<sup>(4)</sup>
- The fluctuations in legal domestic sales between 2010 and 2014 are partially explained by economic decline and recovery, which in 2014 resulted in the growth of GDP, personal disposable income (PDI) and a fall in unemployment<sup>(5)(6)</sup>
- ND(L) flows were reflective of cross-border shopping, whilst C&C volumes increased driven by inflows from Belarus

Notes: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used (b) 2014 Legal Domestic Sales based on State Revenue Service data (c) Timing of Empty Pack Surveys may miss seasonal variations in outflows due to tourism and emigrants visiting home. This may under- or over-weight outflows

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) State Tax Inspectorate (4) EC Excise Duty tables (Part III – Manufactured Tobacco) (5) 2014 Economist Intelligence Unit (6) 2014 Euromonitor

## Flows from Belarus, the cheapest neighbouring country, continued to grow

### Total inflows by country of origin - 2009-2014<sup>(1)</sup>

ND INFLOWS TO LITHUANIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Belarus	0.23	0.78	0.80	0.76	0.81	0.87
Duty Free	0.05	0.08	0.08	0.10	0.10	0.07
Illicit Whites with Duty Free labelling						0.05
Russia	0.87	0.78	0.28	0.18	0.12	0.06
Other	0.03	0.03	0.02	0.02	0.02	0.03
<b>Total inflows</b>	<b>1.18</b>	<b>1.67</b>	<b>1.18</b>	<b>1.06</b>	<b>1.06</b>	<b>1.09</b>

- Belarusian inflows grew whilst Russian inflows declined, which may have been impacted by changes in price differences in 2014
  - The price difference with Belarus increased from €1.74 to €1.78 due to Lithuanian price and excise increases<sup>(2)</sup> whilst the price difference with Russia decreased from €1.20 to €1.14 between January and July 2014<sup>(2)(a)</sup>

### Total outflows by destination country – 2009-2014<sup>(1)</sup>

OUTFLOWS FROM LITHUANIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
UK	0.19	0.06	0.21	0.22	0.09	0.09
Germany	0.02	0.02	0.03	0.03	0.03	0.05
France	0.02	0.00	0.02	0.05	0.04	0.03
Other	0.18	0.11	0.11	0.10	0.09	0.08
<b>Total outflows</b>	<b>0.41</b>	<b>0.19</b>	<b>0.37</b>	<b>0.40</b>	<b>0.25</b>	<b>0.26</b>

#### Overall non-domestic outflows increased by 2% driven by increased outflows to Germany

- This increase may have been impacted by an increased price difference with Germany from €2.62 to €2.68<sup>(2)</sup>
- Outflows are also likely to be impacted by emigration as the UK and Germany have the largest and fourth largest Lithuanian emigrant populations respectively<sup>(3)</sup>

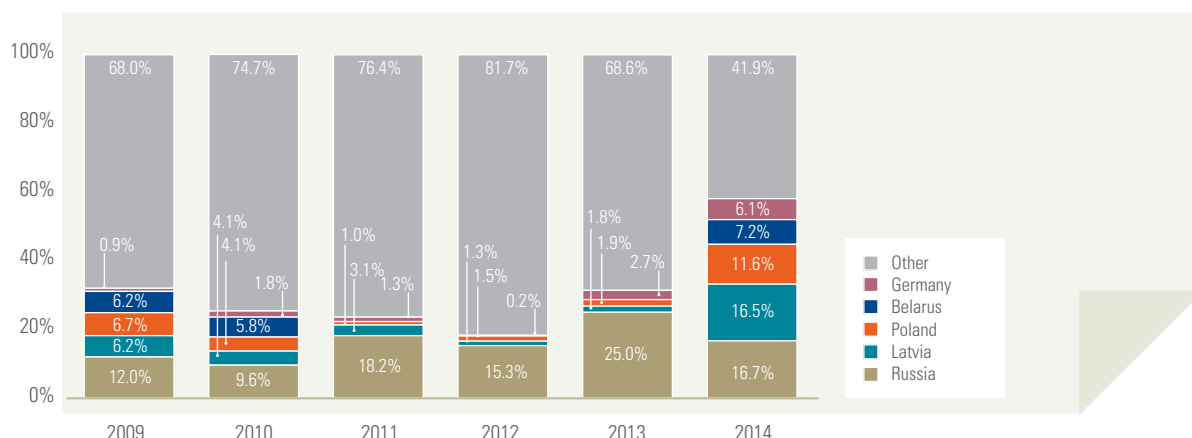
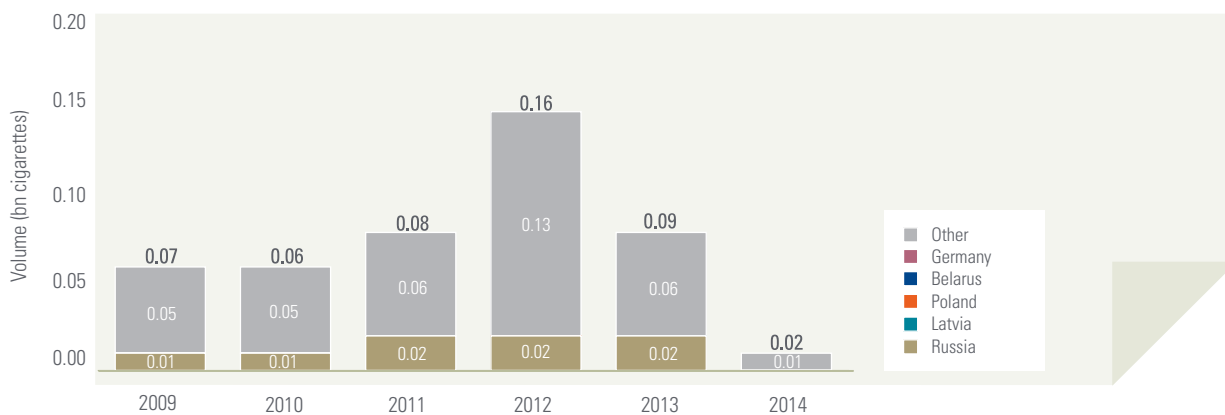
Note: (a) By the end of 2014 the price difference between Latvia and Russia had increased to €1.55 due to Lithuanian excise increases and the Ruble's devaluation

Sources: (1) KPMG EU Flows Model (2) EC Excise Duty tables (Part III – Manufactured Tobacco) (3) Statistics Lithuania



# ND(L) inflows were mainly from neighbouring cheaper priced countries

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



LITHUANIA



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### ND(L) inflows declined by 73%, driven by declines in Russian non-domestic inflows

- Between January and July 2014 the price difference between Lithuania and Russia fell by 13% in Lita terms, resulting in a less incentive for visitors to purchase cigarettes<sup>(3)</sup>
- ND(L) brands were broadly reflective of the Latvian legal market

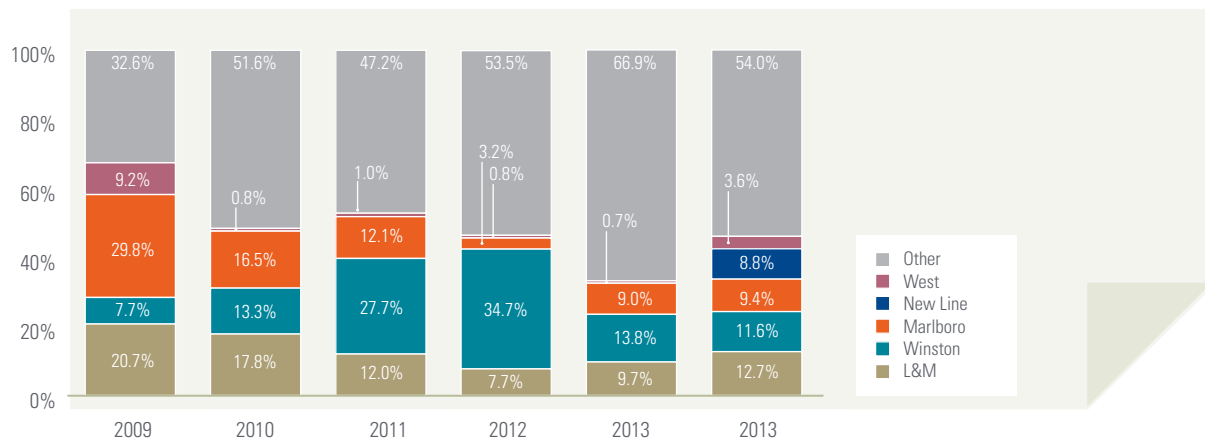
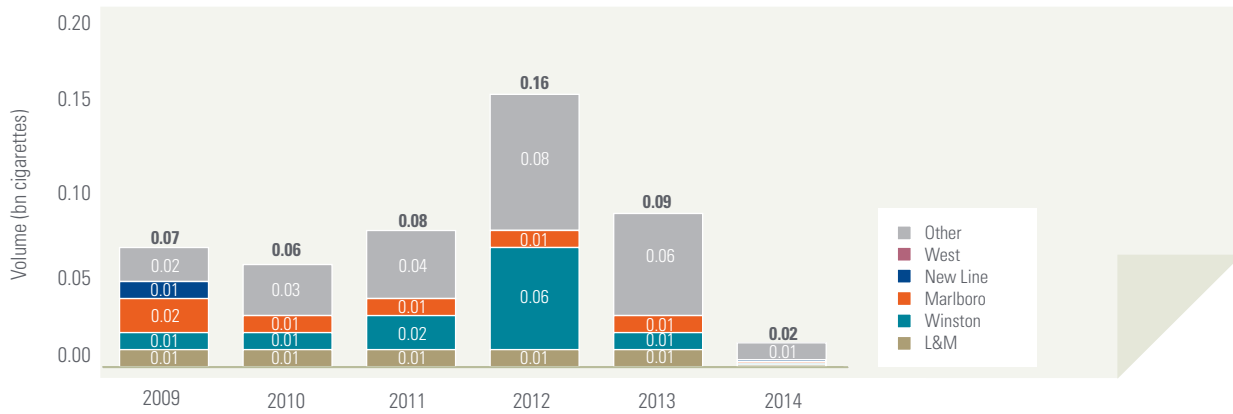
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

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# NON-DOMESTIC LEGAL INFLOWS BY BRAND

**Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>**



LITHUANIA



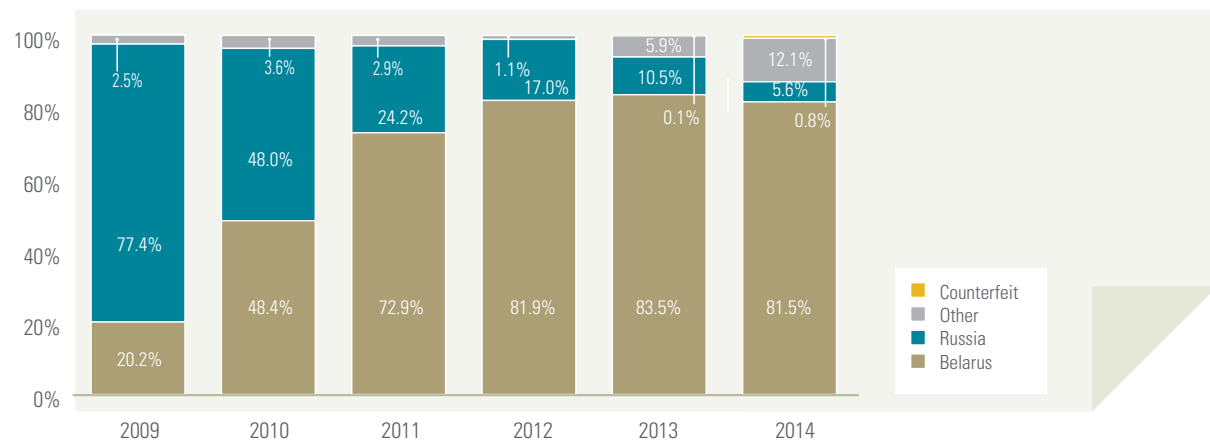
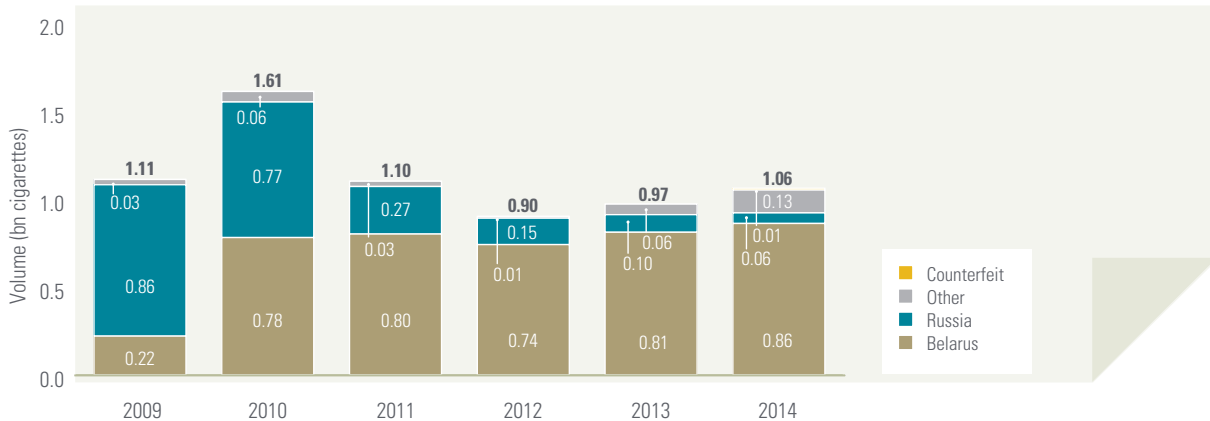
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

The majority of C&C came from Belarusian brands, mainly in the form of Illicit Whites brands

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



LITHUANIA



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**Illicit Belarusian inflows grew whilst Russian inflows declined against a background of cheaper prices in Belarus and greater law enforcement on the Russian border**

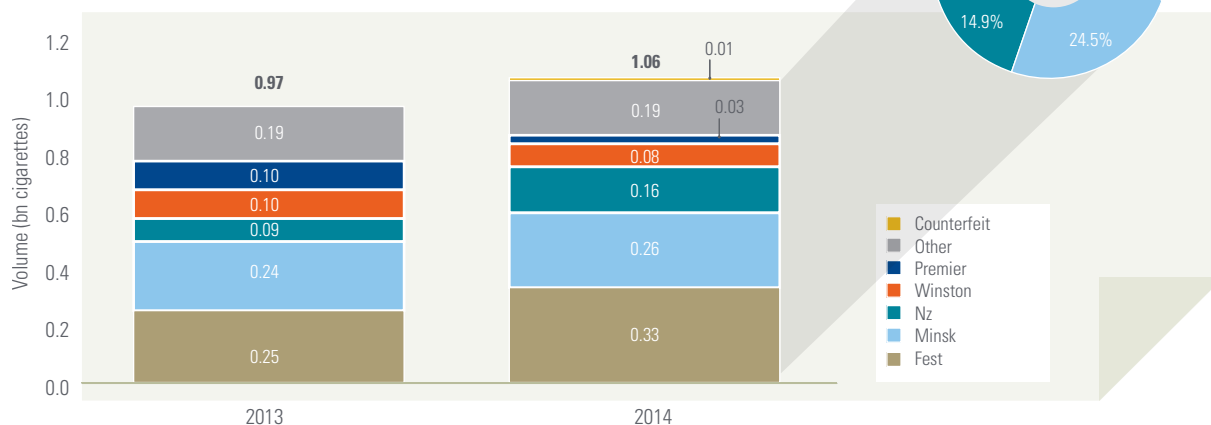
- Belarusian inflows grew by 5%, driven by increased inflows of Illicit White packs with trademarks owned by the Grodno Tobacco Factory
  - The key Grodno Tobacco brands were Fest, Minsk and NZ
  - Flows of Winston also came from Belarus
- Russian illicit inflows declined by 42% in 2014 due to increased enforcement of a two-pack maximum for travellers
- If the total volume of C&C consumed in the Lithuanian market had been purchased legally, the Lithuanian Treasury would have raised approximately €103m in additional tax revenues<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

## C&C INFLOWS BY BRAND

Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type - 2009-2014<sup>(1)(2)(a)</sup>

LABELLING OF ILLICIT WHITES INFLOWS TO LITHUANIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	0.15	0.58	0.65	0.66	0.74	0.82
Duty Free	0.00	0.00	0.01	0.01	0.02	0.05
Unspecified	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Illicit Whites</b>	<b>0.15</b>	<b>0.58</b>	<b>0.66</b>	<b>0.67</b>	<b>0.76</b>	<b>0.87</b>

LITHUANIA



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Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

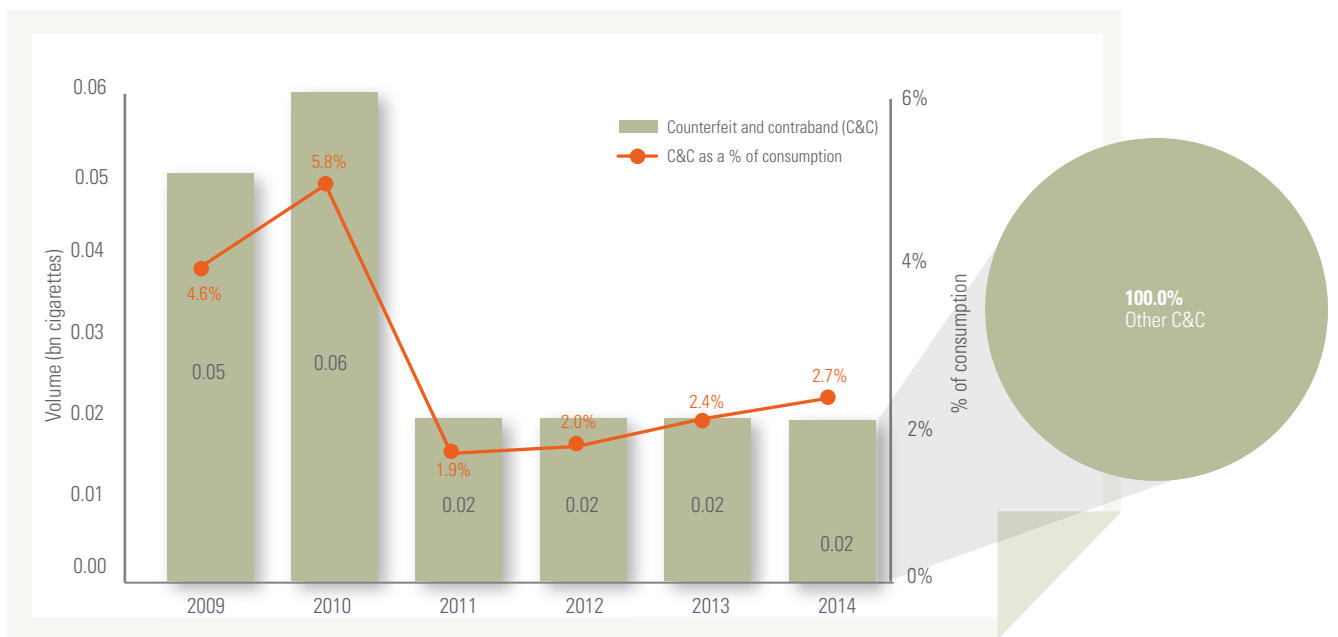
Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

(2) KPMG analysis of data sources provided by manufacturers



## C&C as a share of consumption increased

Manufactured cigarette C&C volumes and share of overall consumption - 2009-14

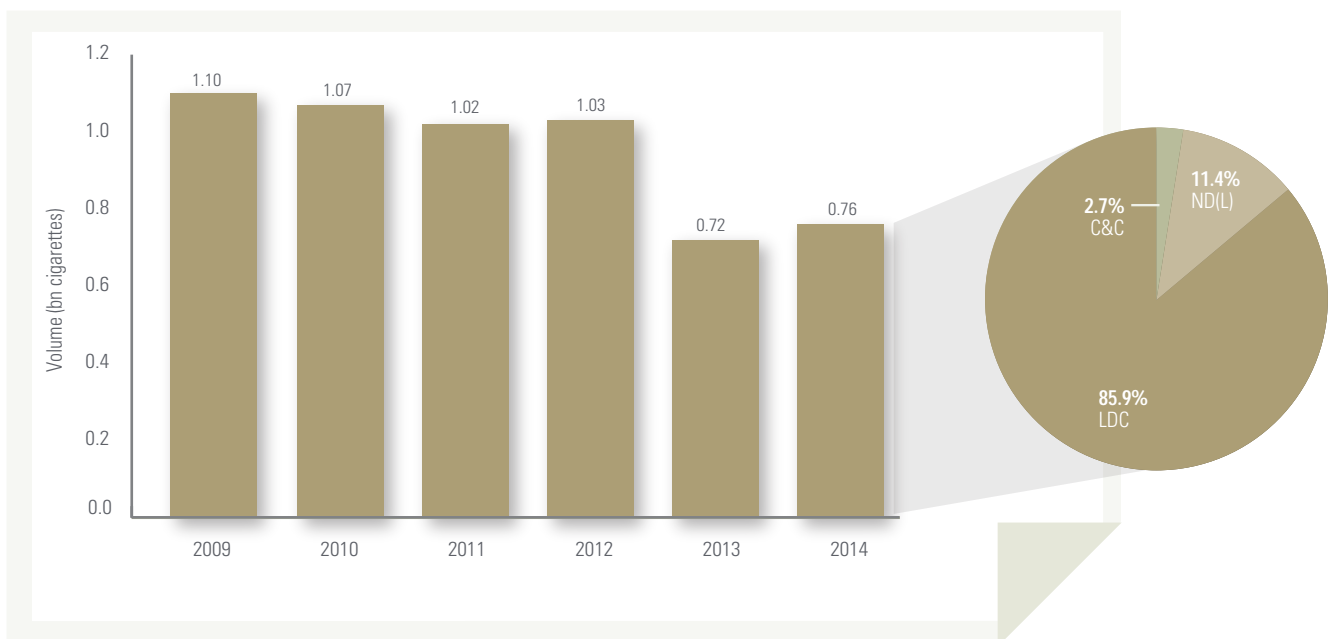


LUXEMBOURG

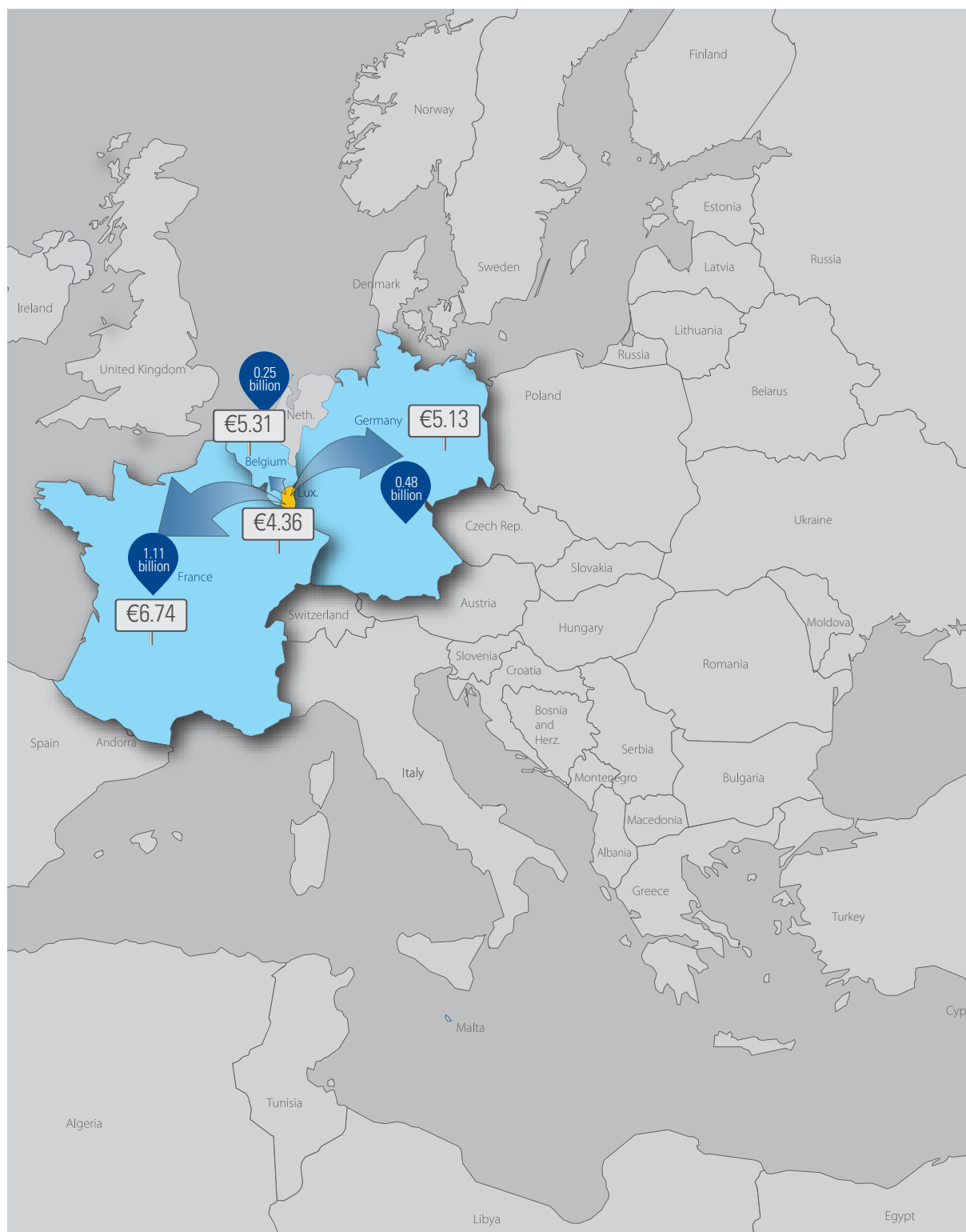


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Manufactured cigarette consumption - 2009-14



## KEY INFLOWS AND OUTFLOWS



LUXEMBOURG



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Main outflow 

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

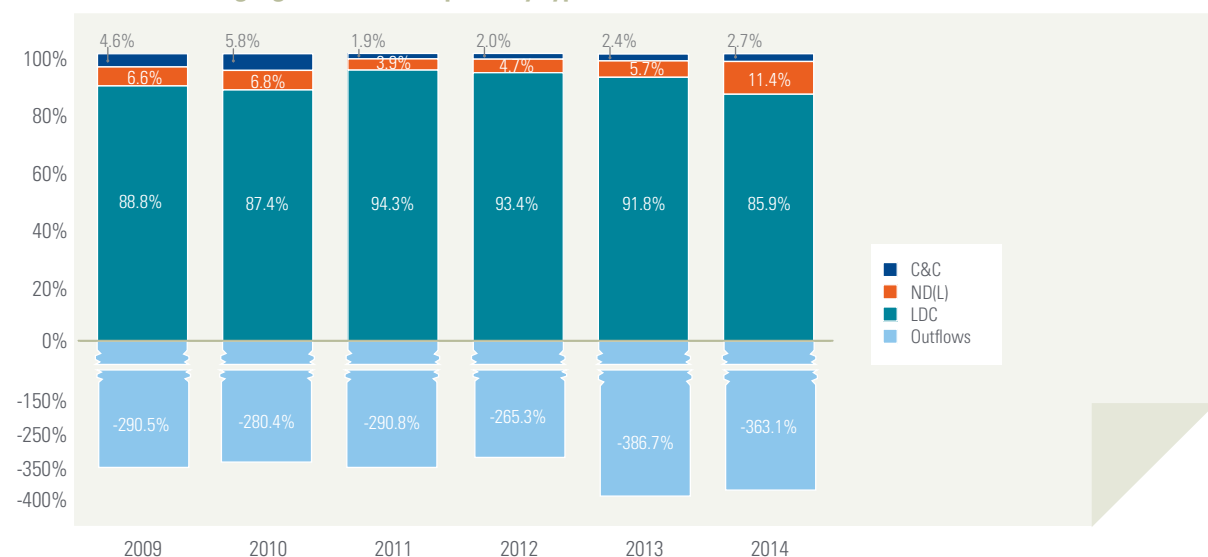
Source: (1) KPMG EU Flows Model

# Consumption increased as Luxembourg's working population increased

## Total manufactured cigarette consumption – Luxembourg<sup>(1)(2)(a)</sup>

TOTAL LUXEMBOURG CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	4.15	3.93	3.94	3.68	3.42	3.39	(1%)
Outflows	-3.18	-3.00	-2.98	-2.72	-2.77	-2.74	(1%)
Legal domestic consumption (LDC)	0.97	0.93	0.96	0.96	0.66	0.65	(1%)
Non-domestic legal (ND(L))	0.07	0.07	0.04	0.05	0.04	0.09	>100%
Counterfeit and contraband (C&C)	0.05	0.06	0.02	0.02	0.02	0.02	16%
Total non-domestic	0.12	0.13	0.06	0.07	0.06	0.11	82%
<b>Total consumption</b>	<b>1.10</b>	<b>1.07</b>	<b>1.02</b>	<b>1.03</b>	<b>0.72</b>	<b>0.76</b>	<b>6%</b>

## Share of Luxembourg cigarette consumption by type – 2009-2014<sup>(1)(2)</sup>



### Outflows account for four times domestic consumption

- Lower prices compared with the surrounding countries resulted in high volumes of outflows
- Consumption in Luxembourg increased slightly, driven by an increase in the number of people working in Luxembourg and is reflected in additional consumption during the working day
- A favorable economic environment indicated by an increase in GDP per capita of 2.6% may have impacted overall consumption<sup>(3)</sup>

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used  
 Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers  
 (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
 (3) 2014 Oxford Economic Forecast

## Outflows to larger neighbouring markets accounted for over 80% of total purchases in Luxembourg

### Total inflows by country of origin – 2009-2014<sup>(1)</sup>

ND INFLOWS TO LUXEMBOURG						
Billion cigarettes	2009	2010	2011	2012	2013	2014
France	0.02	0.01	0.01	0.02	0.01	0.03
Germany	0.02	0.00	0.02	0.01	0.01	0.02
Belgium	0.04	0.06	0.01	0.00	0.01	0.02
Duty Free	0.01	0.01	0.01	0.01	0.00	0.01
Italy	0.00	0.00	0.00	0.00	0.00	0.01
Counterfeit					0.00	0.00
Other	0.04	0.06	0.02	0.02	0.02	0.02
<b>Total inflows</b>	<b>0.12</b>	<b>0.13</b>	<b>0.06</b>	<b>0.07</b>	<b>0.06</b>	<b>0.11</b>

- Inflows increased from surrounding higher priced countries which was reflected by a greater number of visitors and commuters travelling to Luxembourg. In 2014 there were 167,152 daily cross border commuters<sup>(2)</sup>

### Total outflows by destination country – 2009-2014<sup>(1)(a)</sup>

OUTFLOWS FROM LUXEMBOURG						
Billion cigarettes	2009	2010	2011	2012	2013	2014
France	0.58	0.52	0.73	1.11	1.08	1.11
Germany	0.80	0.38	0.41	0.46	0.45	0.48
Belgium	0.12	0.23	0.47	0.51	0.42	0.25
Other	1.68	1.87	1.37	0.63	0.82	0.91
<b>Total outflows</b>	<b>3.18</b>	<b>3.00</b>	<b>2.98</b>	<b>2.72</b>	<b>2.77</b>	<b>2.74</b>

- The total Luxembourg outflows are reported by calculating total consumption by Luxembourg's resident population

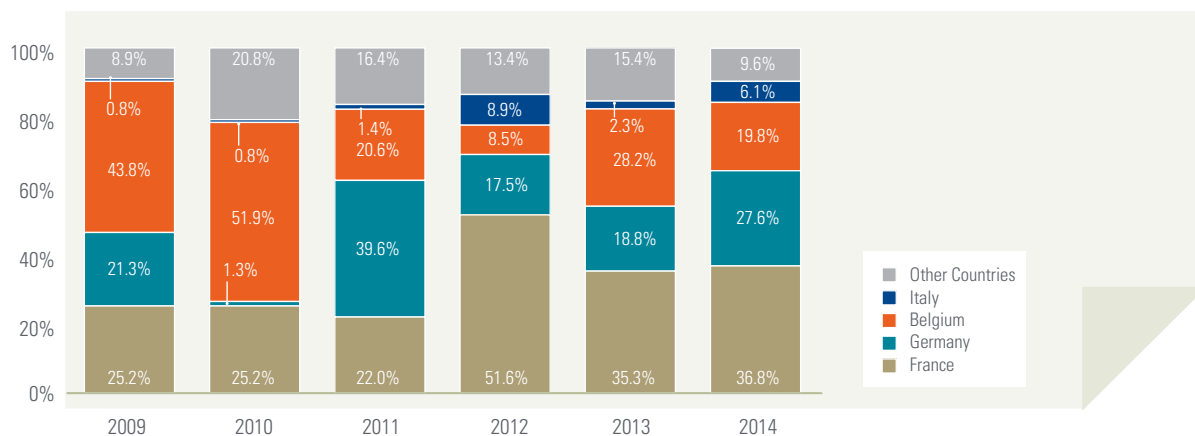
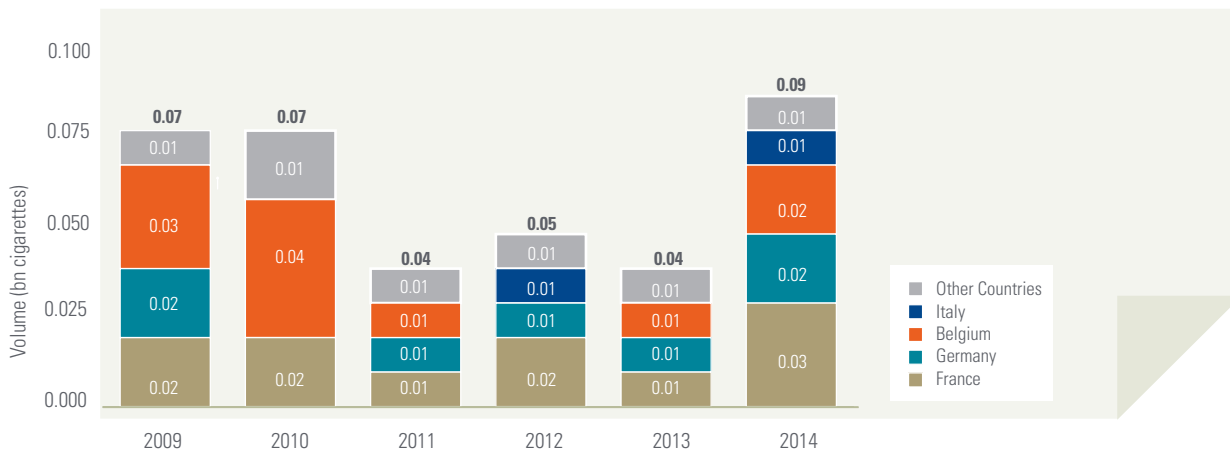
Note: (a) Outflows to Belgium were lower in 2014 than travel sales data suggested, but is reflected by the empty pack survey in Belgium. Please see appendix for "limitations of study"

Sources: (1) KPMG EU Flows Model (2) European Commission



# ND(L) inflows increased from the three larger surrounding countries

Total ND(L) by origin – 2009-2014<sup>(1)(2)(a)(b)</sup>



LUXEMBOURG



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**Whilst the price difference increased between Luxembourg and France and Belgium, increased ND(L) is likely to be reflected by a greater number of visitors (both tourists and commuters)**

- As these inflows came from higher-priced markets, they are all treated as legal cross-border consumption as there is little incentive to bring cigarettes from any of these markets into Luxembourg<sup>(3)</sup>
- Marlboro was the largest ND(L) brand, which reflected Legal Domestic Sales within the source countries

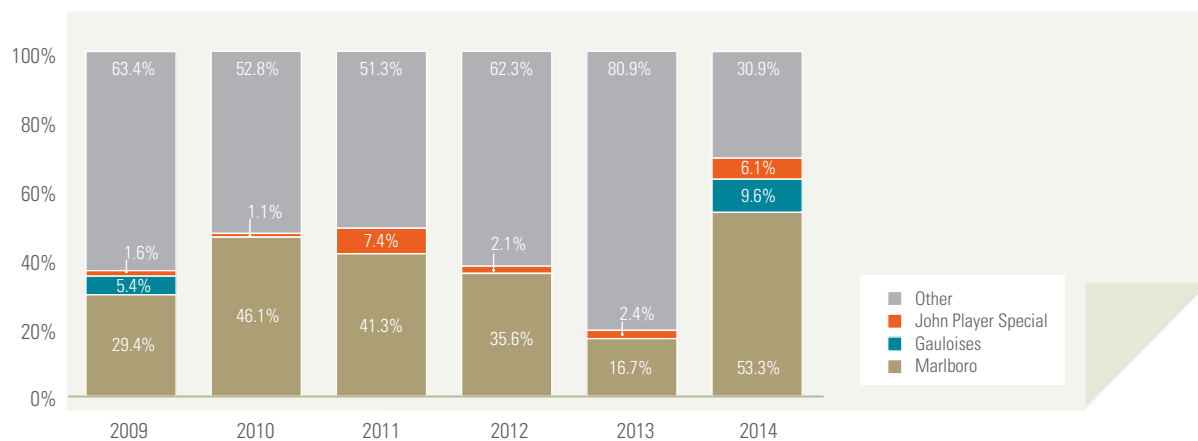
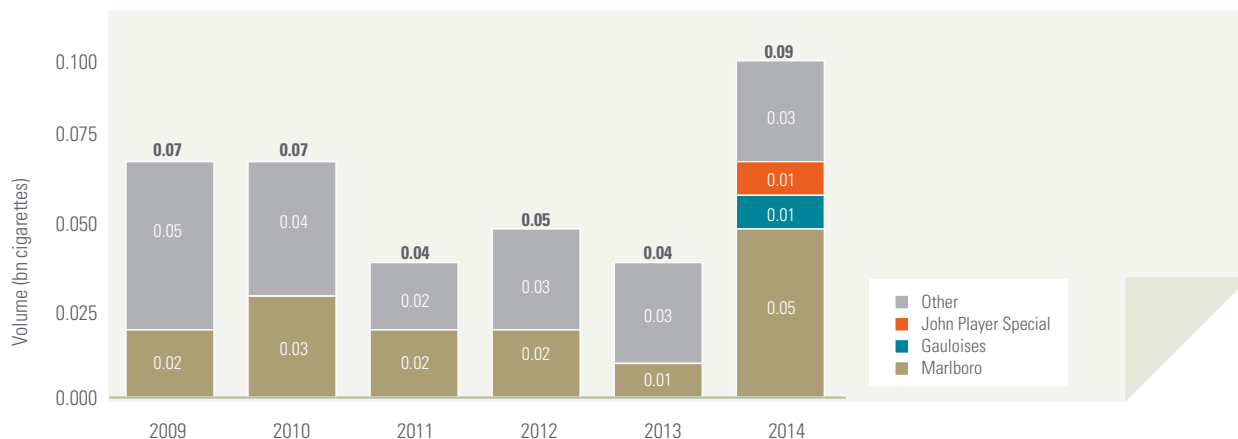
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)



# NON-DOMESTIC LEGAL INFLOWS BY BRAND

Total ND(L) by brand – 2009-2014<sup>(1)(2)(a)(b)</sup>



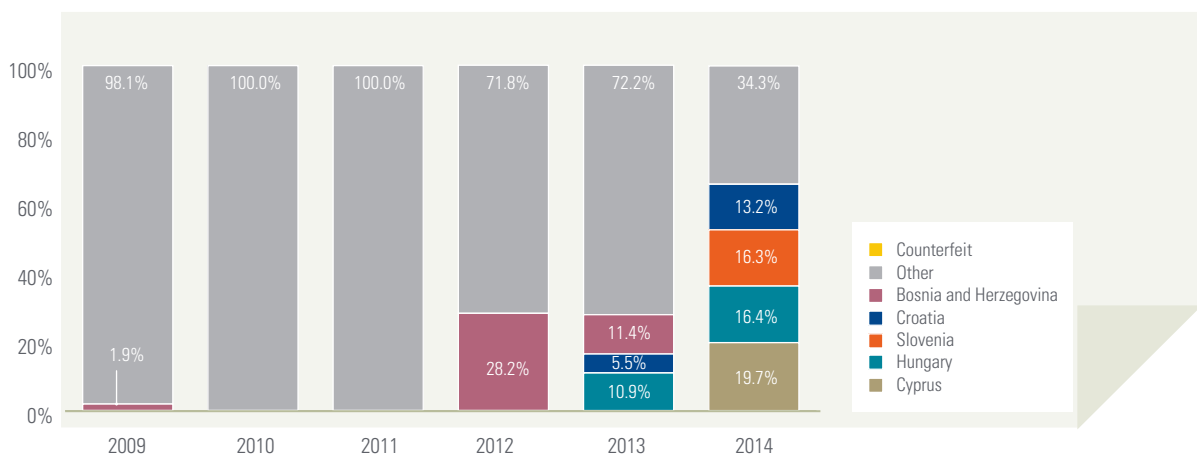
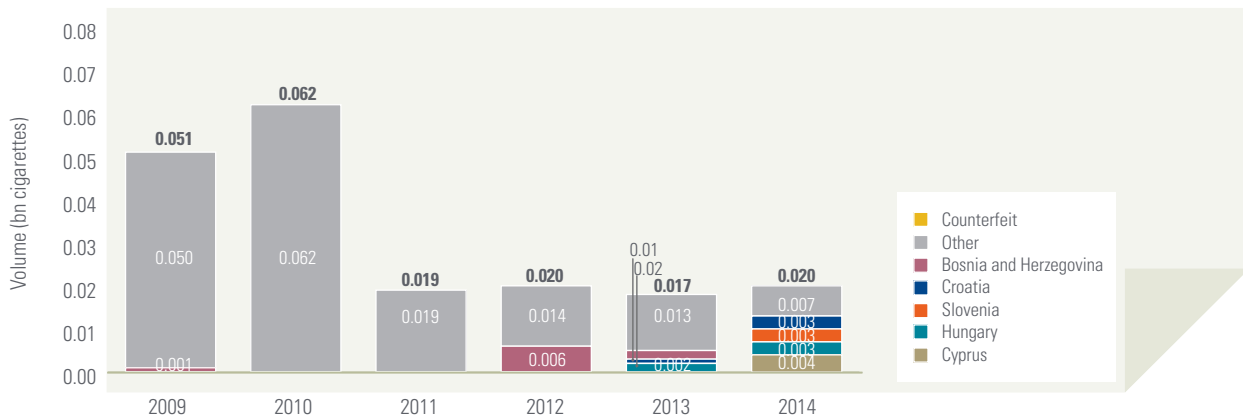
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# C&C was one of the lowest in the study

Total C&C by origin – 2009-2014<sup>(1)(2)(a)</sup>



LUXEMBOURG



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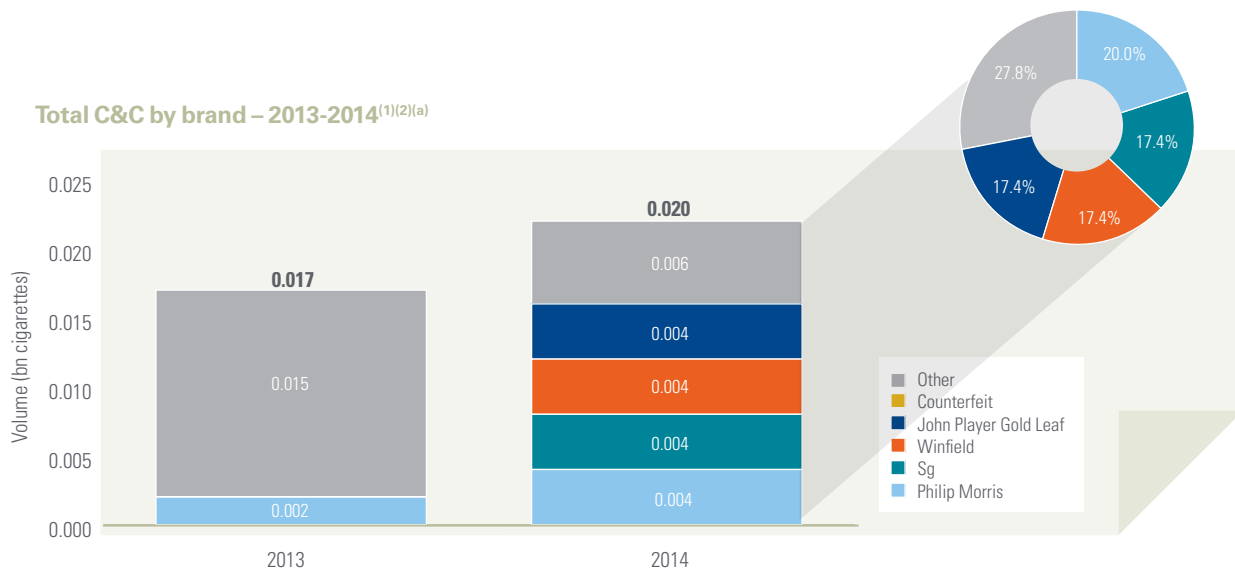
**C&C increased by 16% between 2013 and 2014, driven by flows identified from Cyprus and Hungary**

- If the total volume of C&C had been consumed legally in Luxembourg, an additional tax revenue of approximately €3m would have been raised by the treasury of Luxembourg<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

## C&C INFLOWS BY BRAND



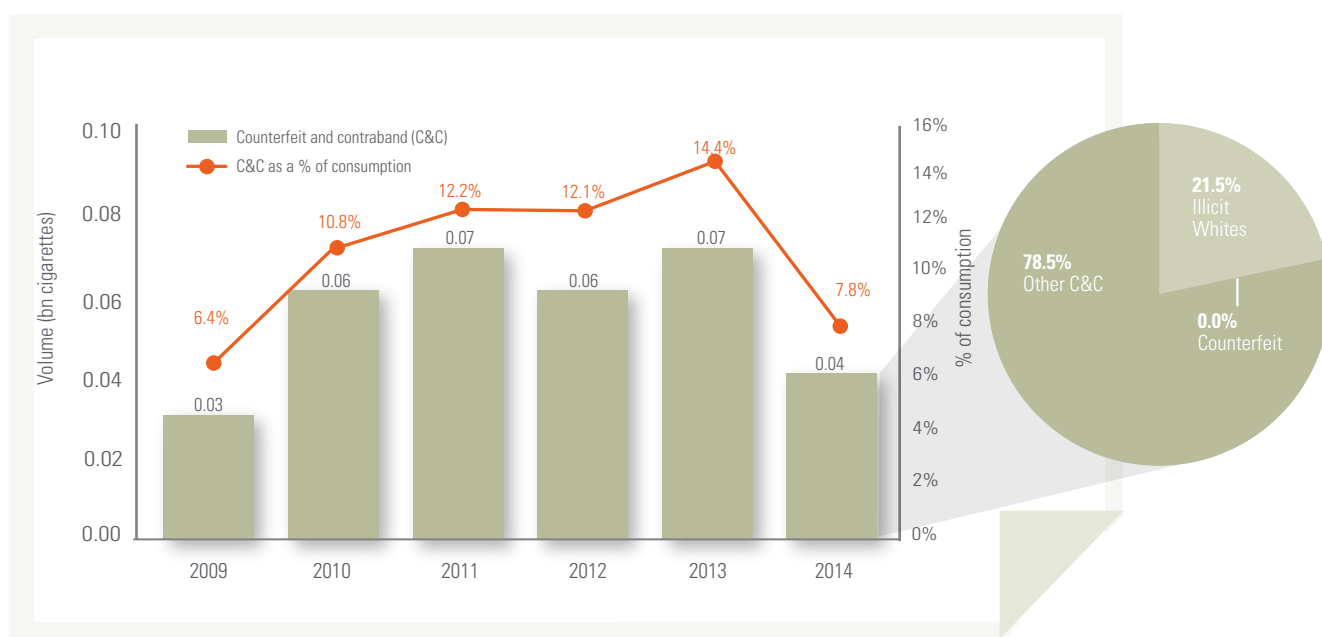
Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows.

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers.



C&C fell as the volume of Illicit Whites brand flows decreased

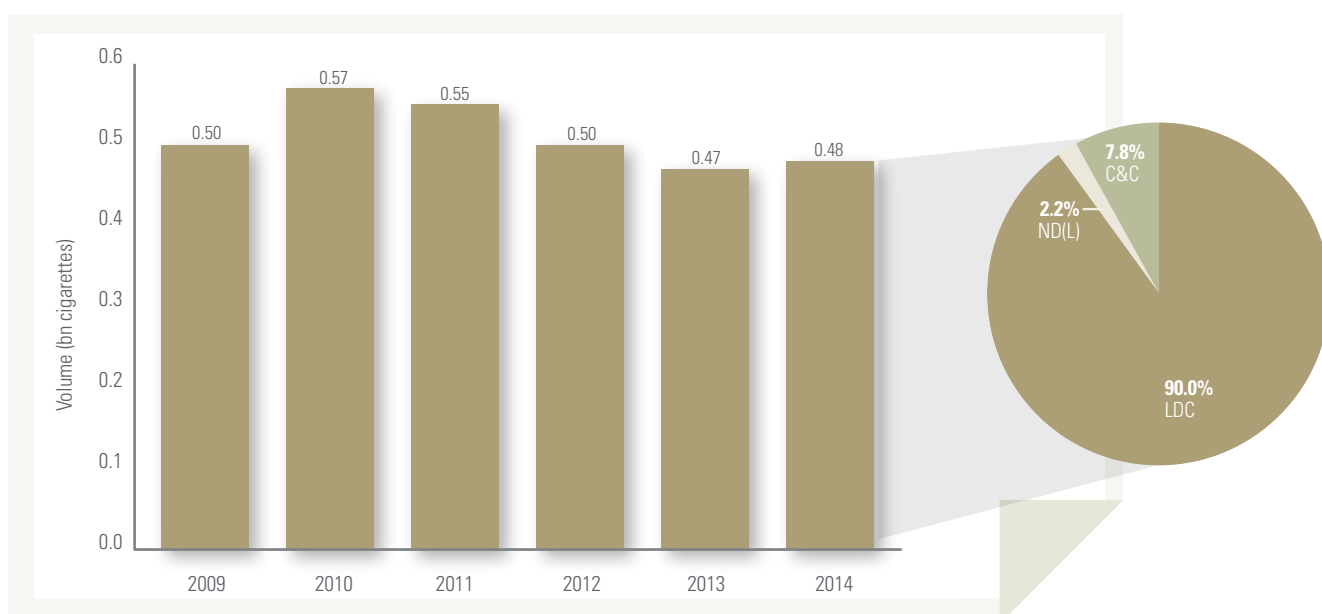
Manufactured cigarette C&C volumes and share of overall consumption 2009-14



MALTA



Manufactured cigarette consumption 2009-14

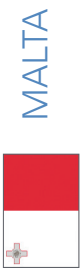


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# KEY INFLOWS AND OUTFLOWS



Main outflow █  
Main inflow █



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Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

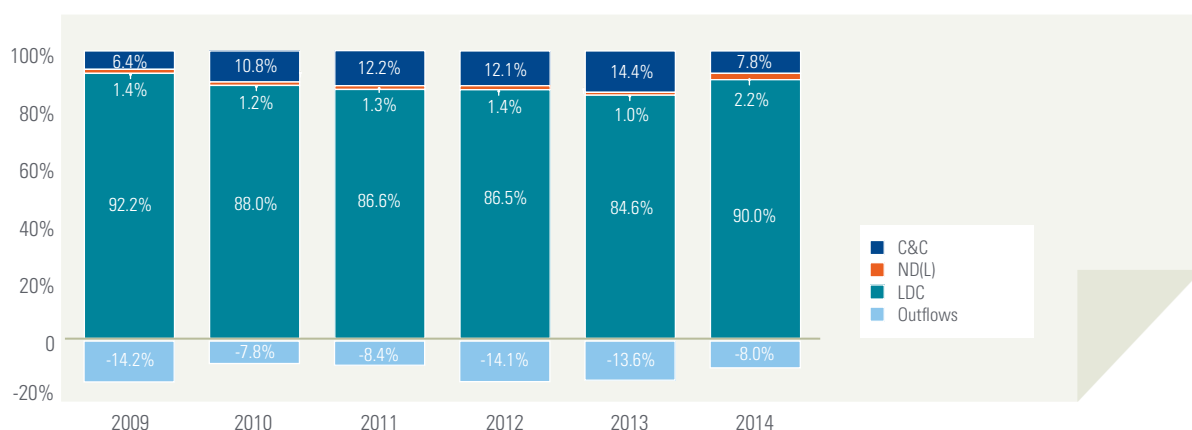
Source: (1) KPMG EU Flows Model

# Overall cigarette consumption remained flat

## Total manufactured cigarette consumption – Malta<sup>(1)(2)(a)</sup>

TOTAL MALTA CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14%
Legal domestic sales (LDS)	0.53	0.55	0.52	0.50	0.46	0.47	2%
Outflows	-0.07	-0.04	-0.05	-0.07	-0.06	-0.04	(39%)
Legal domestic consumption (LDC)	0.46	0.51	0.47	0.43	0.40	0.43	9%
Non-domestic legal (ND(L))	0.01	0.01	0.01	0.01	0.00	0.01	>100%
Counterfeit and contraband (C&C)	0.03	0.06	0.07	0.06	0.07	0.04	(45%)
Total non-domestic	0.04	0.07	0.07	0.07	0.07	0.05	(34%)
<b>Total consumption</b>	<b>0.50</b>	<b>0.57</b>	<b>0.55</b>	<b>0.50</b>	<b>0.47</b>	<b>0.48</b>	<b>2%</b>

## Share of Malta cigarette consumption by type 2009-2014<sup>(1)(2)</sup>



### Total manufactured cigarette consumption remained stable in 2014 with a 39% decline in outflows offset by a 34% decline in non-domestic consumption, mainly C&C

- Average prices declined by 7.7% improving the affordability of legal domestic sales<sup>(3)</sup>
- The decline in illicit inflows may have been the result of consumers switching back to domestic cigarettes
- Favorable economic conditions such as a decline in unemployment may have positively impacted legal domestic sales in Malta<sup>(4)</sup>

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers

(2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

(3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) 2014 Euromonitor



## Declines of inflows of Illicit Whites brands were partially offset by increases reflected by tourist flows

### Total inflows by country of origin - 2009-2014<sup>(1)(a)</sup>

ND INFLOWSTO MALTA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Duty Free	0.027	0.034	0.032	0.021	0.030	0.019
Unspecified	0.000	0.022	0.028	0.041	0.034	0.010
Italy	0.004	0.001	0.001	0.001	0.002	0.003
Russia	0.002	0.000	0.002	0.000	0.001	0.002
Germany	0.000	0.000	0.001	0.000	0.000	0.001
Other	0.004	0.011	0.009	0.004	0.005	0.012
<b>Total inflows</b>	<b>0.039</b>	<b>0.069</b>	<b>0.074</b>	<b>0.068</b>	<b>0.073</b>	<b>0.048</b>

### Declining volumes of Illicit Whites brands drove a decline in inflows

- The majority of Illicit Whites brands had either unspecified or Duty Free labelling
- Of the flows with country specific labelling, the largest was from Italy, which had the highest volume of visitors<sup>(2)</sup>

### Total outflows by destination country - 2009-2014<sup>(1)</sup>

OUTFLOWS FROM MALTA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
UK	0.039	0.035	0.037	0.051	0.020	0.023
Italy	0.005	0.000	0.000	0.009	0.004	0.004
France	0.020	0.007	0.000	0.000	0.010	0.003
Other	0.007	0.003	0.009	0.010	0.030	0.008
<b>Total outflows</b>	<b>0.071</b>	<b>0.045</b>	<b>0.046</b>	<b>0.071</b>	<b>0.064</b>	<b>0.039</b>

**Overall non-domestic outflows declined and mainly reflected tourist flows from the UK, Italy and France**

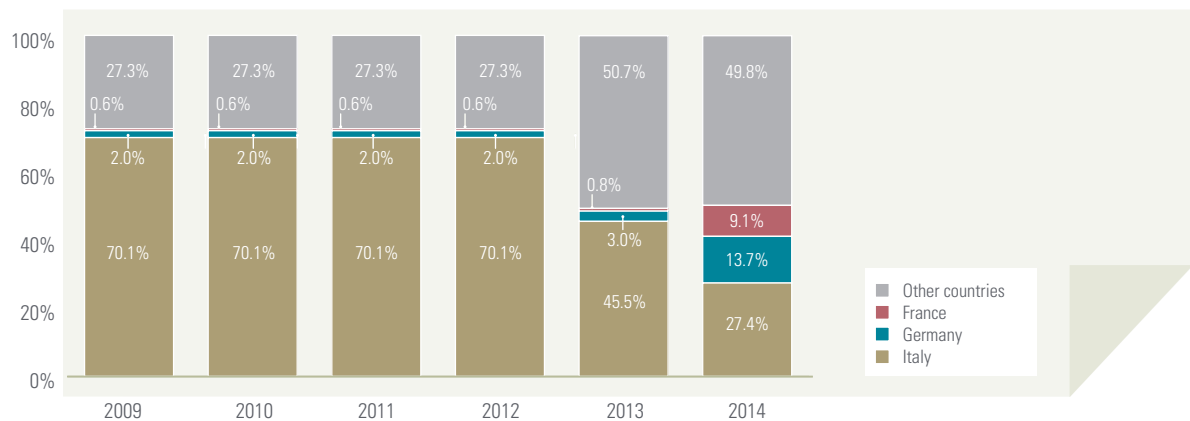
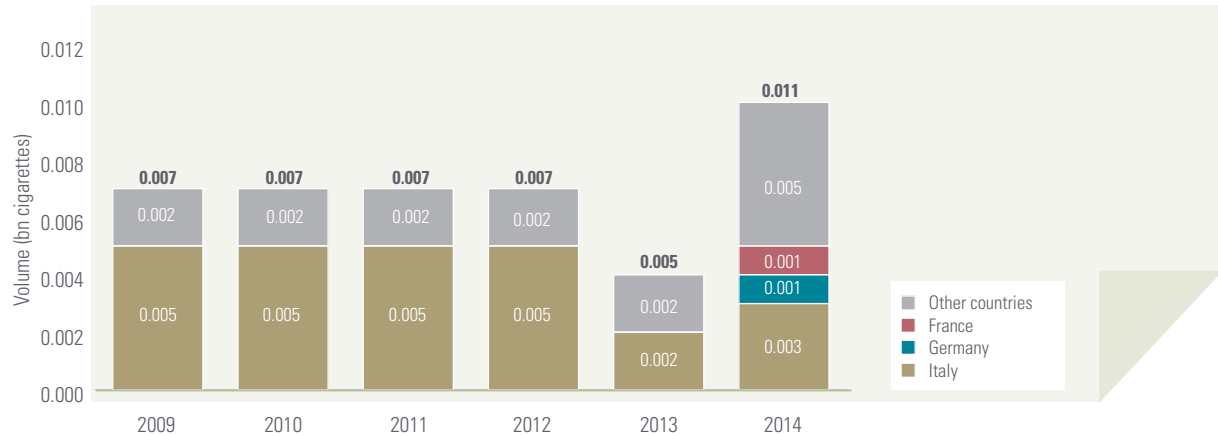
Note: (a) The Duty Free inflow contains both "other" Duty Free product and Illicit Whites which have Duty Free labelling

Sources: (1) KPMG EU Flows Model (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model



# ND(L) more than doubled

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



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## ND(L) more than doubled in Malta during 2014, with the increase driven by increased flows from countries with the highest tourist volumes

- Flows from Italy reflected the highest number of travellers
  - Flows of Rothmans, the most popular brand in Malta, came from Italy
- All inflows from high priced market such as France, Germany and Italy are assumed to be ND(L) inflows

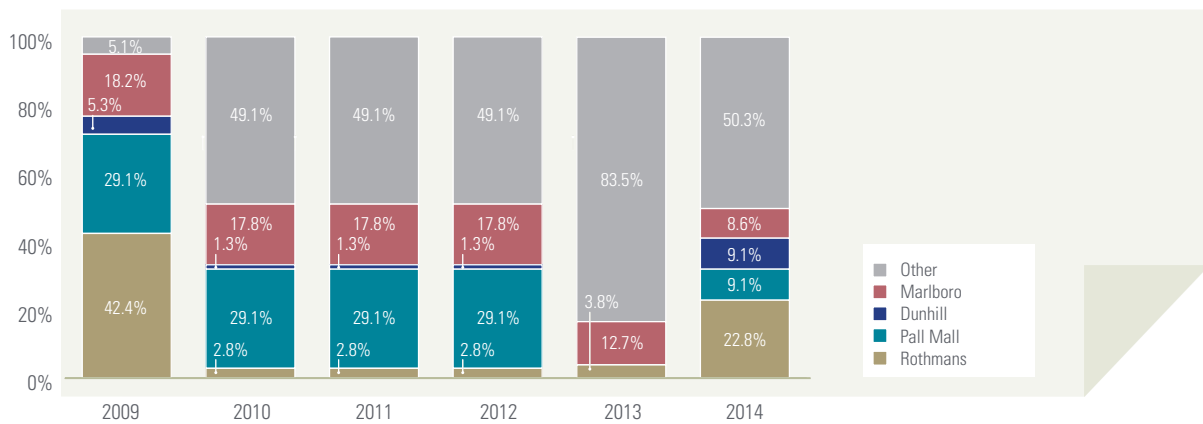
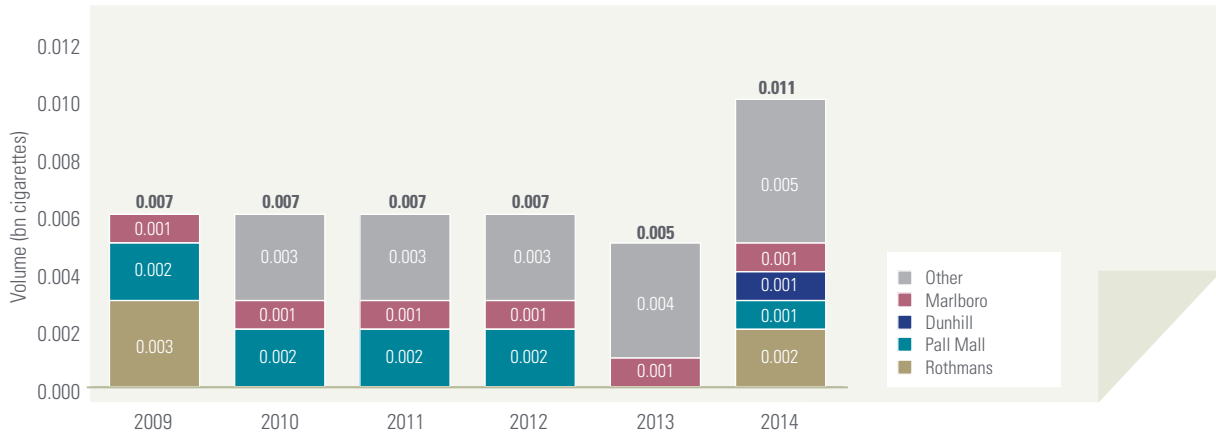
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers



# NON-DOMESTIC LEGAL INFLOWS BY BRAND

**Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>**



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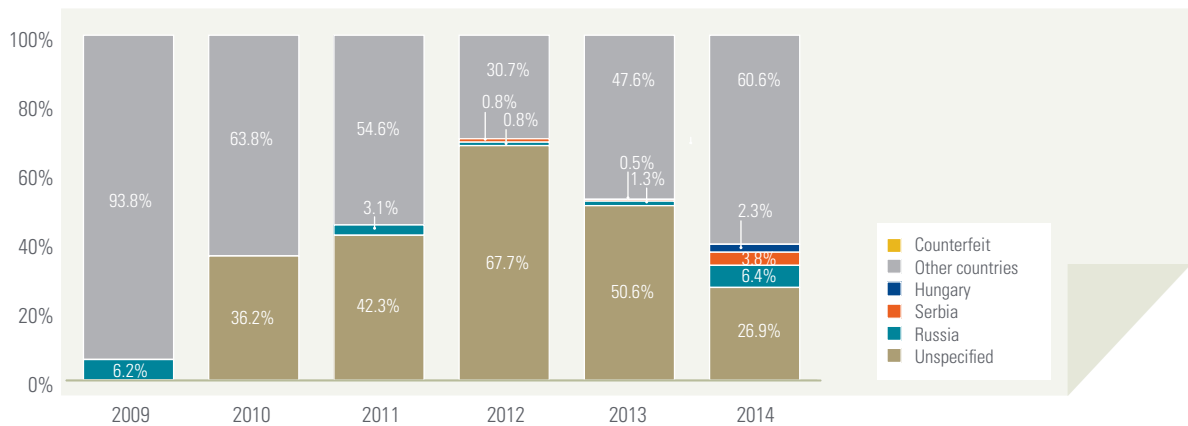
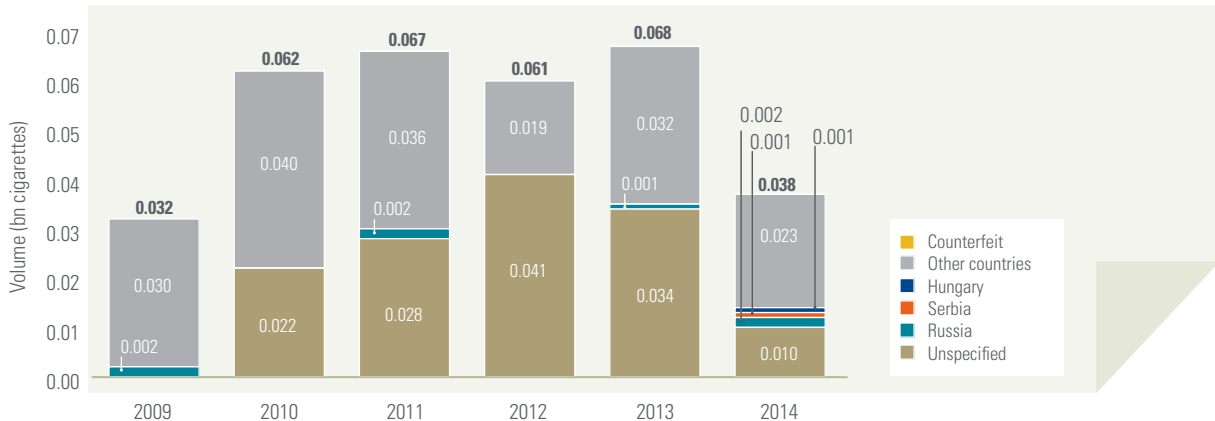
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# C&C flows declined mainly due to declines in Illicit Whites brand flows

Total C&C by origin 2009-2014<sup>(1)(2)(a)</sup>



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## C&C declined by 0.03 billion whilst Illicit Whites brands declined by 0.028 billion

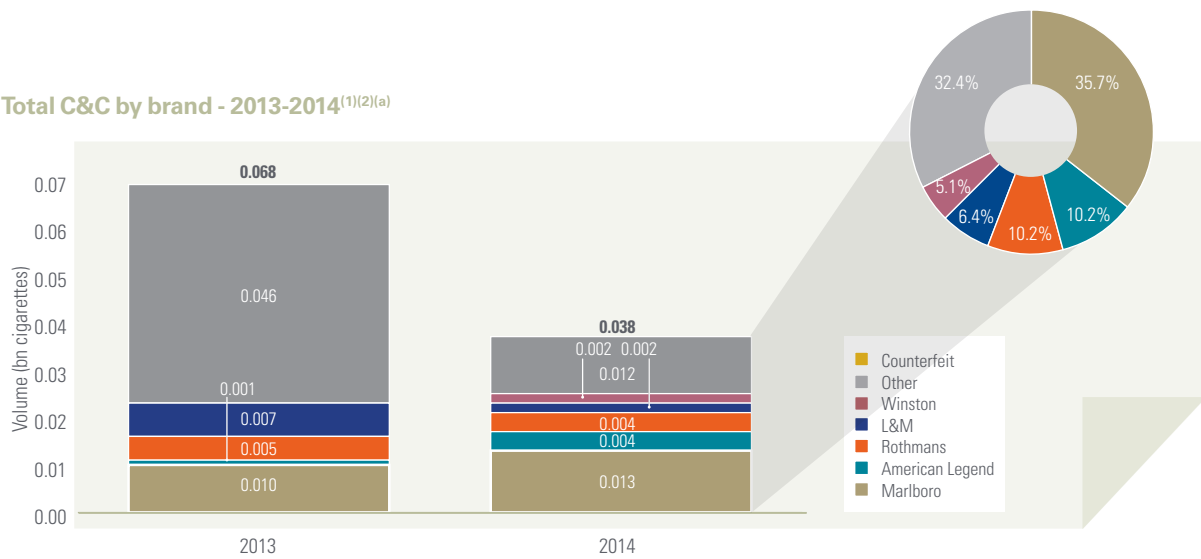
- Illicit Whites brands reduced from 53% to 22% of C&C and had unspecified labelling
  - American Legend was the largest Illicit White brand accounting for almost half of all Illicit White flows
- Contraband volumes came mainly from non-EU countries
- If the total volume of C&C had been consumed legally within Malta, an additional tax revenue of approximately €6m would have been raised by the Maltese Treasury<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) KPMG analysis of EC Excise Duty tables (Part III – Manufactured Tobacco)

## C&C INFLOWS BY BRAND

Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type - 2009-2014<sup>(1)(2)(a)</sup>

LABELLING OF ILLICIT WHITES INFLOWS TO MALTA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	0.000	0.002	0.002	0.001	0.001	0.009
Duty Free	0.000	0.000	0.000	0.003	0.007	0.000
Unspecified	0.000	0.017	0.017	0.034	0.028	0.000
<b>Total Illicit Whites</b>	<b>0.004</b>	<b>0.019</b>	<b>0.019</b>	<b>0.038</b>	<b>0.036</b>	<b>0.009</b>

MALTA



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Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

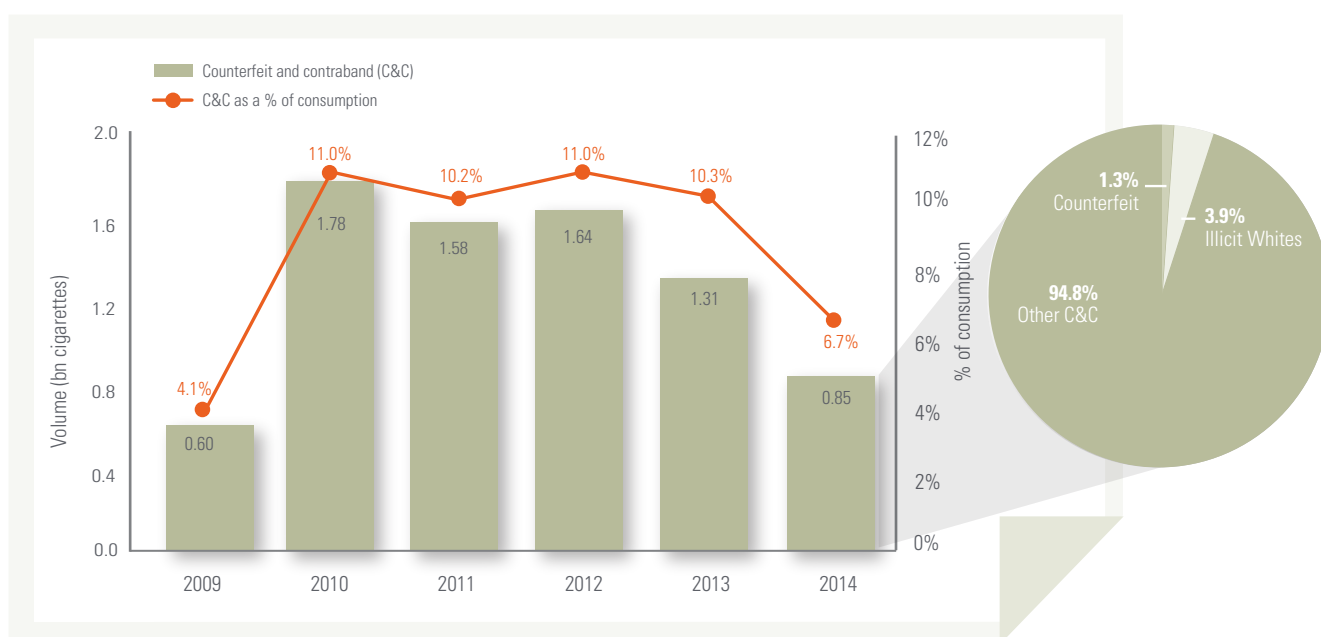
Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# NETHERLANDS



C&C volumes continued to fall whilst ND(L) inflows continued to grow

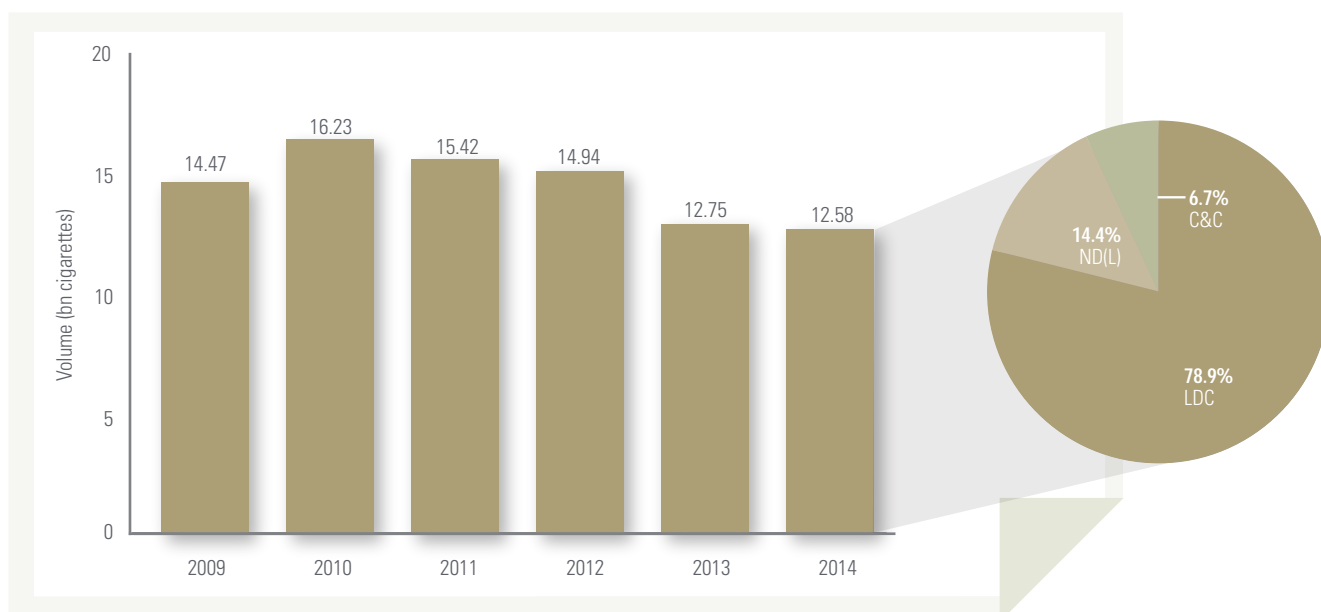
Manufactured cigarette C&C volumes and share of overall consumption - 2009-14



NETHERLANDS





Manufactured cigarette consumption - 2009-14



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# KEY INFLOWS AND OUTFLOWS



Main outflow   
 Main inflow 

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

Source: (1) KPMG EU Flows Model

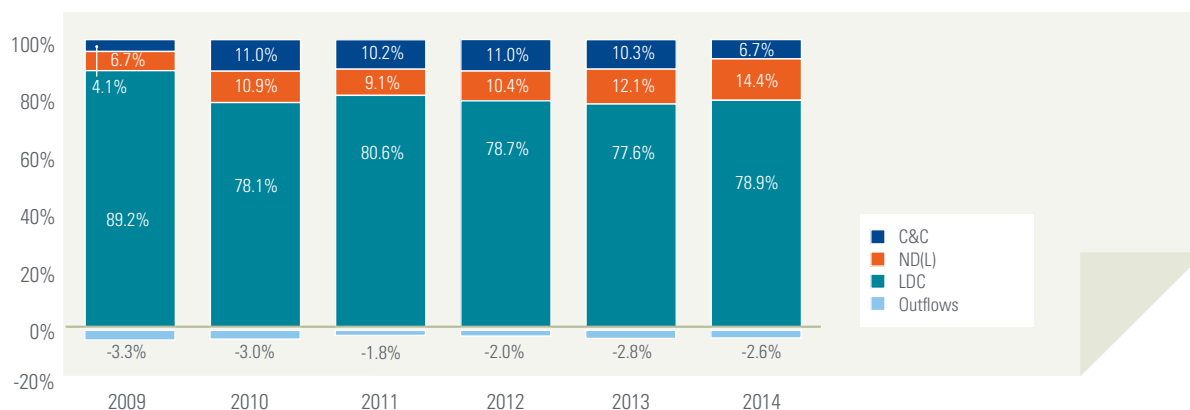
## MANUFACTURED CIGARETTE CONSUMPTION

A small decline in consumption was driven by a decline in C&C

### Total manufactured cigarette consumption – Netherlands<sup>(1)(2)(a)</sup>

TOTAL NETHERLANDS CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	13.39	13.16	12.71	12.05	10.25	10.24	(0%)
Outflows	-0.48	-0.49	-0.27	-0.29	-0.36	-0.32	(10%)
Legal domestic consumption (LDC)	12.91	12.67	12.44	11.75	9.89	9.92	0%
Non-domestic legal (ND(L))	0.97	1.77	1.41	1.55	1.54	1.81	17%
Counterfeit and contraband (C&C)	0.60	1.78	1.58	1.64	1.31	0.85	(35%)
Total non-domestic	1.56	3.55	2.98	3.19	2.85	2.66	(7%)
<b>Total consumption</b>	<b>14.47</b>	<b>16.23</b>	<b>15.42</b>	<b>14.94</b>	<b>12.75</b>	<b>12.58</b>	<b>(1%)</b>

### Share of Netherlands cigarette consumption by type - 2009-2014<sup>(1)(2)</sup>



#### The fall in overall consumption was driven by a decline in C&C volumes whilst legal domestic sales remained stable for the first time since 2008

- There were no price increases in 2014 which is likely to have contributed to stable legal domestic sales<sup>(3)</sup>
- Increased travel to neighbouring countries has supported growth in non-domestic legal inflows<sup>(2)</sup>
- Unfavourable economic conditions may have also driven the increase in non-domestic legal consumption from lower priced neighbouring markets
  - Unemployment grew by 3% in 2014 whilst personal disposable income declined by 1.1%<sup>(4)</sup>

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) 2014 Euromonitor

## The main inflows were Duty Free and neighbouring countries

### Total inflows by country of origin - 2009-2014 <sup>(1)(a)</sup>

ND INFLOWS TO NETHERLANDS						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Duty Free	0.38	0.59	0.59	0.66	0.55	0.52
Germany	0.13	0.35	0.25	0.33	0.33	0.36
Belgium	0.15	0.24	0.29	0.32	0.38	0.28
UK	0.11	0.20	0.14	0.15	0.14	0.16
Italy	0.06	0.21	0.18	0.17	0.13	0.13
France	0.08	0.35	0.13	0.16	0.14	0.13
Other	0.65	1.61	1.40	1.40	1.18	1.08
<b>Total inflows</b>	<b>1.56</b>	<b>3.55</b>	<b>2.98</b>	<b>3.19</b>	<b>2.85</b>	<b>2.66</b>

### Overall non-domestic inflows declined by 7% with a large proportion of the decline coming from Belgium

- The decline in Belgian inflows may be reflected by the narrowing price gap by €0.43 thus reducing the incentive to purchase cheaper cigarettes<sup>(2)</sup>
- Cigarettes with Duty Free labelling accounted for 20% of all inflows into the Netherlands

### Total outflows by destination country - 2009-2014<sup>(1)</sup>

OUTFLOWS FROM NETHERLANDS						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Germany	0.13	0.14	0.07	0.06	0.03	0.11
Belgium	0.11	0.13	0.06	0.04	0.17	0.08
France	0.14	0.09	0.08	0.07	0.07	0.05
Other	0.10	0.13	0.06	0.12	0.08	0.08
<b>Total outflows</b>	<b>0.48</b>	<b>0.49</b>	<b>0.27</b>	<b>0.29</b>	<b>0.36</b>	<b>0.32</b>

### The majority of outflows were reflective of the large volume of border crossings to neighbouring countries

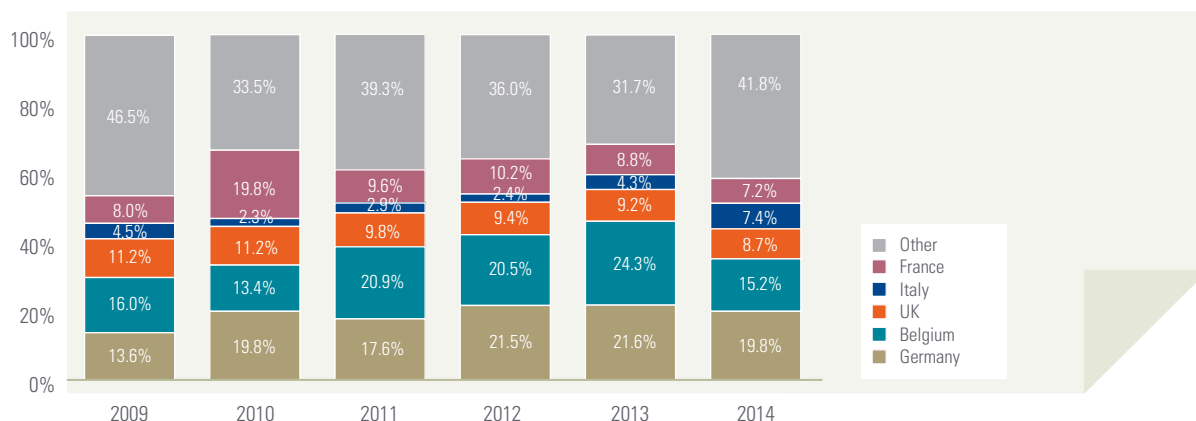
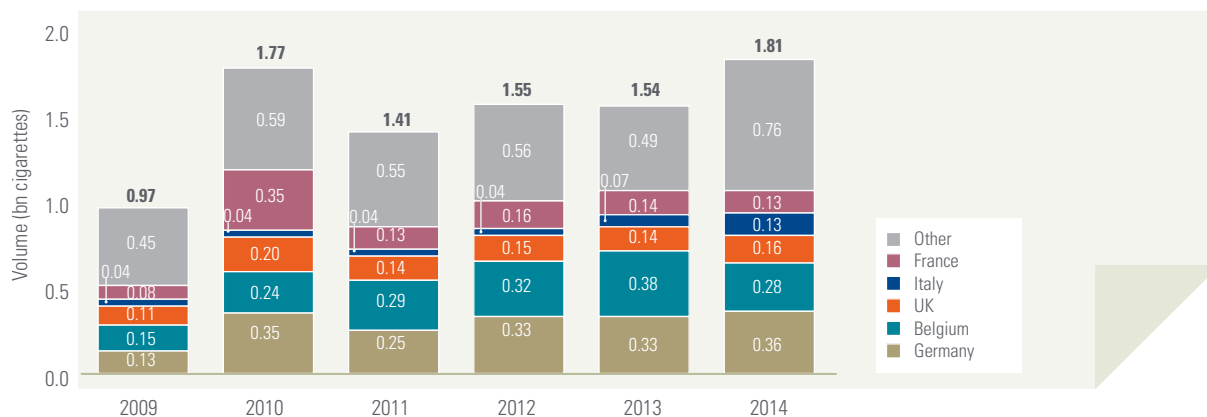
- As the prices are either similar or lower, all outflows are considered legal

Note: (a) The Duty Free inflow contains both "other" Duty Free product and Illicit Whites which have Duty Free labelling  
Sources: (1) KPMG EU Flows Model (2) EC Excise Duty tables (Part III – Manufactured Tobacco)



# ND(L) volumes increased, originating mainly from cheaper priced Western European markets

Total ND(L) by origin - 2009-2014 <sup>(1)(2)(a)(b)</sup>



NETHERLANDS



PROJECT SUN

## ND(L) increased in the Netherlands by 17%, driven by higher levels of non-domestic inflows from Germany and other neighbouring countries

- Legal inflows from Germany grew by 9.1%, reflected by a 4.4% growth in cross-border travel between the two countries<sup>(1)(3)</sup>
- Other ND(L) flows around Western Europe from countries such as Spain, the UK and Italy are considered to be a result of tourist purchases
- The majority of ND(L) brands reflected the legal domestic sales in the Netherlands and surrounding countries

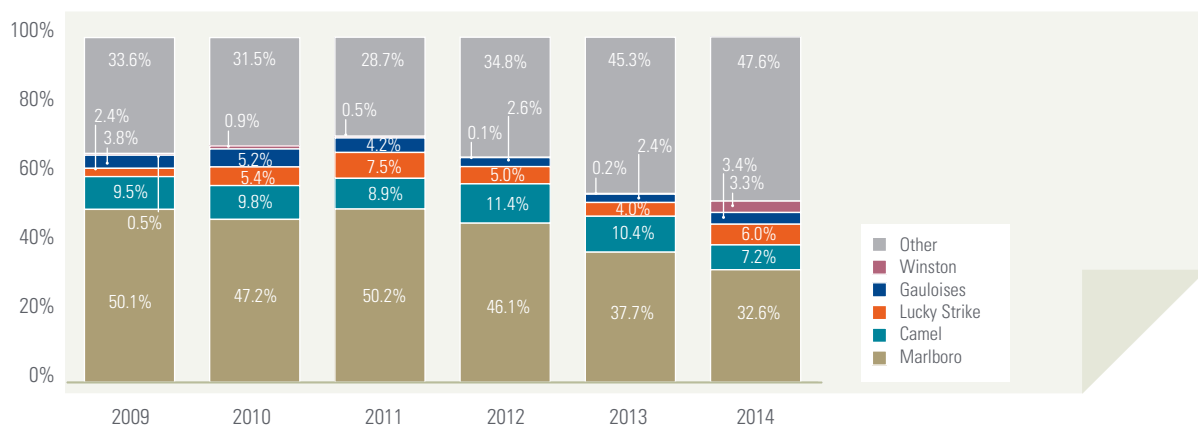
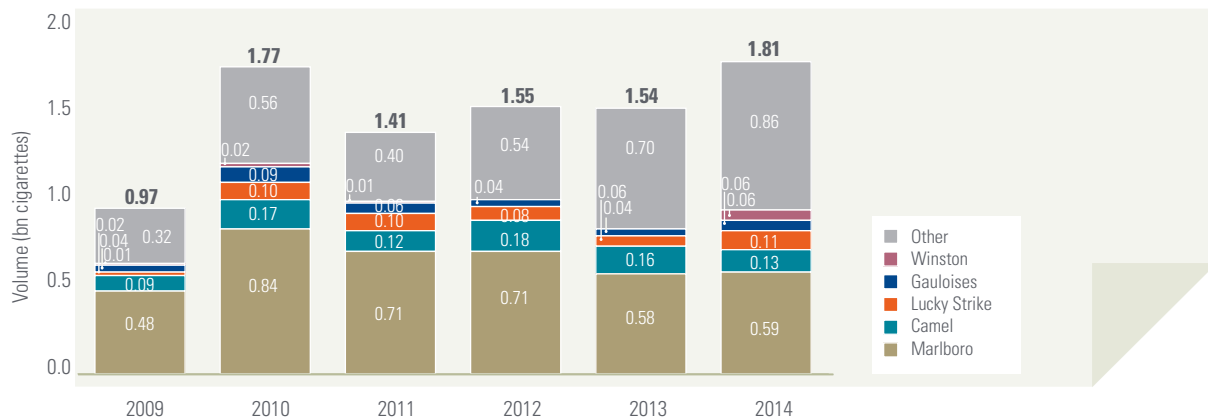
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)



# NON-DOMESTIC LEGAL INFLOWS BY BRAND

**Total ND(L) by brand - 2009-2014** <sup>(1)(2)(a)(b)</sup>



NETHERLANDS



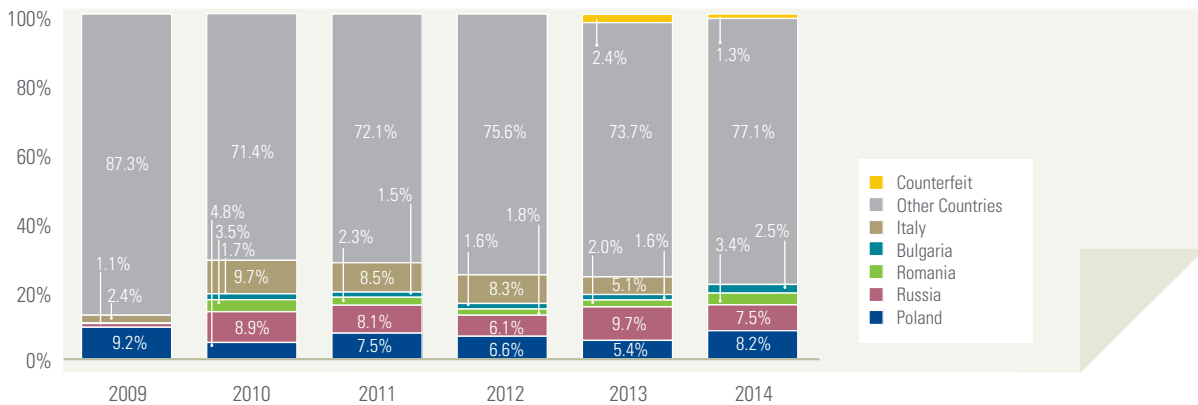
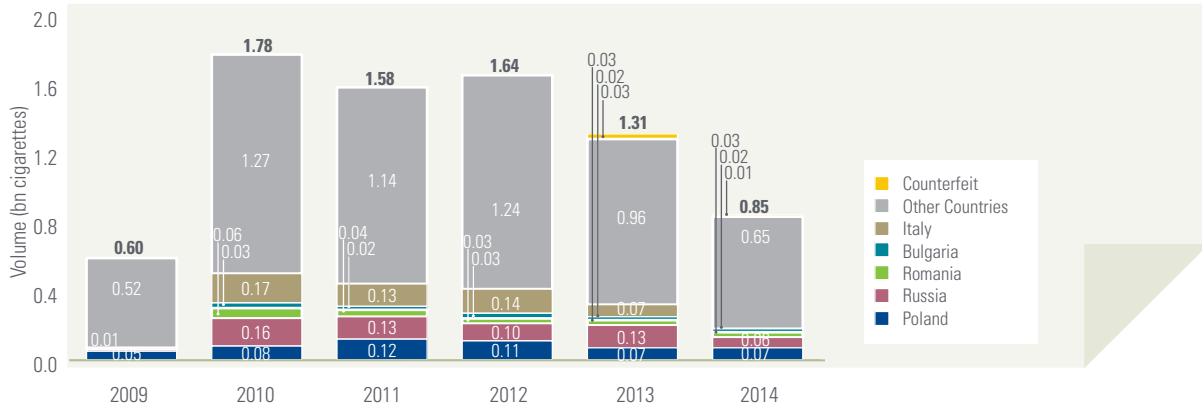
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# C&C volumes originating mainly from Eastern Europe fell in 2014

Total C&C by origin - 2009-2014 <sup>(1)(2)(a)</sup>



NETHERLANDS



PROJECT SUN

### C&C declined by 35% between 2013 and 2014

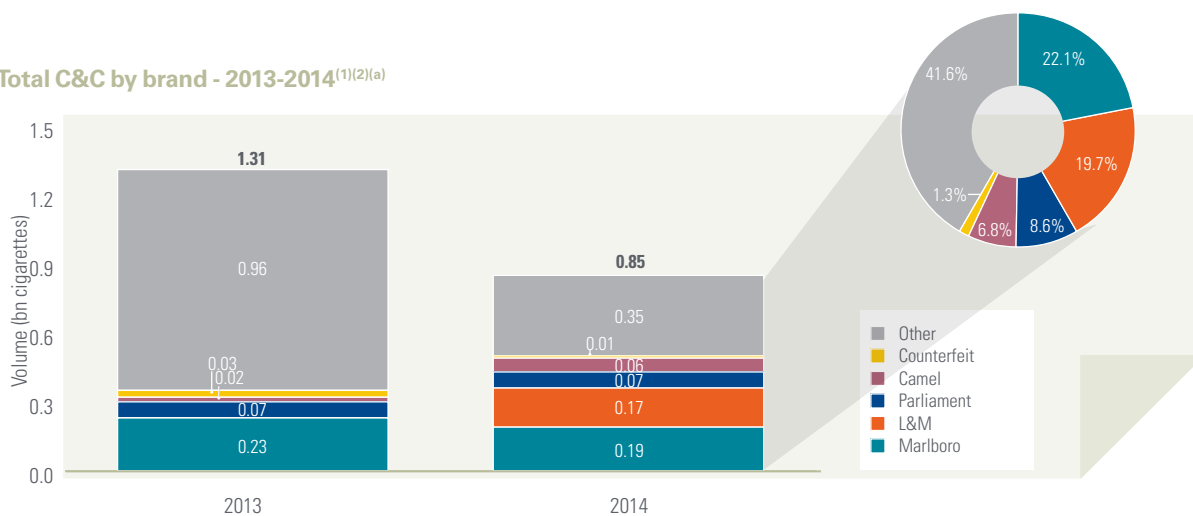
- Illicit Whites represented 4% of C&C volumes in 2014, and the largest brand flow was American Legend
- If the total volume of C&C had been consumed legally within the Dutch market, an additional tax revenue of approximately €192m would have been raised by the Netherlands Treasury<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

# C&C INFLOWS BY BRAND

Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>



NETHERLANDS



PROJECT SUN

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

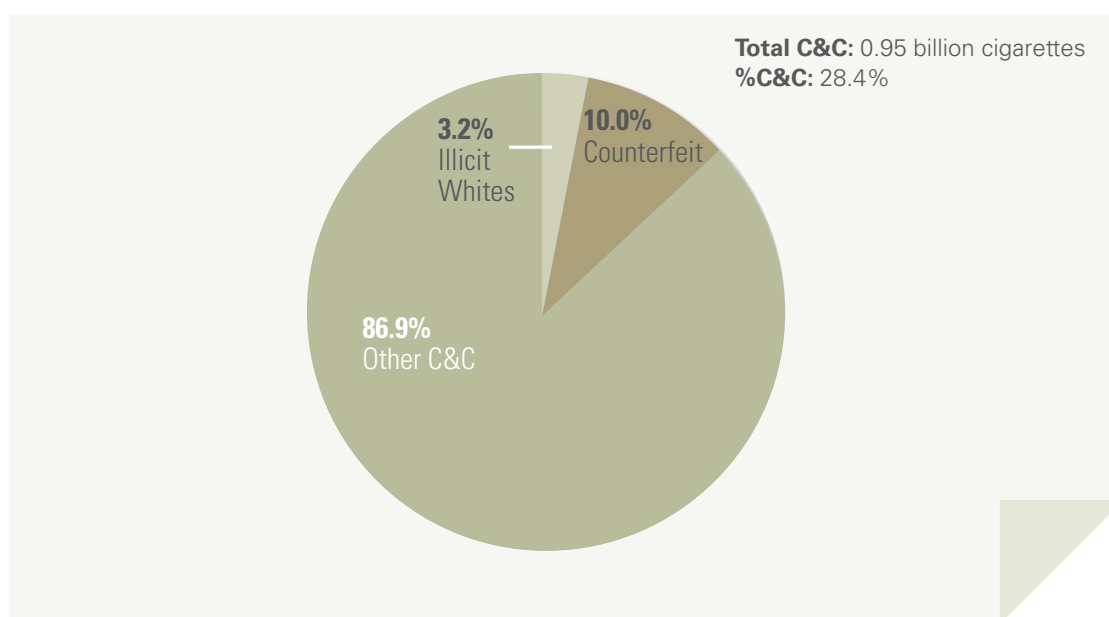
Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
 (2) KPMG analysis of data sources provided by manufacturers

# NORWAY



Norway has the second highest incidence of C&C in the study

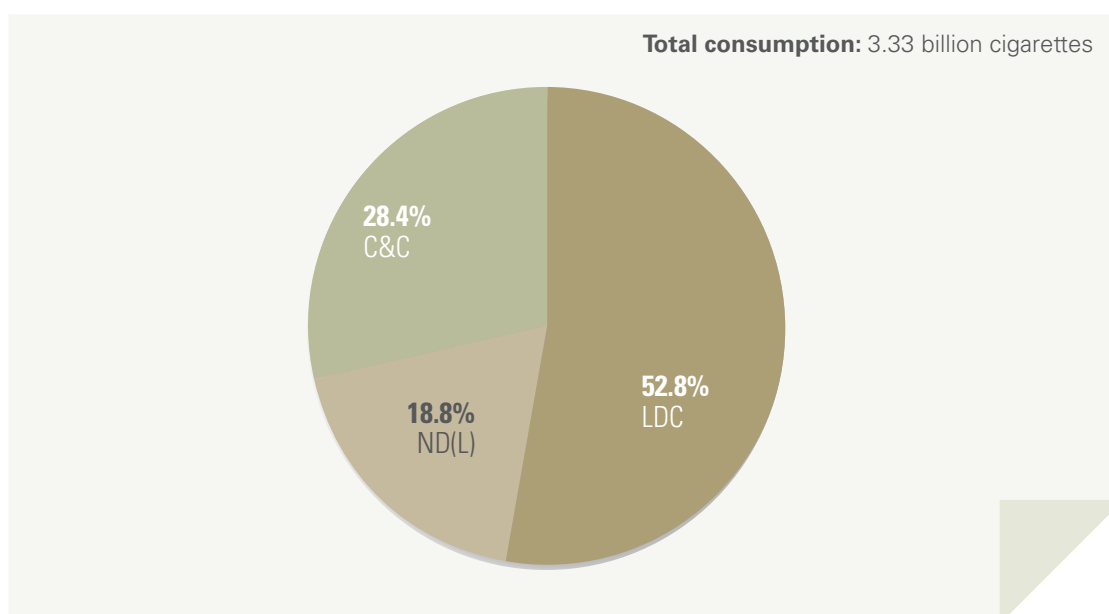
Manufactured cigarette C&C volumes and share of overall consumption - 2014



NORWAY

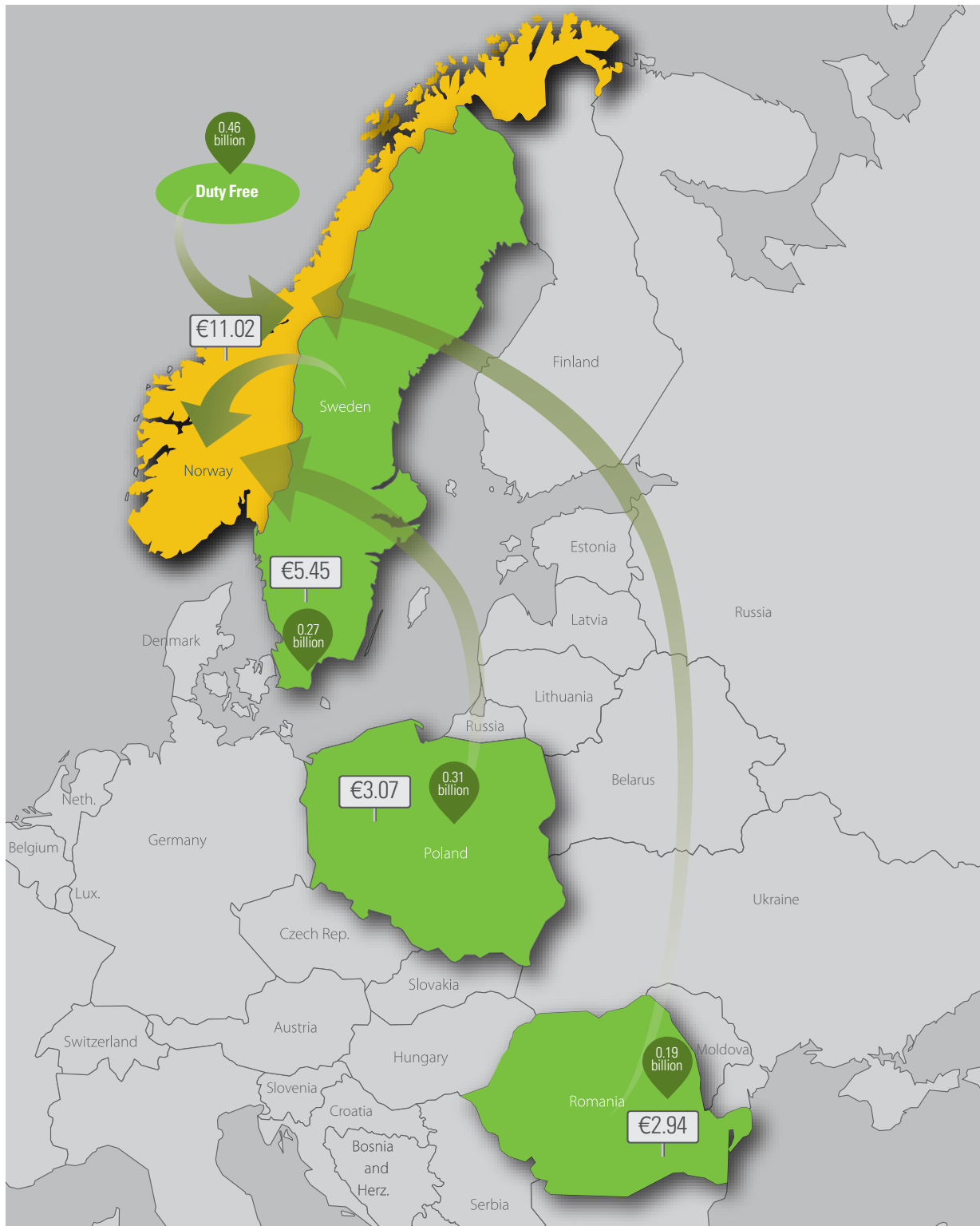


Manufactured cigarette consumption - 2014



PROJECT SUN

# MANUFACTURED CIGARETTE CONSUMPTION



PROJECT SUN

Main inflow

Main outflow

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow.

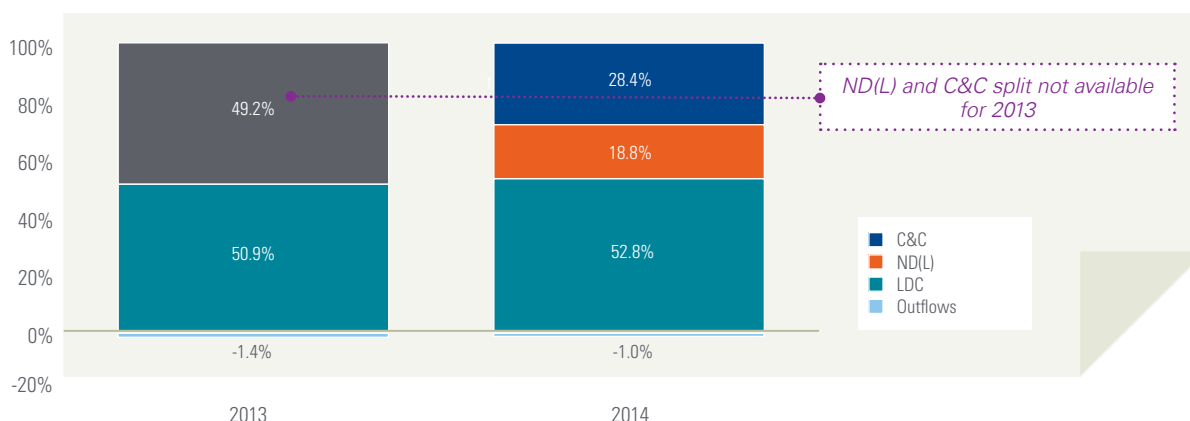
Source: (1) KPMG EU Flows Model.

# Cigarette consumption declined against a background of rising domestic prices and weak economic conditions

## Total manufactured cigarette consumption – Norway<sup>(1)(2)(a)</sup>

TOTAL NORWAY CONSUMPTION			
Billion cigarettes	2013	2014	2013-14 %
Legal domestic sales (LDS)	1.83	1.79	(2%)
Outflows	-0.05	-0.03	(29%)
Legal domestic consumption (LDC)	1.78	1.76	(1%)
Non-domestic legal (ND(L))		0.63	n/a
Counterfeit and contraband (C&C)		0.95	n/a
Total non-domestic	1.72	1.57	(9%)
<b>Total consumption</b>	<b>3.50</b>	<b>3.33</b>	<b>(5%)</b>

## Share of Norway cigarette consumption by type - 2013-2014<sup>(1)(2)</sup>



### Consumption of manufactured cigarettes declined by 5% and non-domestic consumption declined by 9%

- Average prices increased from NOK94.50 to NOK97.65<sup>(3)</sup>
- Economic conditions in Norway may also have had an impact on manufactured cigarette consumption as the GDP per capita declined by 2.3% in 2014<sup>(4)</sup>
- As the highest priced market in Europe, Norway experienced high levels of non-domestic consumption
- As Norway is not an EU member state, Norwegians are subject to low legal limits of 200 cigarettes per traveller

Note: (a) In 2013 and 2014 non-domestic incidence is stated on a sticks basis

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) Pricing tables from PMI (4) 2014 Economist Intelligence Unit



# The biggest inflow came from Duty Free labelled cigarettes

## Total inflows by country of origin – 2013-2014<sup>(1)(a)(b)</sup>

ND INFLOWS TO NORWAY		
Billion cigarettes	2013	2014
Duty Free	0.50	0.46
Poland	0.40	0.31
Sweden	0.26	0.27
Romania	0.14	0.19
Belarus	0.02	0.03
Germany	0.03	0.02
Other	0.37	0.30
<b>Total inflows</b>	<b>1.72</b>	<b>1.57</b>

### Inflows are reflective of both high volumes of Duty Free and flows from lower-priced EU countries

- Duty Free labelled cigarettes are an important inflow given the significant price difference between domestic retail prices and Duty Free. From July 2014 consumers were able to swap their tobacco allowance for an increased alcohol allowance which may have impacted the overall volume<sup>(2)</sup>
- Inflows from Sweden are reflected in the high volume of Norwegians that live on the border and frequently cross to Sweden on shopping trips
- Polish cigarettes are approximately 4 times cheaper than Norwegian cigarettes. Polish cigarettes are brought to Norway through the large volume of Polish migrant workers<sup>(3)(4)</sup>

## Total outflows by destination country – 2013-2014<sup>(1)</sup>

OUTFLOWS FROM NORWAY		
Billion cigarettes	2013	2014
Netherlands	0.01	0.02
Ireland	0.00	0.00
UK	0.01	0.00
Other	0.02	0.01
<b>Total outflows</b>	<b>0.05</b>	<b>0.03</b>

**Norway is one of the highest priced countries in the world and therefore outflows are extremely low, mainly as a result of outbound tourism<sup>(4)</sup>**

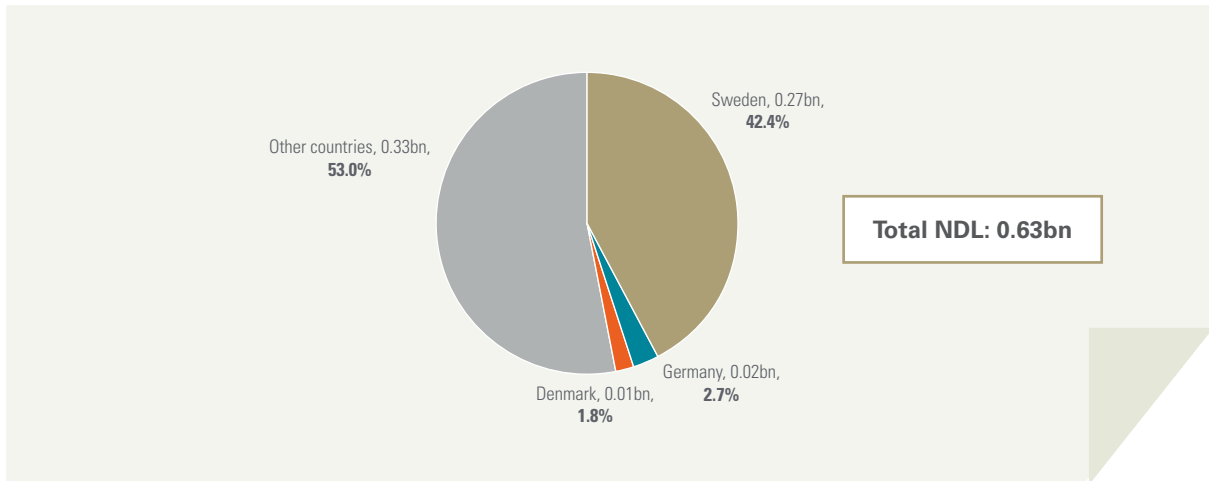
Notes: (a) The Duty Free inflow contains both "other" Duty Free product and Illicit Whites which have Duty Free labelling  
(b) The volumes reported in 2013 are the results of an empty pack survey in Norway as it was not part of project SUN, therefore the results are not comparable to the rest of the 2013 study

Sources: (1) KPMG EU Flows Model (2) Norwegian customs and excise (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model



## ND(L) inflows are mainly lower priced Swedish products or Duty Free

Total ND(L) by origin - 2014<sup>(1)(2)(a)(b)(c)</sup>



### ND(L) volumes accounted for 40% of total non-domestic inflows in 2014

- The largest ND(L) inflows were from Sweden. This is likely to be due to the average price of €11.02 in Norway compared to €5.45 in Sweden and high volumes of border shoppers<sup>(3)</sup>
  - Prince originated mainly from Sweden
- Owing to the large number of outbound trips to Denmark and Germany, all cigarettes from these markets are assumed to be legal

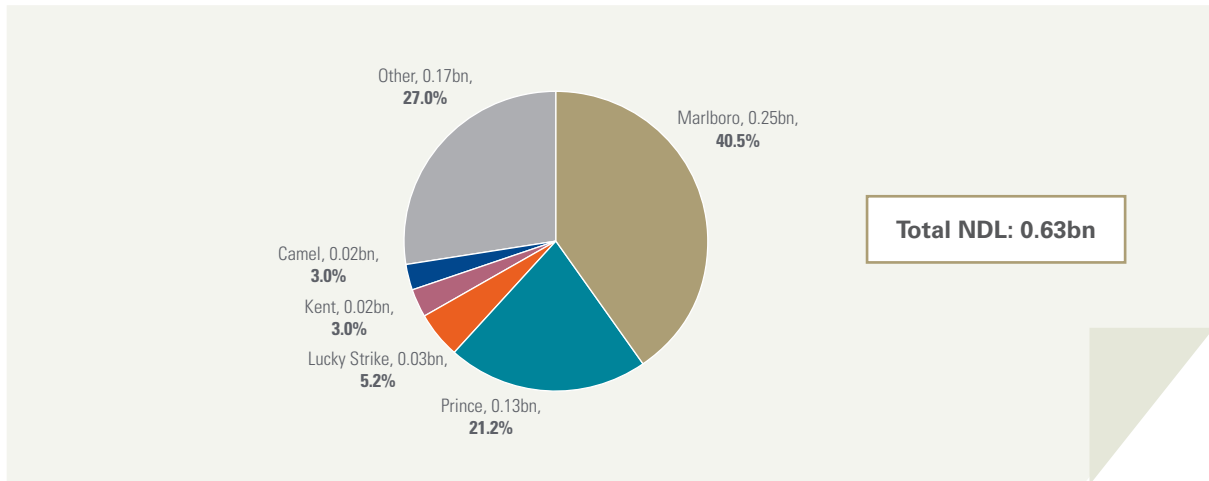
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers (c) As Norway has been included in the study for the first time in 2014, there are no prior year figures for comparison in the chart

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)



# NON-DOMESTIC LEGAL INFLOWS BY BRAND

Total ND(L) by brand - 2014<sup>(1)(2)(a)(b)(c)</sup>



NORWAY



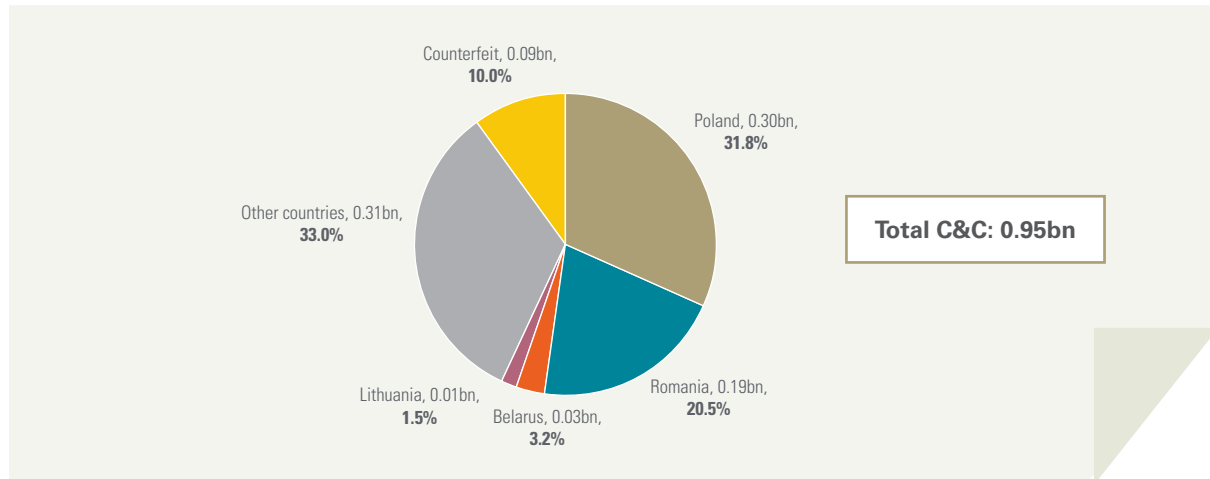
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers (c) As Norway has been included in the study for the first time in 2014, there are no prior year figures for comparison in the chart

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers

C&C flows accounted for approximately 60% of non-domestic inflows in 2014

Total C&C by origin - 2014<sup>(1)(2)(a)(b)</sup>



NORWAY



PROJECT SUN

**Approximately 0.95 billion cigarettes consumed in Norway were classified as C&C, over 28% of total consumption**

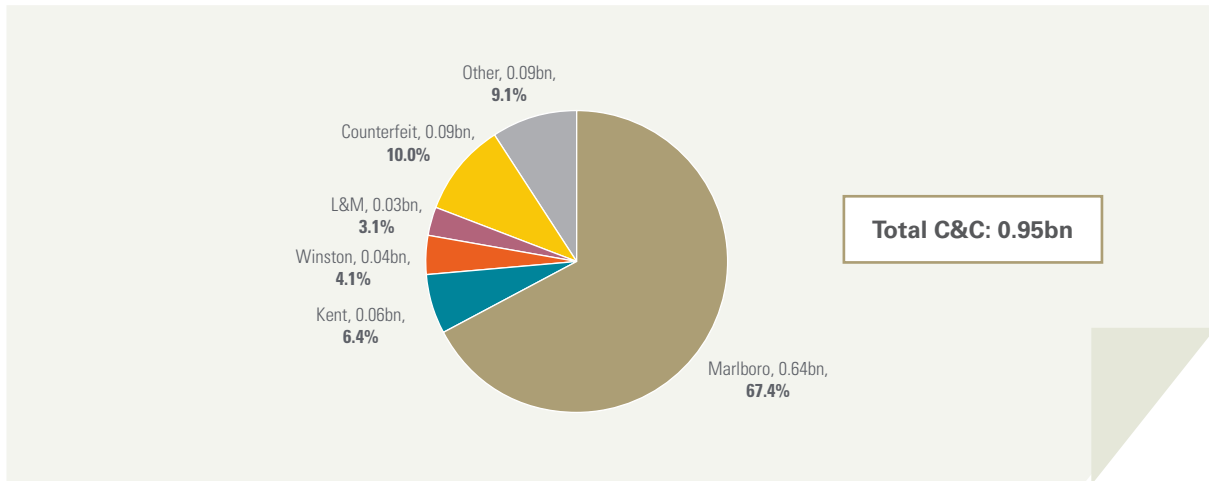
- The largest C&C inflows originated from Poland and Romania where the volume of cigarettes identified was not explained by the number of border crossings between countries
  - High volumes of Marlboro came from Poland and Kent from Romania
- If the total volume of C&C had been consumed legally within the Norwegian market, an additional tax revenue of approximately €180m (NOK1.6bn) would have been raised by the Norwegian Treasury<sup>(3)</sup>

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows. (b) As Norway has been included in the study for the first time in 2014, there are no prior year figures for comparison in the chart

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
 (2) KPMG analysis of data sources provided by manufacturers (3) PMI tax tables

## C&C INFLOWS BY BRAND

Total C&C by brand - 2014<sup>(1)(2)(a)(b)</sup>



NORWAY

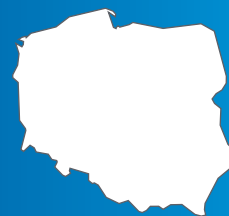


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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows. (b) As Norway has been included in the study for the first time in 2014, there are no prior year figures for comparison in the chart

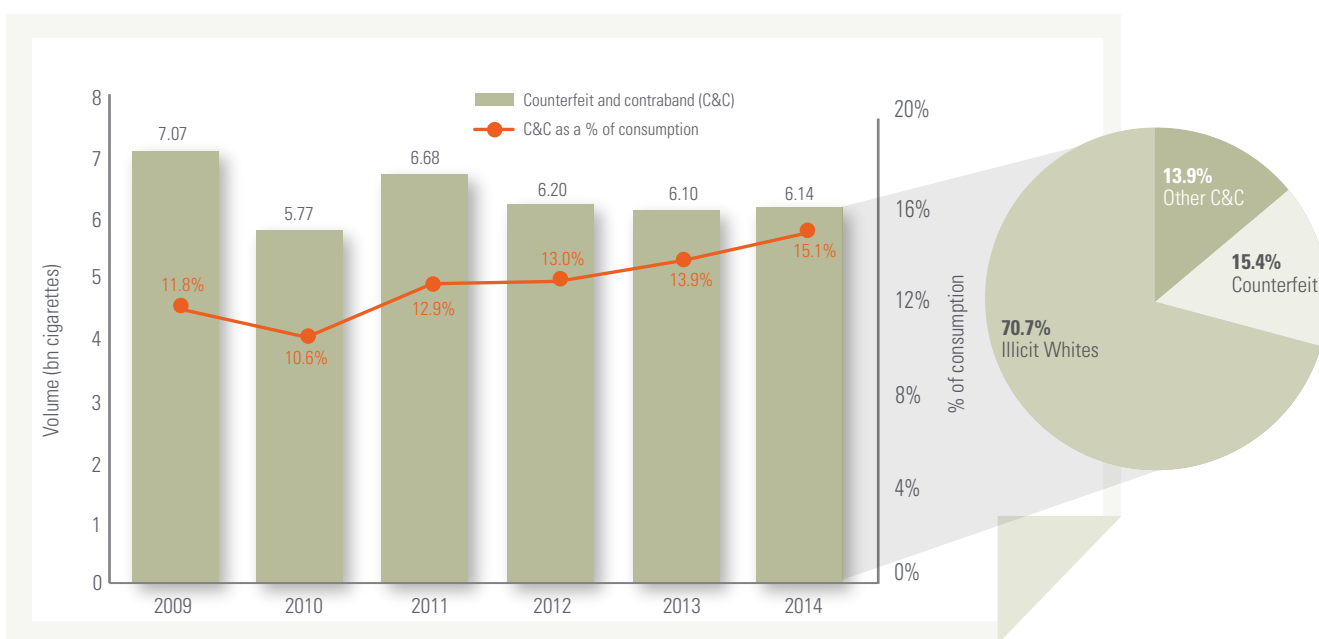
Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers

# POLAND



Almost all C&C to Poland comes from lower-priced non-EU countries

Manufactured cigarette C&C volumes and share of overall consumption - 2009-14

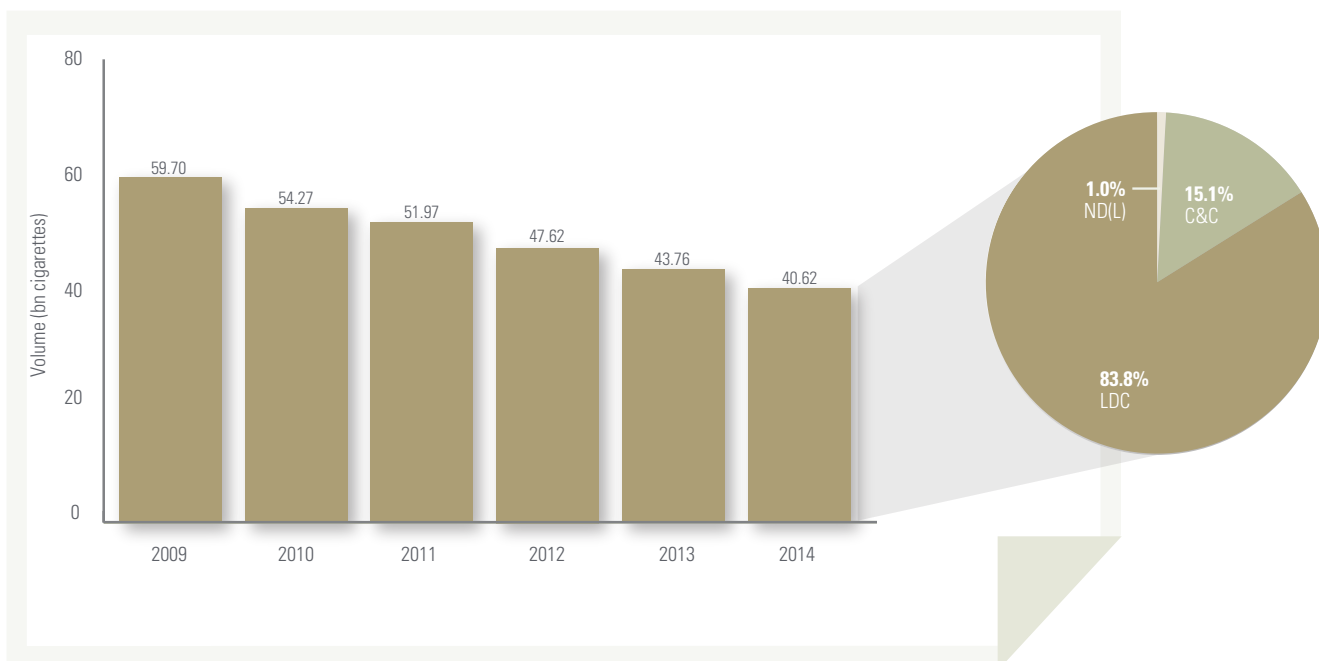


POLAND



PROJECT SUN

Manufactured cigarette consumption - 2009-14



# KEY INFLOWS AND OUTFLOWS



POLAND



PROJECT SUN

Main outflow █  
Main inflow █

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

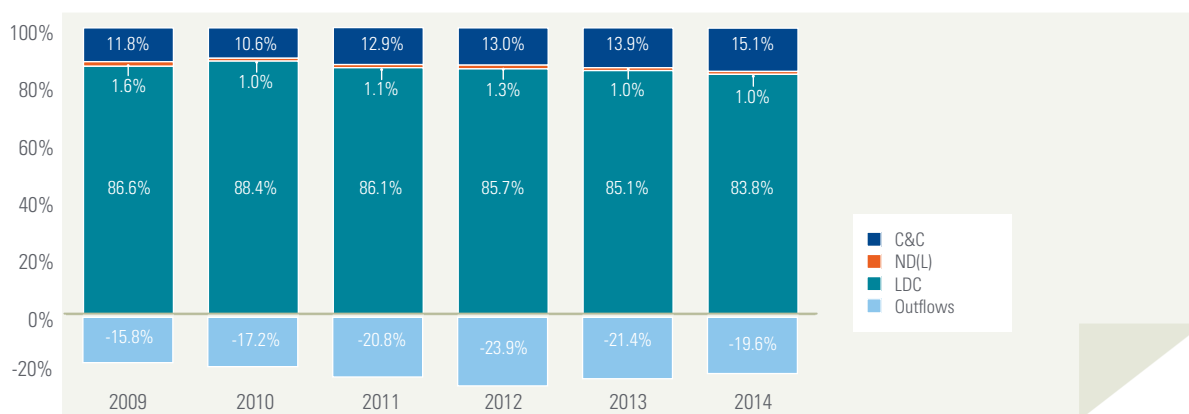
Source: (1) KPMG EU Flows Model

Legal domestic consumption has been negatively impacted by growing loose tobacco consumption (both legal and illicit) and non-EU C&C

**Total manufactured cigarette consumption - Poland** <sup>(1)(2)(3)(a)</sup>

TOTAL POLAND CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14%
Legal domestic sales (LDS)	61.12	57.32	55.55	52.15	46.63	42.00	(10%)
Outflows	-9.43	-9.35	-10.80	-11.36	-9.39	-7.95	(15%)
Legal domestic consumption (LDC)	51.68	47.97	44.75	40.79	37.24	34.05	(9%)
Non-domestic legal (ND(L))	0.94	0.53	0.55	0.63	0.43	0.42	(1%)
Counterfeit and contraband (C&C)	7.07	5.77	6.68	6.20	6.10	6.14	1%
Total non-domestic	8.02	6.30	7.23	6.83	6.52	6.56	1%
<b>Total consumption</b>	<b>59.70</b>	<b>54.27</b>	<b>51.97</b>	<b>47.62</b>	<b>43.76</b>	<b>40.62</b>	<b>(7%)</b>

**Share of Poland cigarette consumption by type - 2009-2014** <sup>(1)(2)</sup>



POLAND



PROJECT SUN

**Price increases in Poland may have led to consumers looking for cheaper alternative products, resulting in a decline in legal domestic sales**

- Legal domestic sales may have been impacted by a 13.1% increase in average price in local currency terms, underpinned by increased excise requirements<sup>(4)</sup>
  - On 1 January 2014 Poland met the minimum EU requirement of €90 of tax per 1,000 cigarettes four years ahead of the EU deadline
- The decline in legal domestic sales of manufactured cigarettes is matched by a 5% increase of OTP products. In addition, industry estimates of illicit OTP range from 4 – 6 billion cigarette equivalents in 2014. In 2013 the Ministry of Finance estimated the potential lost revenue due to illicit OTP to be PLN 1,934 million (€470 million). KPMG has not undertaken any analysis on revenue losses due to illicit OTP or bulk tobacco in this report<sup>(5)(6)(b)</sup>

**At the end of 2014, the government acted to prevent the exploitation of certain tax rules which were contributing to increased illicit loose tobacco, including:**

- Oversized ‘party cigars’ (which can be unwrapped and used as loose tobacco)
- Cigarette production machinery at retail points of sale

Notes: (a) In 2012 and 2013 non-domestic incidence is stated on a cigarettes basis. Prior to this a packs basis was used (see methodology section). (b) Estimated by calculating the consumption gap between sales of tubes and papers and sales of legal FCT. We note the analysis has not been adjusted for other illicit uses (e.g. cannabis use)

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) Ministry of Finance (4) EC Excise Duty tables (Part III – Manufactured Tobacco) (5) Nielsen (6) Ministry of Finance Department of Customs and Excise

## Significant inflows reflect wide price differentials whilst outflows to Western Europe declined

### Total inflows by country of origin - 2009-2014<sup>(1)</sup>

ND INFLOWSTO POLAND						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Belarus	1.04	1.39	2.66	3.52	2.97	3.15
Illicit Whites with Duty Free labelling						1.16
Duty Free	0.36	0.23	0.50	0.62	1.18	0.26
Russia	1.35	1.08	1.01	0.83	0.64	0.59
Ukraine	4.71	2.96	1.70	1.07	0.30	0.14
Germany	0.01	0.00	0.07	0.08	0.10	0.08
Other	0.54	0.64	1.28	0.71	1.33	1.18
<b>Total inflows</b>	<b>8.02</b>	<b>6.30</b>	<b>7.23</b>	<b>6.83</b>	<b>6.52</b>	<b>6.56</b>

### Flows from Russia and Ukraine were replaced largely by Belarusian flows and Illicit Whites with Duty Free labelling

- Belarus continued to remain the cheapest priced market in Eastern Europe, with an average price difference to Poland growing from €2.16 to €2.39
- Whilst prices rose in Russia, the devaluation of the Rouble in October 2014 resulted in average price differences increasing from €1.49 to €2.16<sup>(2)</sup>
- The decrease in Ukrainian inflows was likely due to increased border security due to regional tensions. The price difference with Ukraine increased from €1.92 in 2013 to €2.41 in December, partially due to the devaluation of the Hryvnia<sup>(2)</sup>
- 82% of Duty Free labelled packs were Illicit White brands

### Total outflows by destination country - 2009-2014<sup>(1)(a)</sup>

OUTFLOWS FROM POLAND						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Germany	7.54	7.49	8.64	8.54	7.54	5.67
UK	1.01	0.86	0.96	1.72	0.89	1.23
Norway						0.31
France	0.28	0.30	0.55	0.31	0.32	0.24
Other	0.61	0.69	0.66	0.78	0.63	0.51
<b>Total outflows</b>	<b>9.43</b>	<b>9.35</b>	<b>10.80</b>	<b>11.36</b>	<b>9.39</b>	<b>7.95</b>

- The decline in German outflows may have been impacted by a lower price differences and the availability of cheaper alternatives from the Czech Republic<sup>(2)</sup>
- Increased outflows to the UK were likely influenced by greater price differences and the 9% depreciation of the Polish Zloty

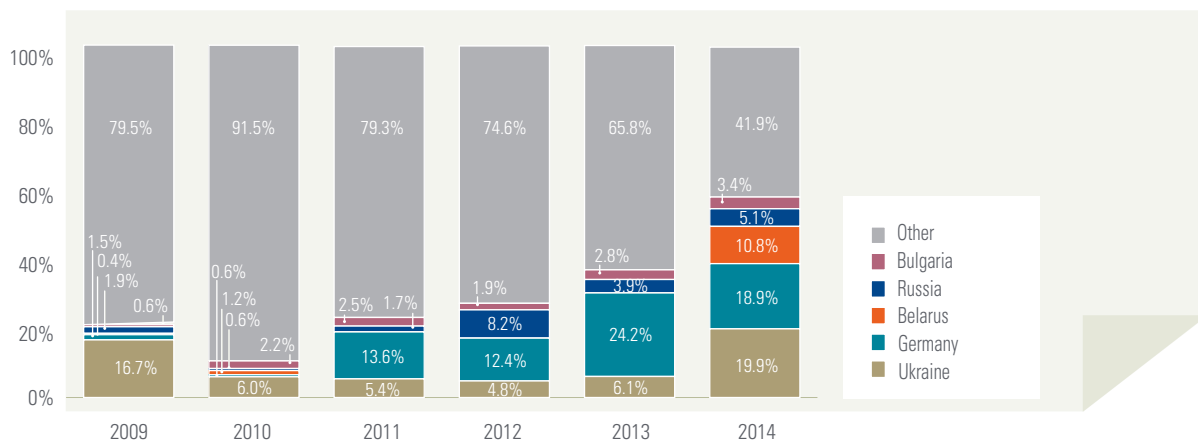
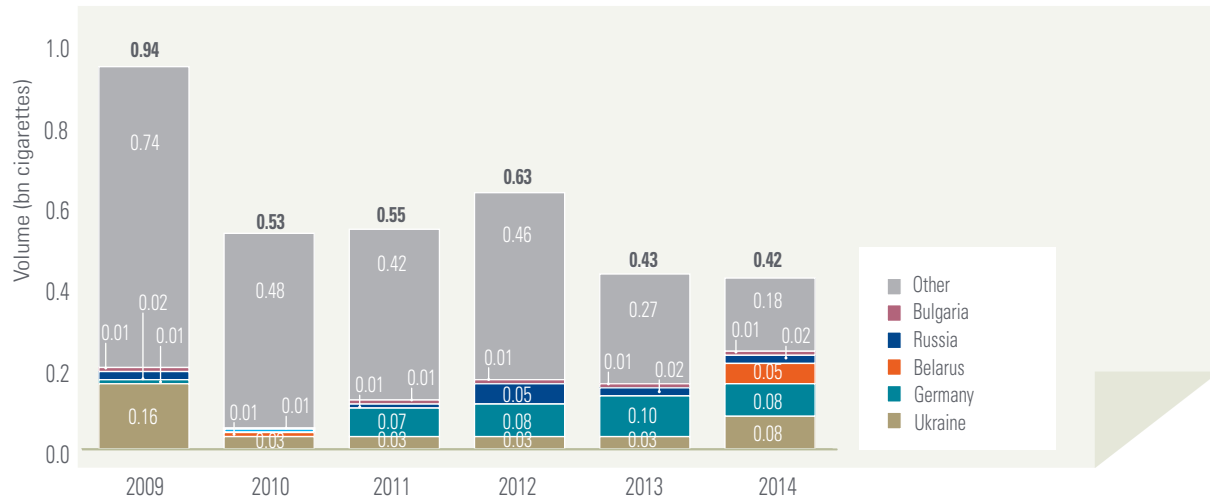
Note: (a) The noted decline could have been impacted by a change in EPS methodology in Germany in 2014. Sales data from POS locations close to the German border provided by Nielsen indicated an 8% decline in sales

Sources: (1) KPMG EU Flows Model (2) EC Excise Duty tables (Part III – Manufactured Tobacco)



ND(L) inflows remained stable and accounted for less than 10% of non-domestic volumes

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



POLAND



PROJECT SUN

Increased inflows from the Ukraine and Belarus were a result of increased travel

- Traveller number increased by 16% from Poland to Ukraine and 18% from Poland to Belarus<sup>(1)</sup>
- German ND(L) inflows decreased despite an increase in travel flows between the two countries<sup>(1)</sup>

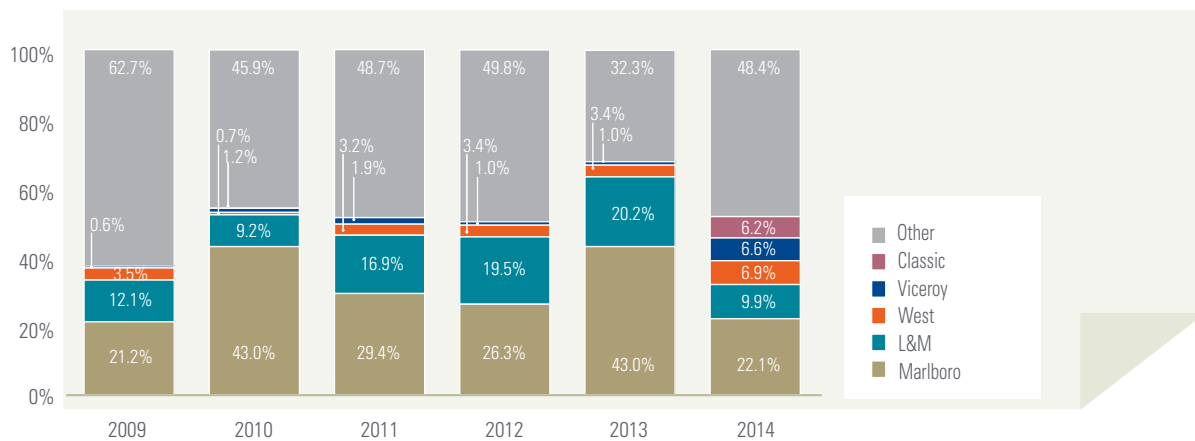
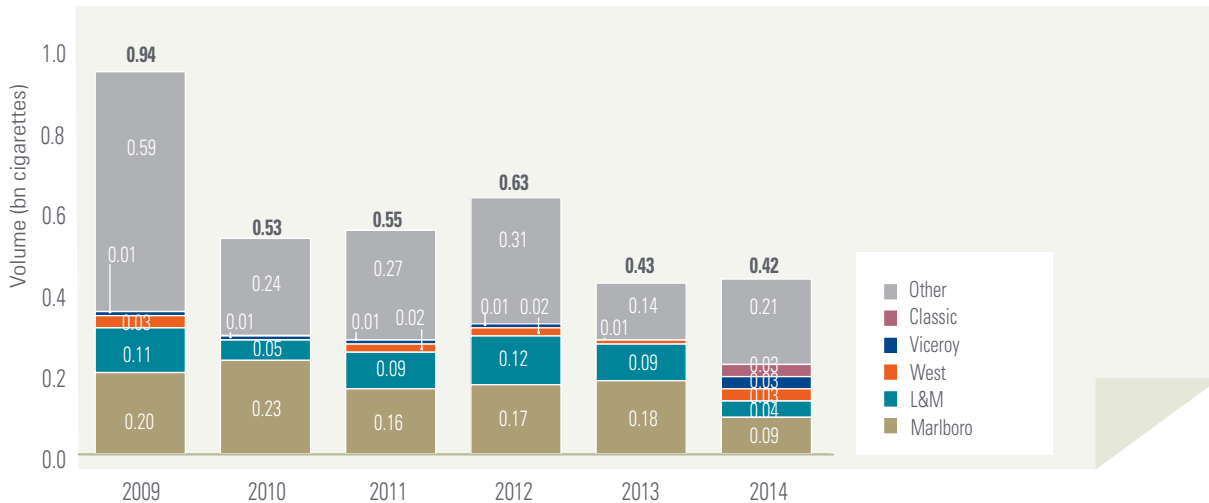
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers



# NON-DOMESTIC LEGAL INFLOWS BY BRAND

Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>



POLAND

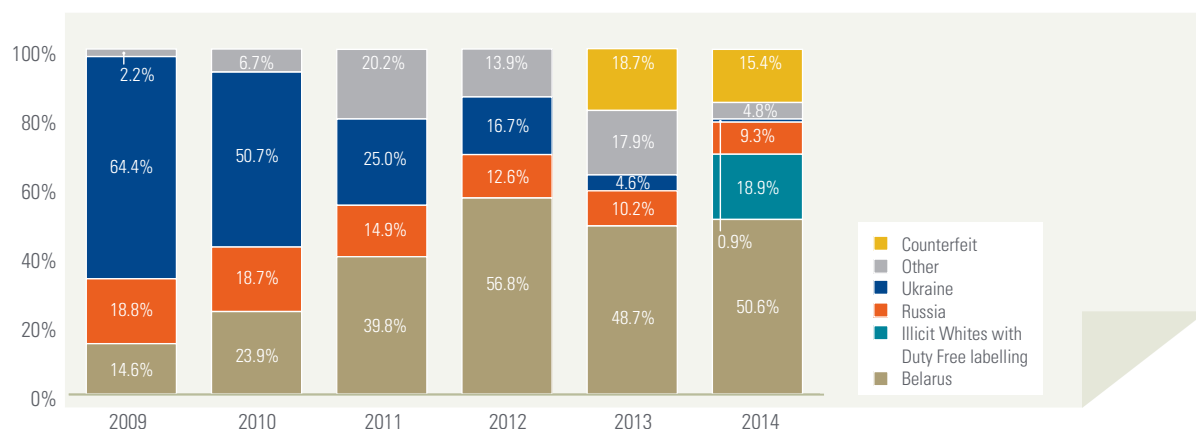
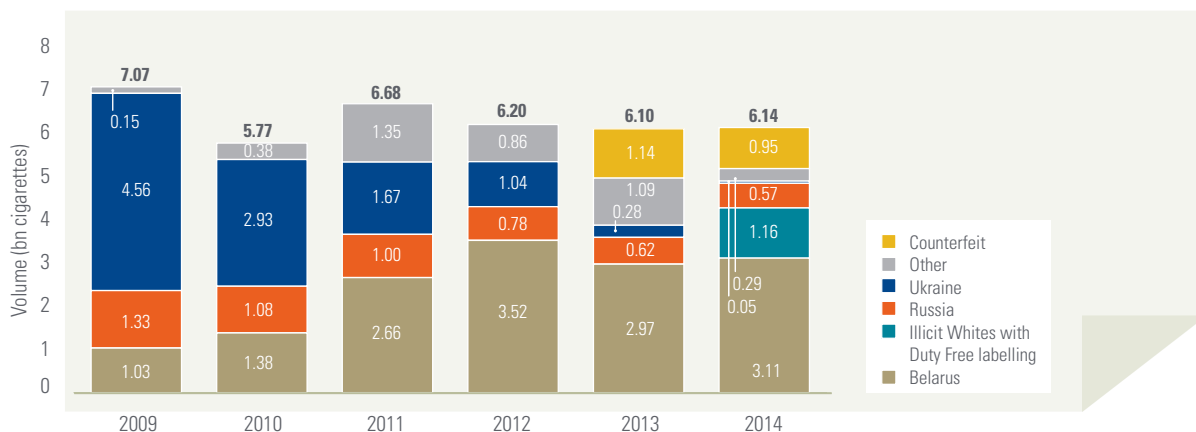
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# Over 50% of the C&C inflow came from Belarus

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



POLAND



PROJECT SUN

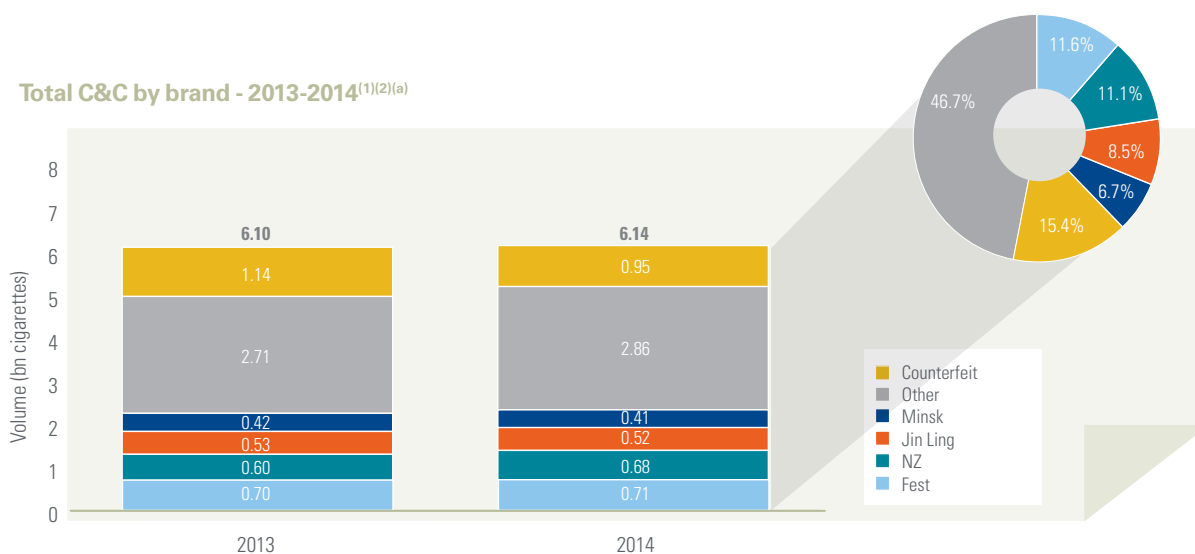
## Overall C&C remained flat in 2014 as Illicit Whites from Belarus and with Duty Free labelling offset declines from Russia and Ukraine

- Belarusian inflows increased 4.6% despite increased border enforcement activity, including the deployment of additional scanners, sniffer dogs and customs personnel<sup>(3)</sup>
  - Industry intelligence suggests this may be due to traffickers smuggling illicit product into other EU countries and then taking advantage of free movement within the Schengen area
- Key brands from Belarus included Fest, NZ and Minsk, with trademarks owned by Grodno Tobacco
- Half of Illicit Whites with Duty Free labelling came from Jin Ling, a trademark owned by Baltic Tobacco Factory
- If the total volume of C&C had been purchased legally within the Polish market, the Polish Treasury would have raised approximately €730m in additional tax revenues<sup>(4)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) Polish Customs Service (4) EC Excise Duty tables (Part III – Manufactured Tobacco)

## C&C INFLOWS BY BRAND



### Breakdown of Illicit Whites by type - 2009-2014<sup>(1)(a)</sup>

LABELLING OF ILLICIT WHITES INFLOWS TO POLAND						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	1.16	1.46	2.89	3.39	2.95	3.09
Duty Free	0.07	0.05	0.15	0.35	0.97	1.16
Unspecified	0.00	0.00	0.31	0.13	0.08	0.09
<b>Total Illicit Whites</b>	<b>1.23</b>	<b>1.51</b>	<b>3.35</b>	<b>3.87</b>	<b>3.99</b>	<b>4.34</b>

POLAND

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Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows  
 Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
 (2) KPMG analysis of data sources provided by manufacturers

# Non-domestic incidence heat map

Empty Pack Survey regional non-domestic incidence – 2014<sup>(1)</sup>



POLAND



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Source: (1) Independent agency Empty Pack Surveys, 2014



POLAND



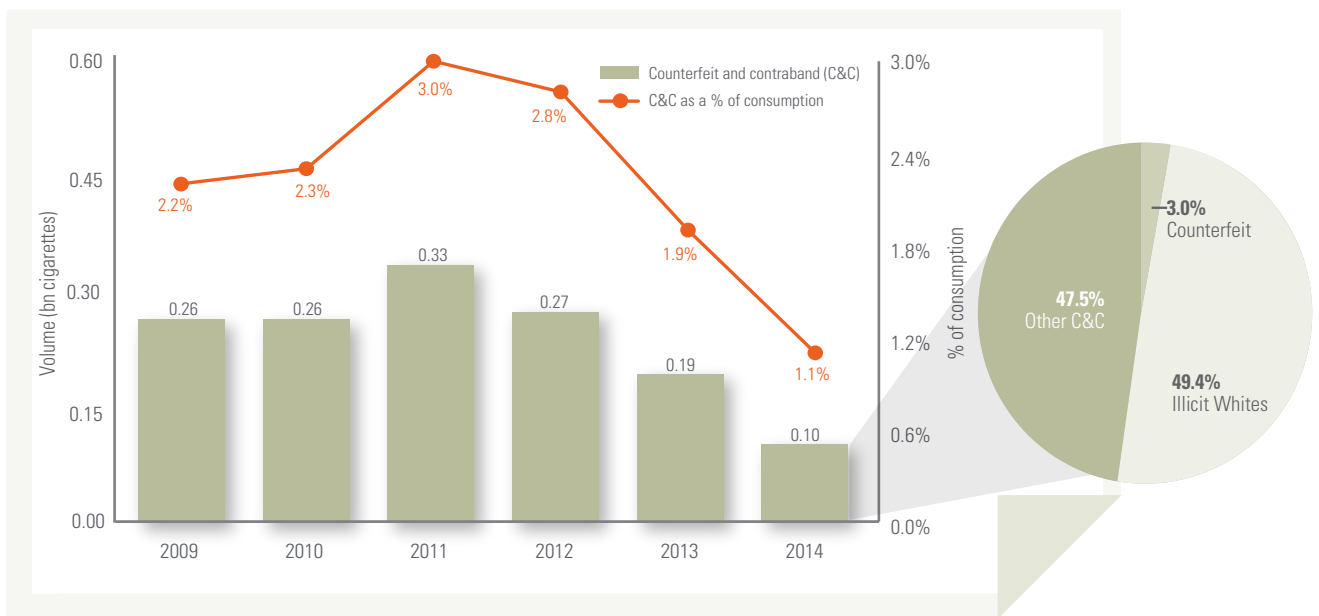
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# PORTUGAL



Consumption remained stable, while Counterfeit and Contraband declined, compensated by lower outflows

Manufactured cigarette C&C volumes and share of overall consumption - 2009-14

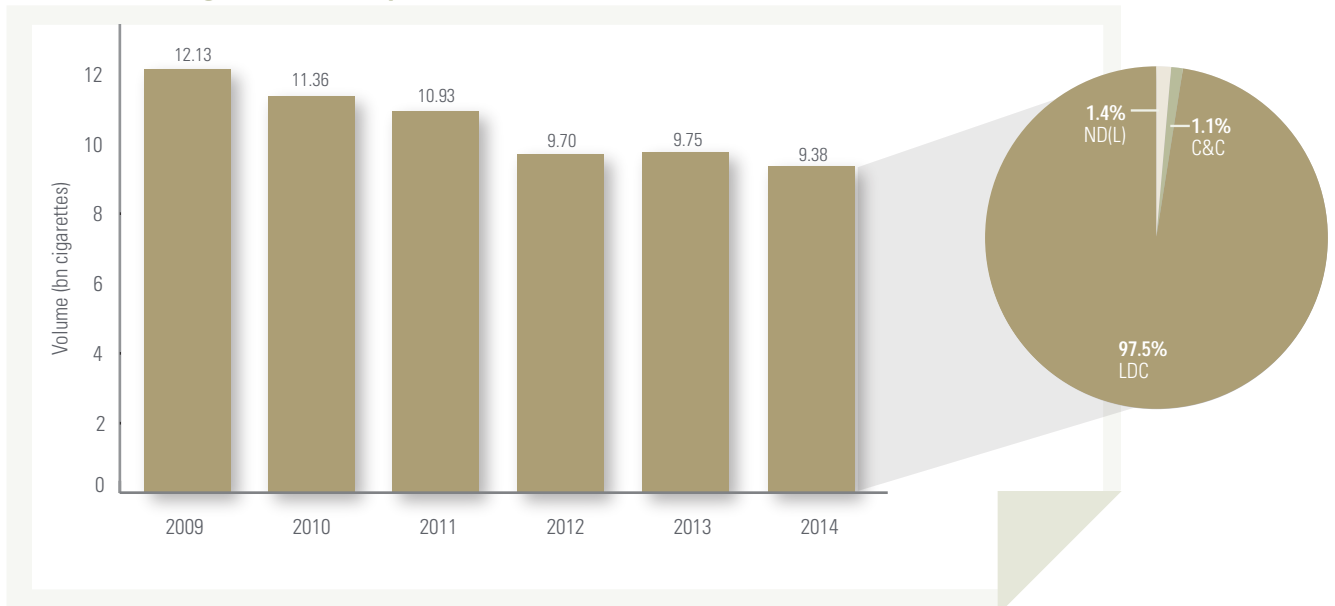


PORTUGAL

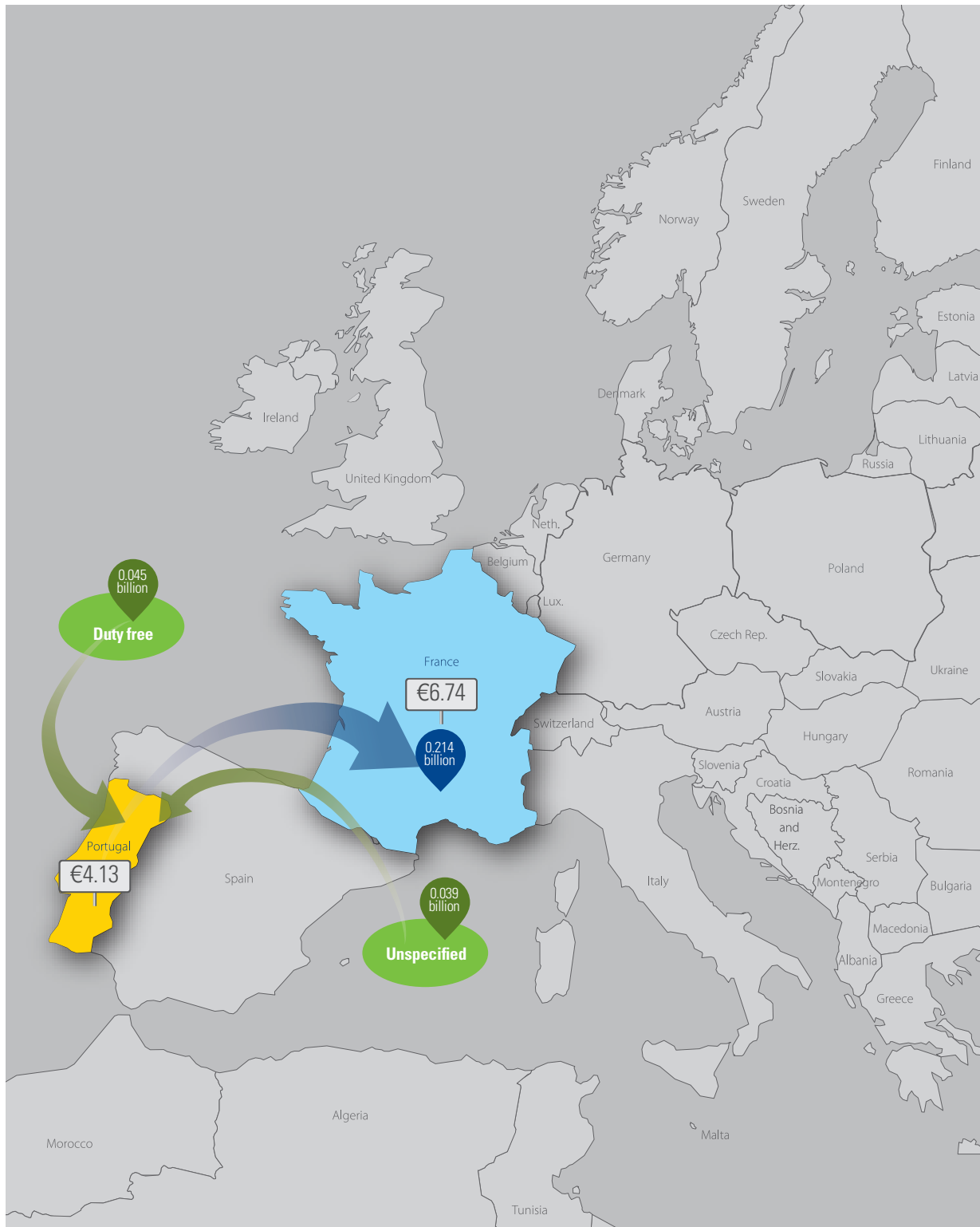


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Manufactured cigarette consumption - 2009-14



# KEY INFLOWS AND OUTFLOWS



PORTUGAL



PROJECT SUN

Main outflow

Main inflow

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

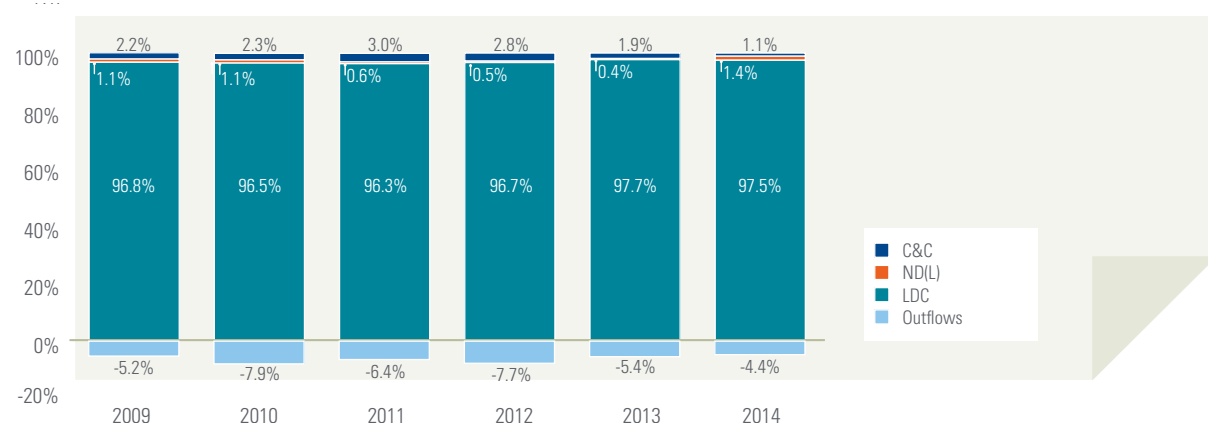
Source: (1) KPMG EU Flows Model

# Legal domestic sales declined against a background of price increases in Portugal in 2014

## Total manufactured cigarette consumption - Portugal<sup>(1)(2)(a)(b)</sup>

TOTAL PORTUGAL CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	12.37	11.86	11.23	10.13	10.04	9.56	(5%)
Outflows	-0.63	-0.89	-0.70	-0.75	-0.52	-0.41	(22%)
Legal domestic consumption (LDC)	11.73	10.97	10.53	9.38	9.52	9.15	(4%)
Non-domestic legal (ND(L))	0.13	0.13	0.07	0.05	0.03	0.13	>100%
Counterfeit and contraband (C&C)	0.26	0.26	0.33	0.27	0.19	0.10	(46%)
Total non-domestic	0.39	0.39	0.40	0.32	0.22	0.23	4%
<b>Total consumption</b>	<b>12.13</b>	<b>11.36</b>	<b>10.93</b>	<b>9.70</b>	<b>9.75</b>	<b>9.38</b>	<b>(4%)</b>

## Share of Portugal cigarette consumption by type 2009-2014<sup>(1)(2)</sup>



**Legal domestic sales declined by 5% in 2014 against a background of average price increases of 7.4%<sup>(3)</sup>**

**Non-domestic consumption increased as a result of increased visitor flows**

- Improving economic conditions in Portugal in 2014, including falling unemployment and an increase in GDP per capita and PDI may have had an impact on reducing C&C<sup>(4)(5)</sup>
- Despite low levels of non-domestic consumption, a survey conducted at the end of 2014 indicated a rise of non-domestic product identified in Portugal<sup>(6)(b)</sup>

Notes: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used (b) An additional pack collection was commissioned by Imperial in Q4. Non-domestic incidence increased by a further 0.9% to 3.4% of total consumption suggesting non-domestic volumes may continue to rise. This data was not used in the report to ensure comparability with previous years

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) 2014 Economist Intelligence Unit (5) 2014 Euromonitor (6) EPS provided by Imperial Tobacco





Inflows remained broadly stable with those from Duty Free labelled cigarettes accounting for the largest share by volume

**Total inflows by country of origin - 2009-2014 <sup>(1)(a)</sup>**

ND INFLOWS TO PORTUGAL						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Duty Free	0.06	0.05	0.08	0.06	0.07	0.05
Spain	0.13	0.11	0.04	0.02	0.00	0.04
Unspecified	0.00	0.00	0.07	0.06	0.05	0.04
Germany	0.00	0.00	0.00	0.00	0.00	0.01
Switzerland	0.00	0.00	0.00	0.00	0.00	0.01
Other	0.20	0.23	0.21	0.17	0.10	0.09
<b>Total inflows</b>	<b>0.39</b>	<b>0.39</b>	<b>0.40</b>	<b>0.32</b>	<b>0.22</b>	<b>0.23</b>

**Inflows in Portugal have historically been low compared to other markets due to its geographical location bordering only Spain, and its comparatively low prices**

- Duty Free labelled products continue to be the largest non-domestic inflow, accounting for 21.7% of the total inflows
- Many of the cigarettes with unspecified labelling were Illicit White brands

**Total outflows by destination country - 2009-2014<sup>(1)</sup>**

OUTFLOWS FROM PORTUGAL						
Billion cigarettes	2009	2010	2011	2012	2013	2014
France	0.27	0.51	0.41	0.44	0.30	0.21
UK	0.12	0.10	0.11	0.15	0.07	0.06
Netherlands	0.01	0.03	0.03	0.03	0.03	0.04
Other	0.22	0.25	0.16	0.13	0.12	0.10
<b>Total outflows</b>	<b>0.63</b>	<b>0.89</b>	<b>0.70</b>	<b>0.75</b>	<b>0.52</b>	<b>0.41</b>

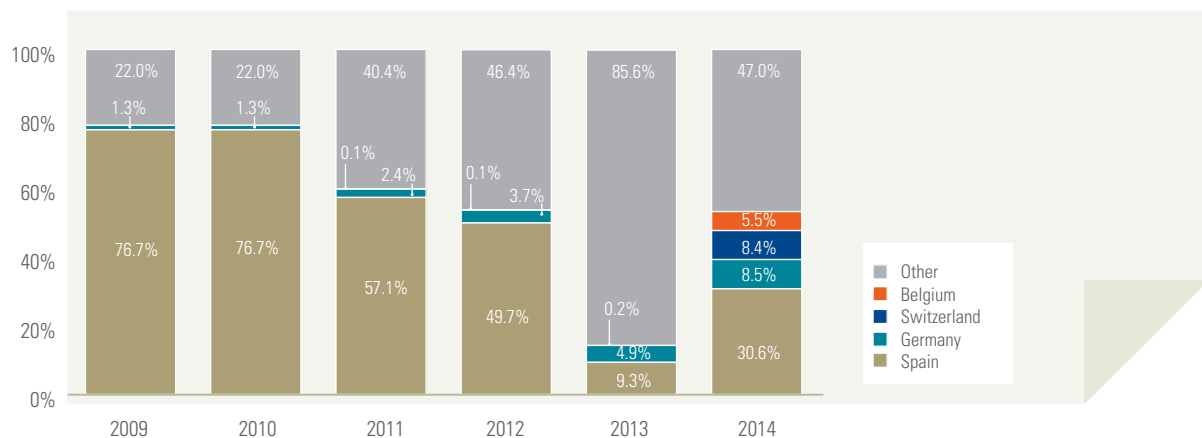
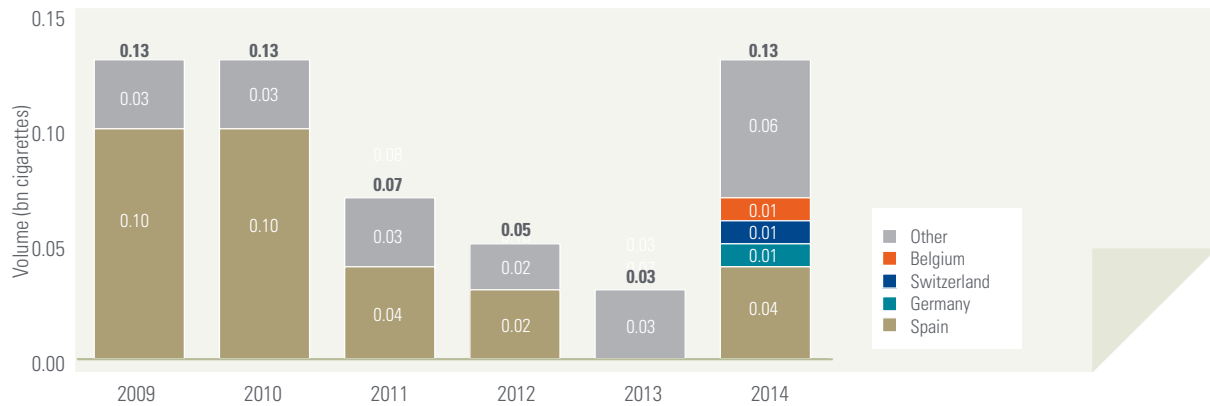
- Outflows are mainly reflected by tourist visits to Portugal from more expensive markets<sup>(2)</sup>
- The average price difference for a pack of 20 was €2.60 for France and €4.87 for the UK<sup>(3)</sup>

Note: (a) The Duty Free inflow contains both "other" Duty Free product and Illicit Whites which have Duty Free labelling.  
Sources: (1) KPMG EU Flows Model (2) EC Excise Duty tables (Part III – Manufactured Tobacco) (3) KPMG analysis of UNWTO Factbook 2008-2013



# Non-domestic legal volumes increased both in terms of volume and as a proportion of total consumption

Total ND(L) by origin - 2009-2014 <sup>(1)(2)(a)(b)</sup>



PORTUGAL



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### ND(L) more than quadrupled in 2014, with most of the increase coming from Spain

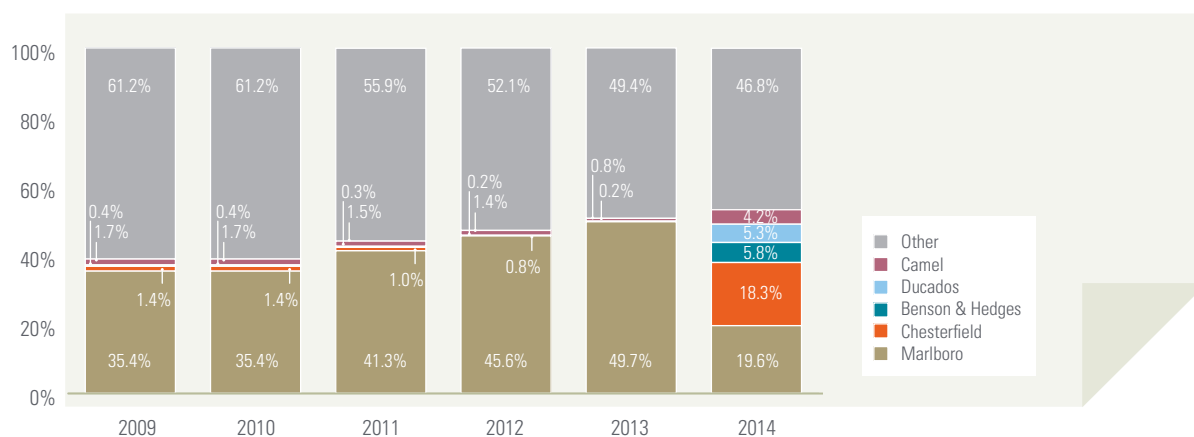
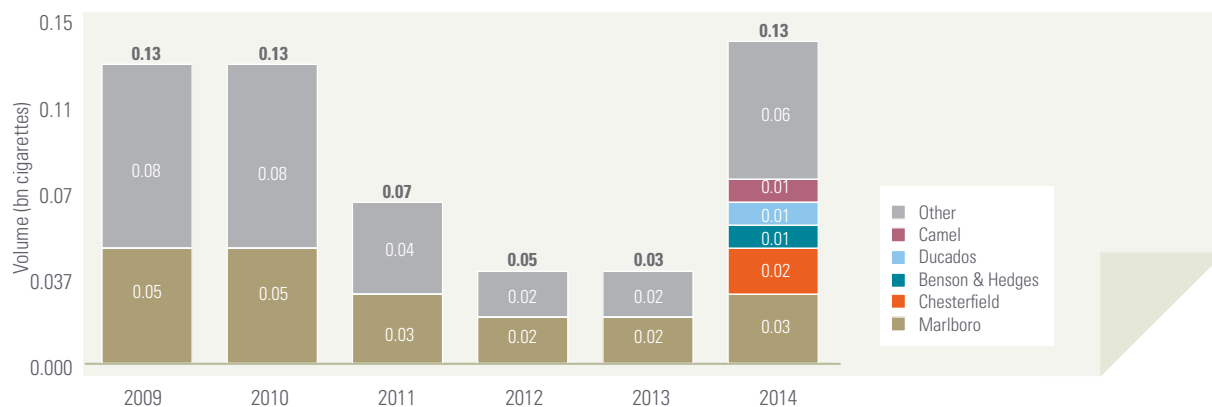
- Spain is a popular tourist destination for Portuguese travelling abroad and is a higher priced market than Portugal. As a result, all flows are considered legal
  - The majority of Chesterfield originated in Spain
- Flows from Germany, Switzerland and Belgium are considered to be legal flows from higher priced markets as a result of consumers bringing cigarettes when visiting Portugal. The increase was supported by greater visitor numbers
- There were also high volumes of legal Duty Free flows, reflected by high Portuguese travel to non-EU countries

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# NON-DOMESTIC LEGAL INFLOWS BY BRAND

**Total ND(L) by brand - 2009-2014** <sup>(1)(2)(a)(b)</sup>



PORTUGAL



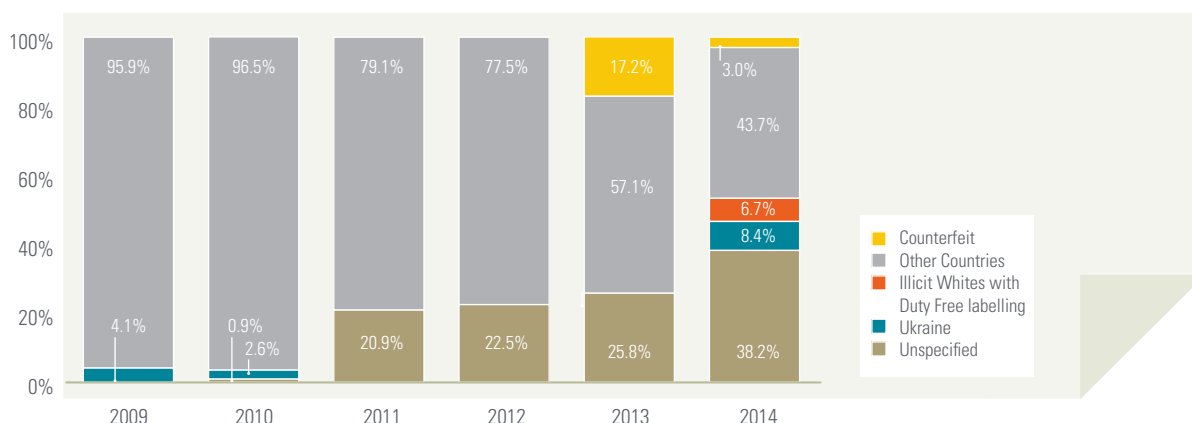
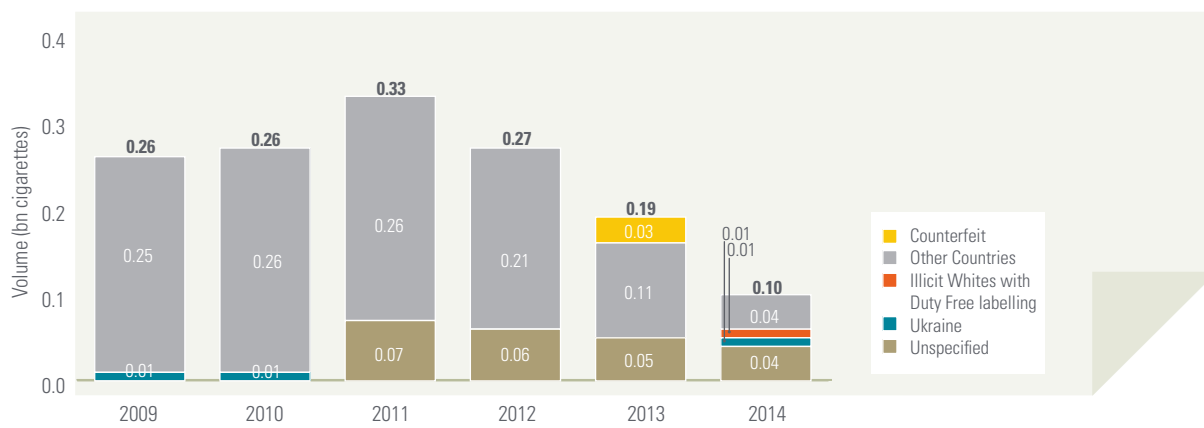
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# Illicit Whites with unspecified labelling was the largest C&C category in 2014

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



PORTUGAL



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## C&C declined, driven by declines in Marlboro and counterfeit product and leaving Illicit Whites as the largest C&C category in 2014

- The main Illicit White brands were Richman and American Legend accounting for half of the Illicit White volumes
- Cigarettes with unspecified labelling were identified most commonly in Agualva-Cacem and Queluz, low income suburbs of Lisbon. However, most Customs seizures occurred in the north of Portugal
- If the total C&C had been consumed legally within Portugal, it is estimated that an additional tax revenue of approximately €16m would have been raised by the Portuguese Treasury<sup>(3)</sup>

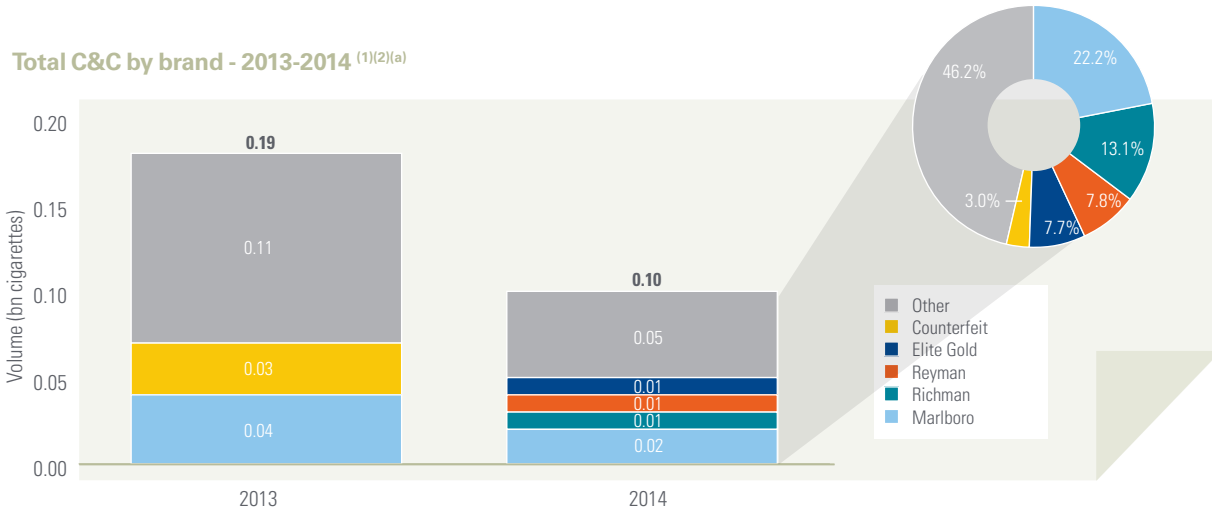
Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

(2) KPMG analysis of data sources provided by manufacturers

(3) EC Excise Duty tables (Part III – Manufactured Tobacco)

## C&C INFLOWS BY BRAND



### Breakdown of Illicit Whites by type - 2009-2014<sup>(1)</sup>

LABELLING OF ILLICITWHITES INFLOWS TO PORTUGAL						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country Specific	0.012	0.012	0.047	0.109	0.041	0.013
Duty Free	0.000	0.000	0.000	0.004	0.001	0.007
Unspecified	0.000	0.000	0.011	0.016	0.010	0.031
<b>Total Illicit Whites</b>	<b>0.012</b>	<b>0.012</b>	<b>0.058</b>	<b>0.129</b>	<b>0.052</b>	<b>0.051</b>

PORTUGAL



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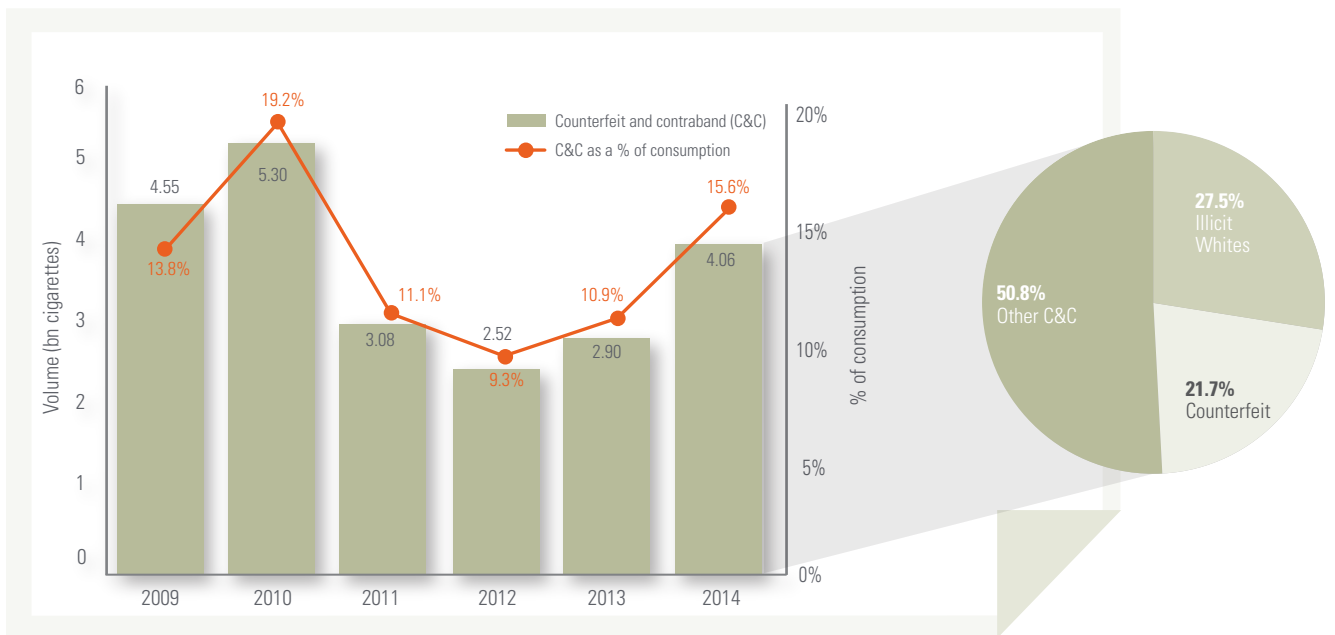
Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers



## Illicit Whites brands accounted for 27.5% of C&C consumption

Manufactured cigarette C&C volumes and share of overall consumption - 2009-2014

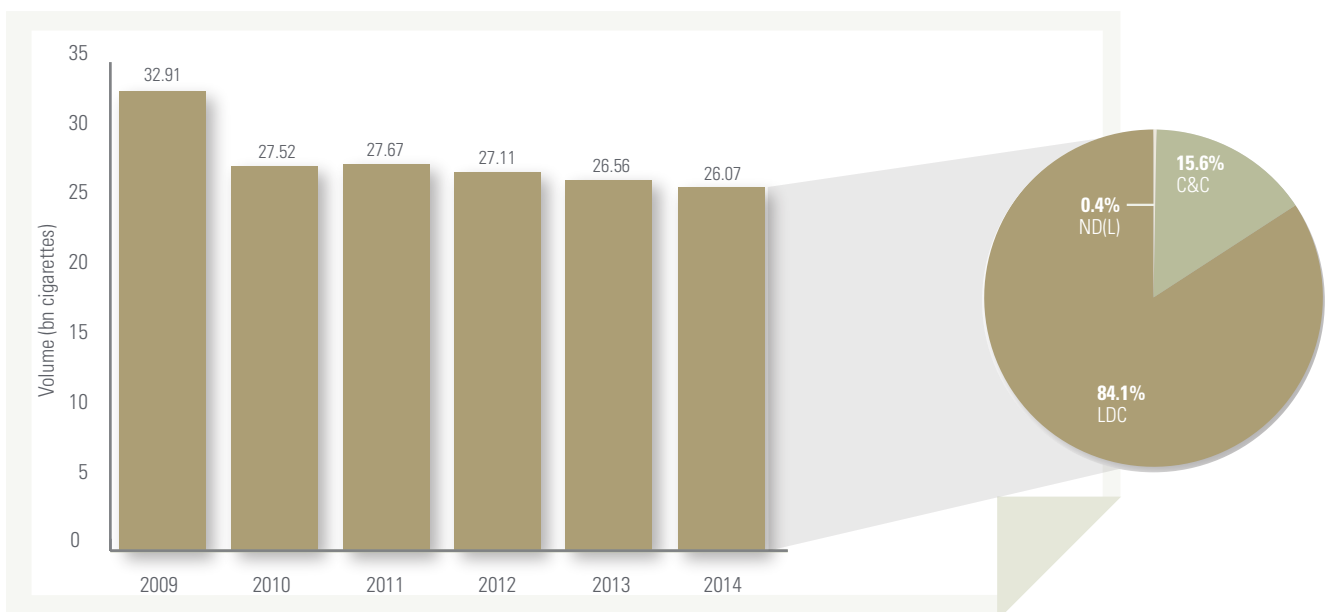


ROMANIA



PROJECT SUN

Manufactured cigarette consumption - 2009-2014



# MANUFACTURED CIGARETTE CONSUMPTION



ROMANIA



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Main outflow

Main inflow

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

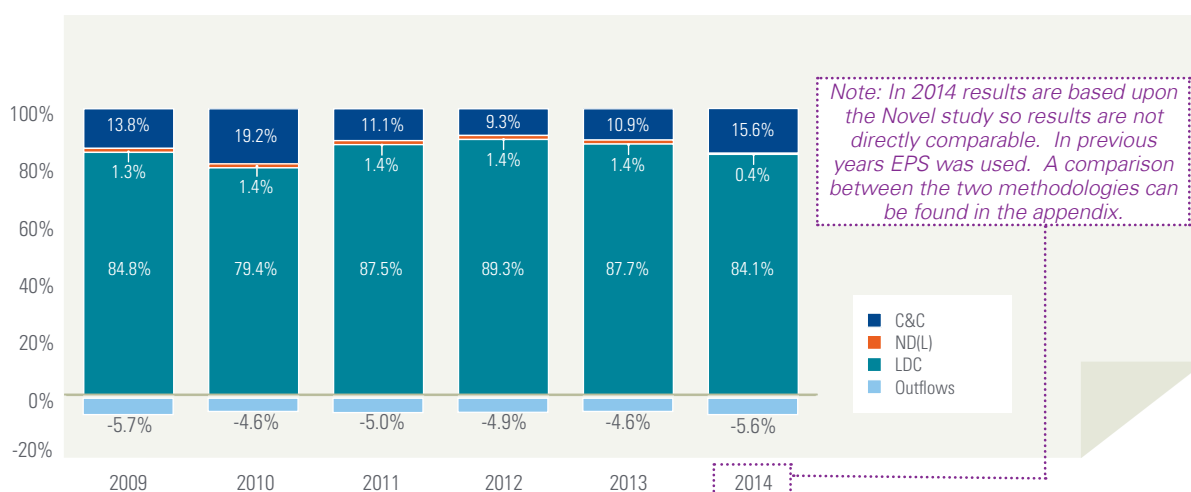
Source: (1) KPMG EU Flows Model

Decreasing legal domestic sales was offset by increased non-domestic inflows from outside the EU

**Total manufactured cigarette consumption – Romania<sup>(1)(2)(3)(a)</sup>**

TOTAL ROMANIA CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	29.81	23.10	25.58	25.54	24.49	23.37	(5%)
Outflows	-1.89	-1.26	-1.38	-1.33	-1.21	-1.45	20%
Legal domestic consumption (LDC)	27.92	21.84	24.21	24.21	23.28	21.92	(6%)
Non-domestic legal (ND(L))	0.44	0.38	0.38	0.38	0.38	0.09	(76%)
Counterfeit and contraband (C&C)	4.55	5.30	3.08	2.52	2.90	4.06	40%
Total non-domestic	4.99	5.67	3.46	2.90	3.27	4.15	27%
<b>Total consumption</b>	<b>32.91</b>	<b>27.52</b>	<b>27.67</b>	<b>27.11</b>	<b>26.56</b>	<b>26.07</b>	<b>(2%)</b>

**Share of Romania cigarette consumption by type 2009-2014<sup>(1)(2)(3)</sup>**



ROMANIA



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**Legal domestic sales in Romania declined in 2014, despite an improving economic backdrop**

- GDP per capita increased by 2.2% and the unemployment rate remained flat<sup>(4)</sup>
- The average price of manufactured cigarettes also grew, with a 7.3% increase in local currency in 2014<sup>(5)</sup>

**Overall consumption decline of 2% is in line with falling smoking incidence<sup>(1)</sup>, which may indicate that, of remaining smokers, consumers appear to be switching to cheaper non-domestic cigarettes**

**In 2014 the non-domestic incidence of 15.9% has been calculated using the results of the Novel Study, a face to face pack swap survey**

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used

Sources: (1) 2014 Novel Study (2) KPMG EU Flows Model and analysis of data sources provided by manufacturers

(3) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (4) 2014 Economist Intelligence Unit (5) Romania Ministry of Public Finances



# Illicit Whites brands and Duty Free labelled cigarettes drove an increase in inflows to Romania in 2014

*Note: In 2014 results are based upon the Novel study so results are not directly comparable. In previous years EPS was used. A comparison between the two methodologies can be found in the appendix.*

## Total inflows by country of origin 2009-2014<sup>(1)</sup>

ND INFLOWSTO ROMANIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Duty Free	1.23	0.93	0.65	0.46	1.12	1.34
Moldova	2.01	1.90	1.10	0.95	0.76	0.77
Illicit Whites with Duty Free labelling						0.75
Belarus	0.00	0.00	0.00	0.01	0.06	0.18
Serbia	0.07	0.95	0.75	0.69	0.40	0.11
Unspecified	0.35	0.34	0.12	0.16	0.29	0.05
Russia	0.15	0.09	0.04	0.00	0.00	0.03
Other	1.17	1.45	0.80	0.64	0.63	0.93
<b>Total inflows</b>	<b>4.99</b>	<b>5.67</b>	<b>3.46</b>	<b>2.90</b>	<b>3.27</b>	<b>4.15</b>

- 36% of Duty Free labelled inflows were Illicit Whites in 2014
- Price increases of cigarettes in Serbia and stricter controls at the border with Romania may have impacted Serbian inflows in 2014<sup>(2)</sup>

## Total outflows by destination country 2009-2014<sup>(1)</sup>

*Note: 2014 was the first year in which Romanian outflows to Norway were analysed*

OUTFLOWS FROM ROMANIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
France	0.62	0.32	0.57	0.62	0.66	0.57
Norway						0.19
UK	0.30	0.37	0.32	0.19	0.05	0.17
Germany	0.10	0.10	0.10	0.14	0.14	0.14
Italy	0.51	0.18	0.12	0.09	0.09	0.11
Ireland	0.08	0.05	0.06	0.10	0.09	0.06
Other	0.29	0.23	0.21	0.18	0.19	0.20
<b>Total outflows</b>	<b>1.89</b>	<b>1.26</b>	<b>1.38</b>	<b>1.33</b>	<b>1.21</b>	<b>1.45</b>

### The majority of cigarettes identified outside of Romania through other pack collection surveys were from France, Norway and the UK

- Outflows to France declined marginally, which is supported by a decline in traveller numbers between the two countries<sup>(3)</sup>
- The increasing price gap between Romania and the UK, and increasing travel volumes between the two markets may have increased outflows in 2014.<sup>(3)</sup> The average price difference between Romania and the UK rose from €5.70 to €6.07 in 2014<sup>(4)</sup>

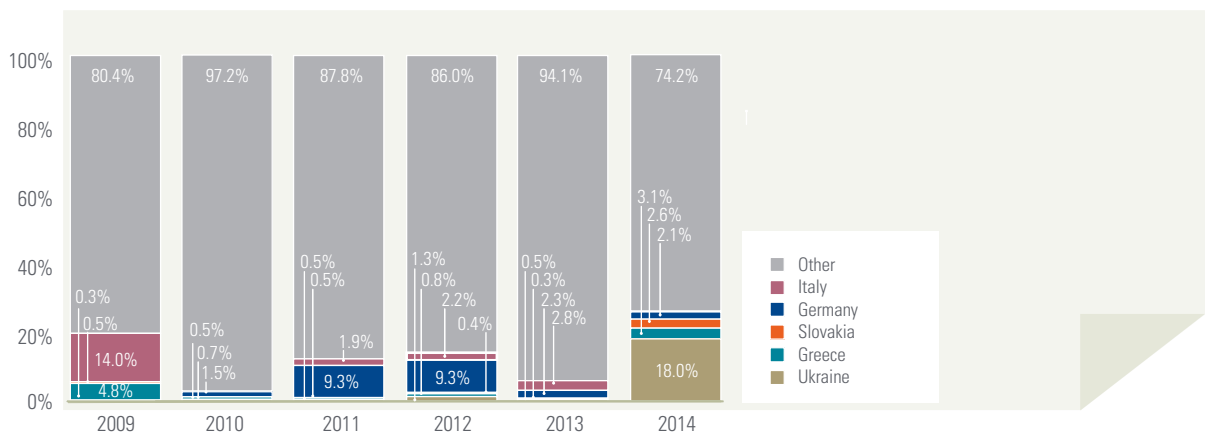
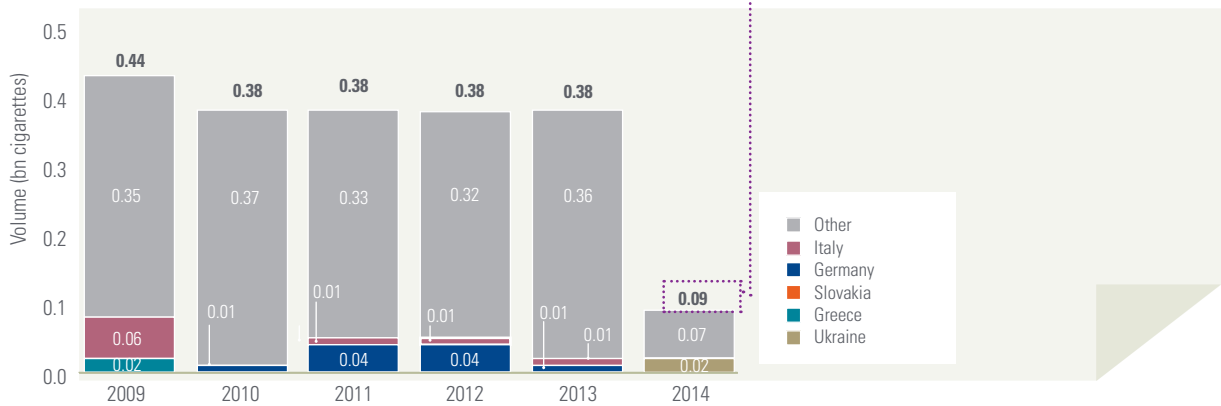
Sources: (1) KPMG EU Flows Model (2) Manufacturer market presentation (3) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (4) EC Excise Duty tables (Part III – Manufactured Tobacco)



# Non-domestic legal inflows remained low particularly given the 40 cigarette limit on the Moldovan border

Note: In 2014 the ND(L) analysis was undertaken using border crossings data. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



ROMANIA



PROJECT SUN

### Neighbouring Ukraine was the largest source of legal inflows in 2014

- The price differences between Romania and Ukraine grew in 2014 from €1.84 to € 2.31 resulting in more incentive to purchase cigarettes<sup>(3)</sup>
- Travel restrictions between Ukraine and Romania were relaxed in 2014.<sup>(2)</sup> This may also be a factor in increasing ND(L) volumes
- Despite sharing a border, travellers between Moldova and Romania are only permitted to bring two packs when crossing the border, leading to small legal volumes<sup>(4)</sup>

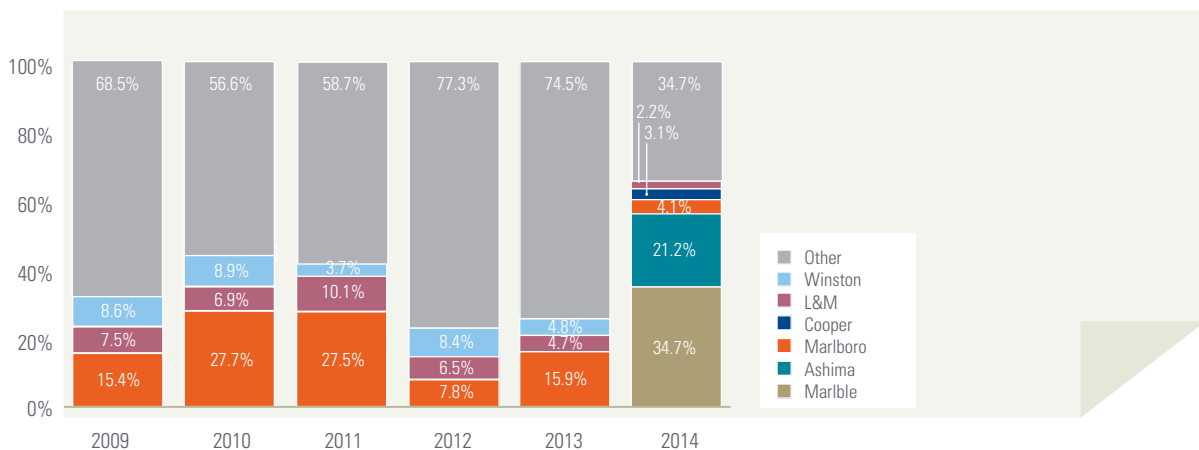
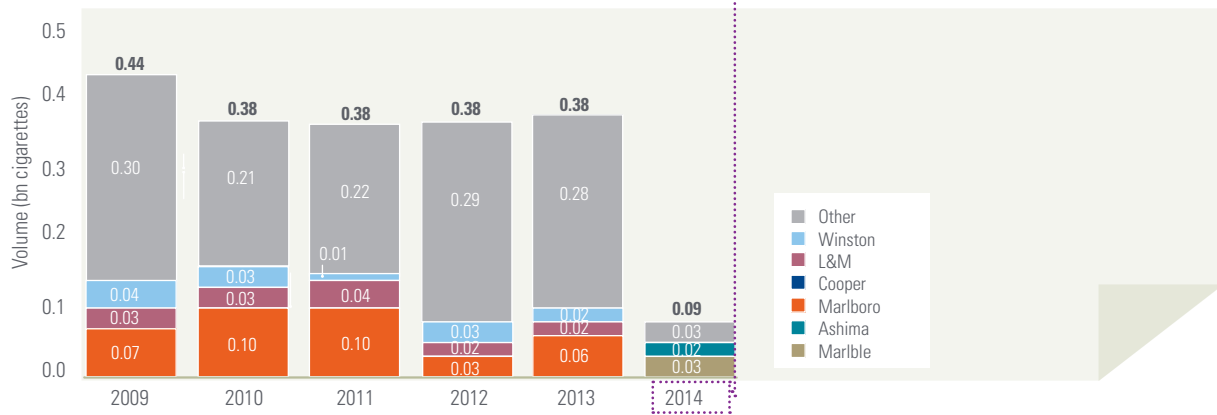
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) World Customs Journal, Tackling cigarette smuggling with enforcement, July 2012

# NON-DOMESTIC LEGAL INFLOWS BY BRAND

Total ND(L) by brand 2009-2014<sup>(1)(2)(a)(b)</sup>

Note: Border sales data has been used to calculate non-domestic legal flows on a brand basis in 2014



ROMANIA



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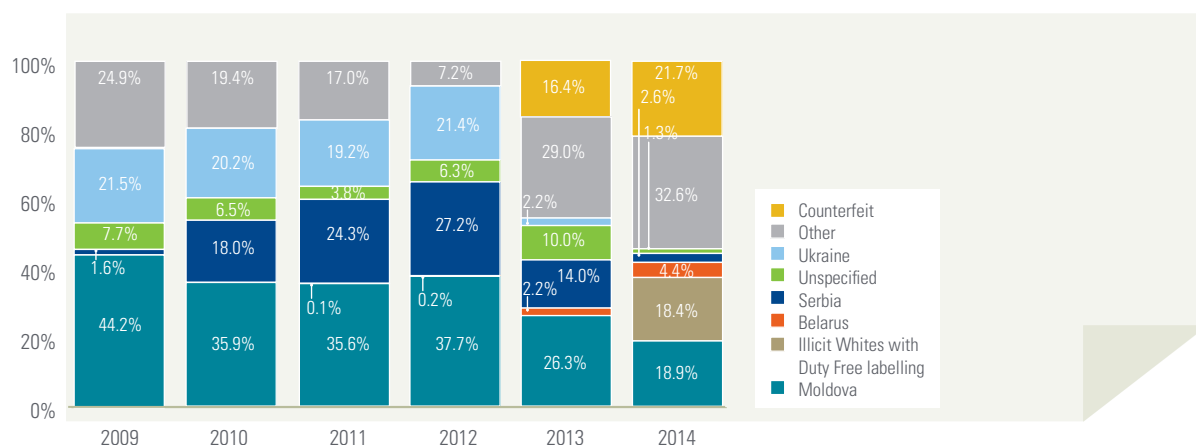
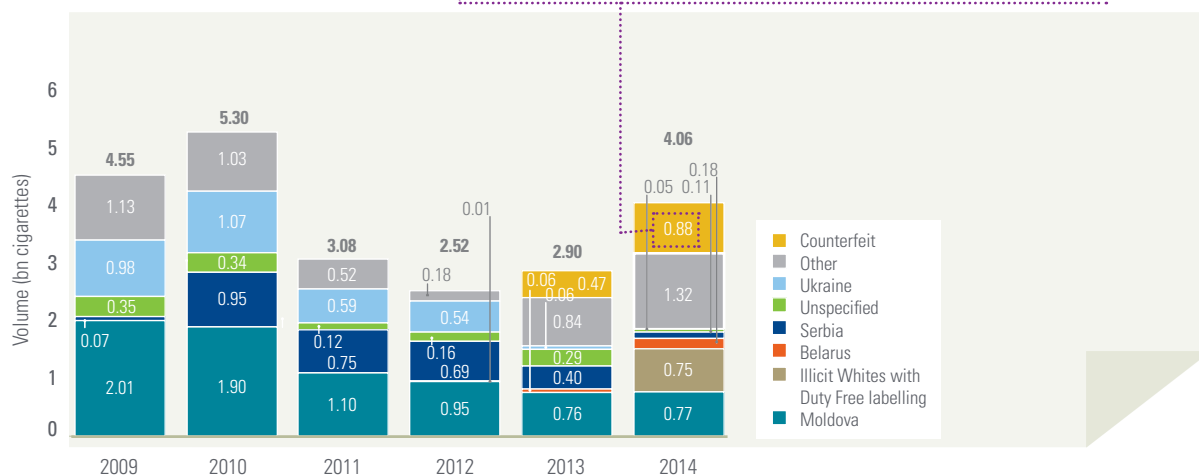
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Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# C&C flows increased in 2014, with Illicit Whites and counterfeit driving growth

Total C&C by origin 2009-2014<sup>(1)(2)(a)</sup>

Note: 0.78bn of counterfeit identified bore Ukrainian labelling



ROMANIA



PROJECT SUN

## C&C flows were driven by Illicit Whites, counterfeit and contraband from neighbouring cheaper priced markets

- Neighbouring Moldova remained a major source of C&C in 2014 due to high price differences and the low legal allowance
  - Average price differences between the two markets increased from €2.16 to €2.34 in 2014
- 27% of packs identified as C&C are Illicit Whites brands, a decrease from 32% in 2013
- All packs of Jin Ling, an Illicit Whites brand flow, bore illegitimate Duty Free labelling
  - Jin Ling is trademark owned by the Baltic Tobacco Factory
  - Illicit Whites were found all over Romania, but were least prevalent in the North Eastern region<sup>(3)</sup>
- If the total volume of C&C had been purchased legally within the Romanian market, an additional tax revenue of approximately €463m would have been raised by the Romanian Treasury<sup>(4)</sup>

## 89% of counterfeit volumes had Ukrainian labelling

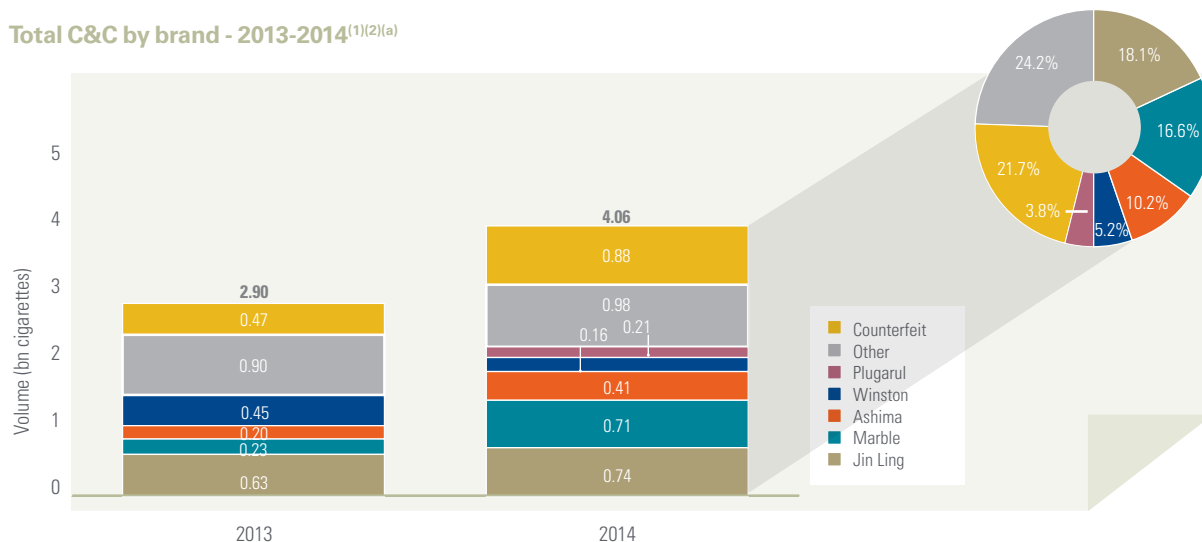
- Viceroy (69%) and Monte Carlo (22%) were the most counterfeited brands
- If these packs were actually produced in Ukraine then it would be the largest country-specific inflow to Romania in 2014

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows.

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) 2014 Novel Study (4) EC Excise Duty tables (Part III – Manufactured Tobacco)

## C&C INFLOWS BY BRAND

Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type 2009-2014<sup>(1)</sup>

LABELLING OF ILLICIT WHITES INFLOWS TO ROMANIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	0.08	0.09	0.23	0.18	0.74	0.35
Duty Free	0.04	0.58	0.54	0.40	0.13	0.75
Unspecified	0.13	0.21	0.08	0.02	0.05	0.02
<b>Total Illicit Whites</b>	<b>0.25</b>	<b>0.87</b>	<b>0.85</b>	<b>0.60</b>	<b>0.93</b>	<b>1.11</b>

ROMANIA

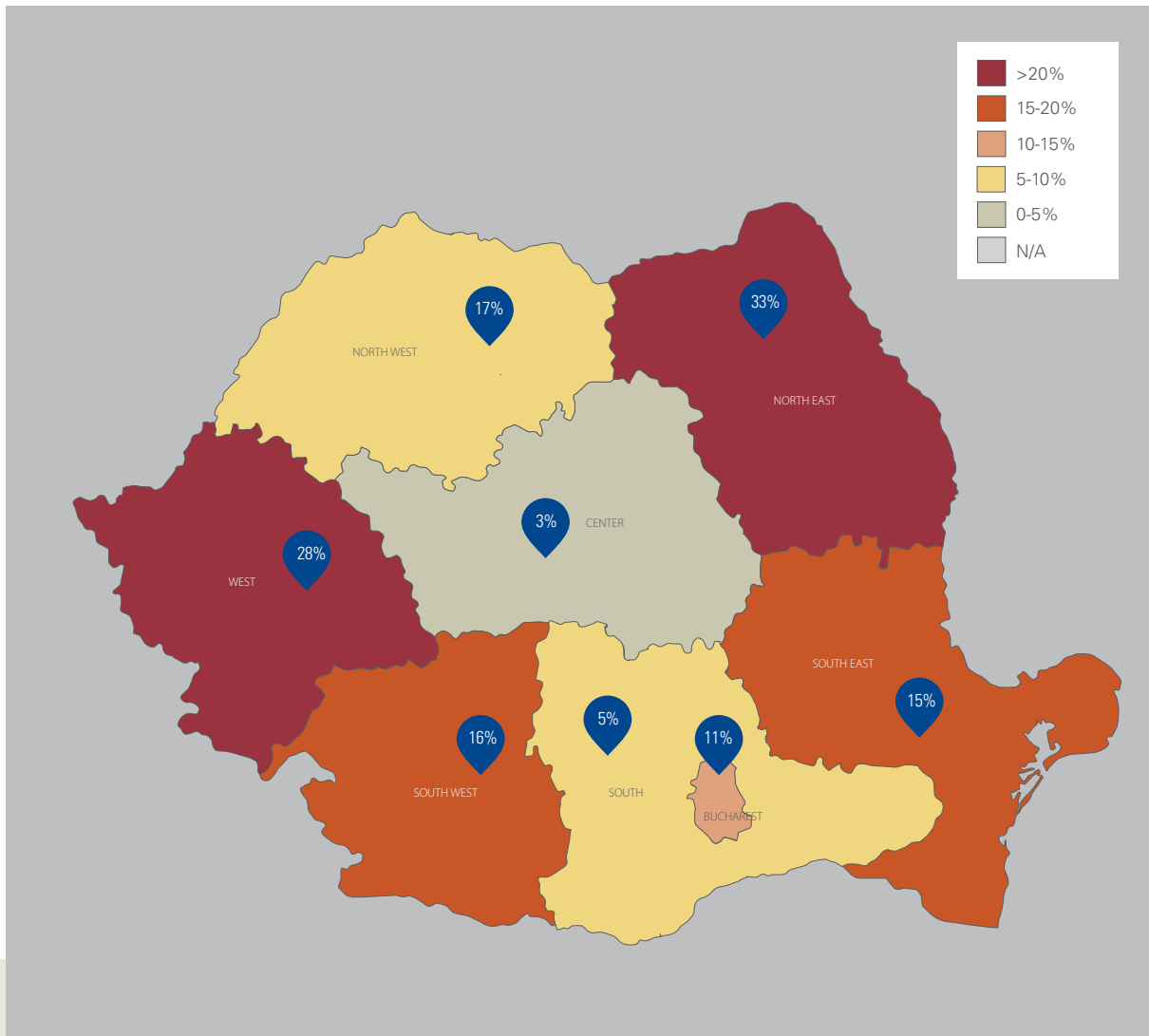


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Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows  
 Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
 (2) KPMG analysis of data sources provided by manufacturers

# Non-domestic incidence heat map

Romania Novel survey regional non-domestic incidence – 2014<sup>(1)</sup>



ROMANIA



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Source: (1) Novel Illicit Trade Tracking Study, 2014



ROMANIA

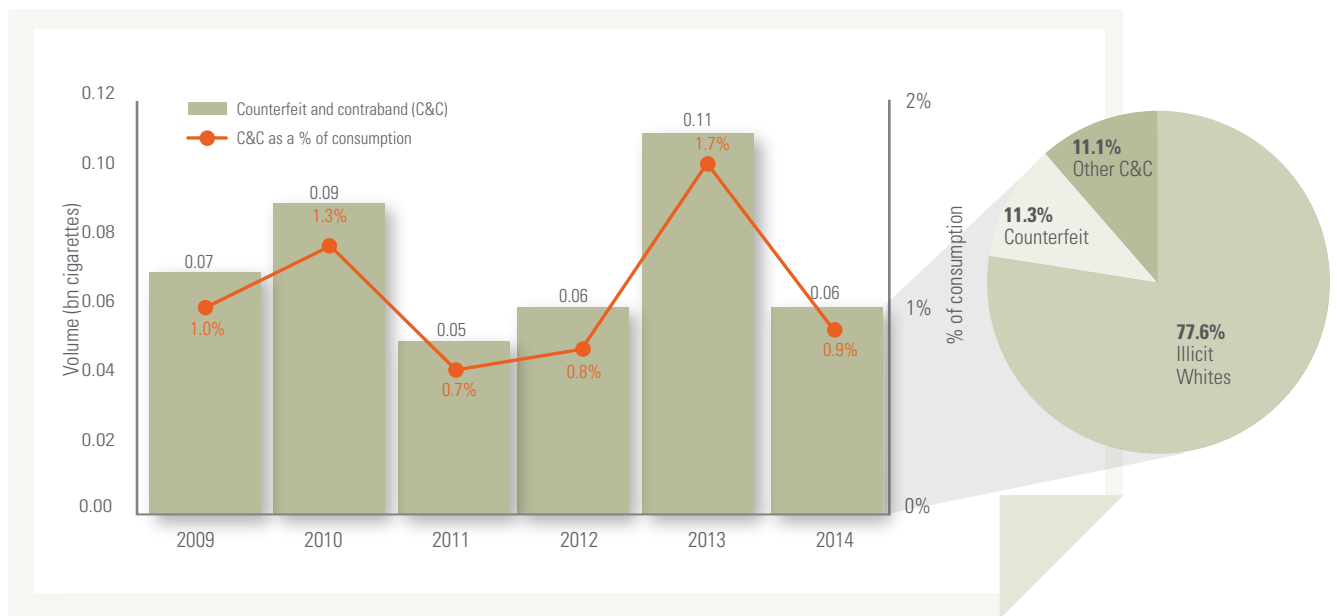


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# SLOVAKIA

Slovakia has the lowest C&C volume as a share of overall consumption in the study

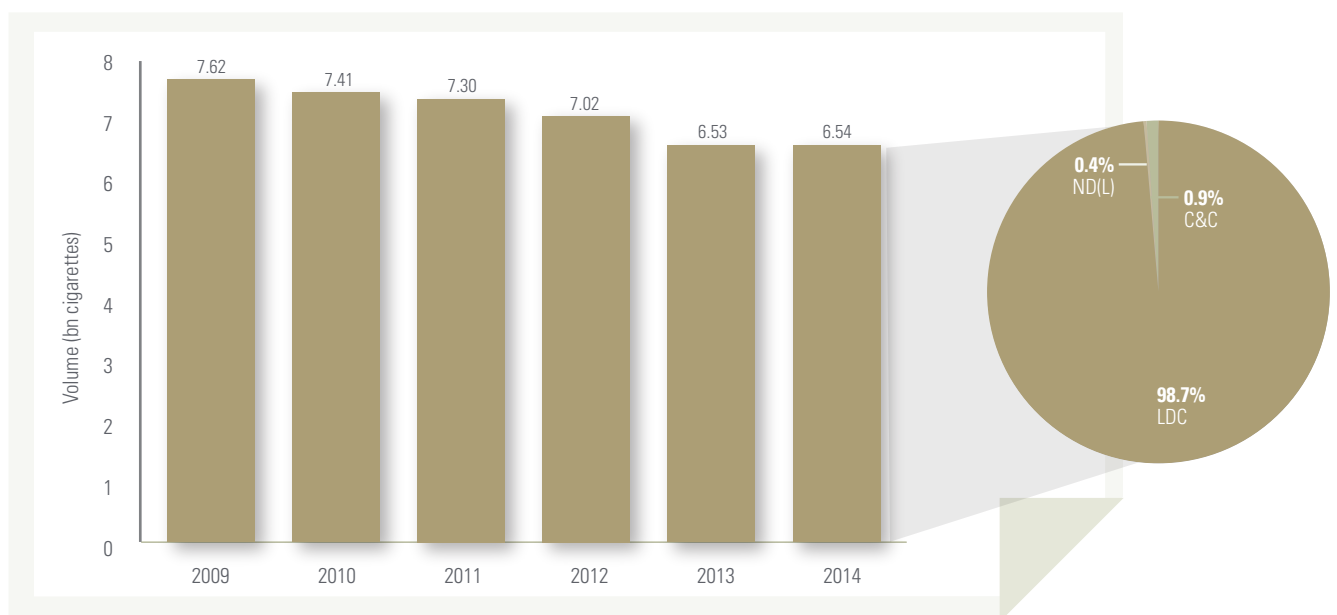
Manufactured cigarette C&C volumes and share of overall consumption - 2009-14



SLOVAKIA



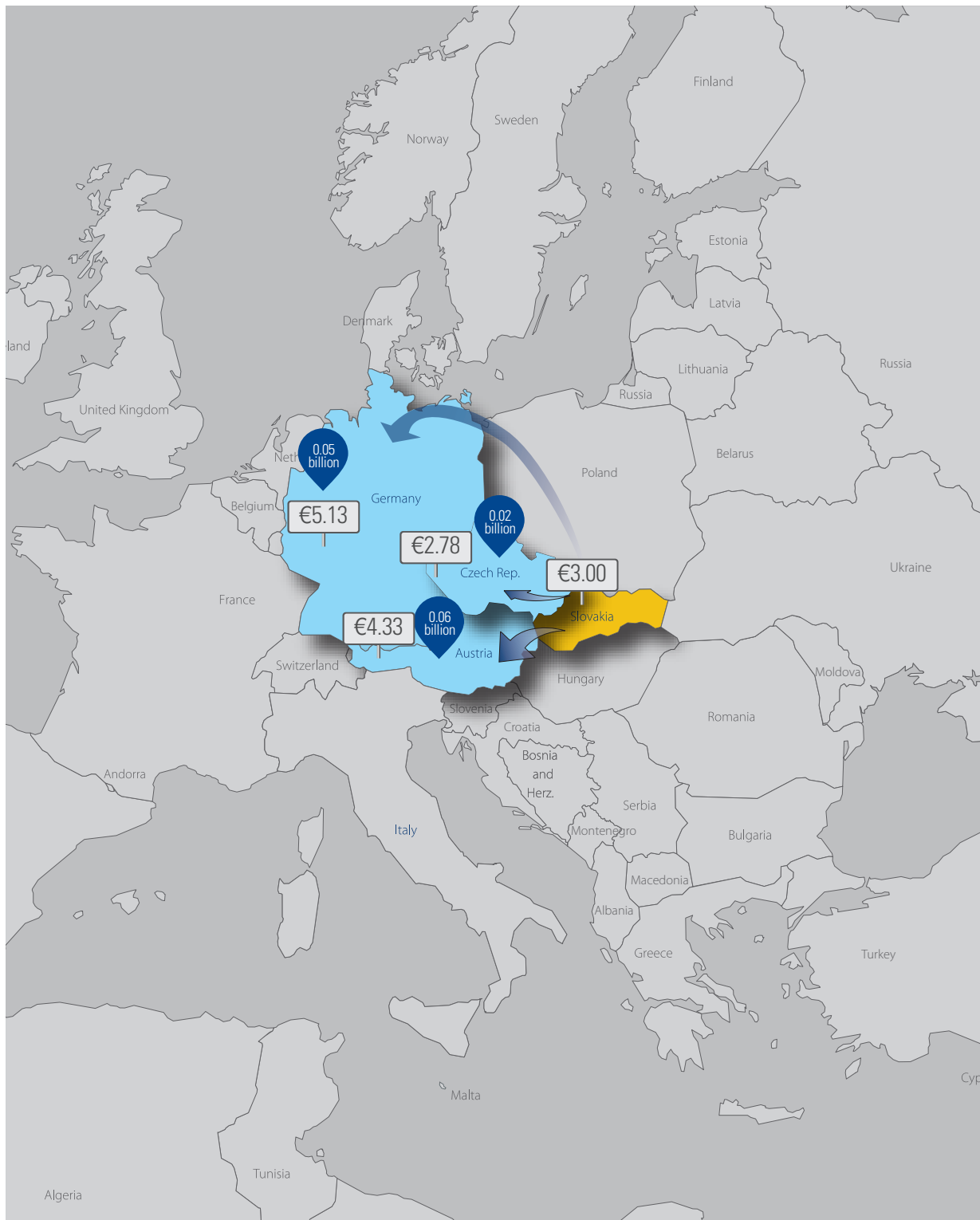
Manufactured cigarette consumption - 2009-14





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# KEY INFLOWS AND OUTFLOWS



Main outflow   
 Main inflow 

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

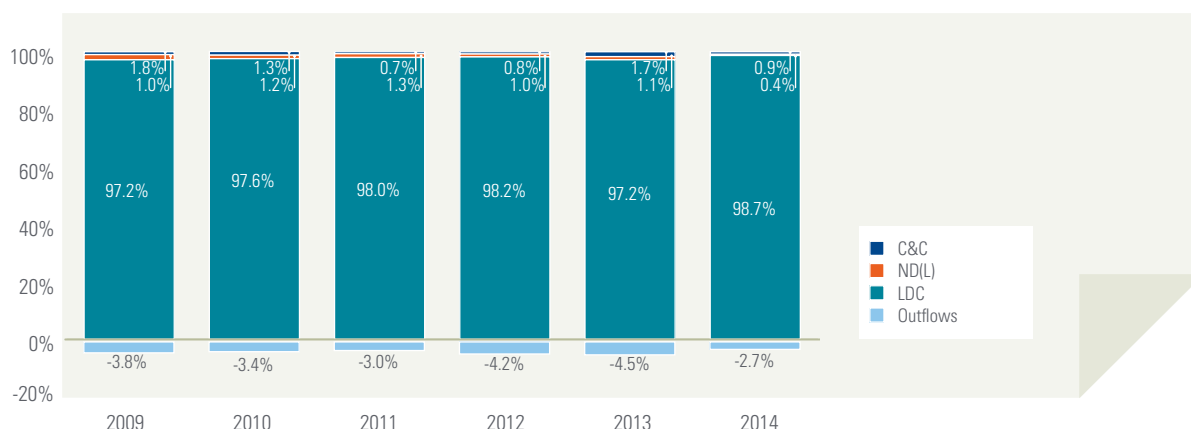
Source: (1) KPMG EU Flows Model

# Cigarette consumption remained stable supported by improved economic conditions

## Total manufactured cigarette consumption – Slovakia<sup>(1)(2)(a)</sup>

TOTAL SLOVAKIA CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	769	748	736	719	6.64	6.63	(0%)
Outflows	-0.29	-0.25	-0.22	-0.29	-0.29	-0.18	(40%)
Legal domestic consumption (LDC)	7.40	7.23	7.15	6.89	6.35	6.45	2%
Non-domestic legal (ND(L))	0.14	0.09	0.10	0.07	0.07	0.03	(63%)
Counterfeit and contraband (C&C)	0.07	0.09	0.05	0.06	0.11	0.06	(48%)
Total non-domestic	0.21	0.18	0.15	0.13	0.18	0.08	(54%)
<b>Total consumption</b>	<b>7.62</b>	<b>7.41</b>	<b>7.30</b>	<b>7.02</b>	<b>6.53</b>	<b>6.54</b>	<b>0%</b>

## Share of Slovakia manufactured cigarette consumption by type - 2009-2014<sup>(1)(2)</sup>



### Legal domestic sales were flat as prices stabilised and economic conditions improved

- Personal disposable income and GDP per capita increased by 5.9% and 2.7% respectively between 2013 and 2014 and unemployment stabilised<sup>(4)(5)</sup>
- Average prices in Slovakia grew marginally by €0.02 in 2014 to €3.00 per 20 cigarettes. However, surrounding countries experienced higher increases which reduced the incentive for cross border purchases<sup>(3)</sup>

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) 2014 Economist Intelligence Unit (5) 2014 Euromonitor



## InfloWS and outflows to neighbouring countries declined as price differences narrowed

### Total inflows by country of origin - 2009-2014<sup>(1)</sup>

ND INFLOWS TO SLOVAKIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Illicit Whites with Duty Free labelling						0.03
Duty Free	0.00	0.02	0.01	0.07	0.09	0.01
Belarus	0.00	0.00	0.00	0.00	0.01	0.01
Czech Republic	0.04	0.02	0.02	0.01	0.02	0.01
Hungary	0.06	0.03	0.04	0.03	0.01	0.01
Ukraine	0.08	0.05	0.05	0.01	0.02	0.00
Other	0.04	0.06	0.03	0.01	0.03	0.01
<b>Total inflows</b>	<b>0.21</b>	<b>0.18</b>	<b>0.15</b>	<b>0.13</b>	<b>0.18</b>	<b>0.08</b>

### Illicit Whites with Duty Free labelling accounted for the largest volume of inflows in 2014

- Declines from the Czech Republic and Hungary reflect price increases that resulted in cigarettes becoming more expensive compared to Slovakia<sup>(2)</sup>

### Total outflows by destination country - 2009-2014<sup>(1)</sup>

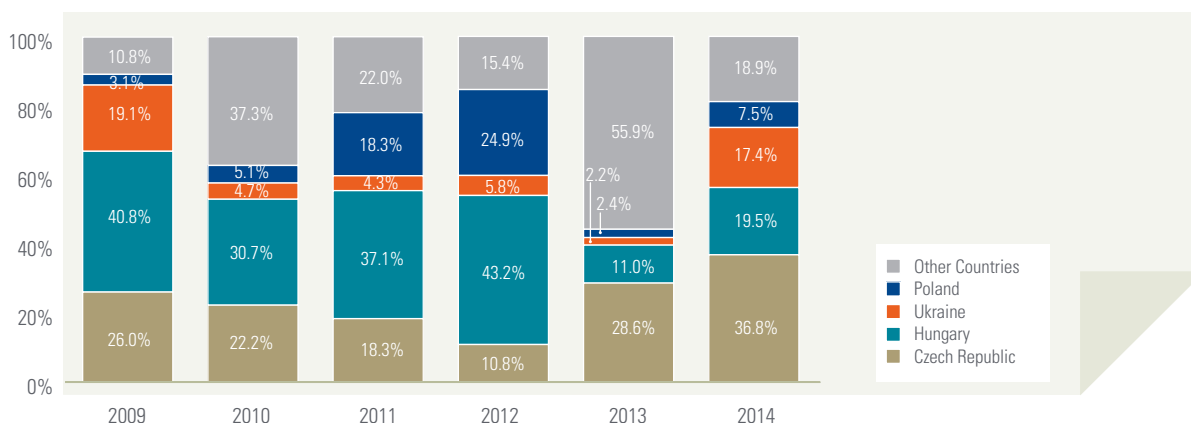
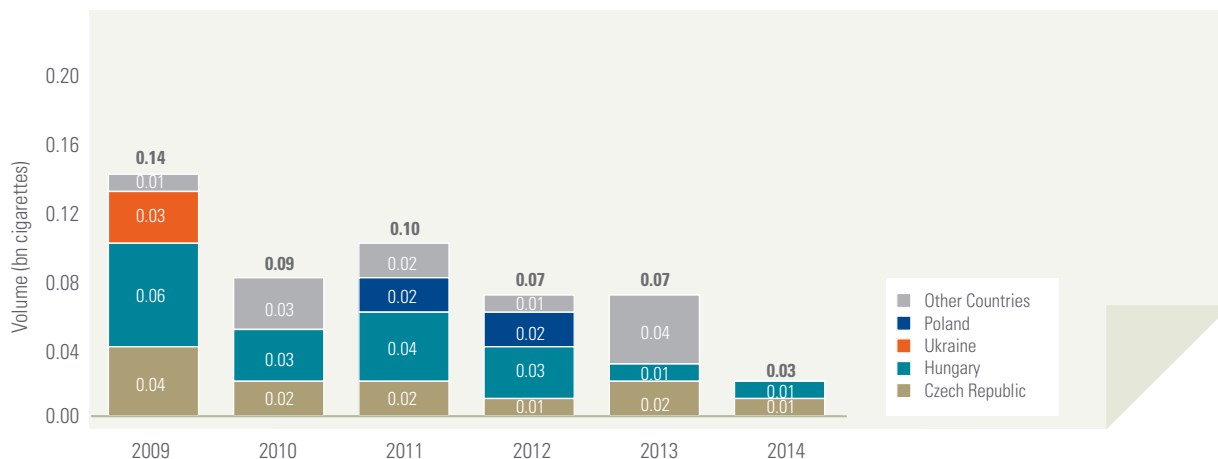
OUTFLOWS FROM SLOVAKIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Austria	0.04	0.03	0.04	0.04	0.04	0.06
Germany	0.04	0.04	0.04	0.07	0.09	0.05
Czech Republic	0.05	0.03	0.02	0.02	0.02	0.02
Other	0.15	0.14	0.12	0.17	0.15	0.05
<b>Total outflows</b>	<b>0.29</b>	<b>0.25</b>	<b>0.22</b>	<b>0.29</b>	<b>0.29</b>	<b>0.18</b>

- Outflows were reflected by tourists travelling to Slovakia and returning to Austria and Germany with cigarettes, whilst outflows to the Czech Republic are reflected by the high travel volumes between each country<sup>(3)</sup>

Sources: (1) KPMG EU Flows Model (2) EC Excise Duty tables (Part III – Manufactured Tobacco) (3) KPMG analysis of UNWTO Fact book 2008-2013 and national visitor number statistics

# ND(L), mainly from surrounding markets, declined as prices rose more quickly than in Slovakia

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



SLOVAKIA



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## ND(L) declined in Slovakia by 63%, primarily driven by a decline in inflows from Czech Republic and Hungary

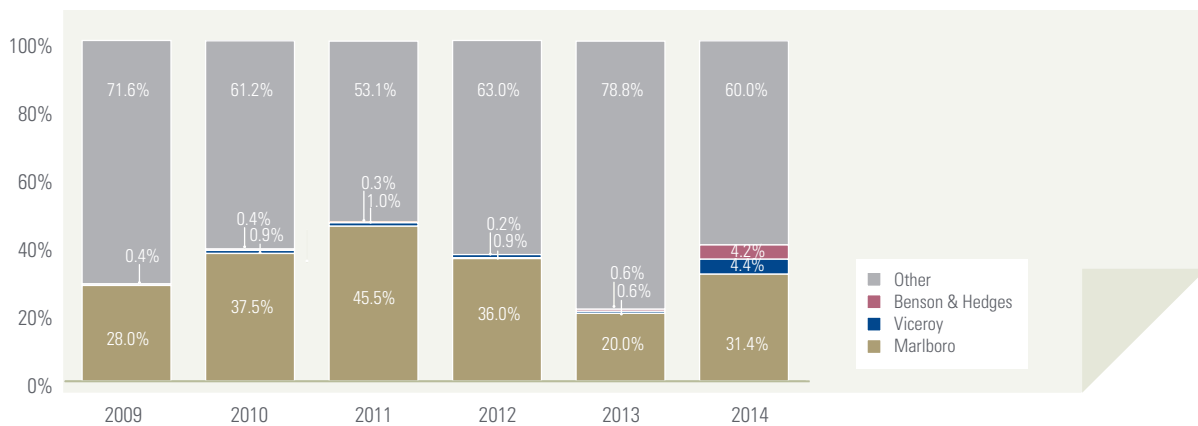
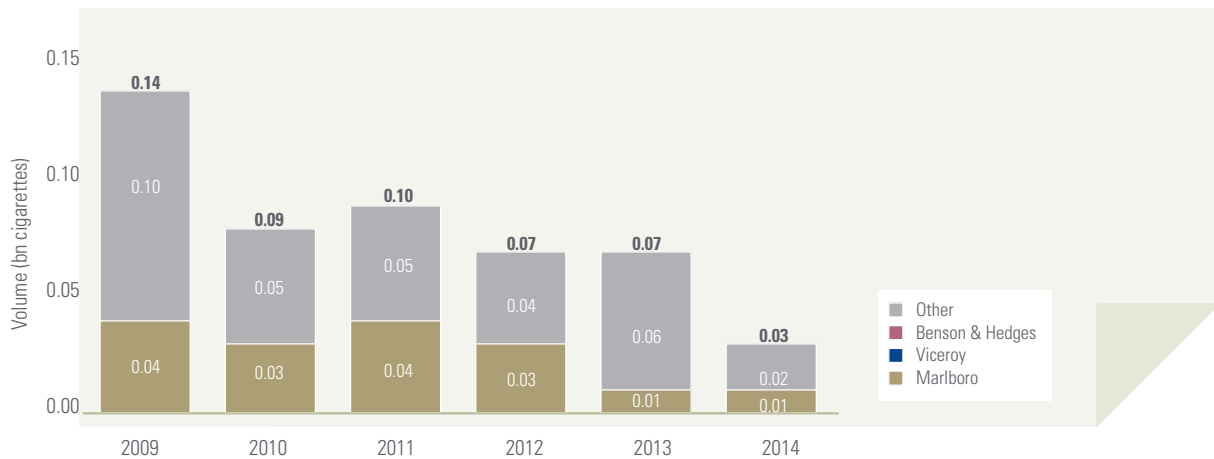
- Both regulatory changes and price increases in Hungary in 2013 may have impacted ND(L) as the regulations curtailed the availability of cigarettes
- As cigarette prices became more expensive in Hungary than in Slovakia in 2014 all inflows from Hungary were categorised as ND(L)<sup>(3)</sup>

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

# NON-DOMESTIC LEGAL INFLOWS BY BRAND

**Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>**



SLOVAKIA

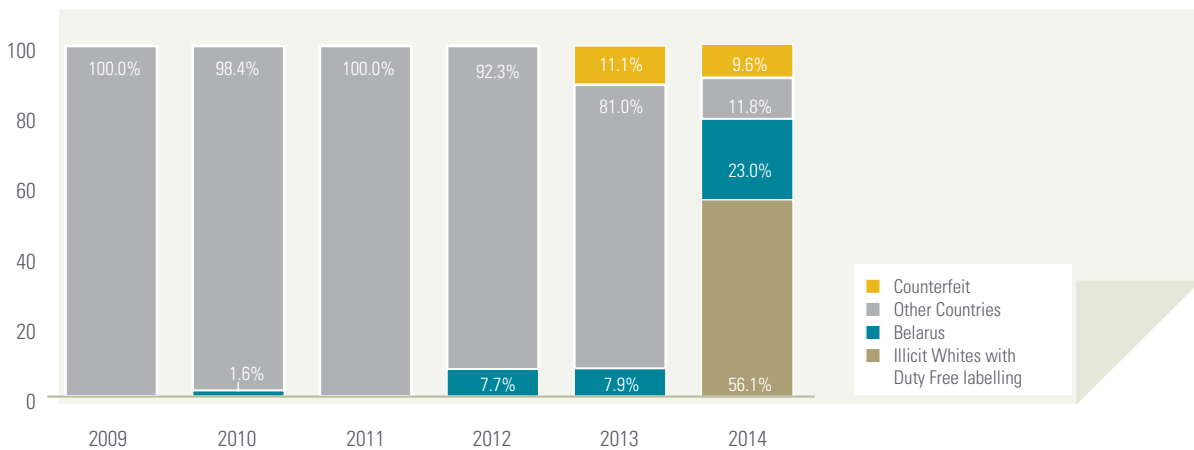
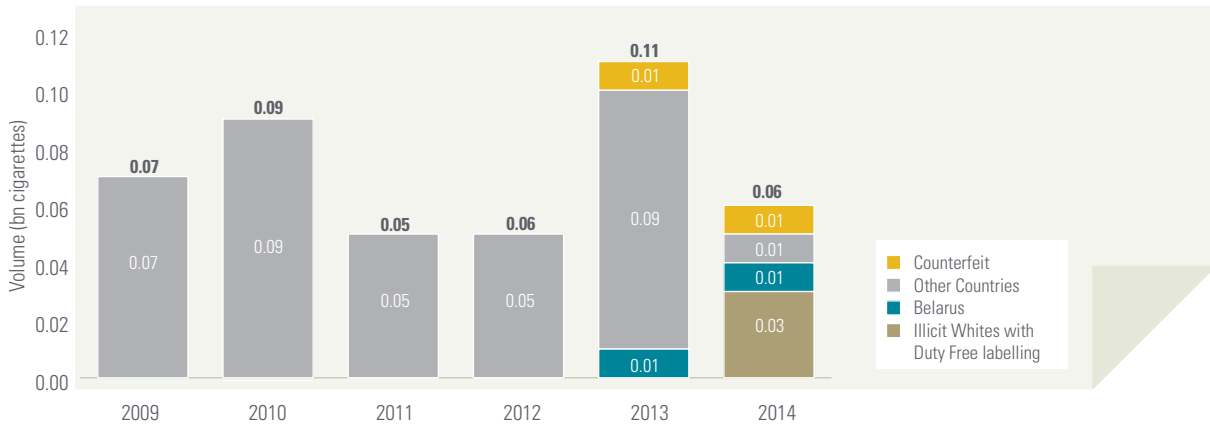
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**Notes:** (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

**Sources:** (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# Over half of C&C in Slovakia is accounted for by Jin Ling

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



### C&C flows decreased by almost 50% between 2013 and 2014

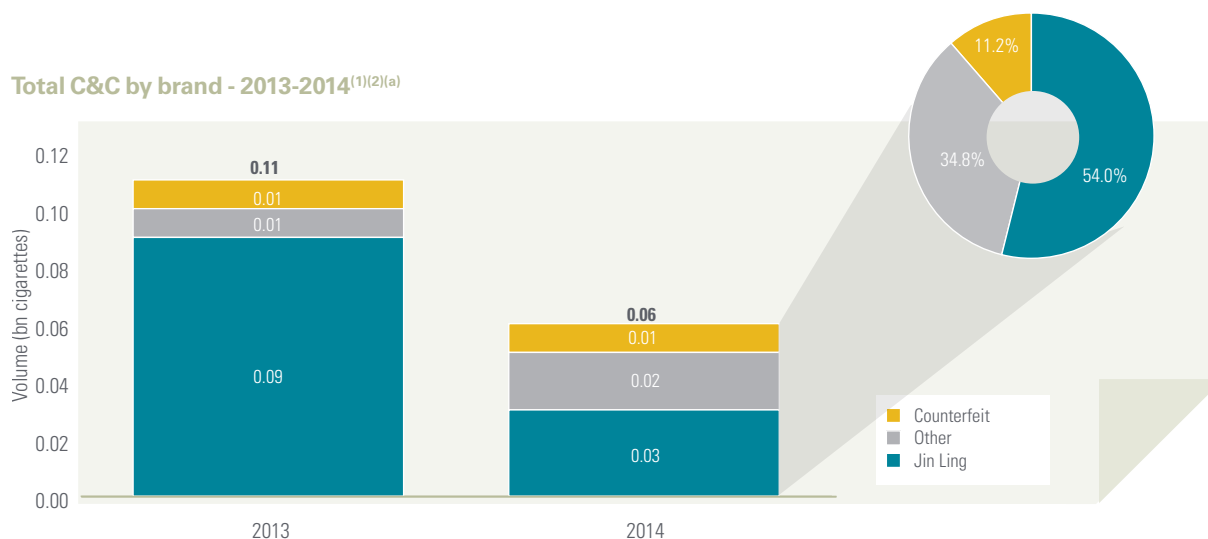
- The majority of C&C is represented by Jin Ling, an Illicit Whites brand with Duty Free labelling
  - Jin Ling is trademark owned by Baltic Tobacco Company
- If these cigarettes had been purchased legally in Slovakia the tax revenue gained would have been approximately €7m<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

## C&C INFLOWS BY BRAND

Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type - 2009-2014<sup>(1)(2)(a)</sup>

LABELLING OF ILLICIT WHITES INFLOWS TO SLOVAKIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	0.00	0.02	0.01	0.00	0.01	0.01
Duty Free	0.00	0.00	0.00	0.04	0.09	0.03
Unspecified	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Illicit Whites</b>	<b>0.00</b>	<b>0.03</b>	<b>0.01</b>	<b>0.04</b>	<b>0.10</b>	<b>0.05</b>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

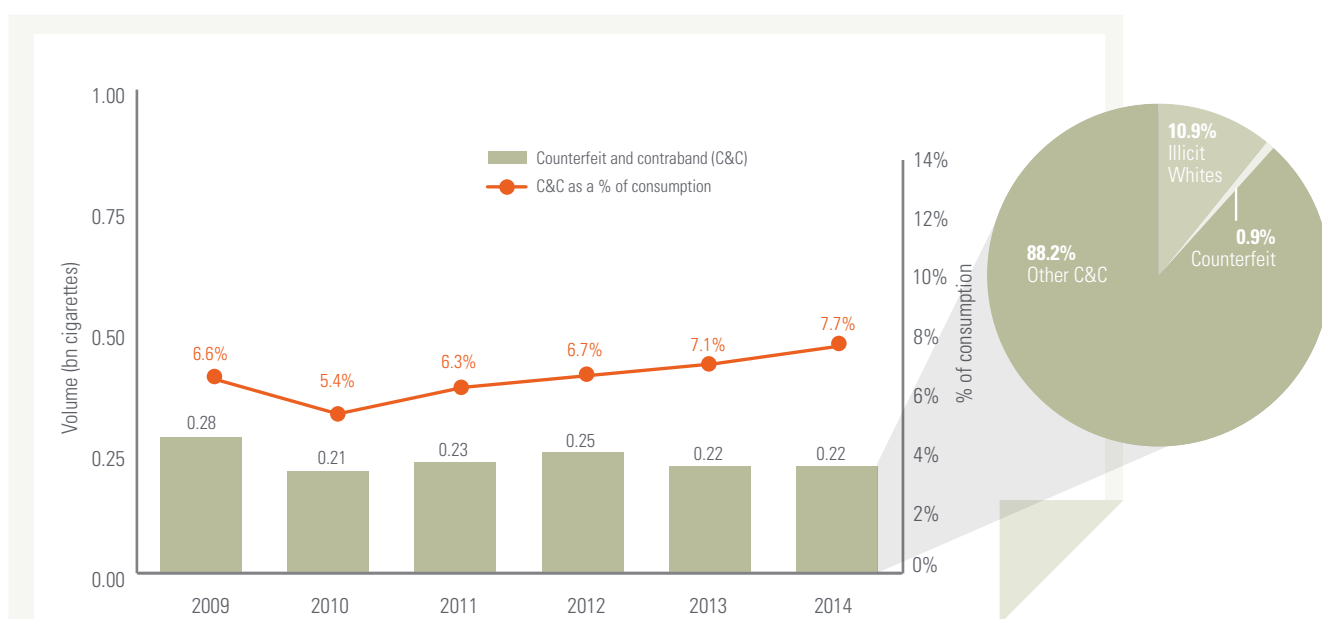
Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

(2) KPMG analysis of data sources provided by manufacturers



## C&C remained stable in 2014

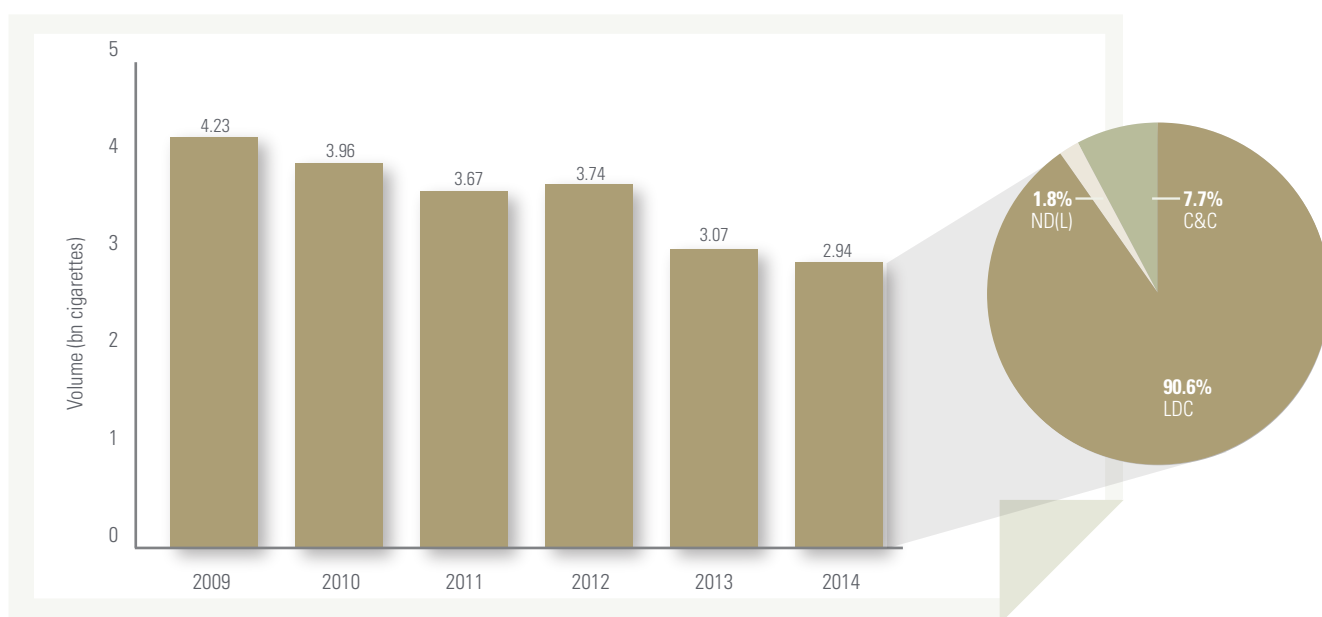
Manufactured cigarette C&C volumes and share of overall consumption - 2009-14



SLOVENIA



Manufactured cigarette consumption - 2009-14



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# KEY INFLOWS AND OUTFLOWS



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Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

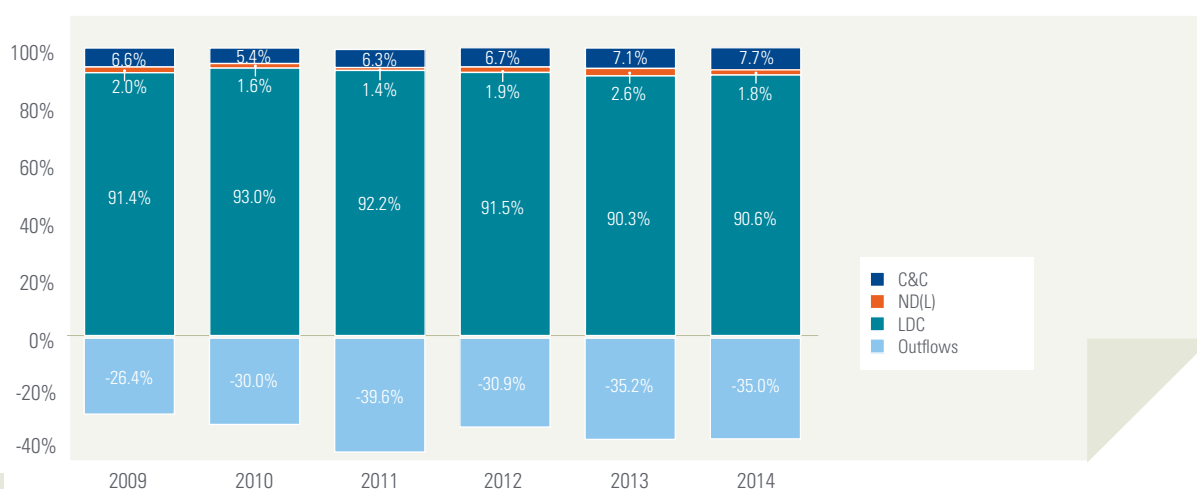
Source: (1) KPMG EU Flows Model

# Cigarette consumption declined against a background of rising prices and growing OTP consumption

## Total manufactured cigarette consumption – Slovenia<sup>(1)(2)(a)</sup>

TOTAL SLOVENIA CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14%
Legal domestic sales (LDS)	4.98	4.87	4.84	4.57	3.86	3.69	(4%)
Outflows	-1.11	-1.19	-1.45	-1.15	-1.08	-1.03	(5%)
Legal domestic consumption (LDC)	3.86	3.68	3.39	3.42	2.77	2.66	(4%)
Non-domestic legal (ND(L))	0.08	0.06	0.05	0.07	0.08	0.05	(35%)
Counterfeit and contraband (C&C)	0.28	0.21	0.23	0.25	0.22	0.22	2%
Total non-domestic	0.36	0.28	0.29	0.32	0.30	0.28	(7%)
<b>Total consumption</b>	<b>4.23</b>	<b>3.96</b>	<b>3.67</b>	<b>3.74</b>	<b>3.07</b>	<b>2.94</b>	<b>(4%)</b>

## Share of Slovenia cigarette consumption by type – 2009-2014<sup>(1)(2)</sup>



### Legal domestic consumption declined

- Average price rises of 4.3% may have impacted legal domestic consumption<sup>(3)</sup>
- In addition, average prices for manufactured cigarettes have increased faster than OTP prices, suggesting smokers may be switching to other tobacco types<sup>(3)</sup>
- Non-domestic consumption also declined, mainly as a result of less cross border shopping to neighbouring lower priced countries

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used  
 Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) EC Excise Duty tables (Part III – Manufactured Tobacco)



## Both inflows and outflows fell in 2014

### Total inflows by country of origin – 2009-2014 <sup>(1)</sup>

ND INFLOWS TO SLOVENIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Bosnia And Herzegovina	0.26	0.16	0.19	0.19	0.13	0.14
Serbia	0.02	0.05	0.02	0.04	0.03	0.03
Croatia	0.01	0.01	0.01	0.01	0.03	0.02
Illicit Whites with Duty Free labelling						0.02
Other	0.07	0.06	0.07	0.07	0.10	0.07
<b>Total inflows</b>	<b>0.36</b>	<b>0.28</b>	<b>0.29</b>	<b>0.32</b>	<b>0.30</b>	<b>0.28</b>

### Half of all non-domestic inflows came from Bosnia

- Price differences between Slovenia and Bosnia were €1.50 at the end of 2014<sup>(2)</sup>
- Travel flows to Bosnia are also high, reflecting the large volume of Slovenia's population with links to other Balkan countries<sup>(3)</sup>

### Total outflows by destination country – 2009-2014<sup>(1)</sup>

OUTFLOWS FROM SLOVENIA						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Austria	0.79	0.85	1.04	0.83	0.68	0.74
Italy <sup>(a)</sup>	0.13	0.09	0.21	0.10	0.19	0.15
Germany	0.14	0.16	0.13	0.16	0.18	0.10
Other	0.05	0.09	0.07	0.07	0.04	0.04
<b>Total outflows</b>	<b>1.11</b>	<b>1.19</b>	<b>1.45</b>	<b>1.15</b>	<b>1.08</b>	<b>1.03</b>

- 90% of outflows from Slovenia were to the neighbouring higher priced countries of Austria and Italy as a result of cross-border shopping (including cheaper petrol and food)
- Flows from Germany fell as German tourists are more likely to take advantage of cheaper prices in Croatia following its accession to the EU

Note: (a) Inflows to Italy may be under-represented as packs are not collected in the Italy EPS right on the border. Therefore this report treats such consumption as domestic consumption to Slovenia

Sources: (1) KPMG EU Flows Model

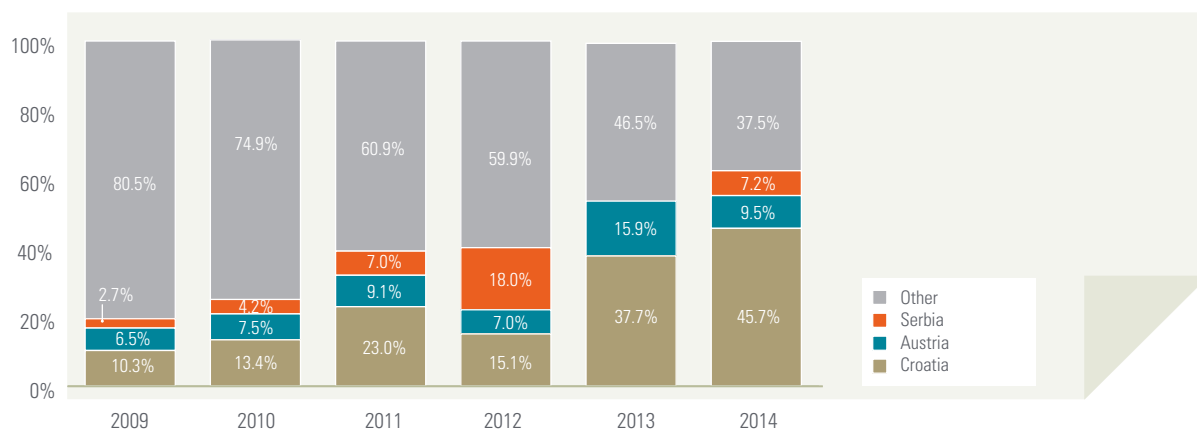
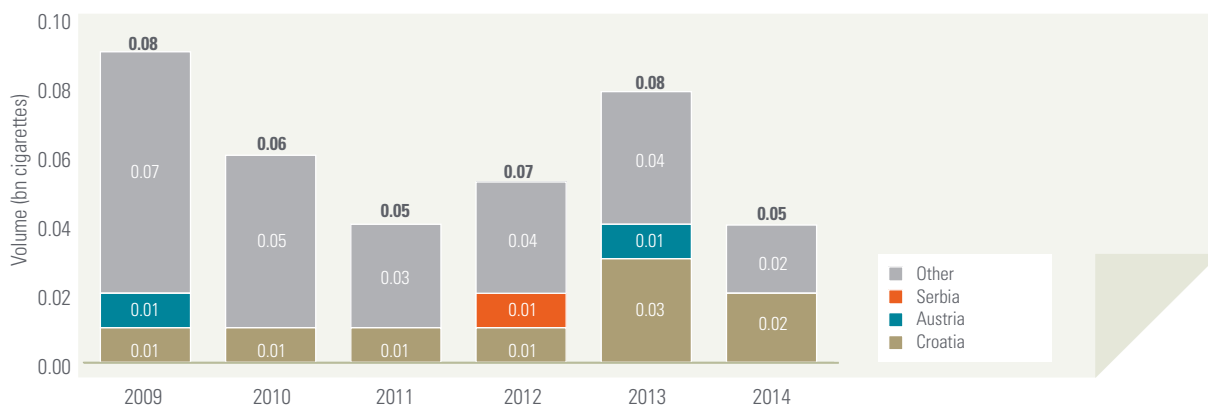
(2) EC Excise Duty tables (Part III – Manufactured Tobacco)

(3) KPMG analysis of UNWTO Factbook 2008-2013



# Croatia and Austria contribute more than half of Slovenia's ND(L)

Total ND(L) by origin 2009-2014<sup>(1)(2)(a)(b)</sup>



SLOVENIA



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**ND(L) in Slovenia is reflected by the number of border crossings between similarly priced markets when all flows are categorised as legal**

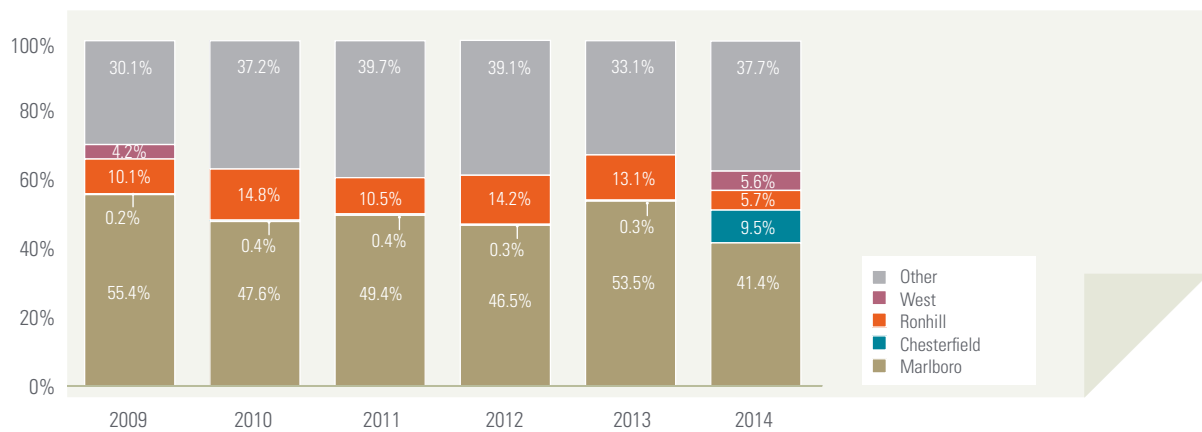
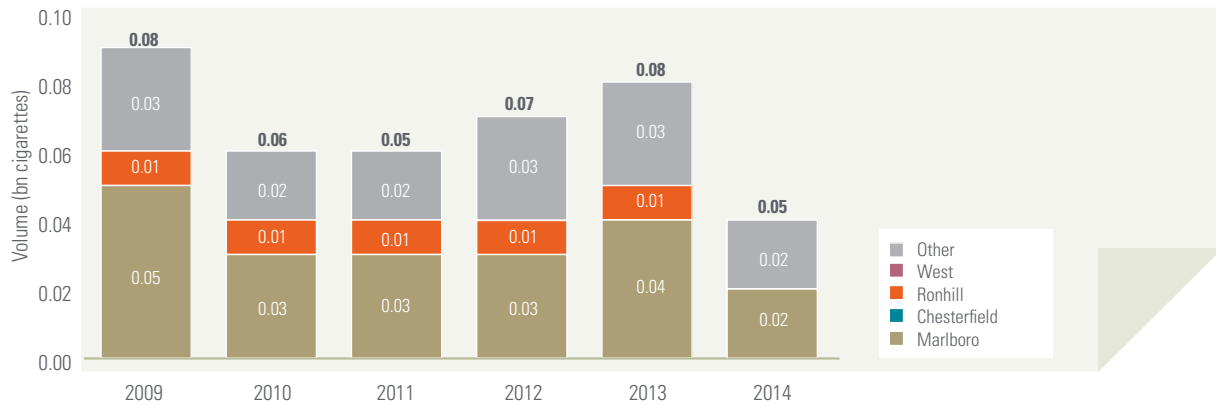
- Cigarettes in Croatia are on average €0.52 cheaper and €0.92 more in Austria<sup>(3)</sup>

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

# NON-DOMESTIC LEGAL INFLOWS BY BRAND

**Total ND(L) by brand 2009-2014<sup>(1)(2)(a)(b)</sup>**



SLOVENIA



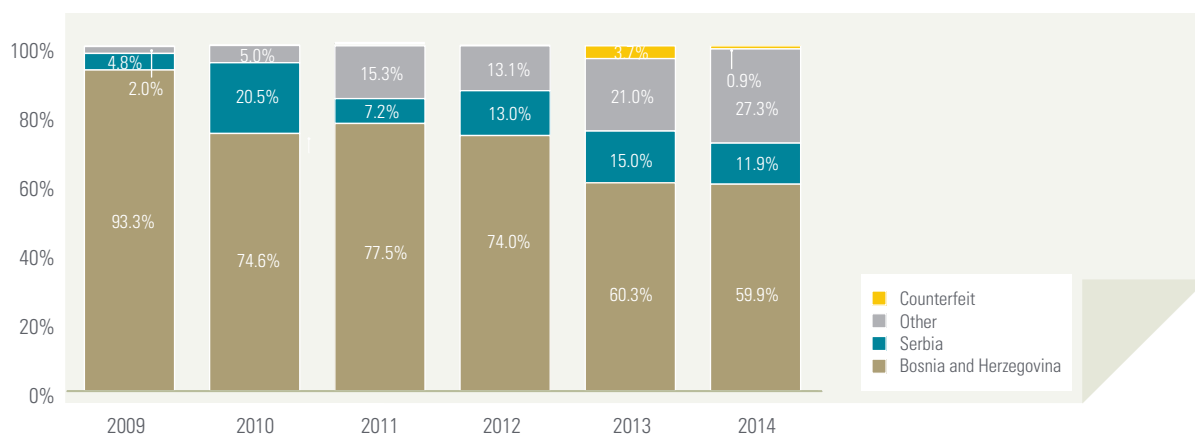
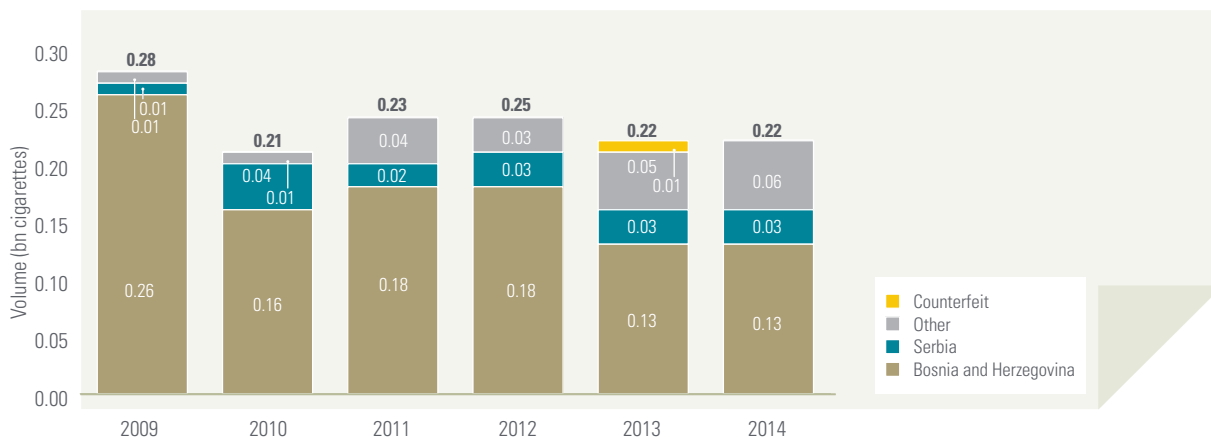
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# C&C flows from non-EU markets remained stable

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



SLOVENIA



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### Neighbouring non-EU markets of Bosnia and Herzegovina and Serbia contributed almost 72% of C&C flows

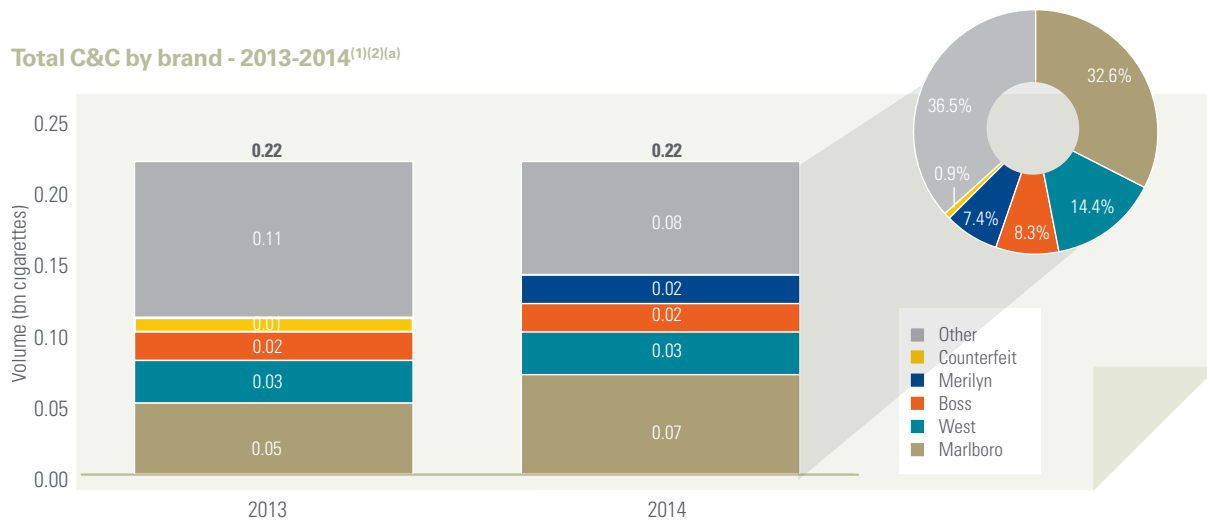
- The majority of total non-domestic cigarettes from Bosnia and Herzegovina and Serbia are C&C as a result of the low legal allowance of 40 cigarettes per trip for visitors travelling by land across the border
- The number of border crossings and low pack limit accounts for a small proportion of the total flow, therefore the majority of the flow from these countries is C&C
- If the total volume of C&C had been consumed legally within the Slovenian market, an additional tax revenue of approximately €31m would have been raised by the Slovenian Treasury<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

# C&C INFLOWS BY BRAND

Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>



Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

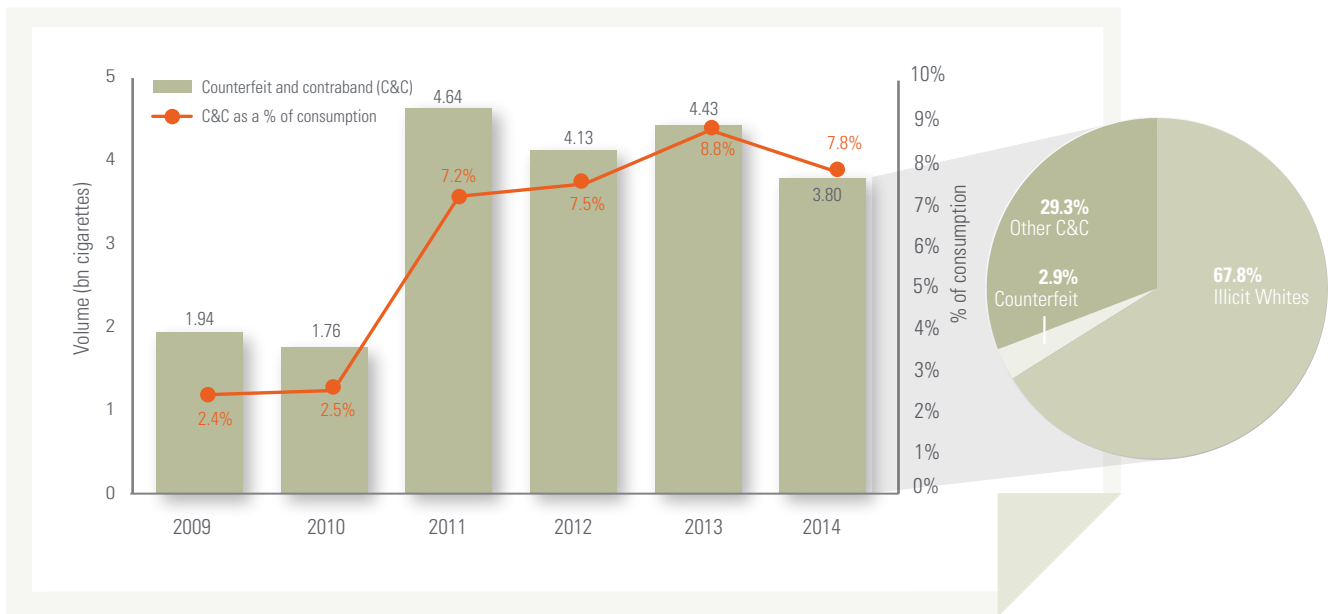
(2) KPMG analysis of data sources provided by manufacturers

# SPAIN



## Illicit Whites brand flows accounted for two thirds of C&C in Spain

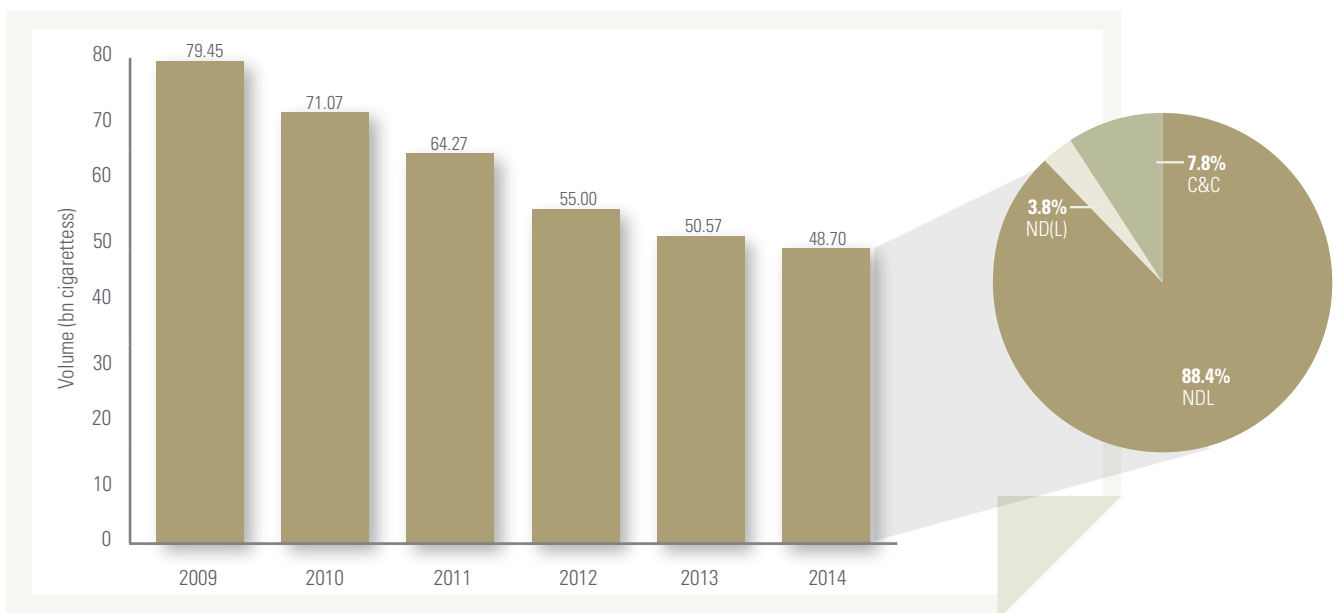
Manufactured cigarette C&C volumes and share of overall consumption - 2009-14



SPAIN



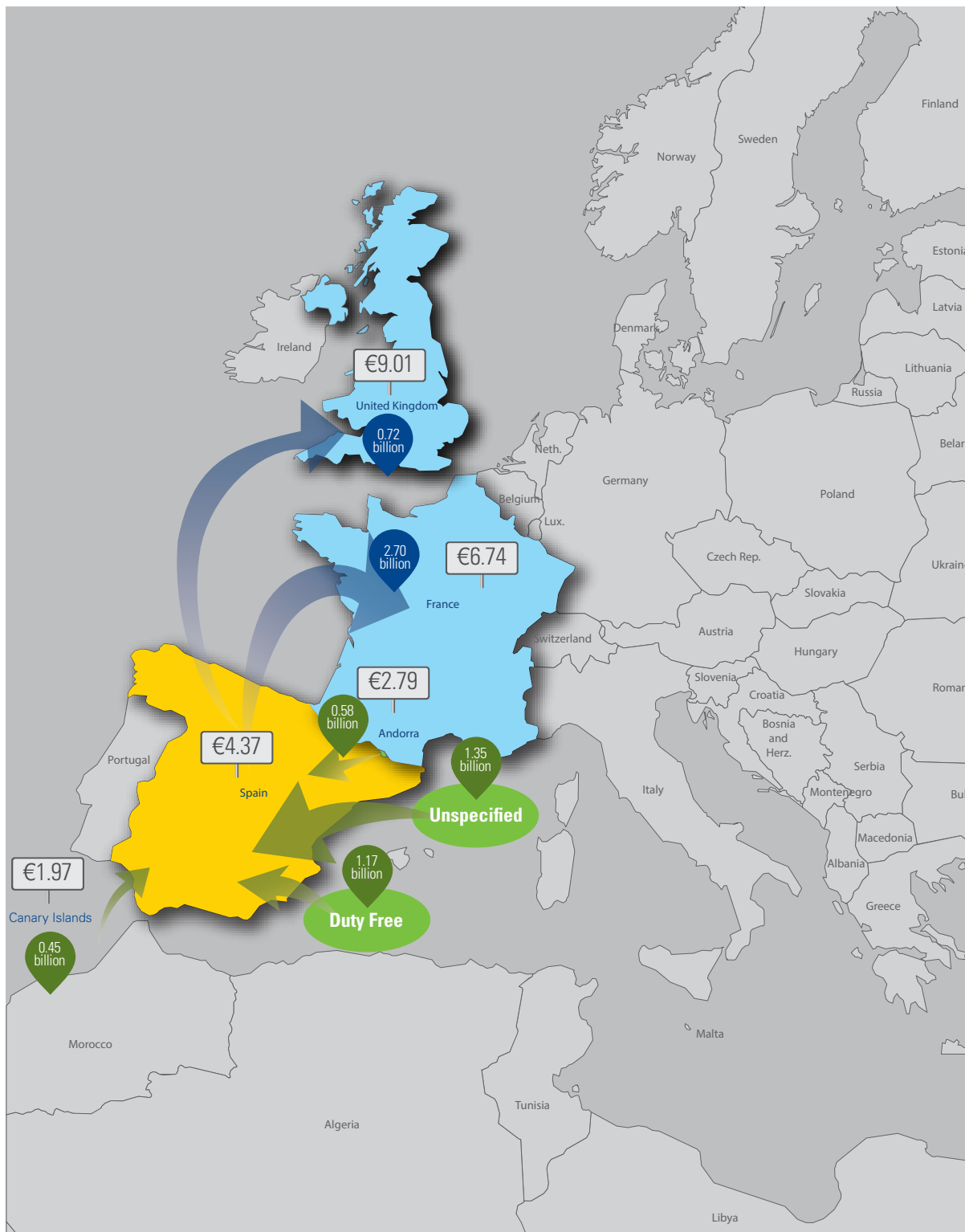
Manufactured cigarette consumption - 2009-14



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# MANUFACTURED CIGARETTE CONSUMPTION



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Main outflow █  
Main inflow █

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

Source: (1) KPMG EU Flows Model

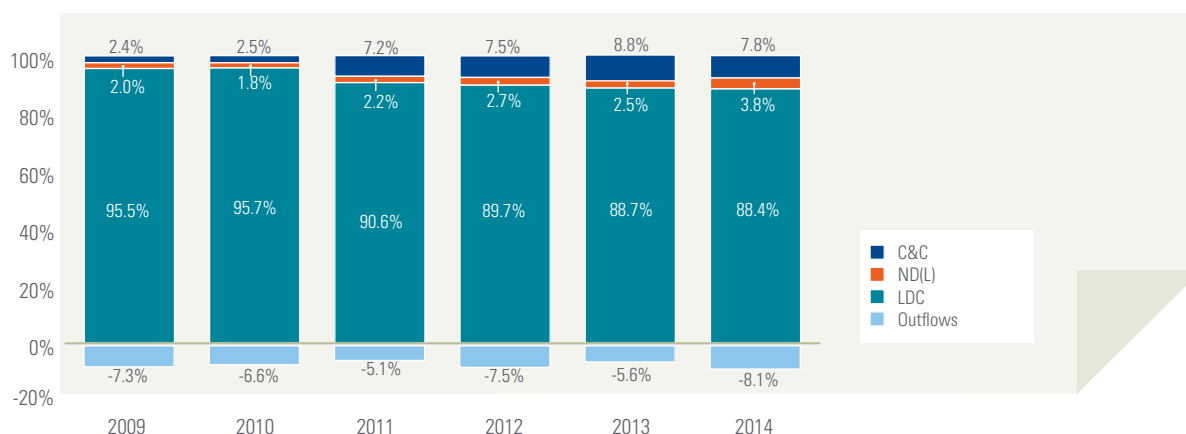
# The rate of decline of cigarette consumption slowed in 2014

*The increase in outflows from Spain may not be a representative trend as new data was made available in 2014 which showed that outflows in previous years may have been under-represented.*

## Total manufactured cigarette consumption – Spain<sup>(1)(2)(3)(a)</sup>

TOTAL SPAIN CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	81.67	72.70	61.52	53.50	47.71	46.99	(2%)
Outflows	-5.76	-4.68	-3.30	-4.14	-2.85	-3.95	39%
Legal domestic consumption (LDC)	75.91	68.01	58.21	49.35	44.86	43.04	(4%)
Non-domestic legal (ND(L))	1.60	1.30	1.41	1.51	1.29	1.85	44%
Counterfeit and contraband (C&C)	1.94	1.76	4.64	4.13	4.43	3.80	(14%)
Total non-domestic	3.54	3.06	6.05	5.64	5.71	5.65	(1%)
<b>Total consumption</b>	<b>79.45</b>	<b>71.07</b>	<b>64.27</b>	<b>55.00</b>	<b>50.57</b>	<b>48.70</b>	<b>(4%)</b>

## Share of Spain cigarette consumption by type - 2009-2014<sup>(1)(2)</sup>



### Legal domestic sales fell less steeply compared to previous years

- After successive price increases above inflation between 2008 and 2013, there were no changes to the excise rate during 2014 and average prices rose by 1.8%<sup>(4)</sup>
- In 2014 Spain came out of recession and unemployment started to fall for the first time since 2009<sup>(5)</sup>
- Non-domestic volumes were flat in 2014, but with a growing proportion of ND(L)

Notes: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) Tobacco Commissioner (4) EC Excise Duty tables (Part III – Manufactured Tobacco) (5) 2014 Economist Intelligence Unit



# InfloWS to Spain came mainly from the lower priced markets of Gibraltar, Andorra and the Canary Islands

Some manufacturers sell products in Gibraltar with Duty Free or no country specific labelling. KPMG have provided an estimate based on sales volumes provided by each industry participant. Therefore the Gibraltar labelled product does not constitute all products sold in Gibraltar

**Total inflows by country of origin - 2009-2014<sup>(1)(a)</sup>**

ND INFLOWS TO SPAIN						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Unspecified	0.00	0.02	1.31	0.97	1.53	1.35
Gibraltar						1.27
Duty Free	1.55	1.30	1.86	1.51	1.36	1.17
Andorra	0.35	0.15	0.79	0.81	0.69	0.58
Canary Islands	0.79	1.11	1.39	1.61	0.88	0.45
Other	0.85	0.48	0.70	0.74	1.25	0.83
<b>Total inflows</b>	<b>3.54</b>	<b>3.06</b>	<b>6.05</b>	<b>5.64</b>	<b>5.71</b>	<b>5.65</b>

ESTIMATED FLOWS FROM GIBRALTAR <sup>(b)</sup>						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Gibraltar estimate	0.24	0.70	1.88	1.96	2.68	2.31

- Prices in Andorra, Gibraltar and the Canary Islands are significantly cheaper than in Spain with average prices ranging from €1.20 and €2.50 per pack of 20, compared to average prices of €4.37 in Spain<sup>(2)</sup>
- Flows from Gibraltar are estimated by KPMG at 2.31 billion cigarettes – of which Illicit Whites brand flows contributed 52%

The increase in outflows from Spain may not be a representative trend as new data was made available in 2014 which showed that outflows in previous years may have been under-represented.

OUTFLOWS FROM SPAIN						
Billion cigarettes	2009	2010	2011	2012	2013	2014
France	2.40	2.08	1.57	2.33	1.84	2.70
UK	1.91	1.15	0.81	1.04	0.50	0.72
Germany	0.52	0.44	0.35	0.26	0.19	0.13
Other	0.94	1.00	0.57	0.51	0.32	0.40
<b>Total outflows</b>	<b>5.76</b>	<b>4.68</b>	<b>3.30</b>	<b>4.14</b>	<b>2.85</b>	<b>3.95</b>

**Spain also has high volumes of outflows, since it is both a comparatively cheaper market and a popular tourist destination. Approximately 53.5 million tourists entered Spain in 2014**

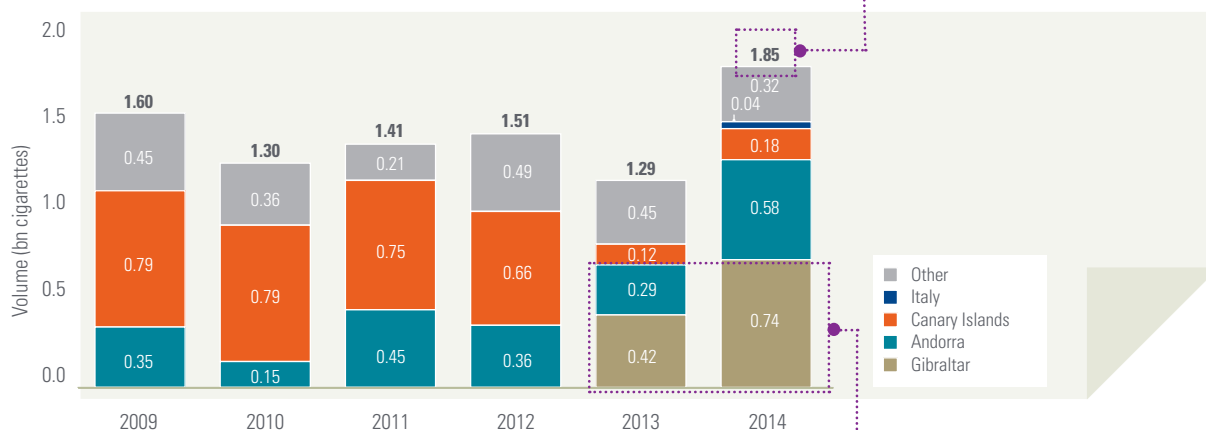
- The largest outflow to France is explained by the price difference of over €2 per pack of 20, with Spain receiving over 10 million overnight stays and 40 million land border crossings per year from France
- Flows to the UK are also significant, driven by 11 million tourists per year<sup>(3)</sup>

Notes: (a) The Duty Free inflow contains both "other" Duty Free product and Illicit Whites which have Duty Free labelling  
 (b) Gibraltar estimate is not included in the ND inflows table because some Gibraltar product is labelled Duty Free and some has unspecified labelling

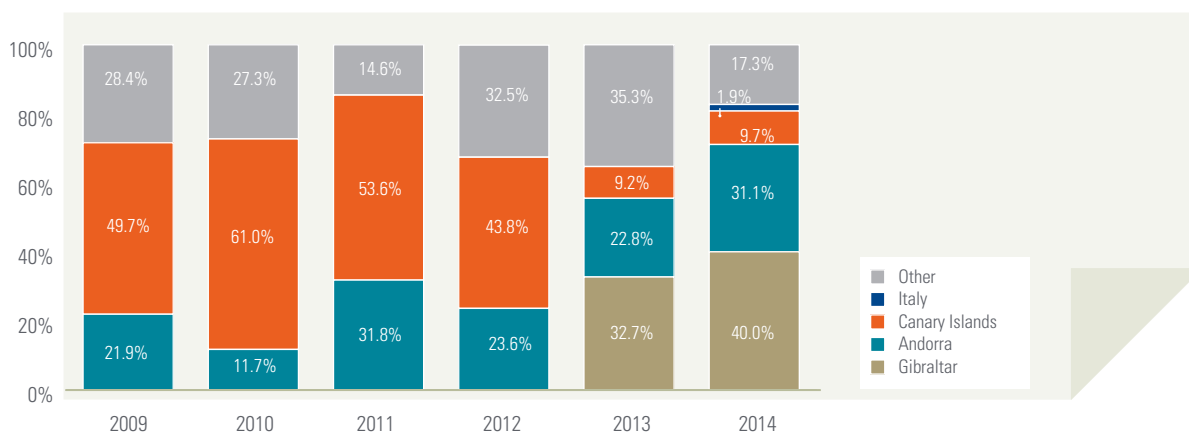
Sources: (1) KPMG EU Flows Model (2) Pricing data provided by manufacturers (3) Tourists by origin, Frontur, 2014

The majority of non-domestic legal purchases come from the neighbouring lower-priced markets of Gibraltar and Andorra

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)(c)</sup>



The flow from Gibraltar includes some Duty Free labelled product



SPAIN



PROJECT SUN

**Flows from Gibraltar, Andorra and Canary Islands are reflected by the high volume of border crossings**

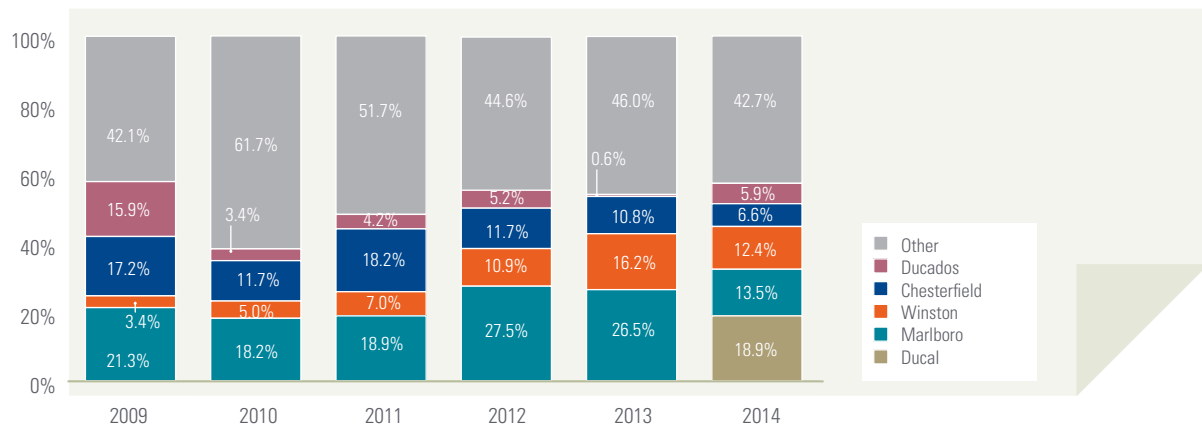
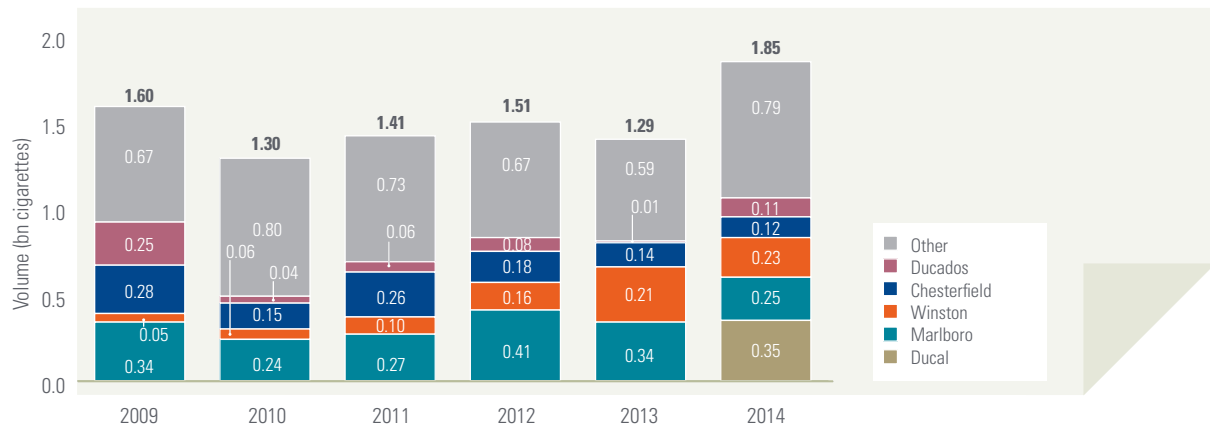
- 9.76 million border crossings were made from Spain to Gibraltar in 2014<sup>(3)</sup>
  - The legal allowance is limited to 80 cigarettes per month for those that live within 15km of the border (7,900 crossings per day), and 200 cigarettes for other crossings
- Flows from Andorra and the Canary Islands reflect the 3.5 million trips to Andorra and 1.5 million trips to the Canary Islands<sup>(4)(5)</sup>
- Given the lower prices of these regions compared to Spain, we have used consumer research to identify the purchasing probability of each adult crossing the border. This data showed a higher proportion of purchases compared to Spanish smoking prevalence statistics<sup>(c)</sup>
- Flows from other countries, mainly Germany and Italy are assumed to come from tourists to Spain and are categorised as legal

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix (c) KPMG uses data on propensity to travel and purchase cigarettes in Andorra, Gibraltar and the Canary Islands instead of smoking prevalence data. For more information, please see Project Sun methodology

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) Government of Gibraltar, Statistics (4) Government of Andorra, Statistics (5) Istec, Canary Island visitor numbers

# NON-DOMESTIC LEGAL INFLOWS BY BRAND

**Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>**



SPAIN



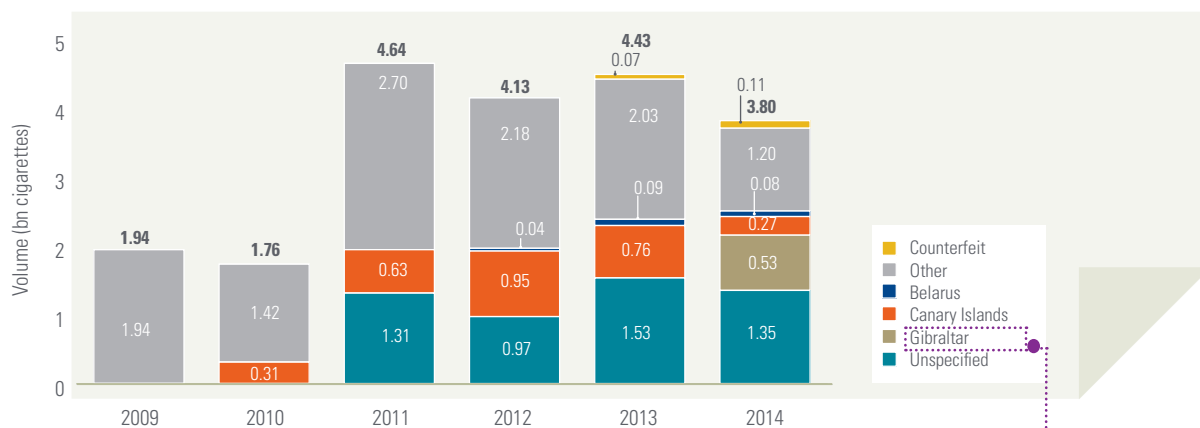
PROJECT SUN

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers along with consumer survey data. Further comparison between the methods is provided in the methodology section of the appendix

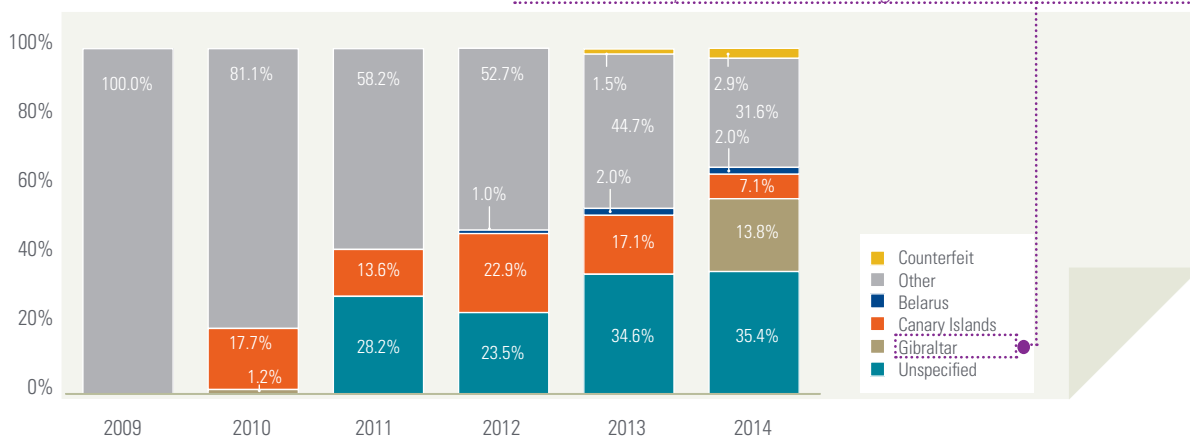
Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# A large proportion of C&C was Illicit Whites with unspecified labelling

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



The flow from Gibraltar appears for the first time as some manufacturers have begun using Gibraltar-specific labelling. This does not account for all flows from Gibraltar as some Duty Free labelled and Unspecified flows also originate from Gibraltar.



SPAIN



PROJECT SUN

### Illicit Whites from unspecified sources and Gibraltar accounted for the majority of C&C in Spain

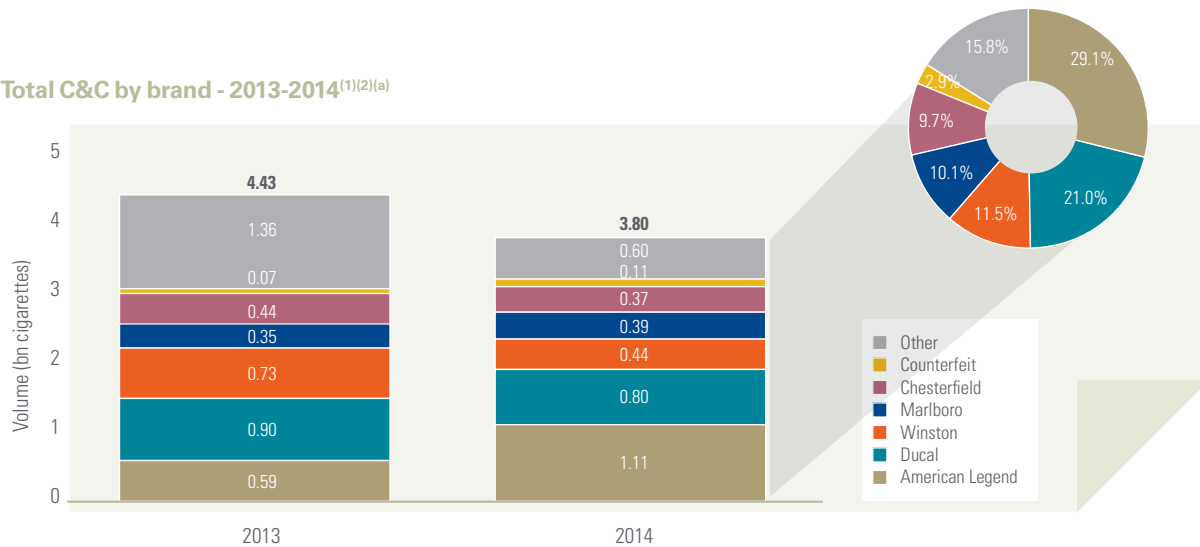
- All of the flows of Ducal came from Gibraltar
- American Legend had no specific labelling and its source is unclear
- 80% of all Spanish C&C was found in Andalusia which has 18% of Spain's population
- Spanish customs authorities have made several raids, including cigarette production facilities in Spain<sup>(4)(5)</sup>
  - This indicates that some cigarettes with unspecified labelling may have been illegally manufactured inside Spain
- If all this product had been purchased legally in Spain, the revenue gained by the Spanish treasury would have been approximately €810 million in 2014<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows.

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) La mayor fabrica ilegal de Tabaco, en Vitoria (5) ABC Sevilla, Desmantelan el Castillo de las Guardas la mayor fabricade Tabaco ilegal del pais, January 2015

## C&C INFLOWS BY BRAND

Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type - 2009-2014<sup>(1)(2)(a)</sup>

LABELLING OF ILLICITWHITES INFLOWS TO SPAIN						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country Specific	0.06	0.20	1.37	1.18	1.39	1.23
Duty Free	0.00	0.00	0.00	0.04	0.05	0.08
Unspecified	0.00	0.00	0.20	0.61	1.01	1.28
<b>Total Illicit Whites</b>	<b>0.06</b>	<b>0.21</b>	<b>1.57</b>	<b>1.83</b>	<b>2.45</b>	<b>2.58</b>

SPAIN

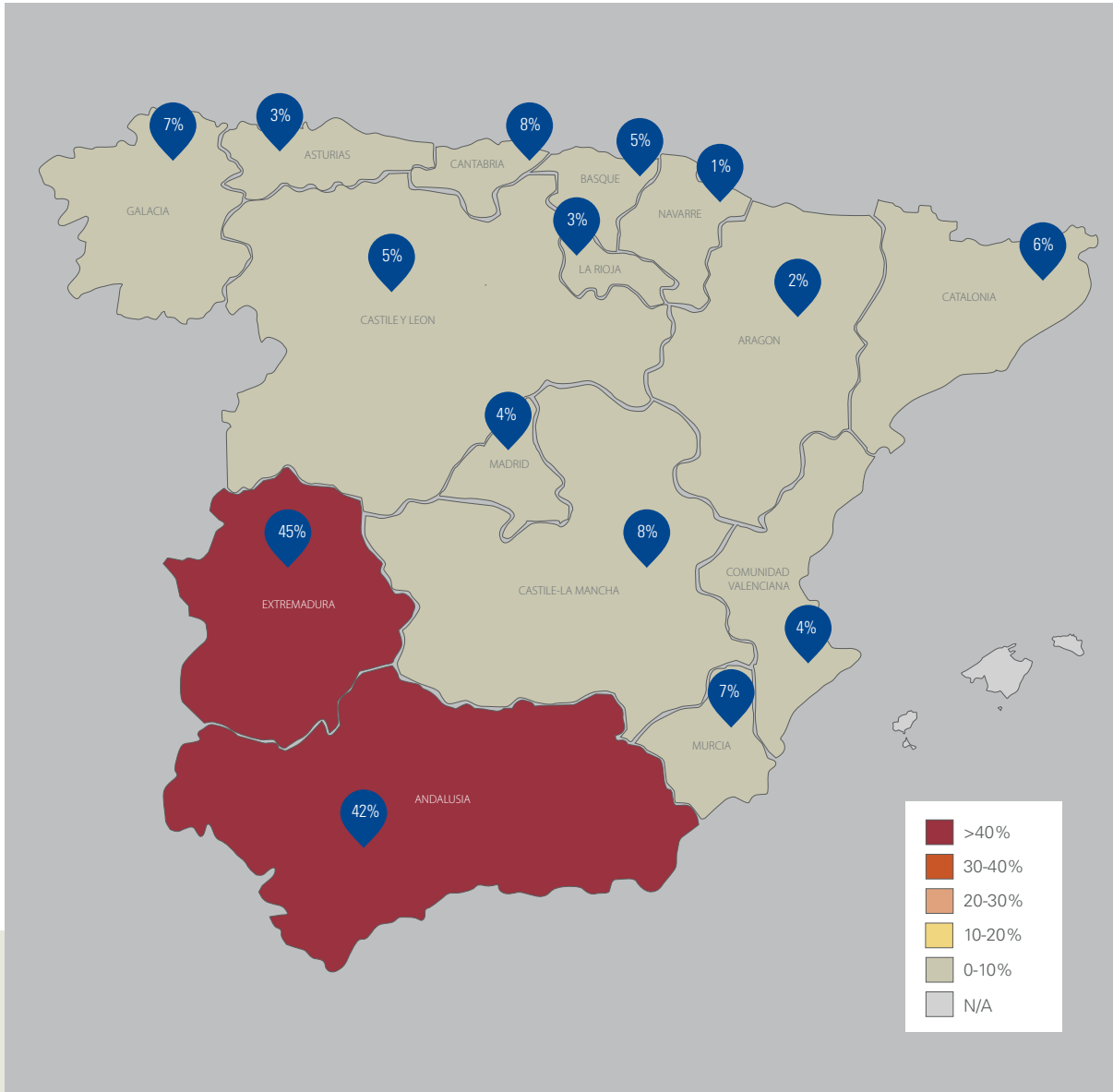


PROJECT SUN

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows.  
Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers.

# Non-domestic incidence heat map

Empty Pack Survey regional non-domestic incidence – 2014<sup>(1)</sup>



SPAIN



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Source: (1) Independent agency Empty Pack Surveys, 2014





SPAIN



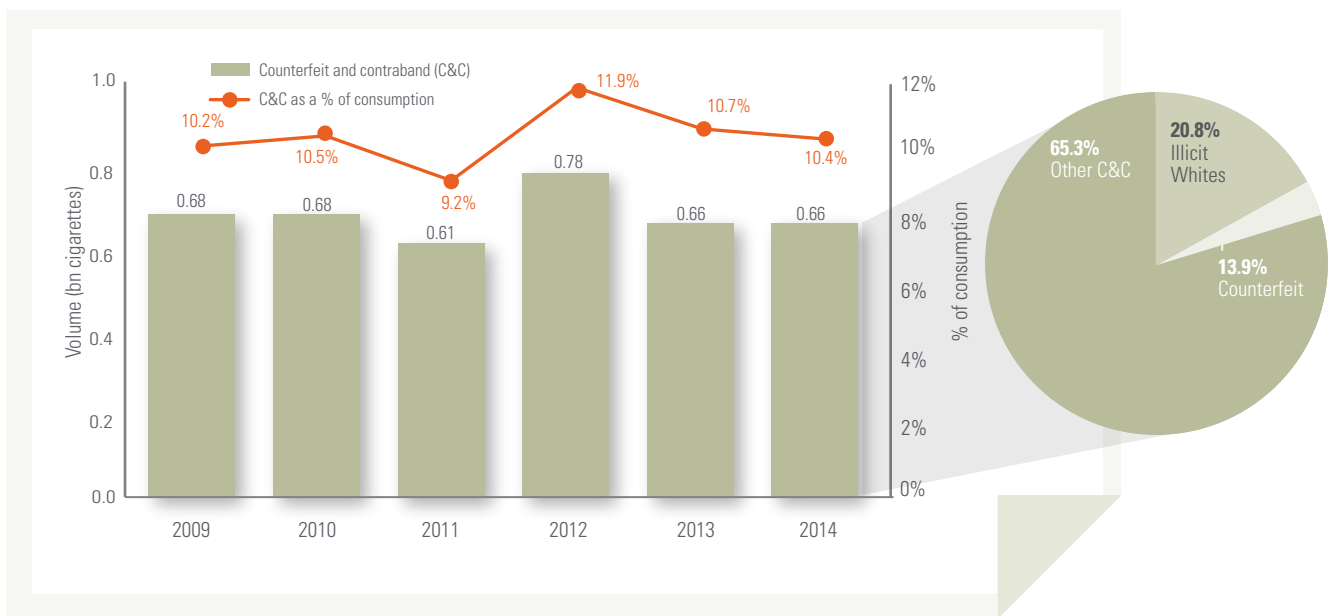
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# SWEDEN



C&C remained stable with higher volumes of Illicit Whites brand flows in 2014

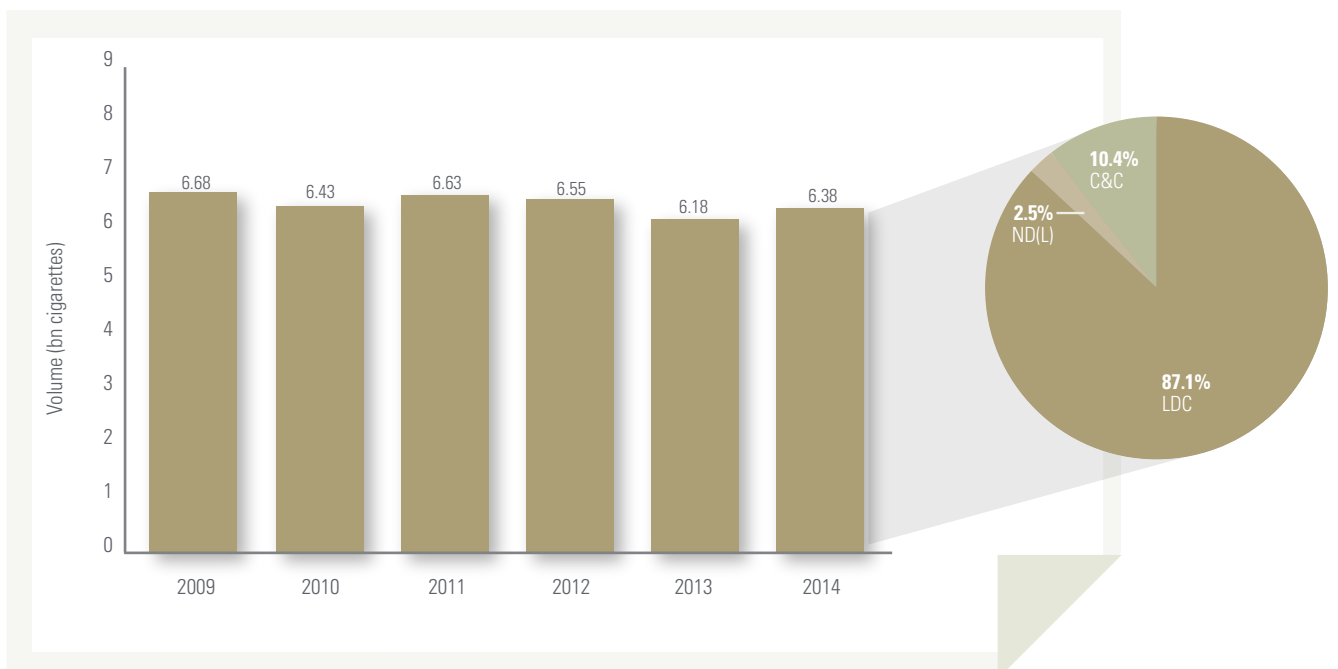
Manufactured cigarette C&C volumes and share of overall consumption - 2009-14



SWEDEN



Manufactured cigarette consumption - 2009-14



PROJECT SUN

# MANUFACTURED CIGARETTE CONSUMPTION



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Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

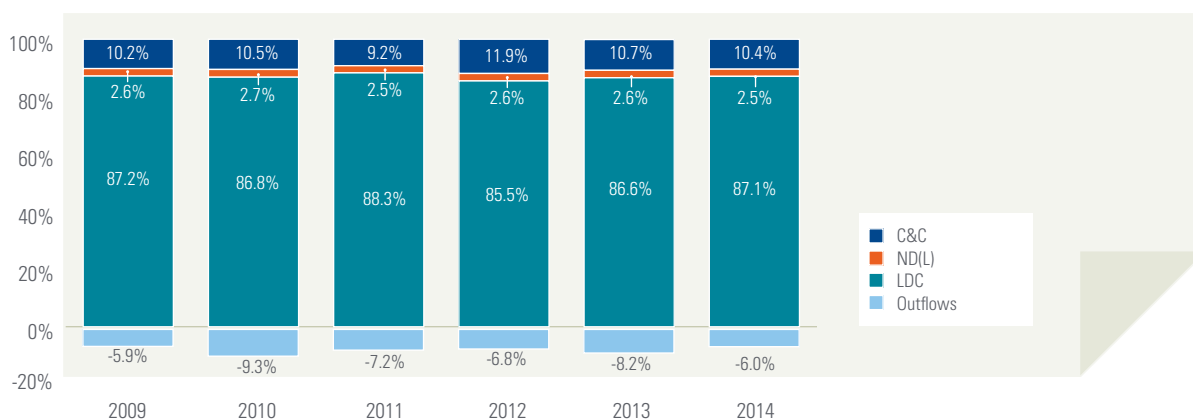
Source: (1) KPMG EU Flows Model

Consumption increased against a background of lower average prices and an improving economic outlook

**Total manufactured cigarette consumption – Sweden<sup>(1)(2)(a)</sup>**

TOTAL SWEDEN CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	6.22	6.18	6.33	6.04	5.87	5.94	1%
Outflows	-0.39	-0.60	-0.48	-0.44	-0.51	-0.39	(25%)
Legal domestic consumption (LDC)	5.83	5.58	5.85	5.59	5.36	5.56	4%
Non-domestic legal (ND(L))	0.17	0.17	0.17	0.17	0.16	0.16	(1%)
Counterfeit and contraband (C&C)	0.68	0.68	0.61	0.78	0.66	0.66	0%
Total non-domestic	0.85	0.85	0.78	0.95	0.83	0.82	(0%)
<b>Total consumption</b>	<b>6.68</b>	<b>6.43</b>	<b>6.63</b>	<b>6.55</b>	<b>6.18</b>	<b>6.38</b>	<b>3%</b>

**Share of Sweden cigarette consumption by type - 2009-2014<sup>(1)(2)</sup>**



SWEDEN



PROJECT SUN

**Improving economic conditions and falling average cigarette prices may be supporting legal domestic sales volumes**

- Economic conditions in Sweden improved in 2014 as unemployment remained stable at 8.0% and average personal disposable income improved by 2.3%<sup>(4)</sup>
- Average prices fell by 5.5% in 2014 in local currency terms<sup>(3)</sup>

**Non-domestic consumption remained stable, characterised by cross-border shopping for ND(L) and domestic Illicit Whites and flows from Eastern Europe in C&C**

Note: (a) In 2012, 2013 and 2014 non-domestic incidence is stated on a sticks basis. Prior to this a packs basis was used  
Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) 2014 Euromonitor

# InfloWS to Sweden mainly come from cheaper EU markets or as Duty Free

## Total inflows by country of origin - 2009-2014<sup>(1)(a)(b)</sup>

ND INFLOWSTO SWEDEN						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Duty Free	0.26	0.33	0.23	0.24	0.31	0.28
Poland	0.04	0.05	0.06	0.13	0.12	0.08
Belarus	0.00	0.00	0.00	0.01	0.08	0.04
Russia	0.18	0.07	0.06	0.08	0.04	0.03
Denmark	0.03	0.05	0.01	0.03	0.01	0.01
Serbia	0.00	0.01	0.01	0.01	0.01	0.01
Other	0.32	0.35	0.40	0.45	0.25	0.37
<b>Total inflows</b>	<b>0.85</b>	<b>0.85</b>	<b>0.78</b>	<b>0.95</b>	<b>0.83</b>	<b>0.82</b>

- High Duty Free inflows are as a result of its availability when travelling between Norway and Sweden
- Inflows from Poland declined by 36%, which may have been impacted by the price difference which decreased from €3.36 to €2.37<sup>(2)</sup>

## Total outflows by destination country - 2009-2014<sup>(1)</sup>

OUTFLOWS FROM SWEDEN						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Norway	0.23	0.30	0.32	0.28	0.35	0.27
Denmark	0.05	0.17	0.11	0.04	0.04	0.03
UK	0.06	0.00	0.00	0.05	0.01	0.02
Other	0.05	0.13	0.05	0.07	0.11	0.07
<b>Total outflows</b>	<b>0.39</b>	<b>0.60</b>	<b>0.48</b>	<b>0.44</b>	<b>0.51</b>	<b>0.39</b>

- The majority of outflows were to Norway where it was €5.57 more expensive to buy a pack of 20 cigarettes in 2014<sup>(2)</sup>
- The decline in flows to Norway is consistent with a decline in the volume of travellers<sup>(3)</sup>
- Outflows decreased to Denmark as a result of price fluctuations between the two countries in 2014<sup>(2)</sup>

Notes: (a) The Duty Free inflow contains both "other" Duty Free product and Illicit Whites which have Duty Free labelling  
 (b) In 2013 a separate study was conducted in Norway using alternative methodology to Project SUN. As a result, the outflow volumes in 2013 for Norway and Sweden are not comparable

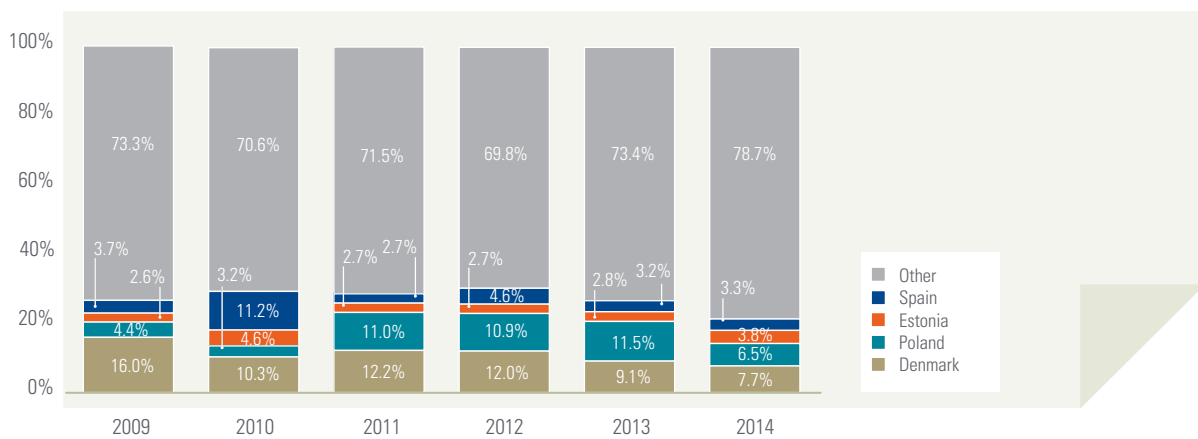
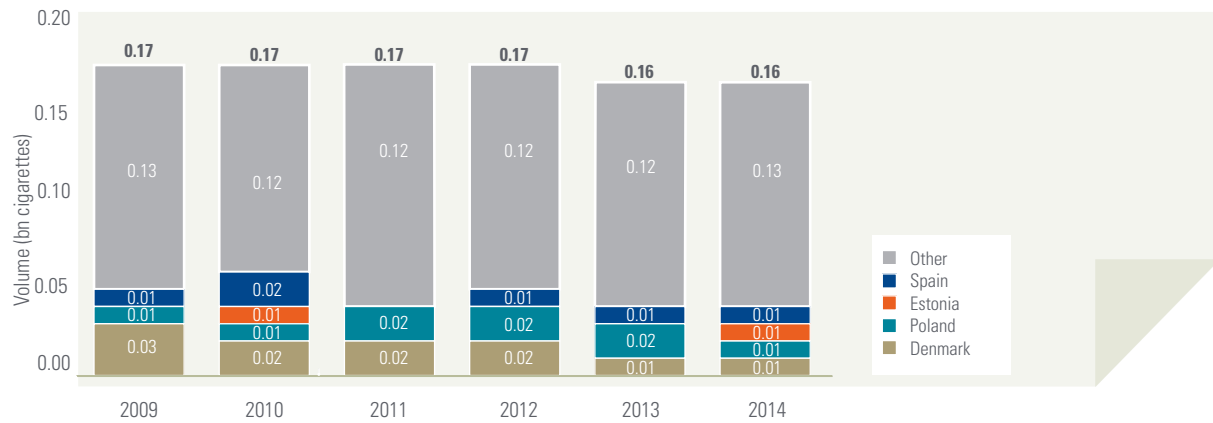
Sources: (1) KPMG EU Flows Model (2) EC Excise Duty tables (Part III – Manufactured Tobacco)

(3) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model



# Non-domestic legal flows remained static in 2014

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



SWEDEN



PROJECT SUN

### ND(L) is largely from neighbouring countries and Duty Free product

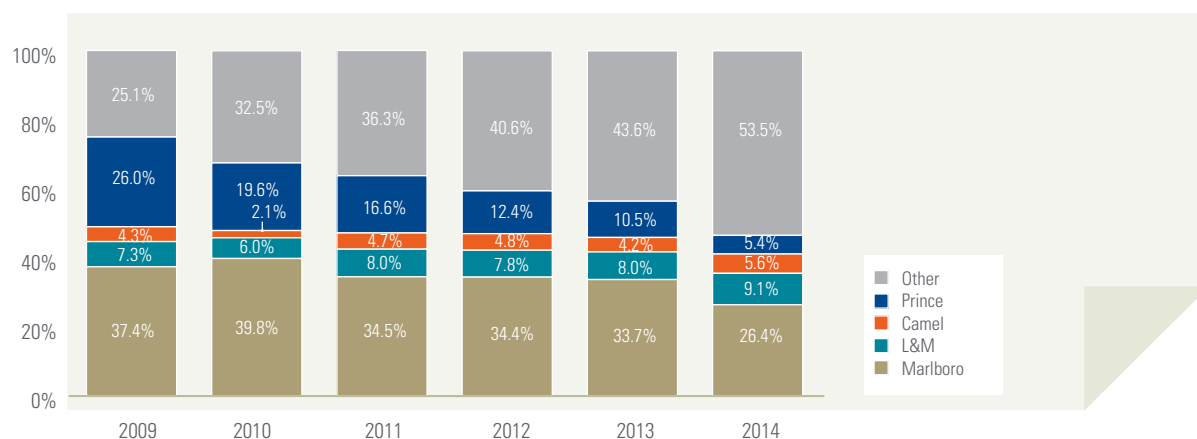
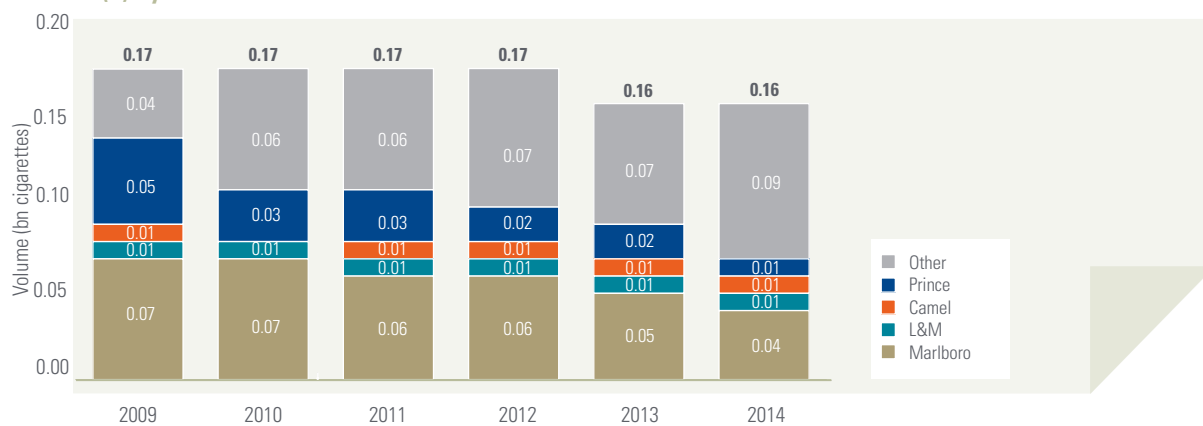
- A decline in ND(L) from Denmark and Poland is reflected in declining visitor numbers<sup>(1)</sup>

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

# NON-DOMESTIC LEGAL INFLOWS BY BRAND

Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>



SWEDEN



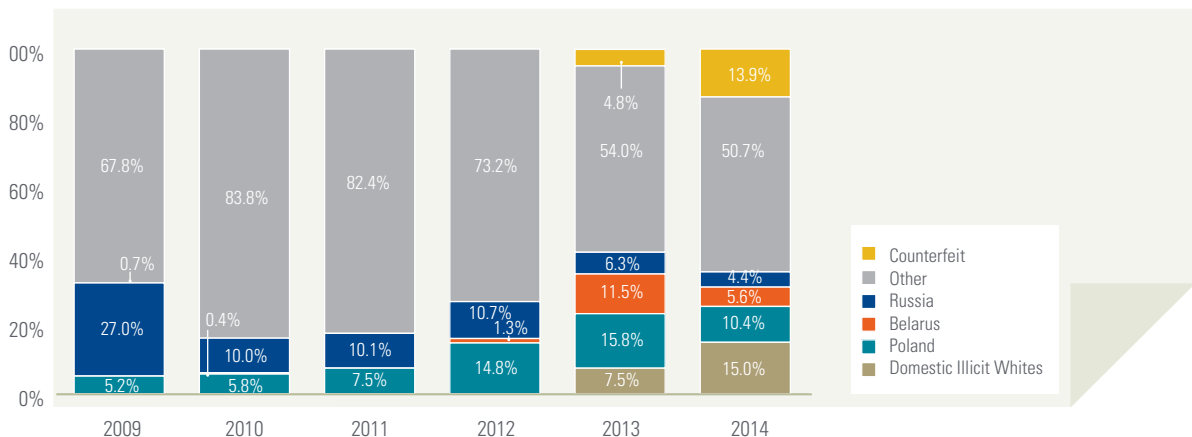
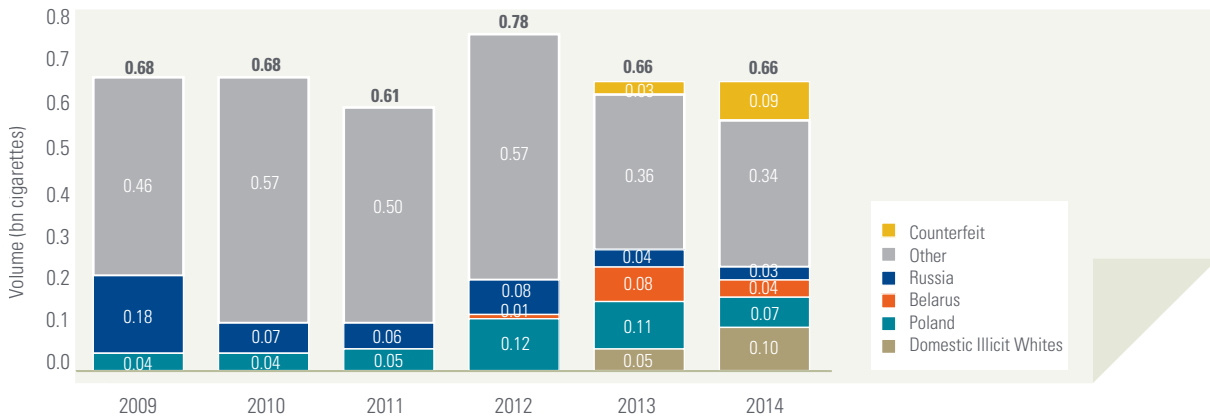
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers

# Total C&C flows remained constant in volume terms in 2014, but counterfeit cigarettes increased

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



SWEDEN



PROJECT SUN

**Overall C&C flows remained stable between 2013 and 2014**

- Domestic Illicit Whites doubled in 2014, accounting for 15% of C&C<sup>(4)</sup>
- Counterfeit volumes of Marlboro, L&M and Price were identified, and had Duty Free and Swedish labelling
- If the total volume of C&C had been consumed legally within the Swedish market, an additional tax revenue of approximately €149m would have been raised by the Swedish Treasury<sup>(3)</sup>

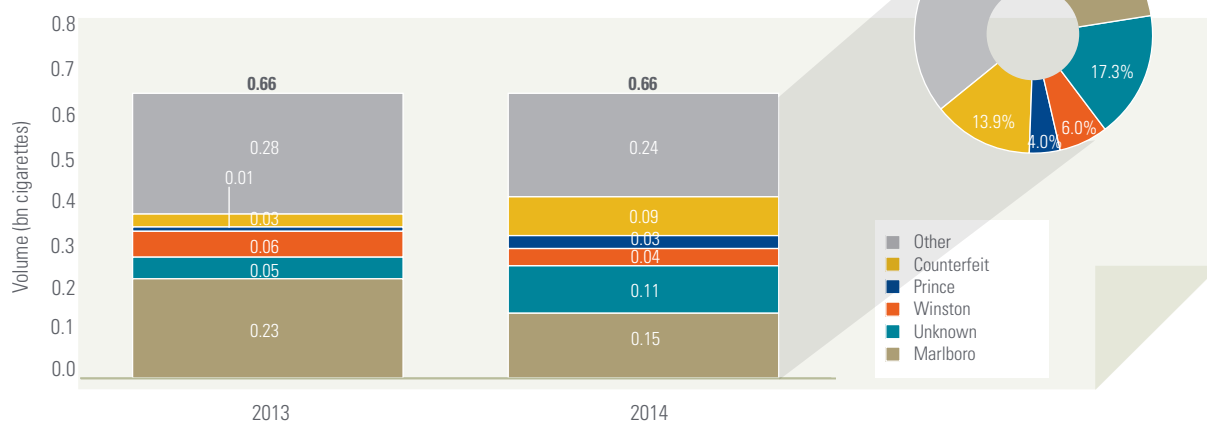
Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco) (4) HUI Research, Tobaksrapport, 2014



## C&C INFLOWS BY BRAND

Total C&C by brand - 2013-2014<sup>(1)(2)(a)</sup>



Breakdown of Illicit Whites by type - 2009-2014<sup>(1)(a)</sup>

LABELLING OF ILLICIT WHITES INFLOWS TO SWEDEN						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	0.00	0.00	0.01	0.03	0.04	0.03
Duty Free	0.14	0.08	0.15	0.03	0.05	0.01
Unspecified	0.00	0.00	0.00	0.01	0.01	0.00
Domestic Illicit Whites					0.05	0.10
<b>Total Illicit Whites</b>	<b>0.14</b>	<b>0.08</b>	<b>0.16</b>	<b>0.07</b>	<b>0.14</b>	<b>0.14</b>

SWEDEN



PROJECT SUN

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

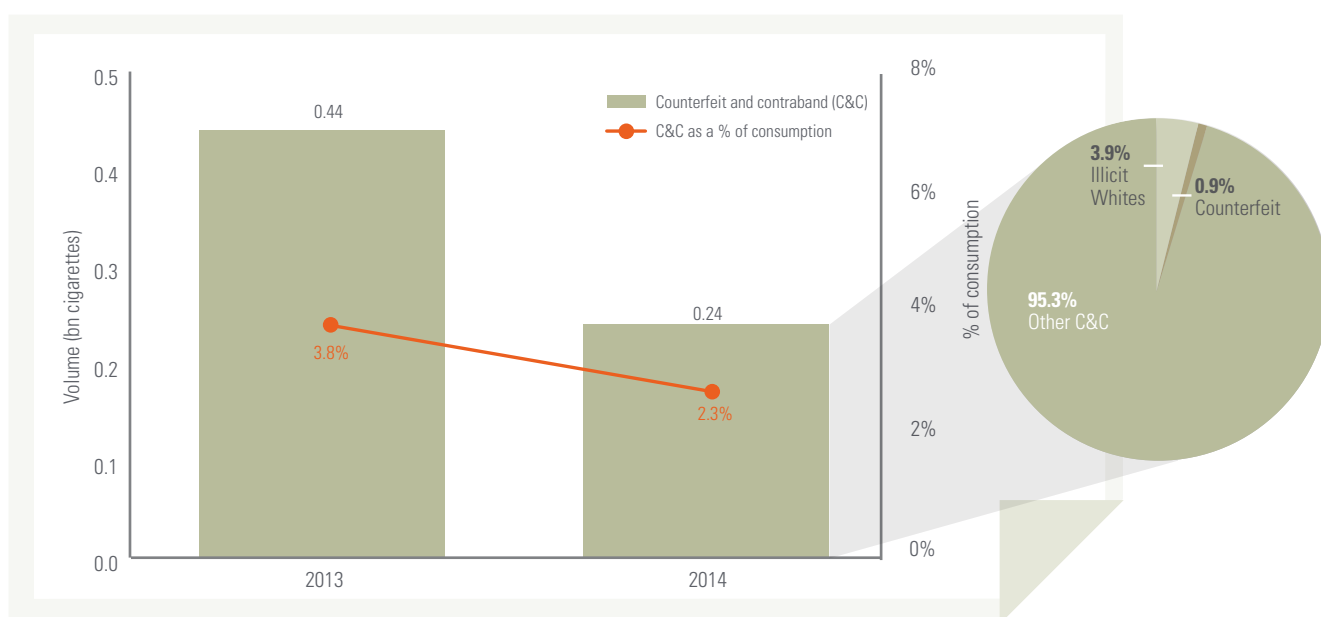
(2) KPMG analysis of data sources provided by manufacturers

# SWITZERLAND



Most non-domestic inflows to Switzerland are from lower priced neighbouring countries

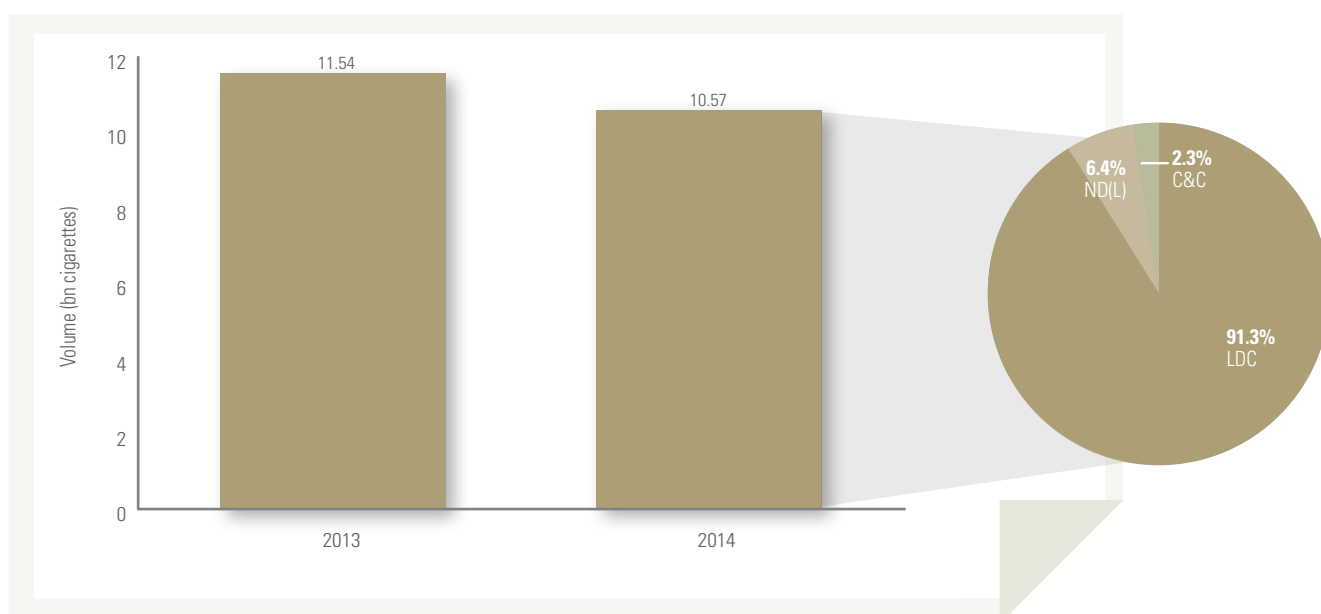
Manufactured cigarette C&C volumes and share of overall consumption - 2013-14



SWITZERLAND

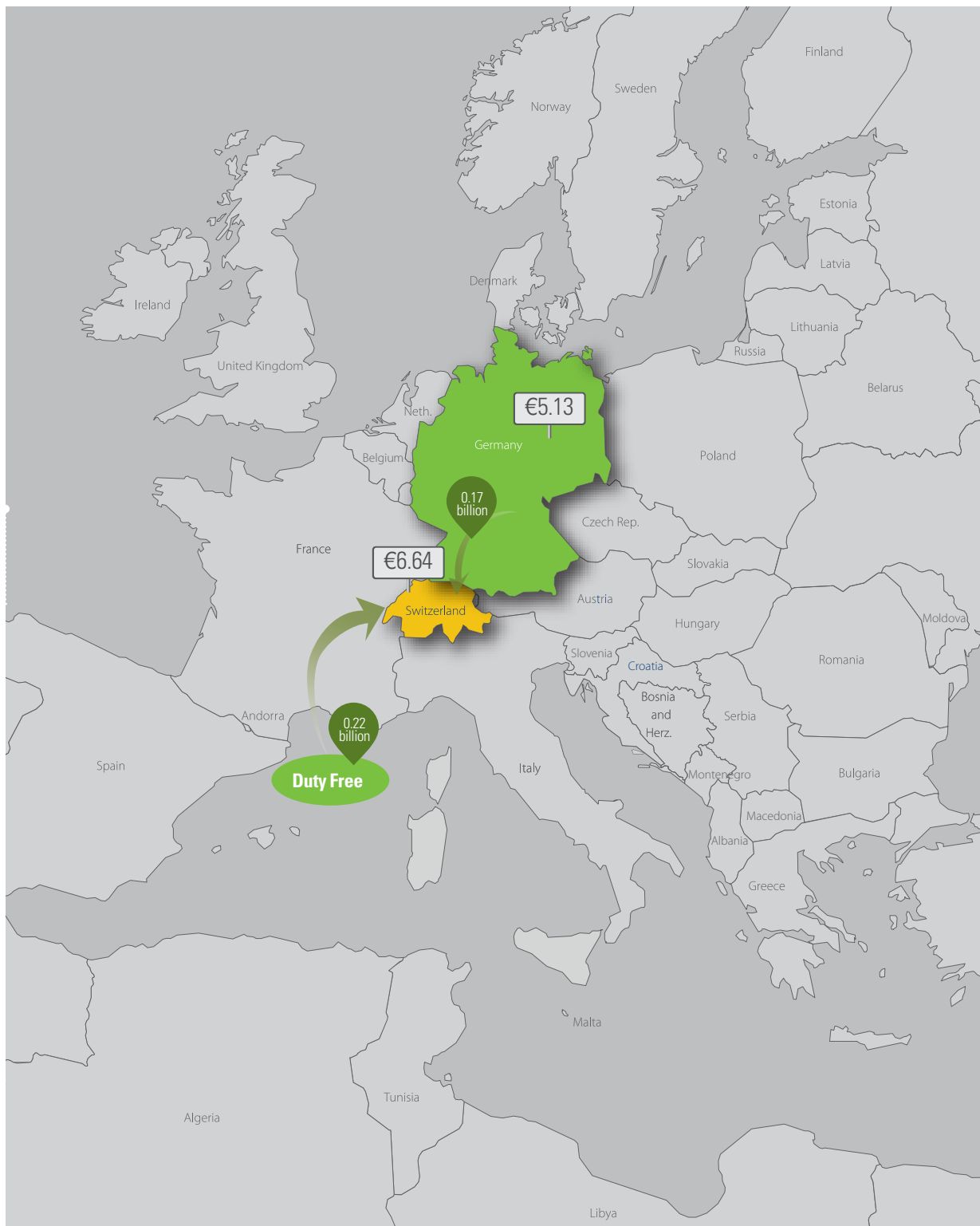


Manufactured cigarette consumption - 2013-14



PROJECT SUN

# KEY INFLOWS AND OUTFLOWS



SWITZERLAND



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Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

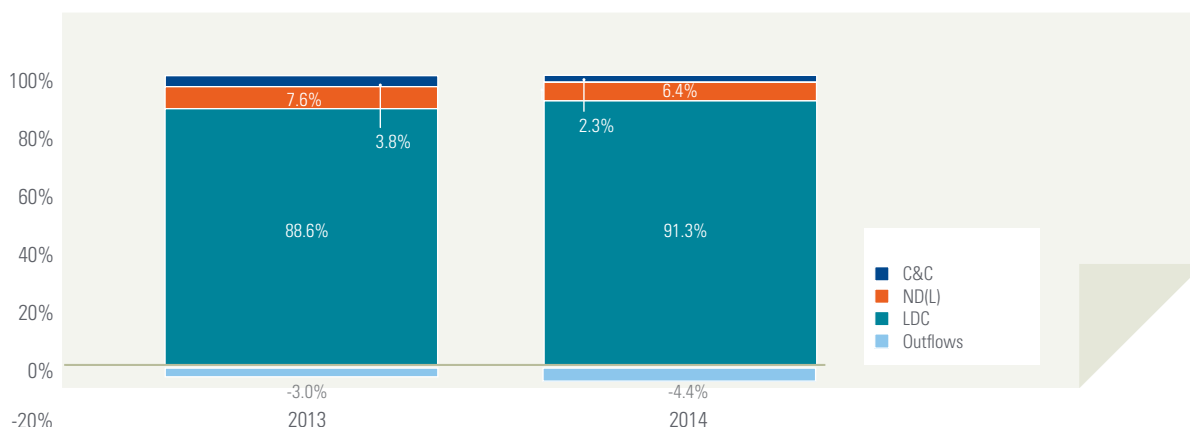
Source: (1) KPMG EU Flows Model

# Both non-domestic and legal domestic consumption declined in 2014

## Total manufactured cigarette consumption – Switzerland<sup>(1)(2)(a)(b)</sup>

TOTAL SWITZERLAND CONSUMPTION			
Billion cigarettes	2013	2014	2013-14%
Legal domestic sales (LDS)	10.57	10.12	(4%)
Outflows	-0.35	-0.47	33%
Legal domestic consumption (LDC)	10.22	9.65	(6%)
Non-domestic legal (ND(L))	0.88	0.68	(23%)
Counterfeit and contraband (C&C)	0.44	0.24	(45%)
Total non-domestic	1.32	0.92	(30%)
<b>Total consumption</b>	<b>11.54</b>	<b>10.57</b>	<b>(8%)</b>

## Share of Switzerland cigarette consumption by type - 2013-2014<sup>(1)(2)(b)</sup>



SWITZERLAND



PROJECT SUN

### Legal domestic sales declined

- Average prices rose 5% in 2014, making the average price €6.64<sup>(3)</sup>
- Economic conditions were favourable in 2014 as unemployment fell whilst both GDP and annual disposable income grew<sup>(4)(5)(6)</sup>

Notes: (a) Non-domestic incidence is stated on a sticks basis  
 (b) Switzerland was included in the study for the first time in 2014, but 2013 is reflective of a study that KPMG undertook for Switzerland using the Project SUN methodology

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers  
 (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
 (3) Tax tables provided by manufacturers (4) 2014 Economist Intelligence Unit (5) 2014 Euromonitor (6) Swiss State Secretariat of Economic Affairs

## InfloWS fell in 2014, with the main sources being Duty Free labelled packs and inflows from neighbouring countries

### Total inflows by country of origin - 2013-2014<sup>(1)(a)(b)</sup>

ND INFLOWSTO SWITZERLAND		
Billion cigarettes	2013	2014
Duty Free	0.32	0.22
Germany	0.21	0.17
Italy	0.12	0.12
Serbia	0.07	0.05
France	0.10	0.04
Other	0.49	0.31
<b>Total inflows</b>	<b>1.32</b>	<b>0.92</b>

**Duty Free inflows make up a large proportion of non-domestic consumption in Switzerland, as it is a non-EU country and therefore all international travellers are entitled to a Duty Free allowance from any country**

- Inflows from surrounding countries are mainly reflected by cheaper prices in Italy and Germany and the high number of border crossings<sup>(2)(3)</sup>
- Inflows from Serbia may relate to the immigrants from the Balkan region; the Balkan emigrant population is estimated to be around 300,000<sup>(4)</sup>

### Total outflows by destination country - 2013-2014<sup>(1)(a)(b)</sup>

OUTFLOWS FROM SWITZERLAND		
Billion cigarettes	2013	2014
Italy	0.05	0.13
Germany	0.03	0.12
France	0.14	0.08
Other	0.13	0.15
<b>Total outflows</b>	<b>0.35</b>	<b>0.47</b>

**Outflows grew 33% driven by increased volumes to Italy and Germany, which was reflected by increased travel volumes between these countries**

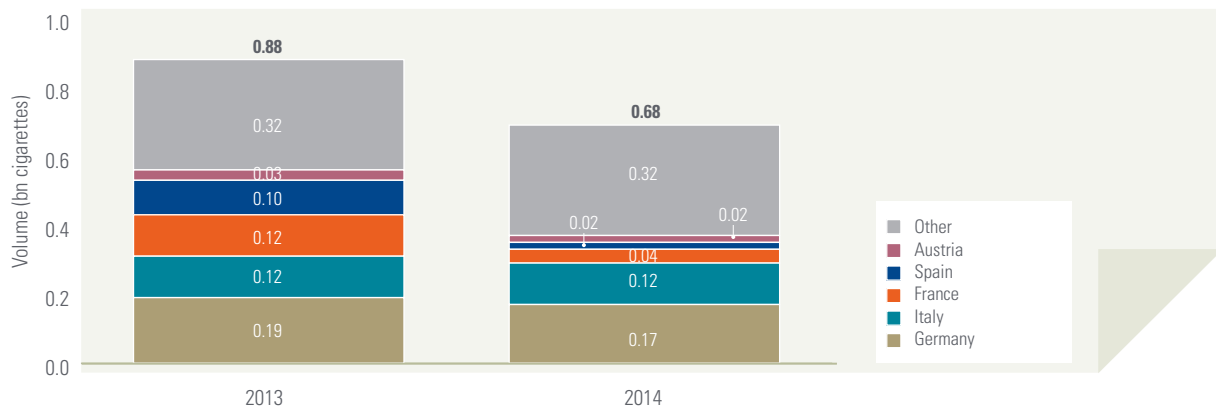
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(b) Switzerland was included in the study for the first time in 2014, but 2013 is reflective of a study that KPMG undertook for Switzerland using the Project SUN methodology

Sources: (1) KPMG EU Flows Model (2) EC Excise Duty tables (Part III – Manufactured Tobacco)  
(3) KPMG analysis of UNWTO Factbook 2008-2013 (4) Swiss Federal Statistics Office



# ND(L) inflows largely came from neighbouring markets

Total ND(L) by origin - 2013-14<sup>(1)(2)(a)(b)(c)</sup>



SWITZERLAND



PROJECT SUN

**ND(L) volumes accounted for 74% of non-domestic inflows in 2014**

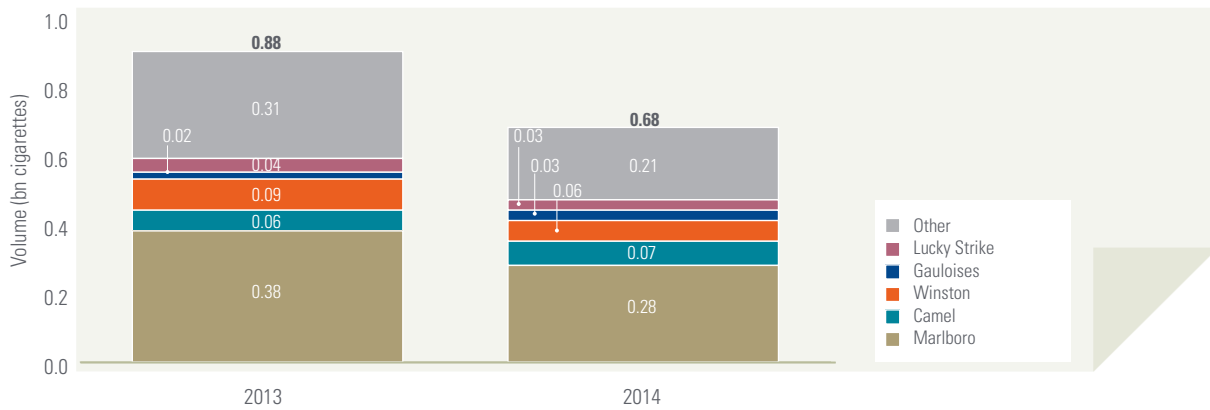
- The largest ND(L) inflows were from Germany and Italy, which together accounted for almost half of the total ND(L) inflow
- The flow from France is reflected by the high volumes of tourist and commuter flows consuming French-origin packs when in Switzerland<sup>(1)</sup>

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers (c) Switzerland was included in the study for the first time in 2014, but 2013 is reflective of a study that KPMG undertook for Switzerland using the Project SUN methodology

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# NON-DOMESTIC LEGAL INFLOWS BY BRAND

**Total ND(L) brand 2013-14<sup>(1)(2)(a)(b)(c)</sup>**



SWITZERLAND



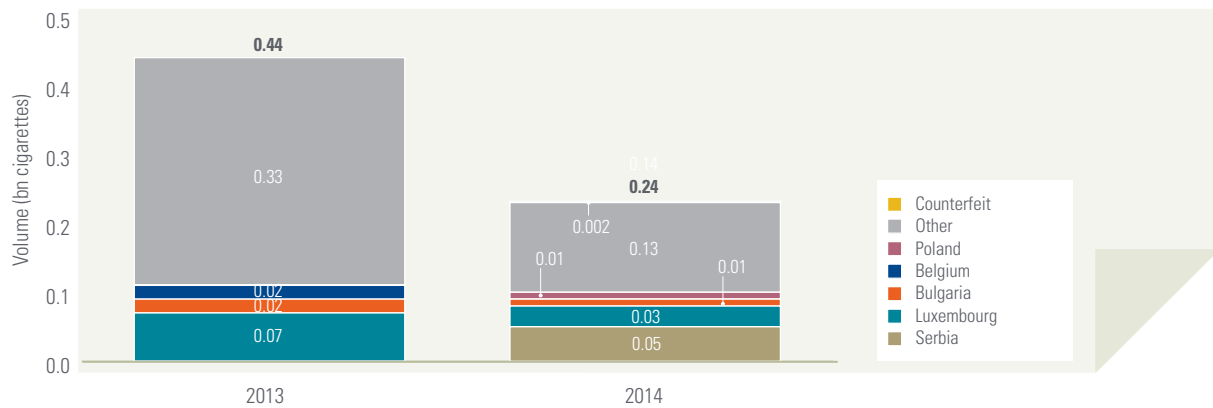
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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers (c) Switzerland was included in the study for the first time in 2014, but 2013 is reflective of a study that KPMG undertook for Switzerland using the Project SUN methodology

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

C&C was a small proportion of total consumption compared to other countries within the study

Total C&C by origin 2013-2014<sup>(1)(2)(a)(b)</sup>



**C&C inflows accounted for less than 3% of the total market in 2014**

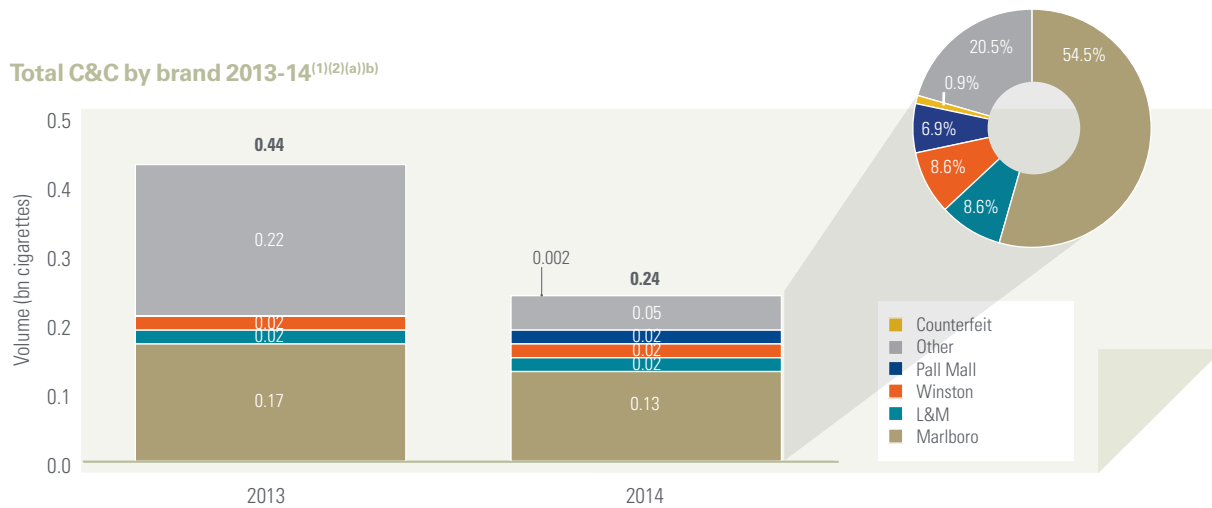
- The largest C&C inflows originated from Serbia. There is not enough travel between the two countries despite accounting for the size of the Balkan emigrant community in Switzerland and so the majority of the inflow was assumed to be C&C<sup>(1)</sup>
- C&C consumption in Switzerland was low in comparison with neighbouring countries. C&C in Switzerland was 2.3% compared with 14.7% in France, 8.4% in Germany and 5.6% in Italy

Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) Switzerland was included in the study for the first time in 2014, but 2013 is reflective of a study that KPMG undertook for Switzerland using the Project SUN methodology

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers



## C&C INFLOWS BY BRAND



SWITZERLAND



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Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) Switzerland was included in the study for the first time in 2014, but 2013 is reflective of a study that KPMG undertook for Switzerland using the Project SUN methodology

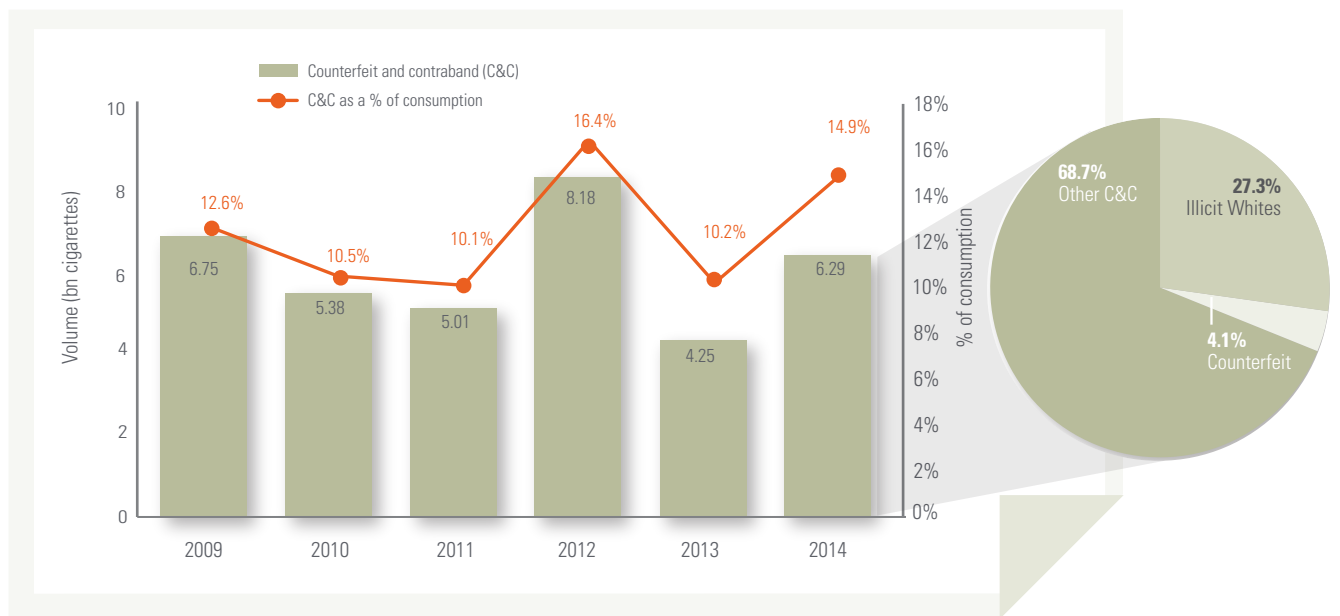
Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model  
(2) KPMG analysis of data sources provided by manufacturers

# UK



Declining legal domestic sales were offset by an increase in cigarettes from non-EU countries

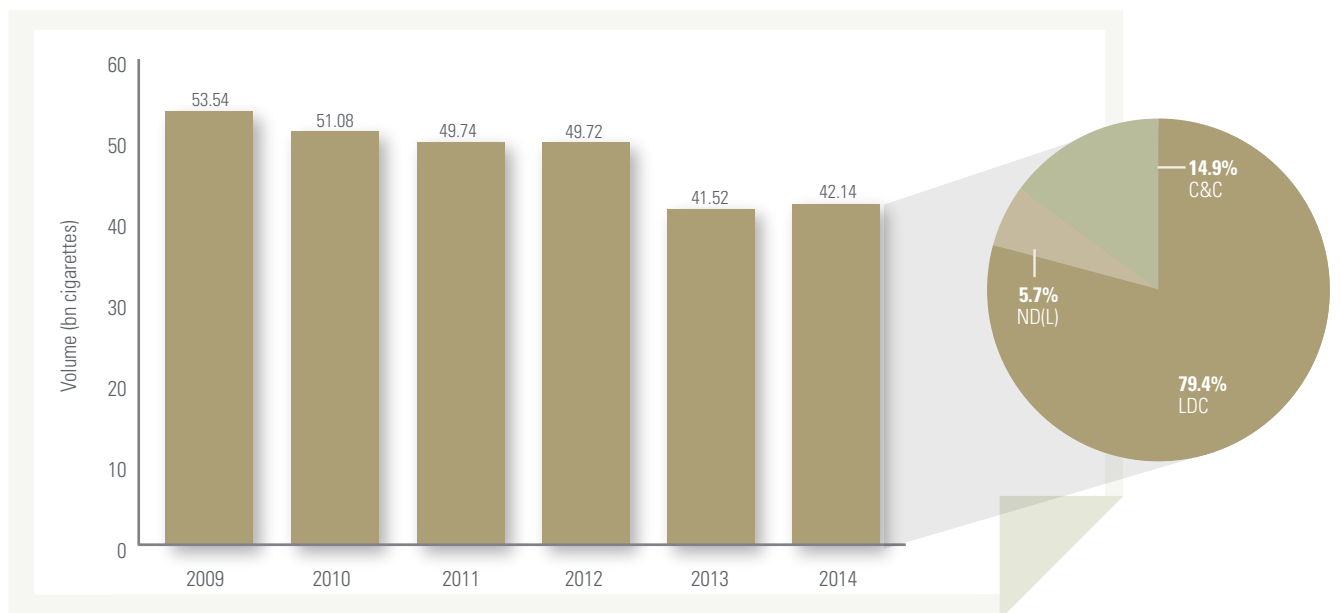
Manufactured cigarette C&C volumes and share of overall consumption - 2009-14



UK

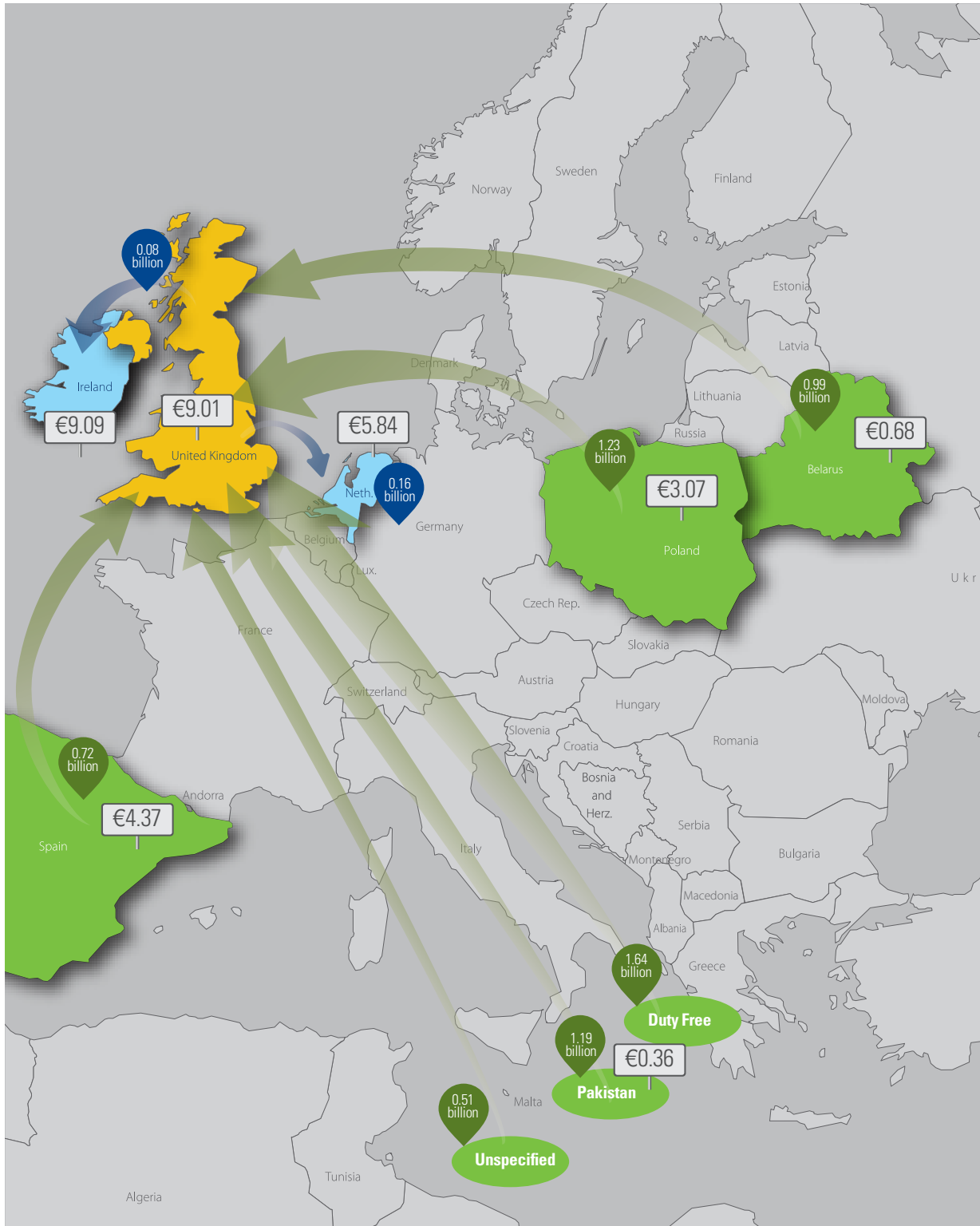


Manufactured cigarette consumption - 2009-14



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# KEY INFLOWS AND OUTFLOWS



UK  
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Main outflow █  
Main inflow █

Note: (a) Map shows major flows. Countries which are both source and destination countries are coded according to the larger flow

Source: (1) KPMG EU Flows Model

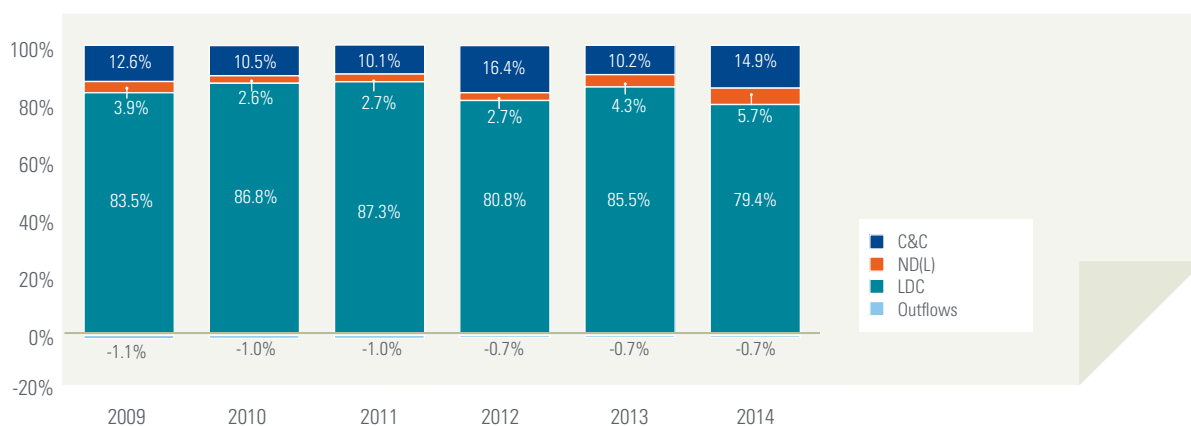
## MANUFACTURED CIGARETTE CONSUMPTION

In the UK, total consumption was flat, with a decline in legal domestic sales offset by increased illicit consumption from non-EU countries

### Total manufactured cigarette consumption – UK<sup>(1)(2)(3)(a)</sup>

TOTAL UK CONSUMPTION							
Billion cigarettes	2009	2010	2011	2012	2013	2014	2013-14 %
Legal domestic sales (LDS)	45.27	44.85	43.89	40.55	35.77	33.78	(6%)
Outflows	-0.57	-0.50	-0.49	-0.37	-0.28	-0.31	11%
Legal domestic consumption (LDC)	44.70	44.35	43.40	40.19	35.49	33.47	(6%)
Non-domestic legal (ND(L))	2.10	1.35	1.32	1.36	1.78	2.39	34%
Counterfeit and contraband (C&C)	6.75	5.38	5.01	8.18	4.25	6.29	48%
Total non-domestic	8.85	6.73	6.33	9.54	6.03	8.67	44%
<b>Total consumption</b>	<b>53.54</b>	<b>51.08</b>	<b>49.74</b>	<b>49.72</b>	<b>41.52</b>	<b>42.14</b>	<b>1%</b>

### Share of UK cigarette consumption by type - 2009-2014<sup>(1)(2)</sup>



### Despite improving economic indicators, legal domestic sales in the UK continued to decline against a background of continued price rises and smaller pack sizes<sup>(4)(5)</sup>

- Average prices rose by 5%; pack sizes got smaller (19, 18 packs) to enable brands to keep specific price points<sup>(6)(7)</sup>

### Increased availability of cheap non-domestic cigarettes and a growing population contributed to a relatively flat market volume of 42.1bn manufactured cigarettes in 2014

- The UK population has increased by 1% in 2014 to 64.5m, with 0.5m international migrants entering the country, many from countries with higher smoking prevalences than the UK<sup>(8)(4)</sup>
- Availability of cheaper non-domestic cigarettes may also have impacted OTP consumption, which declined by 0.2% in 2014<sup>(3)</sup>

Note: (a) In 2012 and 2013 non-domestic incidence is stated on a cigarettes basis. Prior to this a packs basis was used

Sources: (1) KPMG EU Flows Model and analysis of data sources provided by manufacturers (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) HMRC – Tobacco Bulletin, January 2015 (4) 2014 Euromonitor (5) 2014 Economist Intelligence Unit (6) EC Excise Duty tables (Part III – Manufactured Tobacco) (7) In market sales data, Nielsen (8) Office for National Statistics

UK



PROJECT SUN

# InfloWS grew mainly from non-EU countries, in particular Belarus and Pakistan

*Non-domestic inflows to the UK have been volatile in recent years. One off events in 2012 such as the Olympic games may have had an impact on non-domestic volumes. The strengthening of the Pound against the Euro in 2014 made non-domestic cigarettes more affordable*

## Total inflows by country of origin - 2009-2014<sup>(1)(a)</sup>

ND INFLOWSTO UK						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Duty Free	0.83	0.85	1.20	1.63	1.36	1.64
Poland	1.01	0.86	0.96	1.72	0.89	1.23
Pakistan	0.09	0.20	0.20	0.35	0.57	1.19
Belarus	0.03	0.03	0.03	0.14	0.22	0.99
Spain	1.91	1.15	0.81	1.04	0.50	0.72
Unspecified	0.32	0.44	0.25	0.26	0.33	0.51
Russia	0.20	0.43	0.30	0.58	0.18	0.36
Other	4.46	2.77	2.58	3.81	1.99	2.03
<b>Total inflows</b>	<b>8.85</b>	<b>6.73</b>	<b>6.33</b>	<b>9.54</b>	<b>6.03</b>	<b>8.67</b>

## Whilst inflows grew from all main countries of origin, the largest growth came from Pakistan and Belarus

- There was also an increase in travel purchases from Spain and Poland
- Duty Free labelled and cigarettes of unspecified origin remain major sources of non-domestic cigarettes. 23% of these combined inflows were Illicit Whites brand flows in 2014, a decline from 53% in 2013

## Total outflows by destination country - 2009-2014<sup>(1)</sup>

OUTFLOWS FROM UK						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Netherlands	0.11	0.20	0.14	0.15	0.14	0.16
Ireland	0.35	0.20	0.24	0.14	0.06	0.08
France	0.03	0.04	0.04	0.02	0.04	0.02
Other	0.08	0.06	0.07	0.07	0.04	0.06
<b>Total outflows</b>	<b>0.57</b>	<b>0.50</b>	<b>0.49</b>	<b>0.37</b>	<b>0.28</b>	<b>0.31</b>

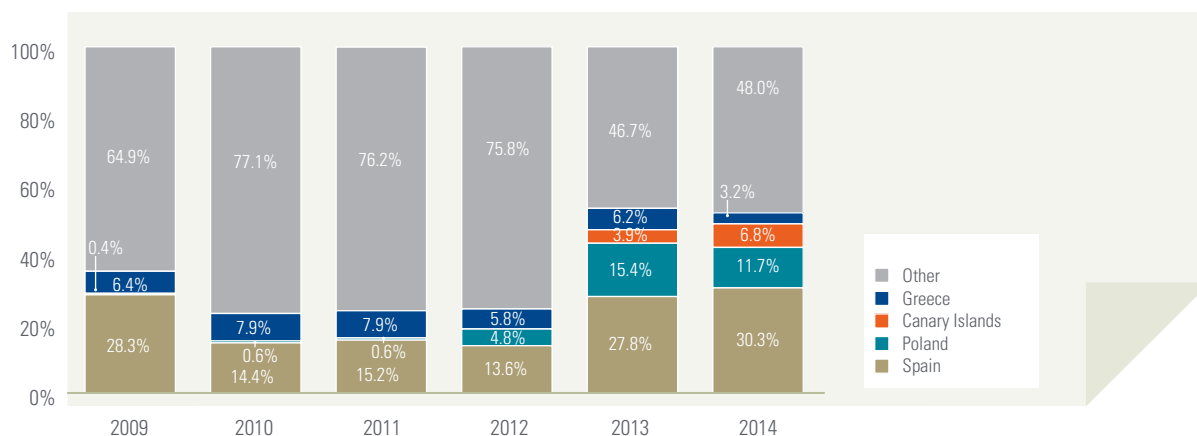
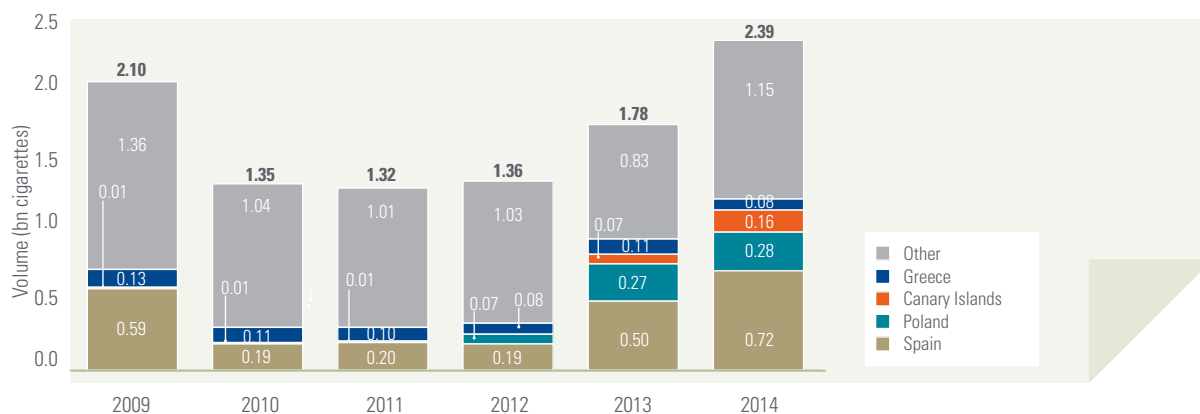
**Given that prices in the UK are generally higher than most other countries in the world, outflows are relatively small and reflected by British tourists in other countries, all of which are considered legal<sup>(2)(3)</sup>**

Note: (a) The Duty Free inflow contains both "other" Duty Free product and Illicit Whites which have Duty Free labelling  
Sources: (1) KPMG EU Flows Model (2) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (3) EC Excise Duty tables (Part III – Manufactured Tobacco)



# Non-domestic legal inflows increased as traveller numbers grew, particularly to Spain

Total ND(L) by origin - 2009-2014<sup>(1)(2)(a)(b)</sup>



UK



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## Popular UK travel destinations with cheaper priced cigarettes remain the largest sources of ND(L) inflows to the UK in 2014

- ND(L) volumes have increased by 34% in 2014 reflecting inbound and outbound travel increases and price increases of 5% in the UK<sup>(3)</sup>
- Price differences between Spain and the UK increased from €4.31 to €4.64 (£2.97 to £3.60), which coupled with the 11 million visitors to Spain in 2014, supports the flow of ND(L)<sup>(3)(4)</sup>
  - Spain accounted for 32% of the Benson & Hedges ND(L)
- Polish ND(L) flows are explained by the large Polish migrant population in the UK
  - The largest brand from Poland was Marlboro

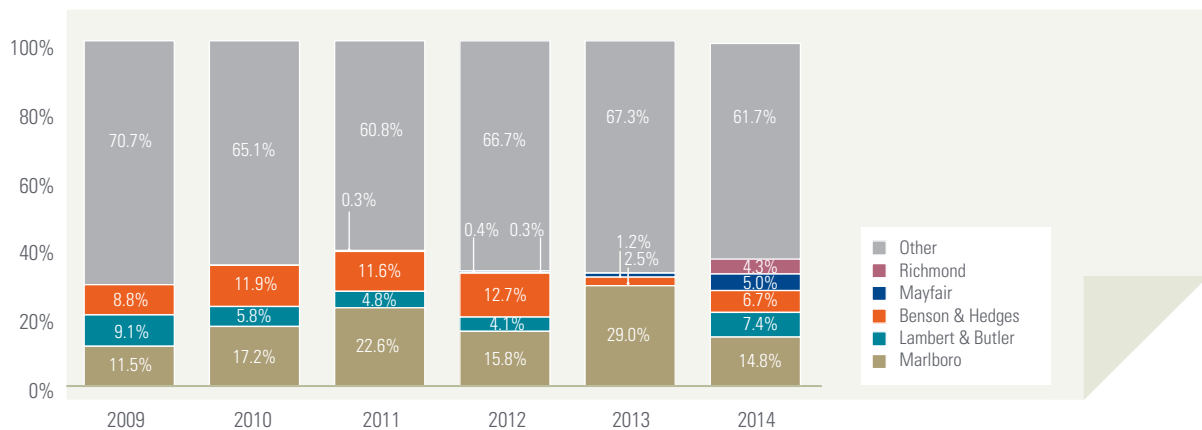
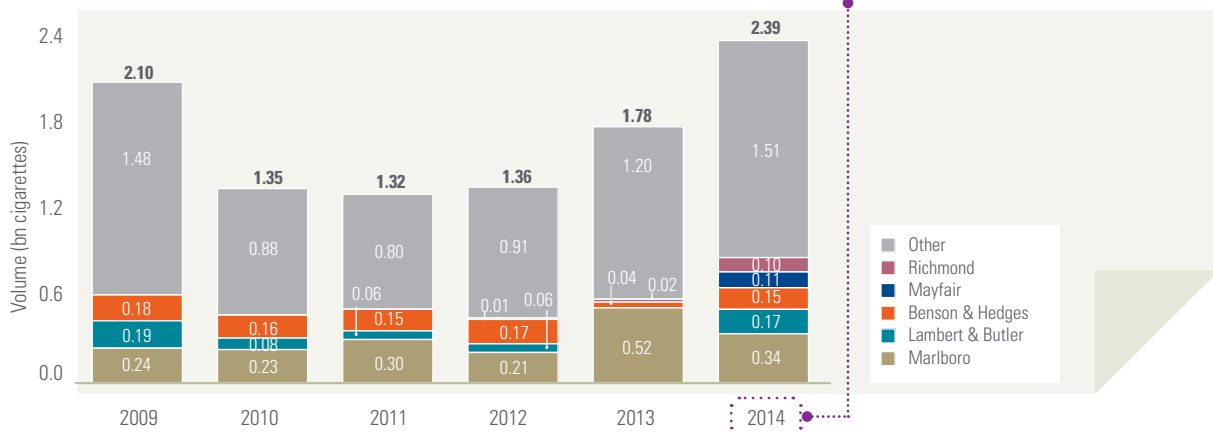
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) In 2014 the ND(L) analysis was undertaken using border crossings and regional sales data provided by manufacturers. In prior years a consumer survey approach was used. Further comparison between the methods is provided in the methodology section of the appendix

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco (4) Mid-point exchange rate at 1/1/14 and 1/1/15

# NON-DOMESTIC LEGAL INFLOWS BY BRAND

Total ND(L) by brand - 2009-2014<sup>(1)(2)(a)(b)</sup>

Note: Border sales data has been used to calculate non-domestic legal flows on a brand basis in 2014



UK



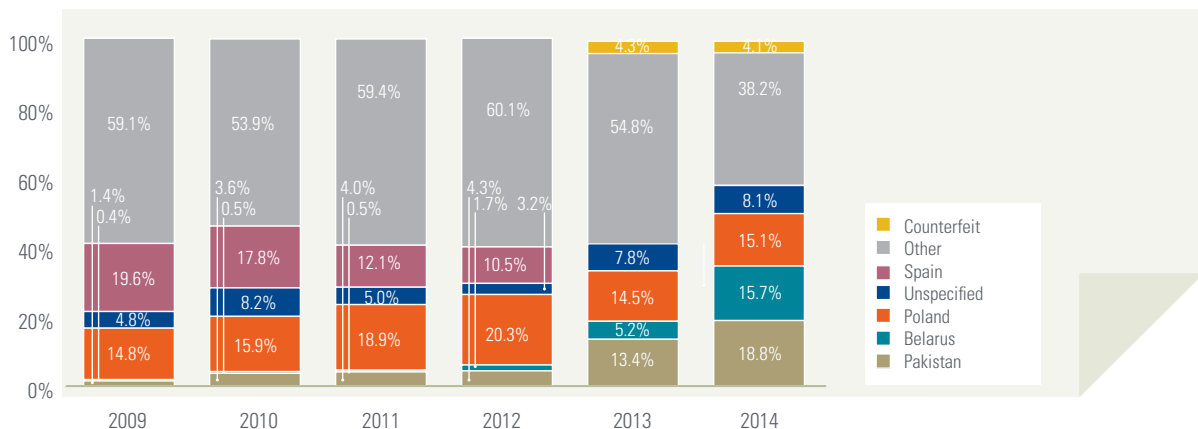
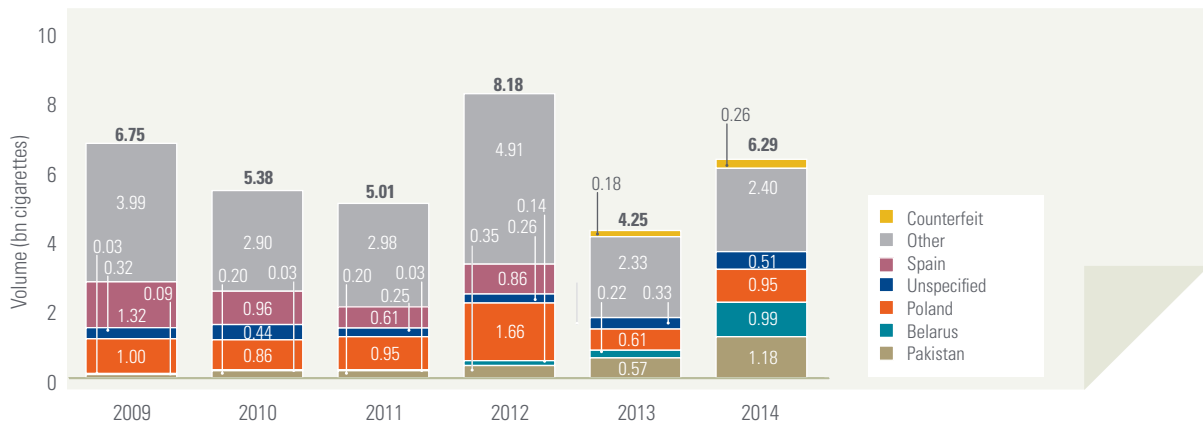
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Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

# C&C flows increased in 2014, with cigarettes from Pakistan and Belarus increasing significantly

Total C&C by origin - 2009-2014<sup>(1)(2)(a)</sup>



## C&C increased by 48% to 6.29bn cigarettes between 2013 and 2014, driven by an increase in flows from Pakistan and Belarus

- Low travel volumes between the UK, Pakistan and Belarus suggest that a large proportion of cigarettes from these countries are illicit<sup>(1)</sup>
- Belarusian and Pakistani cigarettes were found in multiple locations across the whole of the UK in 2014
  - 95% of the total Pakistan inflow was John Player Gold Leaf
  - Fest, an Illicit White brand, accounted for 70% of cigarettes from Belarus and 40% of total Illicit Whites in the UK
- 56% of illicit Marlboro came from Poland
- The volume of cigarettes seized in the UK increased by 19% to 0.43bn cigarettes in 2014. This may indicate an increase in illicit product reaching the UK<sup>(4)</sup>
- 50% of counterfeit volumes had Duty Free labelling
- If the total volume of C&C had been purchased legally within the UK market, an additional tax revenue of approximately £1.98bn (€2.3bn) would have been raised by the UK Treasury<sup>(3)</sup>

Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model

(2) KPMG analysis of data sources provided by manufacturers (3) EC Excise Duty tables (Part III – Manufactured Tobacco)

(4) Gov.uk, Border Force transparency data, February 2015

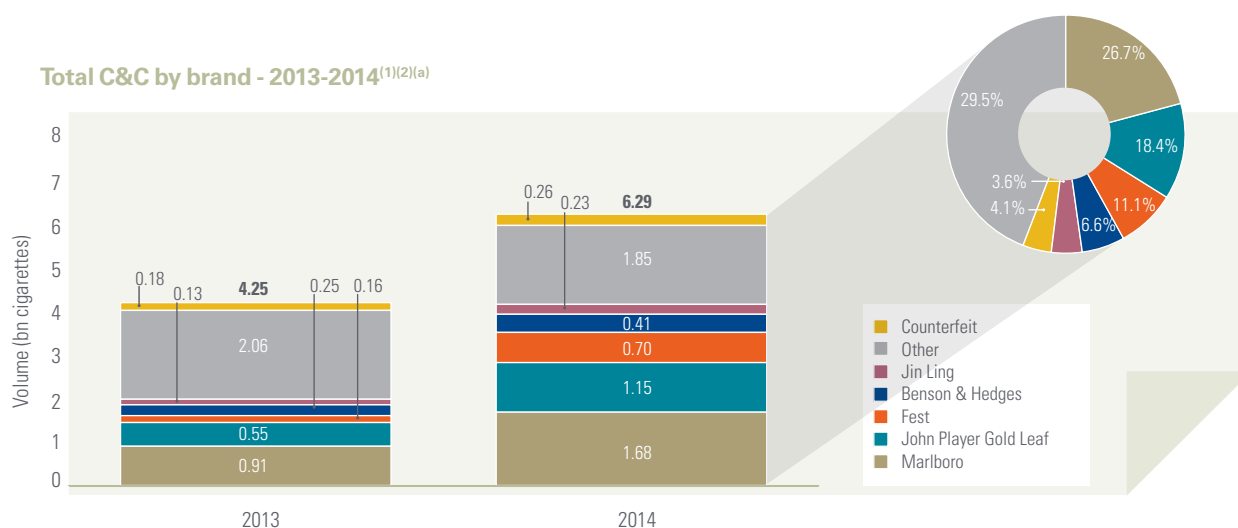
UK



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## C&C INFLOWS BY BRAND



### Breakdown of Illicit Whites by type - 2009-2014<sup>(1)(a)</sup>

LABELLING OF ILLICIT WHITES INFLOWS TO UK						
Billion cigarettes	2009	2010	2011	2012	2013	2014
Country specific	0.03	0.05	0.09	0.12	0.15	1.23
Duty Free	0.18	0.52	0.39	0.72	0.59	0.09
Unspecified	0.08	0.16	0.19	0.22	0.31	0.41
<b>Total Illicit Whites</b>	<b>0.29</b>	<b>0.72</b>	<b>0.67</b>	<b>1.06</b>	<b>1.06</b>	<b>1.73</b>

UK



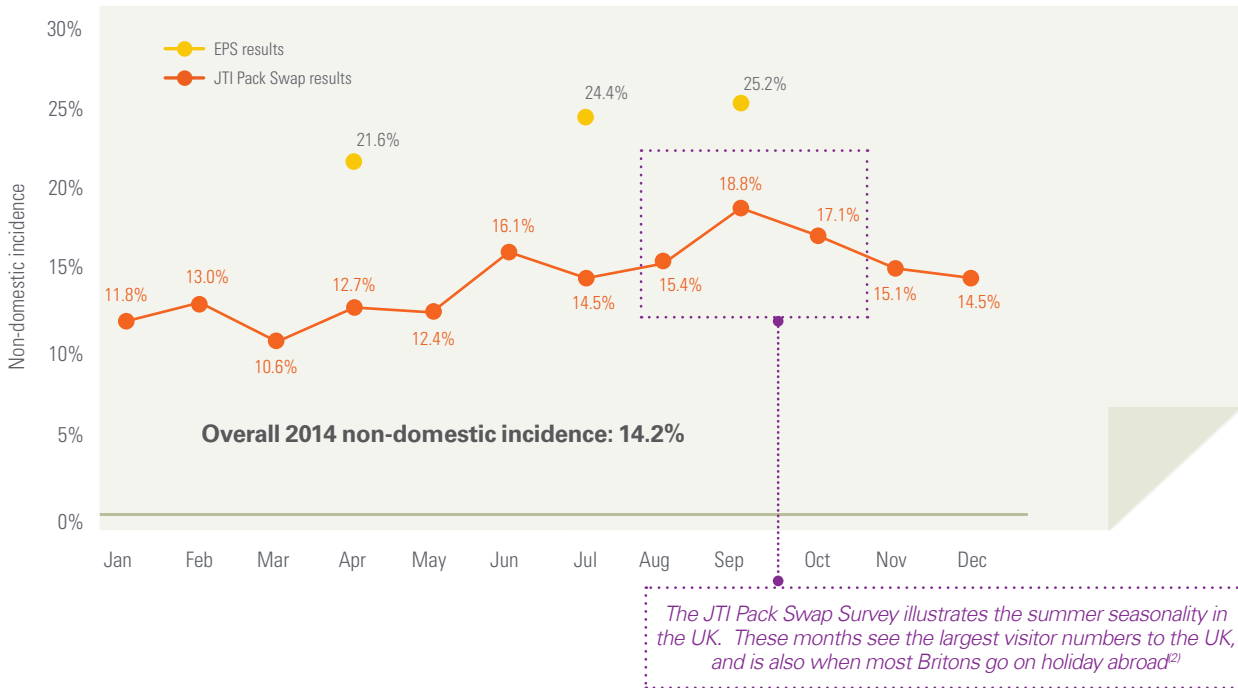
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Note: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows

Sources: (1) KPMG analysis of UNWTO Factbook 2008-2013 and national visitor number statistics and EU flows model (2) KPMG analysis of data sources provided by manufacturers

## Other estimates of non-domestic incidence in 2014 also report an increase in non-domestic incidence, albeit at a lower volume

Manufactured cigarette non-domestic incidence as per JTI pack swap survey - 2014<sup>(1)(2)</sup>



**Alternative estimates are available for the UK non-domestic cigarette market, including the Pack Swap Survey, undertaken by JTI. The Pack Swap Survey non-domestic incidence in 2014 is lower than the project SUN estimate of 20.6%, but a year on year increase in non-domestic incidence is consistent**

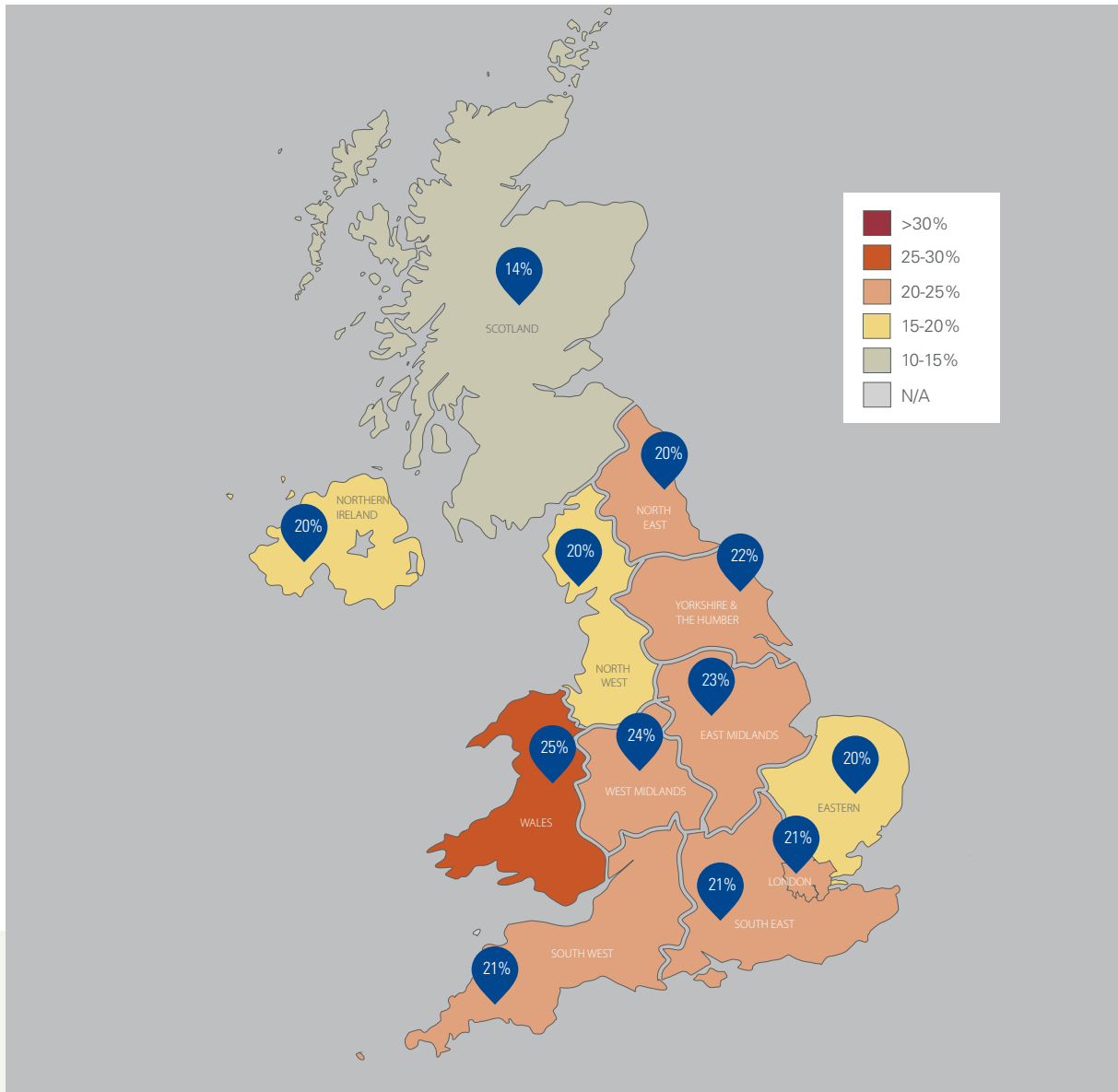
- The JTI pack swap is a household sampling programme that commenced in 1998 undertaken by independent research agencies and commissioned for JTI
- It is designed to be a statistically representative sample that can calculate a measurement of non-domestic cigarettes in the UK
  - 56 waves are undertaken each year with a random location sampling plan that is designed to be representative of the UK as a whole as regards to gender, age group, social class and region
  - Each wave contacts approximately 2,000 respondents aged over 18 who are interviewed at their home by an interviewer from an independent research agency
  - If respondents smoke they are guided through a survey regarding their purchasing habits, and are then asked if they are willing to provide their current pack. Around 63% of smokers agree to exchange their packs when asked
  - This yields approximately 8,000 manufactured cigarette packs that are subsequently analysed by the agency and JTI
- JTI believes the results should be considered the minimum volume of non-domestic incidence in the UK, as respondents may well under-report their smoking habits or refuse to exchange their pack if they know it is counterfeit or contraband

Sources: (1) JTI Pack Swap Survey Results 2014

(2) Office for National Statistics, Travel Trends, 2013, May 2014

# Non-domestic incidence heat map

Empty Pack Survey regional non-domestic incidence – 2014<sup>(1)</sup>



UK



PROJECT SUN

Source: (1) Independent agency Empty Pack Surveys, 2014



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# METHODOLOGY

## OVERVIEW



**KPMG has developed and refined its methodology for quantifying counterfeit and contraband incidence across the 28 EU markets since 2006, with Norway and Switzerland included in the study in 2014**

**The methodology has been tested extensively and refined to ensure that it delivers the most robust and defensible results**

- Our approach integrated multiple sources and custom-built analytical tools
- In 2013, 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'). This extension has provided access to previously unavailable data sources including Legal Domestic Sales data and proprietary consumer surveys owned by manufacturers who participated for the first time in 2013. These data sources have been used in the 2013 and 2014 reports

**The methodology is based primarily on objective evidence from LDS and EPS results, which are inputted to the bespoke EU Flows Model**

**The KPMG EU Flows Model is a dynamic, iterative model that is based on LDS and EPS results and is used to estimate overall manufactured cigarette volumes**

- The KPMG EU Flows model has been developed by KPMG to specifically measure inflows and outflows of cigarettes between EU countries for the purpose of this Report. It is an iterative data driven model that uses LDS and EPS results to estimate the volume of non-domestic outflows and inflows to and from each EU Member State, Norway and Switzerland
- LDS are the starting point of the methodology, from which outflows of legal sales to other countries are then subtracted to estimate legal domestic consumption
- Non-domestic inflows from other countries are then added in to give an estimate for the total consumption within a market
- This methodology has been developed by KPMG for the manufactured cigarettes market specifically. For that reason, an assessment of the OTP market (both legal and illicit) is excluded from the scope of this report

**EPS results provide a robust indication of the incidence of non-domestic and counterfeit packs and country of origin**

**EPS relies purely on physical evidence, avoiding the variability of consumer bias found in interview-based methods**

- The EPSs were conducted by independent market research agencies on a consistent basis across all the EU markets, Norway and Switzerland, allowing for direct comparison of data and the identification of inflows and outflows between all of the countries analysed
- Over 500,000 packs were collected in 2014 as part of this research
- Further detail regarding the reliability and validity of EPS, the sampling approach and results by country at a regional level are provided later in this document

**Tourism & travel trends are used to quantify legal non-domestic cigarette purchases**

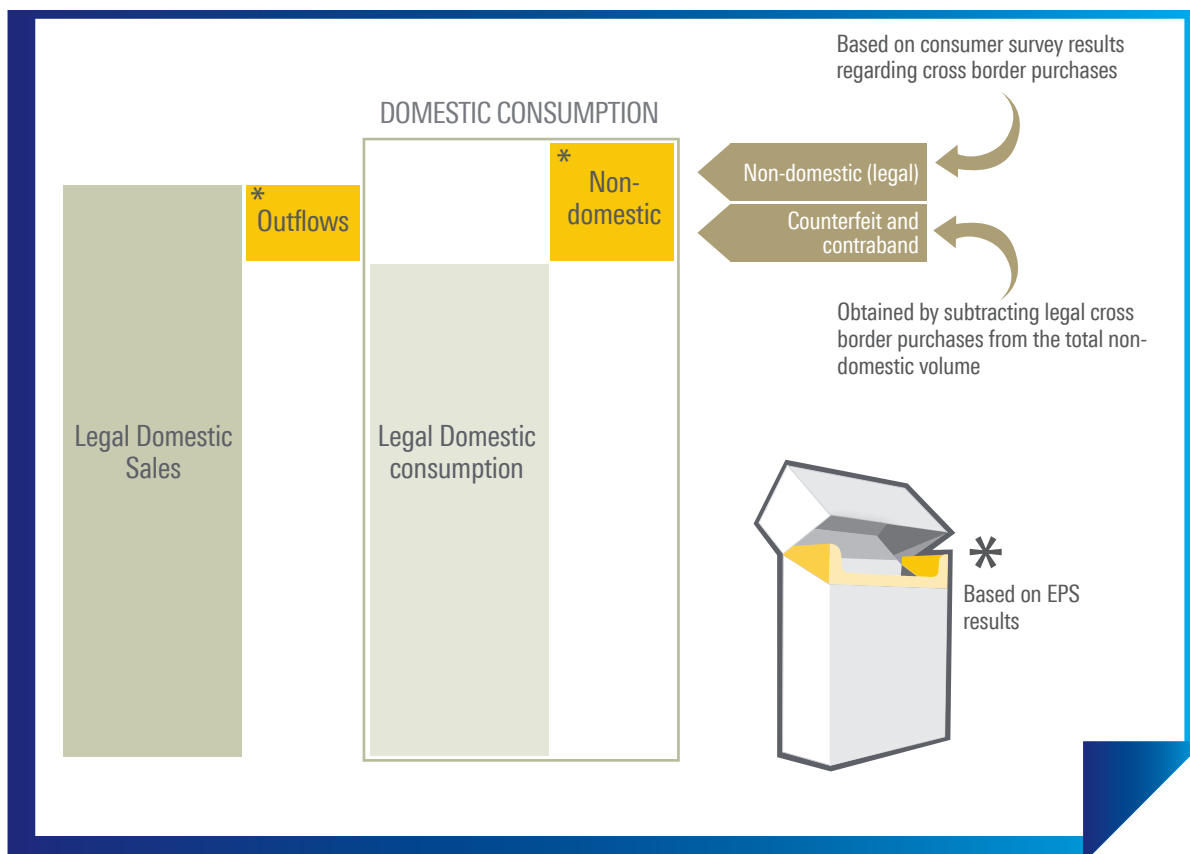
**Tourism and travel data provided by publicly-available 3rd party sources are used to estimate genuine, legal non-domestic tobacco purchases (including cross border shopping) in each market based on inbound visitor inflows**

- World Tourism Organisation<sup>(1)</sup> data is the primary source used to identify travel trends, supplemented with other publicly available data
- European Commission releases<sup>(2)</sup> are used to calculate changes in the weighted average price of a pack of cigarettes between countries. Where flows come into a country from a higher priced country they are assumed to be 100% legal

Sources: (1) UN WTO Tourism Factbook 2008-13.

(2) European Commission Excise Duty tables (Part III – Manufactured Tobacco).

<p><b>There are some specific limitations in the Project SUN methodology</b></p>	<p><b>Given the complexity of measuring C&amp;C, we recognise there are some limitations within the methodology</b></p> <ul style="list-style-type: none"> <li>• There are broadly two types of limitations: scope exclusions and source limitations                     <ul style="list-style-type: none"> <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 (OTP) and legal domestic product flows out of the EU</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> </li> </ul>
<p><b>To help improve the accuracy of results, some minor refinements were necessary at a country level</b></p>	<p><b>Comparison of results from alternative sources identified a few markets where country-to-country flows required minor adjustment</b></p> <ul style="list-style-type: none"> <li>• In nearly all instances, overall country results and flows from the KPMG EU Flows Model appeared reasonable, however, in a limited number of instances, specific adjustments were made to country-to-country flows where additional data provided by manufacturers allowed for further refinement of the analysis</li> </ul>



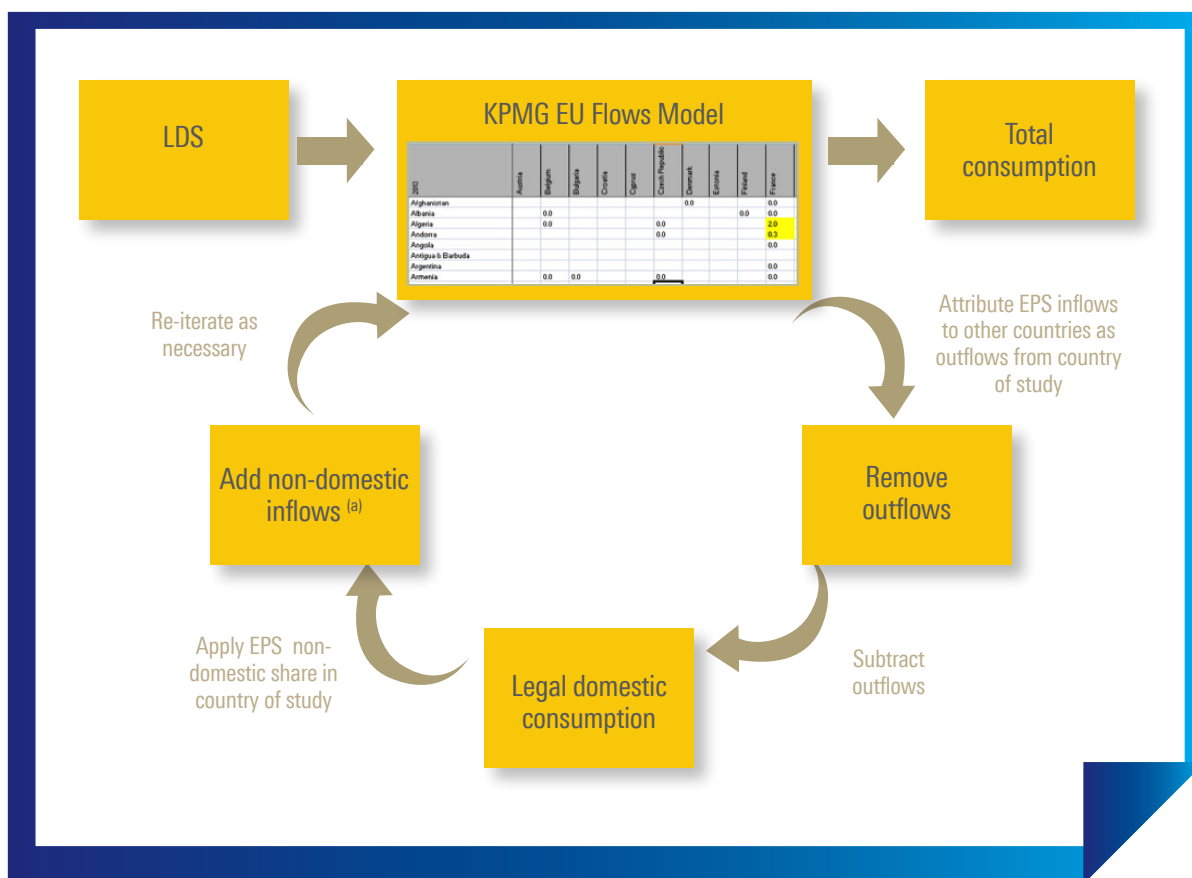
The Project Sun methodology was developed by KPMG. It has been deployed on a consistent basis since 2006, enabling comparisons to be made between counterfeit and contraband volumes from year to year.



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## The KPMG EU Flows Model is a dynamic, iterative model that is principally based on LDS and EPS results

- LDS volumes are the starting point of the model 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 model is then re-iterated as necessary reflecting the relationship of inflows and outflows between all 28 EU countries, Norway and Switzerland
- EPS results provide a measurement of the share of non-domestic packs by country of origin in all markets
  - EPS results provide a consistent source across all 30 markets of non-domestic packs by country of origin from which we can calculate total product outflow from each market to the other 29 markets

Note: (a) The methodology to identify the ND(L) and C&C components of non-domestic flows is explained overleaf.



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## METHODOLOGY – LDS

LDS data was provided to KPMG by all four manufacturers (BAT, ITL, JTI and PMI) and are built up on an individual brands basis

- Where available, each manufacturer's LDS estimates were used for both the total market volumes and for their own sales
- KPMG uses the manufacturer's own sales to build up the market and then compares this to each manufacturer's market estimates.
- Before 2013, Nielsen estimates were used for all non-PMI brands. The availability of sales by country and brand from all four manufacturers starting in 2013 has facilitated a more detailed analysis of LDS which has been added to the KPMG EU Flows model
- KPMG uses either Nielsen estimates or publicly available sources for brands not owned by BAT, ITL, JTI or PMI

### Example LDS methodology <sup>(1)(a)</sup>

Country 1	BAT		ITL		JTI		PMI		Nielsen	Section	Combined	
	LDS (bn sticks)	Market share (%)	LDS (bn sticks)	Market share (%)	LDS (bn sticks)	Market share (%)	LDS (bn sticks)	Market share (%)	LDS (bn sticks)		LDS (bn sticks)	Market share (%)
Brand A							5.25	20.8%		PMI	5.25	21.0%
Brand B	4.50	18.4%								BAT	4.50	18.0%
Brand C					3.80	15.0%				JTI	3.80	15.2%
Brand D			3.10	12.5%						ITL	3.10	12.4%
Brand E			2.40	9.7%						ITL	2.40	9.6%
Brand F					2.20	8.7%				JTI	2.20	8.8%
Brand G	1.50	6.1%								BAT	1.50	6.0%
Brand H									1.00	Nielsen	1.00	4.0%
Brand I							0.75	3.0%		PMI	0.75	3.0%
Brand J			0.50	2.0%						ITL	0.50	2.0%
Total market (bn sticks)	24.50		24.75		25.25		25.30				25.00	100.0%

Manufacturer's estimate of their own brands used to model total sales

Nielsen data used for brands not owned by BAT, ITL, JTI or PMI

### Where appropriate, nationally agreed 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, it has been deemed more appropriate to incorporate these recognised estimates of LDS in the KPMG EU Flows model
- This is the case with:
  - Czech Republic: figure reported by PwC
  - Italy: figure reported by Logista
  - Latvia: figure reported by the State Revenue Service
  - Lithuania: figure reported by the State Tax Inspectorate
  - Poland: figure reported by Ministry of Finance
  - Slovakia: figure reported by PwC
  - Spain: figure reported by the Tobacco Commissioner
  - United Kingdom: figure reported by HMRC

Note: (a) Example volumes included do not reflect actual sales data and are for illustrative purposes.

Sources: (1) LDS data provided by all four manufacturers.





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<p><b>Overview</b></p>	<p><b>EPS 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 (non-duty paid) and counterfeit packs in each of the markets</b></p> <ul style="list-style-type: none"> <li>• EPSs were conducted by independent market research agencies (e.g. Nielsen, Ipsos or MSI) 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 within each given country</li> <li>• Results were 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> <li>• Results are not subject to respondent behaviour and are therefore less prone to sampling errors than many other alternative methodologies</li> <li>• Results reflect actual overall non-domestic share and provide a good snapshot of brands consumed</li> </ul>
<p><b>Process</b></p>	<p><b>EPSs rely purely on physical evidence, avoiding the variability of consumer bias in interview-based methods</b></p> <ul style="list-style-type: none"> <li>• The independent market research agencies randomly collect empty packs of any brand and market variant from streets and easy access bins</li> <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> <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 determine the proportion of packs that did not originate from that jurisdiction (including Duty Free variants)             <ul style="list-style-type: none"> <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 we record these as unspecified</li> </ul> </li> <li>• 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 inks, paper and other characteristics</li> <li>• KPMG used the results of the EPSs to extrapolate overall consumption in the market using LDS and the percentage of non-domestic cigarettes in the market as found through EPSs to calculate overall consumption</li> <li>• The process is repeated across all countries of study using a model which iterates the level of non-domestic cigarettes until all inflows and outflows are equal</li> </ul>
<p><b>Coverage</b></p>	<p><b>Coverage per market is tailored to the size of the market, the likelihood of high non-domestic incidence and the manufacturers' share of the legal market</b></p> <ul style="list-style-type: none"> <li>• Large surveys (10,000 packs or more collected): Austria, Bulgaria, Czech Republic, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Slovakia, Spain, Sweden, UK</li> <li>• Medium surveys (5,000-9,999 packs): Belgium, Denmark, Estonia, Finland, Latvia, Norway, Romania<sup>(a)</sup>, Switzerland</li> <li>• Small surveys (300-4,999 packs): Croatia, Cyprus, Luxembourg, Malta, Portugal, Slovenia</li> </ul>

Note: (a) The Romania EPS collected 9,300 packs. The pack collection done as part of the Novel study collected 15,000





Calculation of non-domestic incidence on a stick basis in 2012 – 2014

<p><b>Overview</b></p>	<p><b>Prior to 2012, the KPMG EU Flows Model assumed that all packs collected were the same size (20 cigarettes). In 2012 the model was updated to take into account different pack sizes, and this approach has been continued in 2013 and 2014</b></p> <ul style="list-style-type: none"> <li>• This update to the approach was made to help give a more accurate result for the volume flows between EU countries, as pack sizes vary on a country by country basis</li> </ul>
<p><b>Process</b></p>	<p><b>EPS results provide the number of cigarettes in each packet</b></p> <ul style="list-style-type: none"> <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>
<p><b>Impact</b></p>	<p><b>The effect of this change on non-domestic incidence was dependant upon whether the typical domestic pack size was greater or less than the average pack size of 20 on a country by country basis</b></p> <ul style="list-style-type: none"> <li>• The average pack contains 20 cigarettes</li> <li>• In countries where the average domestic pack size was less than 20 cigarettes (for example, most LDS in the UK and Italy are of 10 or 20 cigarette packs, giving an average domestic pack size of less than 20 cigarettes, and in Denmark domestic cigarettes are sold in packs of 19), then the conversion to a sticks basis is likely to decrease the proportion of domestic cigarettes in the EPS sample, giving a higher non-domestic incidence than estimating on a pack basis</li> <li>• In countries where the average domestic pack size is greater than 20 cigarettes (for example in Luxembourg domestic packs typically contain 20, 25 or 30 cigarettes), then the conversion to a sticks basis is likely to increase the proportion of domestic cigarettes in the EPS 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 118 cities are sampled in each wave of 11,500 packs. Of all packs collected, 1,260 are collected in Paris, which represents over 10% of the packs collected and sample sizes. 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 datasheet). The details are then entered into the survey "Data Sheet". The packs are delivered to the participating manufacturers in a way that enables easy processing and identification
- Packs where brands are unknown are sent to the participating manufacturers to assess whether they are Illicit Whites

#### 4. Pack analysis

- The participating manufacturers check their packs to identify counterfeit and inform the agency who collates and updates the data-sheets
- These data-sheets are finally provided to KPMG and analysed to calculate the non-domestic incidence and contraband and counterfeit volumes



## EPS adjustments

Adjustments are made to the EPS in the form of reweighting different packs or quarterly surveys, based on additional evidence provided by manufacturers. Adjustments are made to correct for issues identified in the EPS. The main issues identified are covered below:

EPS	Explanation	Method	Countries where adjustment made
<b>1. Brand oversampling</b>	Domestic packs collected by brand in the EPS deviate significantly from the domestic brand shares	<ul style="list-style-type: none"> <li>Premium brands may be oversampled which we can check through a comparison with the LDS</li> <li>KPMG assumes that an oversampling of premium brands domestically will result in an oversampling of non-domestic brands. As a result, it down-weights all packs from this brand (domestic and non-domestic) by the domestic market share</li> </ul>	France, Ireland, Spain, Netherlands, Belgium
<b>2. Adjustments to specific country flows</b>	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 style="list-style-type: none"> <li>Adjustments are made to survey results based on the time of year that the survey was undertaken to make it more reflective of the whole year</li> <li>For example, if a survey is undertaken before a price increase which may impact sales between a country, this is likely to increase the volume of packs collected for the country. In this case, where there is more than one survey, an adjustment can be made by KPMG to make one survey result account for a higher proportion of the overall year compared with others</li> <li>Seasonal adjustments can also be made to take account of increased tourism and travel between countries during the summer months. In France, an adjustment is made to take account of increased traveller numbers to Spain between June and September, when the EPS is undertaken in May and November</li> </ul>	France
<b>3. 10-pack adjustment</b>	Domestic 10-packs are often over-sampled, resulting in an overstating of non-domestic product	<ul style="list-style-type: none"> <li>In the UK and Italy where 10-packs are a sizeable proportion of the market, more 10-packs than 20-packs are often collected. The impact of this is to over-report the number of non-domestic sticks</li> <li>The domestic 10-packs collected are re-weighted by KPMG to ensure that they are representative of the domestic market</li> </ul>	UK and Italy
<b>4. Sweden “domestic whites” EPS adjustments</b>	Addition of “domestic whites” volume to non-domestic consumption	<ul style="list-style-type: none"> <li>In Sweden an adjustment is made to the non-domestic percentage based on the amount of “domestic whites” as reported by HUI Research and outlined in the Sweden report</li> </ul>	Sweden





EPS adjustments

Country	Sample dates	Packs collected	Number of cities	Adjustment	Impact
Austria	Q2: May-Jun Q4: Sep-Nov	12,811	464	None	n/a
Belgium	Q2: April-May Q4: Oct-Nov	5,600	19	<b>Brand adjustment</b> Marlboro was over-sampled and therefore re-weighted according to its domestic share	Reduction of 0.16bn of non-domestic Marlboro
Bulgaria	Q2: April-May Q4: Oct	13,000	26	None	n/a
Croatia	Q4: Oct	3,000	8	None	n/a
Cyprus	Q4: Oct	1,000	4	None	n/a
Czech Republic	Q2: Mar-April Q4: Sep-Oct	21,004	30	None	n/a
Denmark	Q2: April	5,500	9	None	n/a
Estonia	Q2: April Q4: Sep-Oct	6,600	14	None	n/a
Finland	Q2: April	5,000	10	None	n/a
France	Q2: Mar-May Q4: Nov-Dec	23,000	118	<p><b>1. Brand adjustment</b> Marlboro was over-sampled and therefore re-weighted according to its domestic share</p> <p><b>2. Adjustments to country flows</b> Inflows from Belgium increased significantly. An analysis of the EPS showed significantly higher flows from Belgium in the first EPS compared with the second, which may have been impacted by the price increase in February. Therefore the first EPS from Belgium represented 1 month of the year compared to the second which represented 11 months</p> <p>Duty Free flows were adjusted to take account of increased travel flows compared with 2013 which was not identified by the EPS</p> <p>Inflows from Spain were adjusted as the EPS was undertaken in April and November, not taking account of the summer months where border sales doubled. This adjustment was made based on the increase in border sales volumes provided by industry participants.</p>	<p>1. The brand adjustment reduced flows of non-domestic Marlboro by 1.55 billion – this flow was re-allocated to “others”</p> <p>2. a) Inflows from Belgium reduced from 2.91 billion to 2.08 billion</p> <p>b) Inflows of Duty Free increased from 1.84 billion to 2.72billion</p> <p>c) Inflows from Spain increased from 1.76 billion to 2.29 billion</p>



EPS adjustments

Country	Sample dates	Packs collected	Number of cities	Adjustment	Impact
Germany	Every month	156,000	24 stations and other areas covered	None There was a change in the methodology for Germany in 2014, see report page 287	Reduction from approximately 20.9% non-domestic to 18.9%
Greece	Q2: Mar-April Q3: Sep	13,000	34	None	n/a
Hungary	Q2: May-Jun	19,910	53	None	n/a
Ireland	Q2: April-May Q4: Oct-Nov	10,000	22	<b>Brand adjustment</b> Marlboro was over-sampled and therefore re-weighted according to its domestic share	n/a
Italy	Q1: Feb Q2: May-Jun Q3: Jul-Sep Q4: Oct-Nov	40,000	42	<b>10-pack adjustment</b> 27% of domestic packs collected were 10-packs whilst 14% of the market was represented by 10-packs, as a result the domestic 10-packs were downweighted and the 20-packs were upweighted, resulting in more domestic sticks and a lower percentage of non-domestic	n/a
Latvia	Q2: April Q4: Sep-Oct	9,800	25	None	n/a
Lithuania	Q2: April Q3: Jul Q4: Sep-Oct	19,200	26	None	n/a
Luxembourg	Q2: May Q4: Nov	400	2	None	n/a
Malta	Q4: Oct-Nov	1,000	8	None	n/a
Netherlands	Q2: April Q3: Jul Q4: Sep-Oct	21,000	50	<b>Brand adjustment</b> Marlboro was over-sampled and therefore re-weighted according to its domestic share	Reduction of 0.19bn of non-domestic Marlboro
Norway	Q2: May-Jun	5,000	8	None	n/a
Poland	Q2: April Q3: Aug Q4: Oct-Nov	51,000	70	None	n/a
Portugal	Q2: April	3,000	10	None	n/a



EPS adjustments

Country	Sample dates	Packs collected	Number of cities	Adjustment	Impact
Romania	Q2: April Q3: Aug Q4: Oct-Nov	9,300	50	Use of alternative data source	Use of Novel face to face interviews instead of EPS
Slovakia	Q4: Oct-Nov	12,800	28	None	n/a
Slovenia	Q4: Oct	3,000	8	None	n/a
Spain	Q2: April- May Q4: Oct-Nov	29,997	58	<b>Brand adjustment</b> Marlboro was over-sampled and therefore re-weighted according to its domestic share	Reduction of 0.02bn of non-domestic Marlboro
Sweden	Q2: April Q4: Oct-Nov	19,909	29	<b>Addition of domestic whites</b> Addition of “domestic whites” as reported by HUI Research in Sweden	1.8% was added to the overall non-domestic consumption in order to include “domestic whites”
Switzerland	Q2: May-Jun	6,600	25	None	n/a
UK	Q2: April- May Q3: Jul- Aug Q4: Sept-Oct	38,100	105	<b>10-pack adjustment</b> Whilst 10-packs represented 34% of the market, 63% were collected in the EPS. As a result, the number of 10-packs were downweighted and the number of 20-packs upweighted, resulting in a lower level of non-domestic	Reduction of non-domestic share from 23.6% to 20.5%

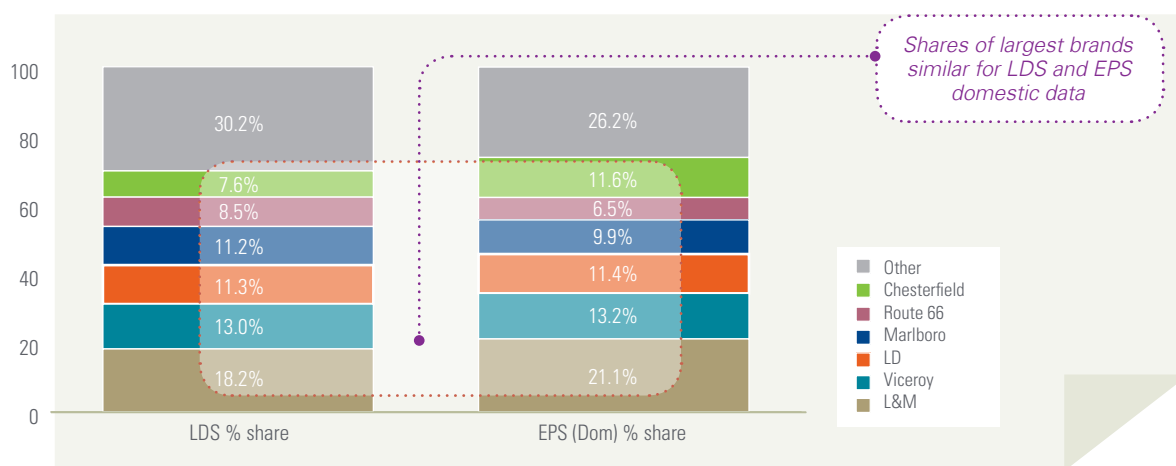




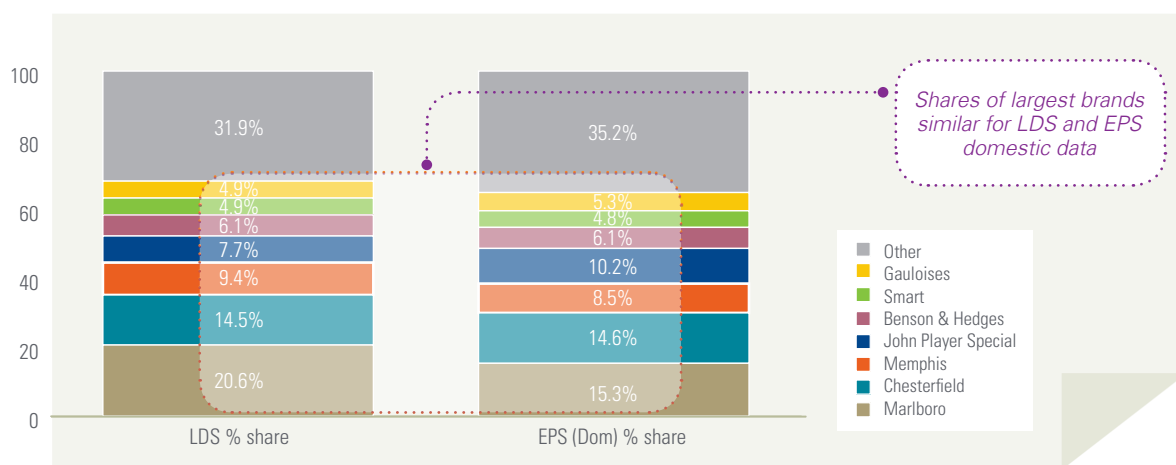
**As collateral for the EPS, the brand shares of domestic origin packs collected during the EPSs closely reflect the brand shares seen in the LDS data**

- If brand shares of domestic origin packs closely reflect the brand shares seen in LDS, EPSs are considered reflective of actual consumption in a market
- This provides additional confidence that the packs identified as non-domestic also fairly reflect the volume and brands actually consumed in that market (see exceptions on next page)
- As the EPSs collect any brand and market variant, there is no bias towards any specific brand being collected
- Two examples are shown below, for Poland and Austria

**Comparison of LDS and domestic EPS brand Shares – Poland<sup>(a)</sup>**



**Comparison of LDS and domestic EPS brand Shares – Austria<sup>(a)</sup>**



Note: (a) Number of 'top' brands shown chosen to reflect approximately two thirds of the total market on an LDS and EPS basis

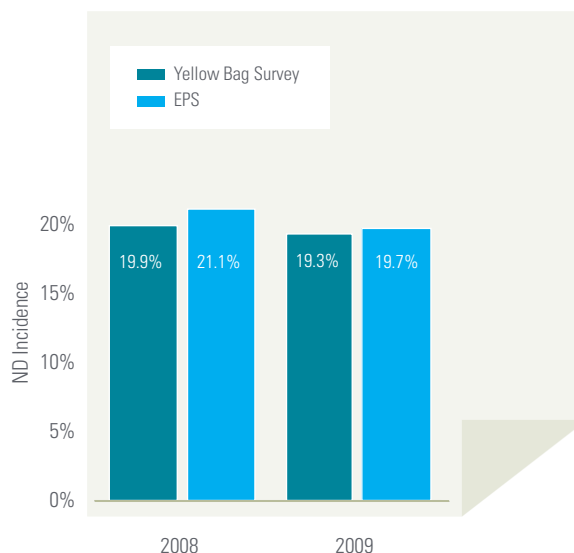
Sources: (1) Analysis of LDS data provided by participating manufacturers  
 (2) Independent agency Empty Pack Surveys, 2006-2014

EPS comparison

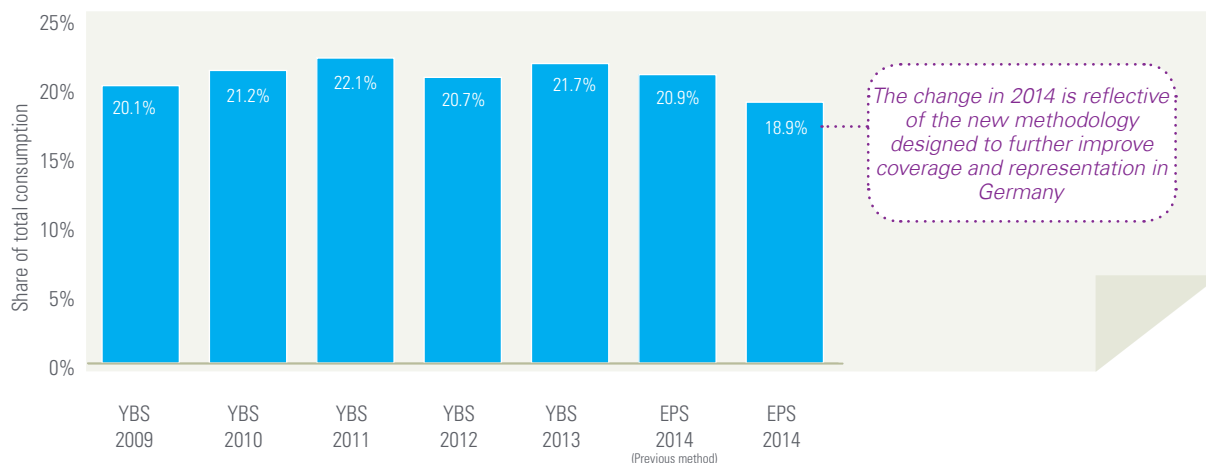
**Validation of empty pack survey analysis**

- A criticism of the empty pack survey is that it samples discarded cigarette packs rather than household waste and therefore significantly overstated non-domestic incidence. Sampling for household waste is impractical in most countries, however it is available in Germany. The household waste survey, known as a Yellow Bag Survey (YBS), is possible in Germany because household waste is sorted, mainly for the purposes of recycling, which makes it possible to separate cigarette packs from other waste
- The Yellow Bag Survey collects 500 packs a month from 24 waste disposal centers throughout Germany. This resulted in over 120,000 weighted packs collected throughout the year, typically a larger sample than an empty pack survey. A comparison was undertaken by KPMG between different methodologies in 2008 and 2009
- In addition to the benefits of the higher sample size, collections from waste disposal centers resulted in packs coming from both household waste and public bins, demonstrating that consumption of illicit tobacco in the home is unlikely to be significantly different to consumption in public places. This helps to address a common criticism of the EPS
- This enables us to compare the results of the Yellow Bag Survey with the EPS to understand differences in the amount of non-domestic product that is captured

YBS and EPS results 2008-2009<sup>(1)(2)(a)</sup>



Germany Yellow Bag Surveys and combined results<sup>(1)(2)(a)</sup>



**Improvement of German pack analysis in 2014**

- In 2014 the German pack collection was refined as fewer waste disposal centres were providing pack collections. Despite weighting the pack collections from each disposal centre according to the population of the region, some regions were not being represented
- As a result, a pack collection was started in 2014 in areas with no coverage from waste recycling centres. This has resulted in a much greater proportion of the German population covered, from 40% to close to 100% of the population.
- The result of the change in methodology has been to reduce the overall non-domestic incidence by approximately 2 percentage points compared to the collection in previous years. Further detail is provided in the Germany country report

Note: (a) The comparison between methodologies is made on a "sticks basis" in 2008 and 2009 rather than the packs basis reported in Project SUN and in the chart below

Sources: (1) MSI Intelligence Research, Germany Empty pack survey report, Q2 2009 (2) Ipsos Empty Pack Surveys, 2008-2009.

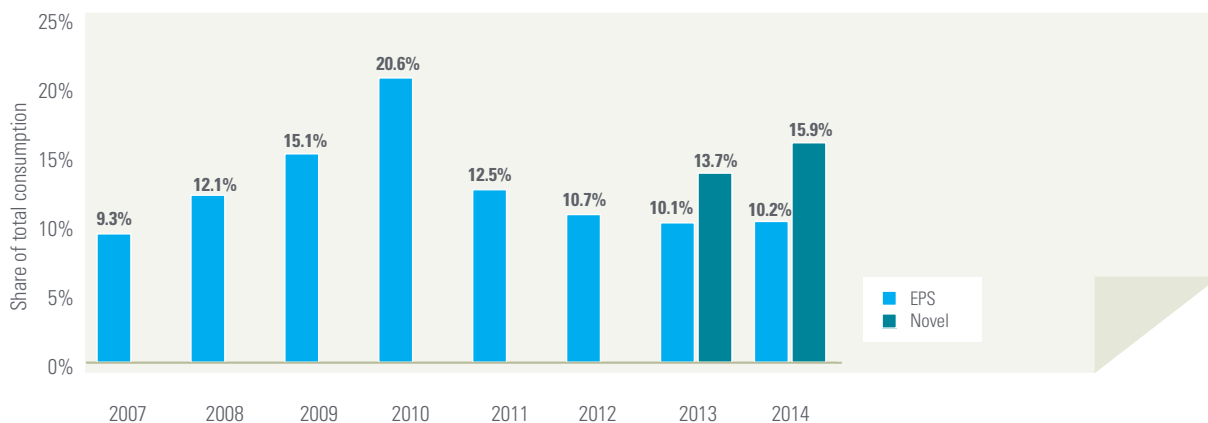


Novel study - Results and EPS corroboration

**In 2013 and 2014 a comparison was undertaken between the EPS and Novel Methodologies**

- Novel combines a pack collection with a face to face interview.
  - 574 localities were covered across 6 waves in 2014. The EPS study covered 50 localities in one wave in 2014
- Compared to the EPS street collection, the Novel study results in a greater number of packs collected from a greater number of sources
  - In 2014 Novel collected 15,000 packs compared to 9,300 in the EPS
  - Novel also collects packs monthly which adjusts for any seasonal variations
- The non-domestic incidence measured by the EPS was 10.2% in 2014, compared to 15.9% in Novel. In 2013 EPS measured non-domestic incidence at 10.1% compared to 13.7% in Novel
- The Novel study has tended to produce results that are higher than the EPS as it also samples rural areas, which tend to have higher non-domestic incidence than urban areas. The EPS is focused on urban areas
  - 45% of the population of Romania lives in rural areas

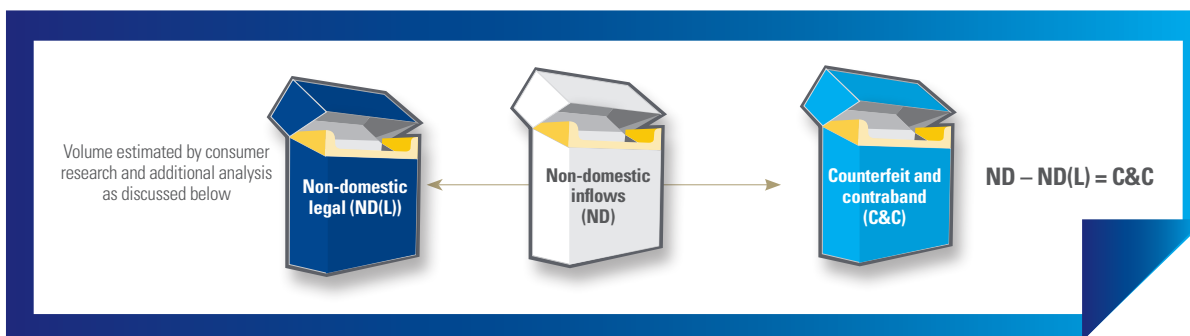
**Romania historical Empty Pack Surveys and Novel<sup>(1)(2)</sup>**



Sources: (1) Novel study, 2012 & 2014  
 (2) Empty Pack Surveys, 2007 to 2014

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ND(L) was determined by analysis of travel trends, border crossings and cigarette pricing data

C&C volumes formed the remaining ND balance after subtracting ND(L) from total non-domestic

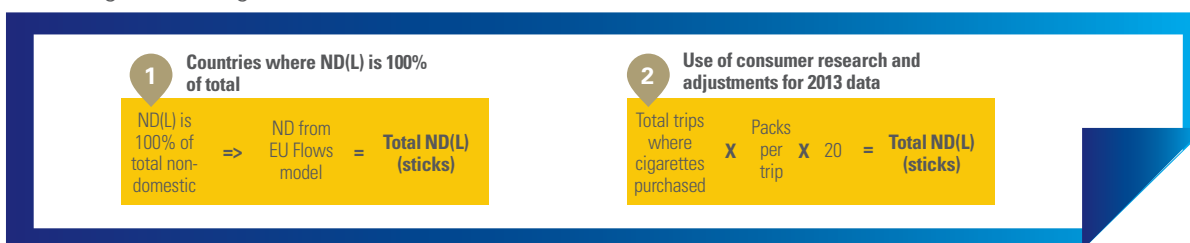
- ND(L) was calculated using 2 methods:

1) Use of travel flows analysis

- Business and tourism travel data from the World Tourism Organization (UNWTO) and national statistics offices were used to calculate the number of trips made by travellers over the age of 18
- This total number of trips was then multiplied by the average smoking prevalence of the country of origin to calculate the total number of trips where cigarettes are purchased. Smoking prevalence data was provided by Euromonitor
- It was assumed that the number of packs purchased per trip is equal to the Duty Free allowance, or the indicative legal limit for intra-EU travel
- The EPS and EU Flows model 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 EU Flows model it is capped at the volume generated by the EU flows model
- 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 and travel retail sales data

2) Countries where ND(L) is 100% of total ND

- Non-domestic product found in Empty Pack Surveys from higher priced inbound tourist/visitor countries was categorised as legal



1 COUNTRIES WHERE ND(L) IS 100% OF TOTAL								
Country	ND 2013 (bn sticks) <sup>(1)</sup>	2014 ND(L) (bn sticks)					% of ND	
Belgium	0.62	0.62					100%	

2 USE OF CONSUMER RESEARCH AND ANY ADJUSTMENTS FOR 2014 DATA								
Country	ND 2014 (bn sticks) <sup>(1)</sup>	Number of border crossings (m) <sup>(2)(3)</sup>	Population 18+ <sup>(2)</sup>	Smoking prevalence	Trips where cigarettes purchased	Cigarettes per trip	2014 ND(L) (bn sticks)	% of ND
Belgium	0.62	8.63 <sup>(b)</sup>	10	90.40		1.81	0.62	90%

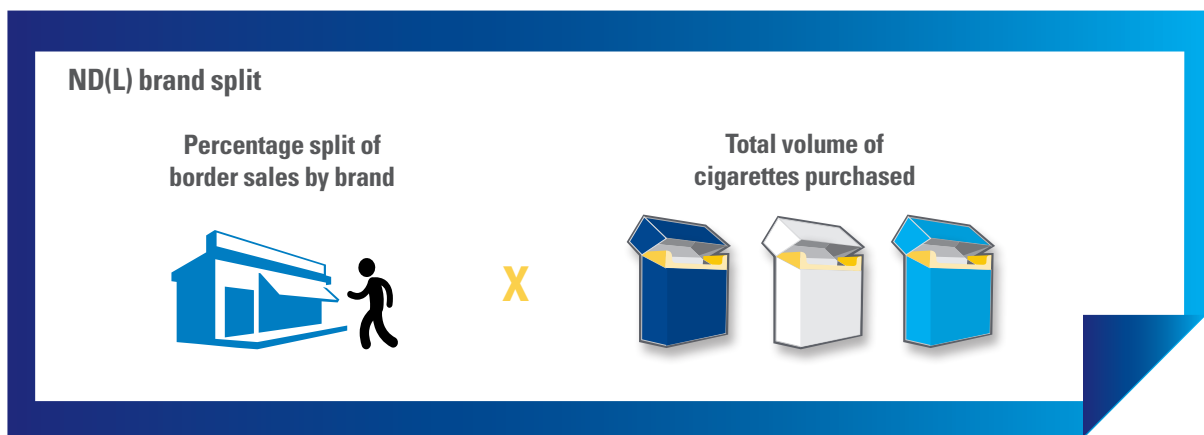
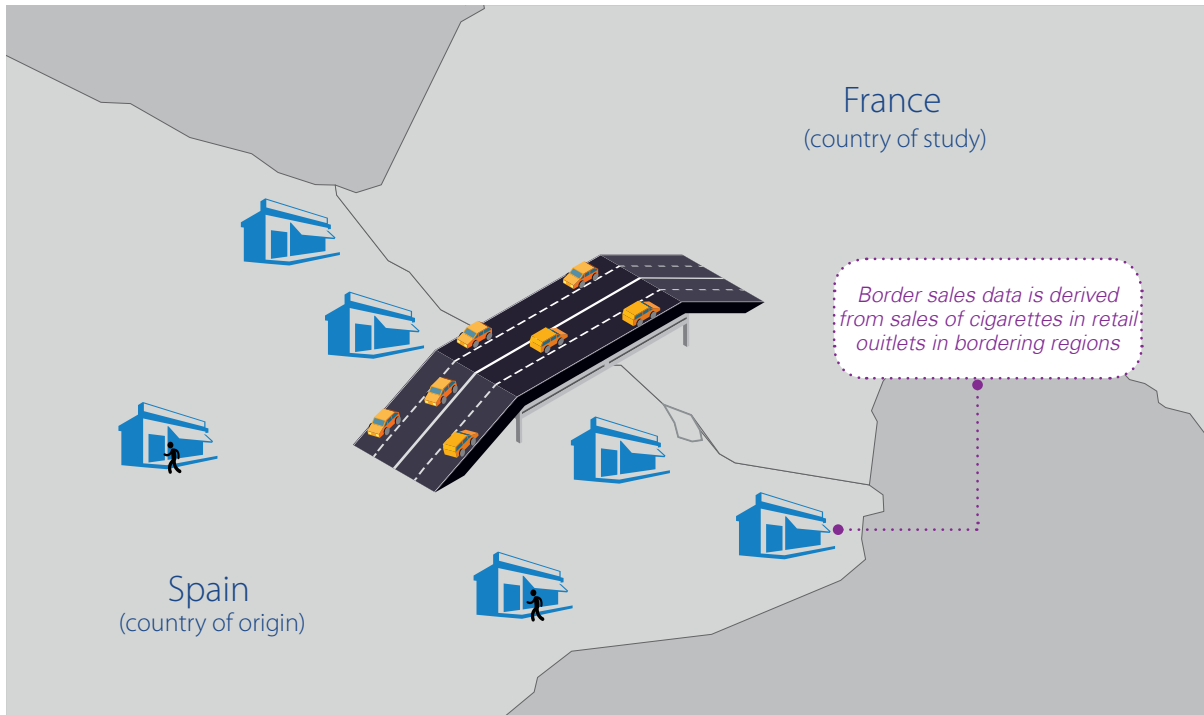
Notes: (a) KPMG calculates the split between C&C and ND(L) by calculating the ND(L) volume and subtracting from the total inflows (b) Unless stated otherwise it is assumed that returning travellers purchase the indicative maximum allowed  
Sources: (1) KPMG EU Flows Model (2) UN WTO Tourism Factbook 2008-14 (3) Euromonitor





## Non-domestic Legal brand split analysis and assumptions

### Illustrative example of ND(L) by brand approach



Having determined the volume of ND(L) using travel statistics, the brand share of each ND(L) inflow was determined by an analysis of brands sold at border shops

- Border sales data was provided to KPMG by manufacturers in a range of formats:
  - Sales data from participants from shops on the border – which can be either the total market, or restricted to the brands that each participant sells
  - Sales data by region bordering the destination country which is often collated by Nielsen for some of the larger countries
  - Any other individual studies that participants have made which can help the overall border sales
- KPMG used all data sources available to come up with a fair representation of the overall brand split, prioritising independent border sales data provided by a third party for all brands where possible
- These border sales are used to calculate the percentage split of brand sales. It is not used in order to calculate volumes
- Where the ND(L) flow was considered 100% of the total flow, all brands from that country were allocated to ND(L) and border sales data was not analysed





## METHODOLOGY – NON DOMESTIC LEGAL ANALYSIS

### Primary information sources and tools – Non-domestic Legal major flow calculations

AUSTRIA									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Slovenia	outbound								0.74
	inbound								
Hungary	outbound								0.56
	inbound								
Czech Republic	outbound	3.22	82%	35%	0.93	22	440	0.41	0.41
	inbound	0.65	82%	26%	0.14	2	40	0.01	
Germany	outbound								0.14
	inbound								
Others									0.25
<b>Total</b>									<b>2.11</b>
BELGIUM									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Luxembourg	outbound								0.25
	inbound								
Italy	outbound								0.11
	inbound								
Netherlands	outbound								0.08
	inbound								
France	outbound								0.07
	inbound								
Others									0.27
<b>Total</b>									<b>0.78</b>
BULGARIA									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Serbia	outbound	0.05	84%	38%	0.02	10	200	0.00	0.01
	inbound	0.51	83%	30%	0.12	2	40	0.00	
Spain	outbound								0.01
	inbound								
Ukraine	outbound	0.07	84%	38%	0.02	10	200	0.00	0.01
	inbound	0.47	83%	23%	0.09	2	40	0.00	
Germany	outbound								0.00
	inbound								
Others									0.04
<b>Total</b>									<b>0.07</b>



## METHODOLOGY – NON DOMESTIC LEGAL ANALYSIS

CROATIA									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Bosnia and Herzegovina	outbound	1.85	82%	28%	0.42	10	200	0.08	0.08
	inbound								
Slovenia	outbound								0.01
	inbound								
Switzerland	outbound								0.01
	inbound								
Finland	outbound								0.01
	inbound								
Others									0.03
<b>Total</b>									<b>0.13</b>

CYPRUS									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
UK	outbound								0.003
	inbound								
Netherlands	outbound								0.001
	inbound								
Greece	outbound								0.001
	inbound								
Bulgaria	outbound	0.00	79%	36%	0.00	40	800	0.001	0.001
	inbound	0.01	84%	38%	0.00	2	40	0.000	
Others									0.004
<b>Total</b>									<b>0.010</b>

CZECH REPUBLIC									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Poland	outbound								0.05
	inbound								
Slovakia	outbound								0.02
	inbound								
Germany	outbound								0.01
	inbound								
Bulgaria	outbound								0.01
	inbound								
Others									0.06
<b>Total</b>									<b>0.14</b>





## METHODOLOGY – NON DOMESTIC LEGAL ANALYSIS

DENMARK									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Sweden	outbound								0.03
	inbound All flows considered legal								
Poland	outbound	0.09	79%	21%	0.01	40	800	0.01	0.01
	inbound	0.09	82%	28%	0.02	2	40	0.00	
Germany	outbound								0.01
	inbound All flows considered legal								
Others									0.11
<b>Total</b>									<b>0.16</b>

ESTONIA									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Latvia	outbound								0.01
	inbound All flows considered legal								
Finland	outbound								0.00
	inbound All flows considered legal								
Others									0.01
<b>Total</b>									<b>0.02</b>

FINLAND									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Estonia	outbound	0.93	80%	19%	0.14	40	800	0.11	0.12
	inbound	0.90	81%	28%	0.21	2	40	0.01	
Russia	outbound	1.64	80%	19%	0.25	10	200	0.05	0.05
	inbound legal flow considered minimal due to travel restrictions								
Latvia	outbound								0.01
	inbound All flows considered legal								
Czech Republic	outbound								0.00
	inbound All flows considered legal								
Others									0.08
<b>Total</b>									<b>0.26</b>



# METHODOLOGY – NON DOMESTIC LEGAL ANALYSIS



FRANCE									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Belgium	outbound	Figure based on Tourism. Commuter and border shopper statistics							1.85
	inbound								
Spain	outbound	ND(L) share of 67% of total non-domestic based upon travel statistics							1.80
	inbound								
Luxembourg	outbound	All flows considered legal							1.11
	inbound								
Germany	outbound	All flows considered legal							0.47
	inbound								
Others									1.77
<b>Total</b>									<b>7.02</b>

GERMANY									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Czech Republic	outbound	40.34	84%	27%	9.05	21	420	3.80	3.80
	inbound	0.46	82%	26%	0.10	2	40	0.00	
Poland	outbound	31.70	84%	27%	7.11	25	500	3.56	3.56
	inbound	0.91	82%	28%	0.21	2	40	0.01	
Luxembourg	outbound	All flows considered legal							0.48
	inbound								
Austria	outbound	All flows considered legal							0.27
	inbound								
Others									2.21
<b>Total</b>									<b>10.32</b>

GREECE									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Bulgaria	outbound	0.11	82%	36%	0.03	40	800	0.03	0.03
	inbound	0.56	84%	38%	0.18	2	40	0.01	
Albania	outbound	0.32	82%	36%	0.10	10	200	0.02	0.02
	inbound	legal flow considered minimal due to 2 pack limit							
Romania	outbound	0.03	82%	36%	0.01	40	800	0.01	0.01
	inbound	0.19	81%	26%	0.04	2	40	0.00	
France	outbound	All flows considered legal							0.01
	inbound								
Others									0.11
<b>Total</b>									<b>0.18</b>

## METHODOLOGY – NON DOMESTIC LEGAL ANALYSIS

HUNGARY									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Austria	outbound								0.02
	inbound								
All flows considered legal									
Ukraine	outbound	0.76	82%	19%	0.12	2	40	0.00	0.02
	inbound	1.96	83%	23%	0.37	2	40	0.01	
Romania	outbound								0.01
	inbound								
All flows considered legal									
Germany	outbound								0.01
	inbound								
All flows considered legal									
Others									0.05
<b>Total</b>									<b>0.11</b>

IRELAND									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Spain	outbound								0.08
	inbound								
All flows considered legal									
UK	outbound								0.08
	inbound								
All flows considered legal									
Italy	outbound								0.02
	inbound								
All flows considered legal									
Poland	outbound	0.13	74%	23%	0.02	40	800	0.02	0.02
	inbound	0.22	82%	28%	0.05	2	40	0.00	
Others									0.14
<b>Total</b>									<b>0.33</b>

ITALY									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Slovenia	outbound								0.15
	inbound								
All flows considered legal									
Switzerland	outbound								0.13
	inbound								
All flows considered legal									
Spain	outbound								0.08
	inbound								
All flows considered legal									
Germany	outbound								0.05
	inbound								
All flows considered legal									
Others									0.58
<b>Total</b>									<b>0.99</b>



# METHODOLOGY – NON DOMESTIC LEGAL ANALYSIS



LATVIA										
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)	
Russia	outbound	0.43	83%	28%	0.10	2	40	0.00	0.00	
	inbound	legal flow considered minimal								
Lithuania	outbound	All flows considered legal								0.00
	inbound									
Estonia	outbound	All flows considered legal								0.00
	inbound									
Ukraine	outbound	All flows considered legal								0.00
	inbound									
Others									0.01	
<b>Total</b>									<b>0.01</b>	

LITHUANIA										
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)	
Russia	outbound	0.52	82%	23%	0.10	2	40	0.00	0.00	
	inbound	Inflow considered minimal								
Latvia	outbound	All flows considered legal								0.00
	inbound									
Poland	outbound	All flows considered legal								0.00
	inbound									
Belarus	outbound	0.00	82%	23%	0.00	2	40	0.00	0.00	
	inbound	0.20	82%	26%	0.04	2	40	0.00		
Others									0.01	
<b>Total</b>									<b>0.02</b>	

LUXEMBOURG										
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)	
France	outbound	All flows considered legal								0.03
	inbound									
Germany	outbound	All flows considered legal								0.02
	inbound									
Belgium	outbound	All flows considered legal								0.02
	inbound									
Italy	outbound	All flows considered legal								0.01
	inbound									
Others									0.01	
<b>Total</b>									<b>0.09</b>	



## METHODOLOGY – NON DOMESTIC LEGAL ANALYSIS

MALTA									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Italy	outbound								0.003
	inbound								
All flows considered legal									
Others									0.008
<b>Total</b>									<b>0.011</b>

NETHERLANDS									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Germany	outbound								0.36
	inbound								
All flows considered legal									
Belgium	outbound								0.28
	inbound								
All flows considered legal									
UK	outbound								0.16
	inbound								
All flows considered legal									
Italy	outbound								0.13
	inbound								
All flows considered legal									
Others									0.89
<b>Total</b>									<b>1.81</b>

POLAND									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Ukraine	outbound	1.06	82%	28%	0.24	2	40	0.01	0.08
	inbound	9.84	83%	23%	1.87	2	40	0.07	
Germany	outbound								0.08
	inbound								
All flows considered legal									
Belarus	outbound	0.00	82%	28%	0.00	2	40	0.00	0.05
	inbound	5.50	82%	26%	1.15	2	40	0.05	
Russia	outbound	2.33	82%	28%	0.54	2	40	0.02	0.02
	inbound								
legal flow considered minimal									
Others									0.19
<b>Total</b>									<b>0.42</b>



## METHODOLOGY – NON DOMESTIC LEGAL ANALYSIS

PORTUGAL									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Spain	outbound								0.04
	inbound								
Germany	outbound								0.01
	inbound								
Switzerland	outbound								0.01
	inbound								
Belgium	outbound								0.01
	inbound								
Others									0.06
<b>Total</b>									<b>0.13</b>

ROMANIA									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Ukraine	outbound								0.02
	inbound								
Greece	outbound								0.00
	inbound								
Slovakia	outbound								0.00
	inbound								
Germany	outbound								0.00
	inbound								
Others									0.07
<b>Total</b>									<b>0.09</b>

SLOVAKIA									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Czech Republic	outbound								0.01
	inbound								
Hungary	outbound								0.01
	inbound								
Ukraine	outbound								0.00
	inbound								
Poland	outbound								0.00
	inbound								
Others									0.00
<b>Total</b>									<b>0.03</b>



## METHODOLOGY – NON DOMESTIC LEGAL ANALYSIS

SLOVENIA									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Croatia	outbound								0.02
	inbound								
Austria	outbound								0.00
	inbound								
Serbia	outbound	0.07	83%	24%	0.01	10	200	0.00	0.00
	inbound	0.09	83%	30%	0.02	2	40	0.00	
Czech Republic	outbound								0.00
	inbound								
Others									0.02
<b>Total</b>									<b>0.05</b>

SPAIN <sup>(a)</sup>									
Country		# of border crossings (mn)	Population 18+	Purchasing probability	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Gibraltar <sup>(b)</sup>	frontier workers	1.95	100%	39%	0.03	4	80	0.003	0.74
	border crossings	7.82	78%	61%	3.69	10	200	0.74	
Andorra	border crossings	3.71	78%	66%	1.92	15	300	0.58	0.58
Canary Islands	border crossings	1.52	91%	65%	0.90	10	200	0.18	0.18
Italy	outbound								0.04
	inbound								
Others									0.32
<b>Total</b>									<b>1.85</b>

Note: (a) As Spain's three major source markets are cheaper than Spain, consumer research has indicated a higher volume of purchasing than smoking prevalence rates would suggest. Data is provided by consumer surveys for JTI in Andorra and Canary Islands and for Project SUN/STAR 2009-2013 for Gibraltar.  
 (b) Frontier workers are restricted to 80 cigarettes per month



# METHODOLOGY – NON DOMESTIC LEGAL ANALYSIS



SWEDEN									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Denmark	outbound								0.01
	All flows considered legal								
Poland	outbound	0.12	80%	13%	0.01	40	800	0.01	0.01
	inbound	Volumes appear negligible							
Canary Islands	outbound								0.01
	All flows considered legal								
Estonia	outbound								0.01
	All flows considered legal								
Others									0.12
<b>Total</b>									<b>0.16</b>

UK									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Spain	outbound								0.72
	All flows considered legal								
Poland	outbound	0.39	79%	19%	0.06	40	800	0.05	0.28
	inbound	1.36	82%	28%	0.32	37	740	0.23	
Canary Islands	outbound								0.16
	All flows considered legal								
Greece	outbound								0.08
	All flows considered legal								
Others									1.15
<b>Total</b>									<b>2.39</b>

NORWAY									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Sweden	outbound								0.27
	All flows considered legal								
Germany	outbound	0.45	78%	14%	0.05	10	200	0.01	0.02
	inbound	0.83	84%	27%	0.19	2	40	0.01	
Denmark	outbound								0.01
	All flows considered legal								
Others									0.33
<b>Total</b>									<b>0.63</b>

## METHODOLOGY – NON DOMESTIC LEGAL ANALYSIS

SWITZERLAND									
Country		# of border crossings (mn)	Population 18+	Smoking prevalence	Smoker trips (mn)	Packs per trip	# of cigarettes	ND(L) volume (bn)	Total ND(L) (bn)
Germany	outbound								0.17
	inbound			All flows considered legal					
Italy	outbound								0.12
	inbound			All flows considered legal					
France	outbound								0.04
	inbound			All flows considered legal					
Spain	outbound								0.02
	inbound			All flows considered legal					
Others									0.33
<b>Total</b>									<b>0.68</b>



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## Illicit Whites brand flows have grown at a CAGR of 22% between 2009 and 2014 and now account for 37% of total C&C volumes in the EU

- Illicit Whites are defined as
  - Cigarettes that are usually manufactured legally in one country/market, but which the evidence suggests have been smuggled across borders during their transit to their destination market under review where they have limited or no legal distribution and are sold without payment of tax
- KPMG undertook the following analysis to determine which brands made up Illicit Whites brand flows:
  - Each participating manufacturer provided Illicit Whites brand lists which was compiled for analysis
  - The list was corroborated through an analysis of LDS (and pack labelling as per EPS). Illicit volumes were compared to LDS on a country by country basis to determine a share of total consumption
  - KPMG conservatively assumed that where illicit volumes represented >99% of total consumption, the brand is an Illicit White
  - Once identified, the brand's overall volume is determined only in countries where the brand flow meets the 99% criteria
- Many of the Illicit Whites brand flows are identified in high volumes in the EPS. However, given our identification of counterfeit product is limited to the four industry participants, we cannot assess whether these flows are genuine or counterfeit

### Illicit Whites identification process, Project SUN – worked example

PROJECT SUN - 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

PROJECT SUN - LDS BY BRAND AND BY COUNTRY				
Brand	Country 1	Country 2	Country 3	Country 4
Brand A	-	0.00	-	0.01

PROJECT SUN - NON-DOMESTIC VOLUMES AS SHARE OF TOTAL CONSUMPTION				
Brand	Country 1	Country 2	Country 3	Country 4
Brand A	100%	100%	100%	38%

PROJECT SUN - ILLICIT WHITE VOLUMES BY BRAND AND BY DESTINATION COUNTRY				
Brand	Country 1	Country 2	Country 3	Country 4
Brand A	0.01	0.24	0.01	-

*Classified as an Illicit White country 2 where there is no evidence of legal distribution and all flows are unspecified origin*

*Not classified as an Illicit White in country 4 where non-domestic volumes are 38% of consumption*



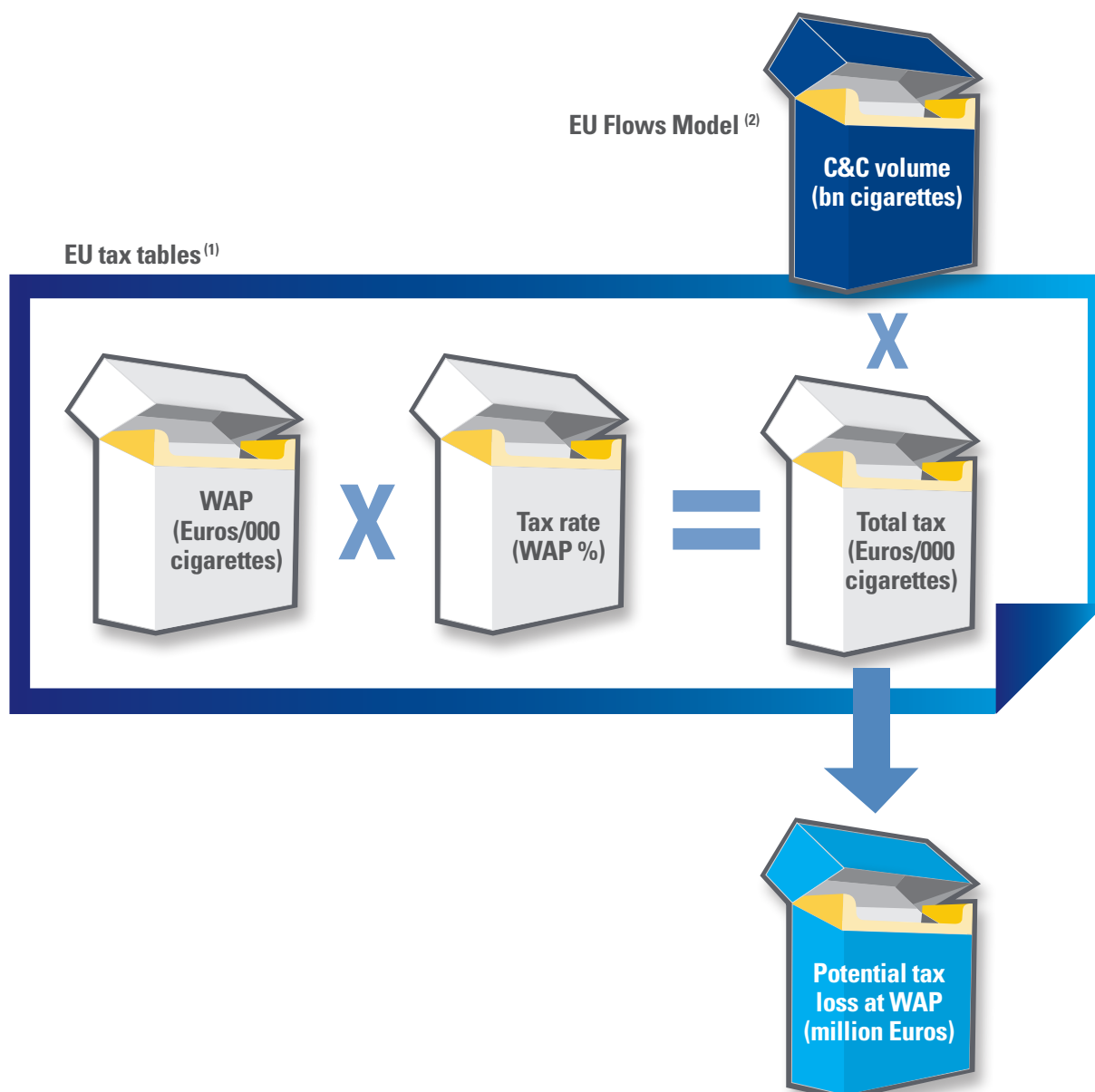
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**Tax losses are calculated to estimate the tax revenue that would have been gained had the volume of C&C cigarettes consumed been legally purchased in that country**

- The calculation shown below was performed for each country:
  - EU tax tables were used to determine the WAP<sup>(a)</sup> for cigarettes in July 2014
  - This is then multiplied by the tax rate (as a % of WAP)
  - The resultant tax take (per cigarette) is multiplied by the C&C consumption volumes for that country per the EU Flows Model to give the total potential tax loss based on WAP
- Total tax losses for the EU 28 countries based on WAP were estimated to be €11.5bn in 2014. This was an increase versus prior year (2013: €11.3bn)
- Total tax losses for Norway and Switzerland based on WAP were estimated to be €0.3bn in 2014
- Tax losses are calculated 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 20 cigarettes

Sources: (1) EC Excise Duty tables (Part III – Manufactured Tobacco) as at 1 July 2013.

(2) KPMG EU Flows Model and analysis of data sources provided by manufacturers.

# APPENDICES – LIMITATION OF RESULTS

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## APPENDICES – LIMITATION OF RESULTS

Limitation	Detail	Impact	
<b>Geographic coverage</b>	<ul style="list-style-type: none"> <li>We have limited our geographic coverage in some markets where extension would significantly impair confidence levels in the ND(L) research for the further territories included</li> <li>In some instances (e.g. Greek islands), LDS data is also insufficient for the purposes of this study</li> </ul>	<ul style="list-style-type: none"> <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 are 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> </ul>	Not adjusted for
<b>Non-major manufacturer counterfeit</b>	<ul style="list-style-type: none"> <li>EPS results do not identify counterfeit packs that have been made by manufacturers other than British American Tobacco plc, Imperial Tobacco Limited, JT International SA and Philip Morris International Management SA as only the manufacturer / trademark owner can confirm whether their brand pack is genuine</li> </ul>	<ul style="list-style-type: none"> <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> </ul>	Not adjusted for
<b>OTP</b>	<ul style="list-style-type: none"> <li>EPSs collect cigarette packs only</li> <li>Non-domestic consumption for OTP cannot be measured via EPS results</li> </ul>	<ul style="list-style-type: none"> <li>Reports in a number of countries suggest that non-domestic consumption of OTP may have been growing in recent years. These observations are supported by Customs organisations in some countries</li> </ul>	Not adjusted for
<b>Non-EU outflows</b>	<ul style="list-style-type: none"> <li>In order to calculate consumption, we have assumed no outflows of LDS outside the 30 countries of study</li> </ul>	<ul style="list-style-type: none"> <li>With the exception of Bulgaria to Turkey, non-EU LDS outflows are not considered to be material due to the high prices relative to other parts of the world and Duty Free import restrictions. This is supported by market discussions and non-EU EPSs</li> <li>Outflows from Luxembourg are also under-estimated by EPS so an adjustment is made which increases the outflows so that consumption in Luxembourg equates to the expected demand based on the population</li> </ul>	Partially adjusted for





Source	Limitation
EPSs	<ul style="list-style-type: none"> <li>• Whilst the EPS for every country is designed to be representative of the overall population, in some countries, owing to the geographical circumstances or demographics it is not possible to ensure that the sample is fully representative. This may be because:               <ul style="list-style-type: none"> <li>- the sample is more heavily weighted towards populous, urban areas and therefore may not be fully representative of consumption habits in rural regions</li> <li>- homes and workplaces or public spaces are not covered</li> </ul> </li> <li>• Results from Germany are based on a monthly analysis of approximately 10,000 packs collected at recycling centres and so are not directly comparable with the EPS results from other countries due to the difference in methodology, however, both methods produce similar results (see page 287 for details)</li> <li>• Although EPS dates are selected 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 style="list-style-type: none"> <li>- in some instances the timing of EPSs has changed between years. In order to ensure comparability of results, monthly LDS figures, consumption trends and visitor data are all analysed and adjustments made where appropriate</li> </ul> </li> <li>• 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</li> <li>• EPS results are analysed to identify any outliers that may impact results, such as geographic concentrations of a specific brand or market variant. Brand specific data is also compared to known sales in the source market to identify whether results are credible               <ul style="list-style-type: none"> <li>- where data suggests a sampling or data capture error may have occurred at a specific location, results are adjusted and the remainder of the survey is re-weighted accordingly</li> </ul> </li> <li>• In some specific instances it is not possible to differentiate between Duty Free and Duty Paid variants from the empty packs collected as the tear tape on the packet is required in order to make the necessary distinction</li> </ul>

## APPENDICES – LIMITATION OF RESULTS

Source	Limitation
LDS	<ul style="list-style-type: none"> <li>• In some cases tax stamp data 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 management to be representative of smoker consumption during the calendar year, or official government data sources (for example, in Bulgaria)</li> <li>• AC Nielsen Retail Audit data is derived from retail sales information but may exclude particular sales channels or retailers               <ul style="list-style-type: none"> <li>- In markets where we have used Retail Audit data, AC Nielsen have calculated an appropriate uplift to derive total market sales, including volumes not accounted for in Retail Audit data</li> </ul> </li> <li>• Slight timing variances may arise between the date the product was shipped and actual consumption but, following discussions with local 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 style="list-style-type: none"> <li>• For the 2014 results, we have used business and tourism travel data from sources such as the World Tourism Organization and national statistics office to calculate the number of trips made</li> <li>• We have calculated the volume of cigarettes purchased by assuming that smokers purchase the Duty Free limit, or the indicative legal limit for intra-EU travel</li> <li>• This may over-weight ND(L) volume as a proportion of the total non-domestic flow</li> <li>• Comparison of ND(L) volumes as calculated by travel flows analysis with historic consumer research has ensured that some of these limitations have been corrected, such as the number of packs purchased per trip</li> <li>• In order to determine the ND(L) brand split, border sales data is used. Whilst this gives an accurate approximation of the likely brand split, some brands may be sold more specifically on the border than others, which could increase the share of that brand.</li> <li>• Where border sales data is not available and the EPS cannot be used, the brands are categorised as "other"</li> </ul>



## APPENDICES – EPS RESULTS BY COUNTRY

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## APPENDICES – EPS RESULTS FOR EU 28 COUNTRIES

EU 28 countries, Norway and Sweden		Number of packs			ND incidence		
Region		2012	2013	2014	2012	2013	2014
Austria		27,494	25,485	12,811	22%	20%	16%
Belgium		5,800	5,600	5,600	15%	17%	13%
Bulgaria		13,000	13,000	13,000	19%	21%	21%
Croatia		3,000	3,000	3,000	9%	5%	10%
Cyprus		1,000	1,000	1,000	4%	6%	5%
Czech Republic		21,003	21,004	21,004	3%	5%	4%
Denmark		10,000	5,300	5,500	6%	6%	5%
Estonia		6,600	6,600	6,600	25%	22%	20%
Finland		5,000	5,000	5,000	20%	21%	16%
France		23,000	34,500	23,000	25%	25%	25%
Germany		120,000	120,000	120,000	21%	22%	19%
Greece		14,000	7,000	13,000	14%	20%	21%
Hungary		12,350	24,709	19,910	4%	9%	12%
Ireland		10,000	10,000	10,000	28%	28%	24%
Italy		20,000	40,000	40,000	12%	5%	8%
Latvia		9,800	9,800	9,800	34%	30%	30%
Lithuania		12,800	12,800	19,200	32%	29%	30%
Luxembourg		326	400	400	6%	8%	7%
Malta		1,050	1,000	1,000	13%	15%	10%
Netherlands		14,000	14,000	21,000	21%	22%	21%
Poland		51,000	51,000	51,000	14%	15%	17%
Portugal		3,000	3,000	3,000	3%	2%	2%
Romania		27,900	18,600	15,072	11%	10%	16%
Slovakia		5,000	5,000	12,800	2%	3%	1%
Slovenia		3,000	3,000	3,000	9%	11%	9%
Spain		29,484	29,404	29,997	10%	11%	12%
Sweden		10,000	10,000	19,909	12%	13%	11%
UK		25,400	38,099	38,100	21%	15%	24%
Norway		-	-	5,000	-	-	47%
Switzerland		-	-	6,600	-	-	9%
<b>Total</b>		<b>485,006</b>	<b>518,302</b>	<b>535,303</b>	<b>15.3%</b>	<b>15.5%</b>	<b>13.0%</b>



## APPENDICES – EPS RESULTS BY COUNTRY

### Austria EPS results by region, 2012-14<sup>(1)(2)</sup>

Austria		Number of packs			ND incidence		
Region		2012	2013	2014	2012	2013	2014
Burgenland		3,907	2,987	1,544	17%	15%	14%
Kärnten		5,531	5,546	2,402	41%	35%	23%
Niederösterreich		4,144	3,871	1,555	21%	19%	16%
Oberösterreich		3,586	3,180	1,993	16%	22%	18%
Salzburg		1,066	1,663	759	4%	9%	10%
Steiermark		3,263	2,398	1,146	12%	13%	15%
Tirol		1,309	1,581	779	5%	6%	6%
Vorarlberg		381	308	658	1%	2%	7%
Wien		4,307	3,951	1,975	23%	20%	20%
<b>Total</b>		<b>27,494</b>	<b>25,485</b>	<b>12,811</b>	<b>22%</b>	<b>20%</b>	<b>16%</b>




Source: (1) Austria Chamber of Commerce Empty Pack Surveys, 2012-2014  
(2) CPM, Vienna, 2014



## APPENDICES – EPS RESULTS BY COUNTRY

### Belgium EPS results by region, 2012-14<sup>(1)</sup>


Belgium Region		Number of packs			ND incidence		
		2012	2013	2014	2012	2013	2014
Aalst		0	100	200	0%	6%	19%
Anderlecht		0	120	240	0%	9%	30%
Antwerp		1,086	550	1,100	14%	12%	7%
Antwerpen		0	550	0	0%	14%	0%
Arlon		0	160	160	0%	44%	44%
Brugge		0	240	240	0%	19%	11%
Brussels		951	500	380	15%	18%	15%
Charleroi		0	460	460	0%	13%	12%
East Flanders		662	100	0	9%	18%	0%
Flemish Brabant		325	0	0	8%	0%	0%
Genk		0	200	200	0%	20%	7%
Gent		0	500	500	0%	12%	11%
Hainaut		670	0	0	17%	0%	0%
Hasselt		0	200	200	0%	25%	11%
Kortrijk		0	200	200	0%	20%	12%
Leuven		0	200	200	0%	13%	5%
Liege		481	440	440	10%	31%	13%
Limburg		337	0	0	9%	0%	0%
Luxembourg		271	0	0	64%	0%	0%
Mechelen		0	200	200	0%	20%	13%
Mons		0	200	200	0%	10%	21%
Namur		466	240	240	10%	25%	27%
Sambreville		0	160	160	0%	21%	7%
Schaerbeek		0	280	0	0%	16%	0%
West Flanders		551	0	0	9%	0%	0%
<b>Total</b>		<b>5,800</b>	<b>5,600</b>	<b>5,600</b>	<b>15%</b>	<b>17%</b>	<b>13%</b>


Source: (1) MS Intelligence Empty Pack Surveys, 2012-2013.



## APPENDICES – EPS RESULTS BY COUNTRY

### Bulgaria and Croatia EPS results by region, 2012-14<sup>(1)</sup>

Bulgaria		Number of packs			ND incidence		
		2012	2013	2014	2012	2013	2014
Region							
Blagoevgrad				500	0%	0%	34%
Burgas		660	660	660	12%	17%	19%
Dobric		300	300	300	11%	11%	4%
Gabrovo				300	0%	0%	37%
Grad Sofia		3,960	3,960	3,960	15%	20%	14%
Haskovo		708	708	908	31%	25%	36%
Jambol		244	244	244	25%	20%	5%
Kjustendil				300	0%	0%	40%
Lovec		352	352	352	18%	16%	14%
Montana				500	0%	0%	24%
Pazardzik		236	236	236	29%	32%	40%
Pernik		264	264	264	16%	11%	10%
Plovdiv		1,114	1,114	1,114	17%	18%	34%
Razgrad				200	0%	0%	4%
Ruse		492	492	492	9%	17%	16%
Silistra				200	0%	0%	4%
Sliven		302	302	302	37%	31%	66%
Sumen		266	266	266	6%	3%	4%
Varna		1,102	1,102	1,102	12%	22%	14%
Veliko Tarnovo				500	0%	0%	10%
Vidin				300	0%	0%	39%
Other		3,000	3,000		28%	26%	0%
<b>Total</b>		<b>13,000</b>	<b>13,000</b>	<b>13,000</b>	<b>19%</b>	<b>21%</b>	<b>21%</b>

Croatia		Number of packs			ND incidence		
		2012	2013	2014	2012	2013	2014
Region							
Osijek		193	193	193	18%	20%	20%
Pula		132	132	132	12%	12%	4%
Rijeka		294	294	294	9%	1%	5%
Sesvete		126	126	126	10%	3%	15%
Slavonski Brod		124	124	124	43%	18%	46%
Split		383	383	383	7%	4%	11%
Zadar		163	163	163	3%	1%	2%
Zagreb		1,585	1,585	1,585	7%	4%	7%
<b>Total</b>		<b>3,000</b>	<b>3,000</b>	<b>3,000</b>	<b>9%</b>	<b>5%</b>	<b>10%</b>


Source: (1) Nielsen Empty Pack Surveys, 2012-2014.




## APPENDICES – EPS RESULTS BY COUNTRY

Cyprus, Czech Republic and Denmark EPS results by region, 2012-14<sup>(1)(2)(3)</sup>

Cyprus 	Number of packs			ND incidence		
	2012	2013	2014	2012	2013	2014
Larnaca	150	150	150	2%	4%	10%
Limassol	318	300	300	3%	5%	2%
Nicosia	422	400	400	5%	8%	6%
Paphos	110	150	150	2%	5%	5%
<b>Total</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>4%</b>	<b>6%</b>	<b>5%</b>

Czech Republic 	Number of packs			ND incidence		
	2012	2013	2014	2012	2013	2014
Jihocesky Kraj	724	724	724	4%	3%	2%
Jihomoravsky Kraj	2,148	2,148	2,148	3%	5%	4%
Karlovarsky Kraj	300	300	300	3%	4%	7%
Kralovehradecky Kraj	526	526	526	3%	4%	2%
Liberecky Kraj	1,034	1,034	1,034	3%	4%	3%
Moravoslezsky Kraj	3,332	3,332	3,332	3%	6%	5%
Olomoucky Kraj	1,062	1,062	1,062	4%	5%	4%
Pardubicky Kraj	510	510	510	2%	5%	4%
Plzensky Kraj	948	948	948	3%	6%	3%
Praha	7,113	7,114	7,114	3%	5%	4%
Stredocesky Kraj	636	636	636	3%	5%	5%
Ustecky Kraj	1,750	1,750	1,750	3%	6%	5%
Vysocina	496	496	496	2%	4%	4%
Zlinsky Kraj	424	424	424	2%	5%	4%
<b>Total</b>	<b>21,003</b>	<b>21,004</b>	<b>21,004</b>	<b>3%</b>	<b>5%</b>	<b>4%</b>

Denmark 	Number of packs			ND incidence		
	2012	2013	2014	2012	2013	2014
Capital Region	5,186	2,593	2,612	6%	6%	5%
Mid Jutland	2,028	1,014	1,211	6%	7%	5%
North Jutland	842	421	422	6%	6%	5%
South Denmark	1,944	1,122	1,105	6%	5%	5%
Zealand		150	150	0%	9%	6%
<b>Total</b>	<b>10,000</b>	<b>5,300</b>	<b>5,500</b>	<b>6%</b>	<b>6%</b>	<b>5%</b>

Sources: (1) Nielsen Empty Pack Surveys, 2012-2014.


(2) Ultex Empty Pack Surveys, 2012-2014.


(3) MS Intelligence Empty Pack Surveys, 2012-2014.



## APPENDICES – EPS RESULTS BY COUNTRY

### Estonia and Finland EPS results by region, 2012-14<sup>(1)(2)</sup>

Estonia		Number of packs			ND incidence		
		2012	2013	2014	2012	2013	2014
Har				1,600	0%	0%	16%
Harju		3,200	3,200	1,600	21%	18%	15%
Ida				550	0%	0%	42%
Ida-Viru		1,100	1,100	550	48%	46%	39%
Lääne		200	200	200	22%	27%	22%
Lääne-Viru		200	200	200	30%	24%	18%
Pär				150	0%	0%	13%
Pärnu		300	300	150	18%	16%	12%
Saa				100	0%	0%	19%
Saare		200	200	100	24%	24%	14%
Tar				400	0%	0%	13%
Tartu		800	800	400	14%	13%	12%
Val				100	0%	0%	43%
Valga		200	200	100	40%	41%	36%
Vil				100	0%	0%	22%
Viljandi		200	200	100	18%	22%	15%
Vör				100	0%	0%	31%
Võru		200	200	100	22%	22%	25%
<b>Total</b>		<b>6,600</b>	<b>6,600</b>	<b>6,600</b>	<b>25%</b>	<b>22%</b>	<b>20%</b>


Finland		Number of packs			ND incidence		
		2012	2013	2014	2012	2013	2014
Keski-Suomi		329	329	320	27%	22%	18%
Kymenlaakso		222	222	210	19%	23%	20%
Paijat-Hame		255	255	248	23%	23%	20%
Pirkanmaa		537	537	522	20%	23%	16%
Pohjois-Savo		244	244	252	22%	22%	17%
Prohiois-Pohianmaa		357	357	458	18%	20%	16%
Uusimaa		2,610	2,610	2,558	19%	21%	15%
Varsinais-Suomi		446	446	432	16%	20%	19%
<b>Total</b>		<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>20%</b>	<b>21%</b>	<b>16%</b>


Sources: (1) Nielsen Empty Pack Surveys, 2012-2014.

(2) MS Intelligence Empty Pack Surveys, 2012-2014.

## APPENDICES – EPS RESULTS BY COUNTRY

### France and Germany EPS results by region, 2012-14<sup>(1)</sup>

France		Number of packs			ND incidence		
Region		2012	2013	2014	2012	2013	2014
Alsace Lorraine Champagne Ardennes		2,200	3,300	2,200	34%	36%	31%
Aquitaine		1,400	2,100	1,400	31%	26%	23%
Auvergne Limousin		1,000	1,500	1,000	25%	19%	24%
Basse Haute Normandie		1,600	2,400	1,600	23%	18%	24%
Bourgogne Franche Comte		2,000	3,000	2,000	23%	21%	27%
Bretagne		2,000	3,000	2,000	17%	17%	12%
Centre		1,000	1,500	1,000	20%	22%	25%
Ile De France		3,000	4,500	3,000	21%	24%	25%
Languedoc Roussillon Midi Pyrenees		1,600	2,400	1,600	30%	24%	28%
Nord Picardie		2,000	3,000	2,000	32%	33%	42%
Pays De Loire Poitou Charentes		1,600	2,400	1,600	17%	18%	12%
Provence Alpes Cote D Azur		1,600	2,400	1,600	29%	30%	36%
Rhone Alpes		2,000	3,000	2,000	18%	26%	20%
<b>Total</b>		<b>23,000</b>	<b>34,500</b>	<b>23,000</b>	<b>25%</b>	<b>25%</b>	<b>25%</b>

Germany		Weighted number of packs		ND incidence	
Region		2014		2014	
Nielsen 1		19,810		11%	
Nielsen 2		26,774		11%	
Nielsen 3a		16,388		10%	
Nielsen 3b		15,368		9%	
Nielsen 4		17,469		25%	
Nielsen 5		5,583		44%	
Nielsen 6		10,144		39%	
Nielsen 7		8,464		43%	
<b>Total</b>		<b>120,000</b>		<b>19%</b>	

Source: (1) MS Intelligence Empty Pack Surveys, 2012-2014.


(2) Ipsos Yellow Bag Surveys, 2012-2013 (Germany).



## APPENDICES – EPS RESULTS BY COUNTRY

### Greece and Hungary EPS results by region, 2012-14<sup>(1)(2)</sup>

Greece		Number of packs			ND incidence		
Region		2012	2013	2014	2012	2013	2014
Attica		4,600	2,300	4,600	20%	25%	25%
Central Greece		400	200	400	15%	19%	18%
Central Macedonia		3,000	1,500	2,700	15%	22%	22%
Crete		1,000	500	1,000	5%	22%	26%
East Macedonia/Thrace		800	400	400	15%	25%	23%
Epirus		600	300	500	12%	16%	20%
Ionian Islands		400	200	400	12%	16%	11%
South Aegean		400	200	400	17%	9%	11%
Thessaly		1,200	600	1,200	7%	15%	17%
West Greece		1,200	600	1,200	6%	8%	11%
West Macedonia		400	200	200	16%	17%	26%
<b>Total</b>		<b>14,000</b>	<b>7,000</b>	<b>13,000</b>	<b>14%</b>	<b>20%</b>	<b>21%</b>

Hungary		Number of packs			ND incidence		
Region		2012	2013	2014	2012	2013	2014
Bács-Kiskun		980	1,960	980	6%	11%	12%
Baranya				645	0%	0%	9%
Békés		420	840	760	6%	13%	13%
Borsod-Abaúj-Zemplén		205	410	1,465	0%	0%	16%
Budapest		6,249	12,500	6,250	4%	9%	10%
Csongrád		205	410	1,310	22%	21%	14%
Fejér		211	430	640	2%	3%	3%
Győr-Moson-Sopron		535	1,070	935	1%	7%	5%
Hajdú-Bihar		1,195	2,390	1,195	6%	11%	16%
Heves		390	780	390	2%	7%	11%
Jász-Nagykun-Szolnok		205	409	520	0%	0%	15%
Komárom-Esztergom		145	290	440	4%	9%	7%
Nógrád				165	0%	0%	15%
Pest		915	1,830	1,235	3%	5%	6%
Somogy		490	980	490	0%	4%	4%
Szabolcs-Szatmár-Bereg		205	410	1,100	0%	0%	45%
Tolna				145	0%	0%	2%
Vas				335	0%	0%	3%
Veszprém				420	0%	0%	1%
Zala				490	0%	0%	6%
<b>Total</b>		<b>12,350</b>	<b>24,709</b>	<b>19,910</b>	<b>4%</b>	<b>9%</b>	<b>12%</b>

Sources: (1) Nielsen Empty Pack Surveys, 2012-2014.


(2) GfK Hungary Empty Pack Surveys, 2012-2013.



## APPENDICES – EPS RESULTS BY COUNTRY

Ireland and Italy EPS results by region, 2012-14<sup>(1)(2)</sup>

Ireland		Number of packs			ND incidence		
		2012	2013	2014	2012	2013	2014
Connacht		800	800	800	24%	30%	24%
Leinster		6,450	6,450	6,450	29%	29%	23%
Munster		2,550	2,550	2,550	28%	27%	25%
Ulster		200	200	200	29%	29%	28%
<b>Total</b>		<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>28%</b>	<b>28%</b>	<b>24%</b>

Italy		Number of packs			ND incidence		
		2012	2013	2014	2012	2013	2014
Abruzzo		182	400	400	10%	2%	2%
Calabria		276	552	552	4%	5%	4%
Campania		1,808	3,648	3,648	45%	17%	26%
Emilia Romagna		2,172	4,416	4,416	7%	3%	1%
Friuli Venezia Giulia		304	608	608	28%	2%	11%
Lazio		4,246	7,892	7,892	6%	4%	4%
Liguria		904	1,796	1,796	5%	3%	5%
Lombardia		2,580	5,284	5,284	10%	9%	9%
Marche		152	400	400	7%	2%	3%
Piemonte		1,504	3,080	3,080	8%	4%	4%
Puglia		986	1,968	1,968	6%	3%	3%
Sicilia		1,956	3,920	3,920	8%	4%	9%
Toscana		1,062	2,128	2,128	7%	3%	2%
Trentino Alto Adige		172	400	400	9%	2%	1%
Umbria		416	896	896	7%	2%	2%
Veneto		1,280	2,612	2,612	13%	3%	3%
<b>Total</b>		<b>20,000</b>	<b>40,000</b>	<b>40,000</b>	<b>12%</b>	<b>5%</b>	<b>7%</b>

Sources: (1) MS Intelligence Empty Pack Surveys, 2012-2013.

(2) MS Intelligence Empty Pack Surveys, 2012-2013.



## APPENDICES – EPS RESULTS BY COUNTRY

Latvia, Lithuania, Luxembourg and Malta EPS results by region, 2012-14<sup>(1)(2)</sup>

Latvia		Number of packs			ND incidence		
Region		2012	2013	2014	2012	2013	2014
Kurzeme		1,200	1,200	1,200	35%	32%	28%
Latgale		1,400	1,400	1,400	40%	46%	54%
Pieriga		1,400	1,400	1,400	26%	29%	25%
Riga		4,000	4,000	4,000	33%	27%	27%
Vidzeme		800	800	800	27%	32%	19%
Zemgale		1,000	1,000	1,000	40%	25%	27%
<b>Total</b>		<b>9,800</b>	<b>9,800</b>	<b>9,800</b>	<b>34%</b>	<b>30%</b>	<b>30%</b>

Lithuania		Number of packs			ND incidence		
Region		2012	2013	2014	2012	2013	2014
Alytus		800	800	1,200	36%	40%	33%
Kaunas		3,000	3,000	4,500	32%	28%	31%
Klaipeda		1,600	1,600	2,400	24%	18%	18%
Marijampole		600	600	900	55%	35%	32%
Panevezys		800	800	1,200	38%	36%	34%
Siauliai		800	800	1,200	29%	28%	32%
Taurage		200	200	300	46%	44%	42%
Telsiai		800	800	1,200	36%	31%	25%
Utena		600	600	900	19%	16%	28%
Vilnius		3,600	3,600	5,400	34%	31%	32%
<b>Total</b>		<b>12,800</b>	<b>12,800</b>	<b>19,200</b>	<b>32%</b>	<b>29%</b>	<b>30%</b>

Luxembourg		Number of packs			ND incidence		
Region		2012	2013	2014	2012	2013	2014
Esch-Sur-Alzette		160	160	160	0%	7%	3%
Luxembourg		166	240	240	12%	8%	9%
<b>Total</b>		<b>326</b>	<b>400</b>	<b>400</b>	<b>6%</b>	<b>8%</b>	<b>7%</b>

Malta		Number of packs			ND incidence		
Region		2012	2013	2014	2012	2013	2014
Northern		383	350	350	12%	14%	10%
Northern Harbour		544	550	550	14%	16%	9%
Southern Harbour		123	100	100	16%	16%	12%
<b>Total</b>		<b>1,050</b>	<b>1,000</b>	<b>1,000</b>	<b>13%</b>	<b>15%</b>	<b>10%</b>

Sources: (1) MS Intelligence Empty Pack Surveys, 2012-2013.

(2) Nielsen Empty Pack Surveys, 2012-2013.






## APPENDICES – EPS RESULTS BY COUNTRY

### Netherlands and Poland EPS results by region, 2012-14<sup>(1)(2)</sup>

Netherlands		Number of packs			ND incidence		
		2012	2013	2014	2012	2013	2014
Region							
Drenthe		206	206	303	21%	22%	14%
Flevoland		502	502	756	20%	20%	23%
Friesland		334	334	498	22%	18%	18%
Gelderland		1,088	1,088	1,626	19%	24%	20%
Groningen		358	358	546	18%	27%	23%
Limburg		760	760	1,128	25%	24%	23%
North Brabant		1,862	1,862	2,790	23%	25%	26%
North Holland		3,078	3,078	4,635	19%	24%	21%
Overijssel		996	996	1,488	22%	22%	21%
South Holland		3,954	3,954	5,916	23%	19%	20%
Utrecht		862	862	1,314	18%	24%	18%
<b>Total</b>		<b>14,000</b>	<b>14,000</b>	<b>21,000</b>	<b>21%</b>	<b>22%</b>	<b>21%</b>

Poland		Number of packs			ND incidence		
		2012	2013	2014	2012	2013	2014
Region							
Dolnoslaskie		3,900	3,900	3,900	4%	7%	8%
Kujawsko-Pomorskie		2,775	2,775	2,775	8%	11%	12%
Lodzkie		3,375	3,375	3,375	25%	22%	24%
Lubelskie		2,550	2,550	2,550	25%	28%	34%
Lubuskie		1,350	1,350	1,350	4%	4%	5%
Malopolskie		2,925	2,925	2,925	8%	12%	13%
Mazowieckie		8,100	8,100	8,100	22%	22%	24%
Opolskie		1,800	1,800	1,800	3%	4%	6%
Podkarpackie		2,850	2,850	2,850	33%	28%	28%
Podlaskie		1,425	1,425	1,425	42%	40%	43%
Pomorskie		2,325	2,325	2,325	3%	2%	1%
Slaskie		7,350	7,350	7,350	11%	11%	12%
Swietokrzyskie		1,575	1,575	1,575	5%	5%	8%
Warminsko-Mazurskie		2,400	2,400	2,400			55%
Wielkopolskie		4,050	4,050	4,050	1%	2%	2%
Zachodniopomorskie		2,250	2,250	2,250	3%	5%	6%
<b>Total</b>		<b>51,000</b>	<b>51,000</b>	<b>51,000</b>	<b>14%</b>	<b>15%</b>	<b>17%</b>

Sources: (1) Nielsen Empty Pack Surveys, 2012-2013.


(2) Almares Research Empty Pack Surveys, 2012-2014.




## APPENDICES – EPS RESULTS BY COUNTRY

Portugal, Romania and Slovakia EPS results by region, 2012-14<sup>(1)</sup>

Portugal		Number of packs			ND incidence		
Region		2012	2013	2014	2012	2013	2014
Center		162	162	200	1%	0%	1%
Lisboa		1,910	1,910	1,900	2%	2%	3%
North		928	928	900	6%	3%	2%
<b>Total</b>		<b>3,000</b>	<b>3,000</b>	<b>3,000</b>	<b>3%</b>	<b>2%</b>	<b>2%</b>

Romania		Number of packs			ND incidence		
Region		2012	2013	2014	2012	2013	2014
Bucharest		7,423	5,027	1,586	11%	8%	11%
Center		3,749	2,512	1,497	5%	2%	3%
North-East		3,627	2,276	2,667	15%	18%	33%
North-West		3,228	2,278	2,087	9%	10%	17%
South		2,639	1,687	2,025	15%	13%	5%
South-East		4,057	2,573	2,087	12%	11%	15%
South-West				1,510			16%
West		3,176	2,247	1,613	13%	13%	28%
<b>Total</b>		<b>27,900</b>	<b>18,600</b>	<b>15,072</b>	<b>11%</b>	<b>10%</b>	<b>16%</b>


Slovakia		Number of packs			ND incidence		
Region		2012	2013	2014	2012	2013	2014
Banskobystricky Kraj		450	450	1,100	0%	1%	1%
Bratislavsky Kraj		1,200	1,200	2,400	1%	1%	0%
Kosicky Kraj		800	800	2,600	4%	7%	3%
Nitriansky Kraj		650	650	1,700	1%	1%	0%
Presovsky Kraj		600	600	2,200	5%	7%	1%
Trenciansky Kraj		400	400	800	2%	0%	1%
Trnavsky Kraj		300	300	800	0%	3%	1%
Zilinsky Kraj		600	600	1,200	0%	1%	1%
<b>Total</b>		<b>5,000</b>	<b>5,000</b>	<b>12,800</b>	<b>2%</b>	<b>3%</b>	<b>1%</b>


Sources: (1) Ipsos Empty Pack Surveys, 2012-2014.



## APPENDICES – EPS RESULTS BY COUNTRY

### Slovenia and Spain EPS results by region, 2012-14<sup>(1)(2)</sup>

Slovenia		Number of packs			ND incidence		
		2012	2013	2014	2012	2013	2014
Region							
Celje		211	211	210	8%	10%	11%
Koper		141	141	139	17%	11%	2%
Kranj		207	207	208	27%	4%	9%
Ljubljana		1,530	1,530	1,539	8%	10%	11%
Maribor		535	535	531	7%	13%	7%
Nova Gorica		131	131	130	0%	7%	2%
Novo Mesto		102	102	101	0%	6%	8%
Ptuj		143	143	142	17%	27%	18%
Velenje		3,000	3,000	3,000	9%	11%	9%
<b>Total</b>		<b>3,000</b>	<b>3,000</b>	<b>3,000</b>	<b>9%</b>	<b>11%</b>	<b>9%</b>

Spain		Number of packs			ND incidence		
		2012	2013	2014	2012	2013	2014
Region							
Andalucia		5,098	5,070	5,174	33%	39%	42%
Aragon		1,095	1,100	1,170	3%	1%	2%
Asturias		839	823	858	4%	6%	3%
Basque Country		1,469	1,490	1,534	6%	7%	5%
Cantabria		304	293	304	8%	5%	8%
Castilla Y Leon		1,309	1,311	1,320	7%	3%	5%
Castilla-La Mancha		289	288	296	1%	3%	8%
Catalonia		5,299	5,298	5,394	7%	8%	6%
Comunidad Valenciana		2,782	2,778	2,841	3%	4%	4%
Extremadura		258	257	258	42%	39%	45%
Galicia		1,074	1,077	1,130	10%	8%	7%
La Rioja		252	256	262	2%	5%	3%
Madrid		7,974	7,928	7,992	4%	4%	4%
Murcia		1,105	1,102	1,126	5%	5%	7%
Navarra		337	332	338	6%	3%	1%
<b>Total</b>		<b>29,484</b>	<b>29,404</b>	<b>29,997</b>	<b>10%</b>	<b>11%</b>	<b>12%</b>

Source: (1) Nielsen Empty Pack Surveys, 2012-2013.

(2) Ipsos Empty Pack Surveys, 2012-2013.



## APPENDICES – EPS RESULTS BY COUNTRY

### Sweden EPS results by region, 2012-14<sup>(1)</sup>


Sweden Region		Number of packs			ND incidence		
		2012	2013	2014	2012	2013	2014
Blekinge		90	90	150	16%	4%	26%
Dalarna		101	101	150	7%	4%	10%
Gastrikland				190	0%	0%	4%
Gävleborg		190	190		15%	6%	0%
Götaland		84	84		17%	5%	0%
Halland		226	226	304	14%	4%	16%
Jönköping		233	233	233	6%	8%	9%
Kalmar		97	97		3%	10%	0%
Kronoberg		154	154	154	4%	8%	24%
Norrbottn		126	126	150	3%	3%	1%
Örebro		272	272	272	13%	11%	5%
Östergötland		500	500	500	9%	13%	9%
Skåne		1,177	1,177	11,010	22%	26%	12%
Skellefteå		90	90		0%	4%	0%
Smaland				150	0%	0%	6%
Södermanland		225	225	316	12%	13%	8%
Södertälje		167	167		9%	17%	0%
Stockholm		3,461	3,461	3,284	11%	12%	11%
Uppsala		355	355	355	10%	11%	11%
Värmland		162	162	162	8%	6%	2%
Västerbotten		209	209	359	4%	2%	4%
Västernorrland		136	136	150	7%	12%	6%
Västmanland		296	296	296	9%	7%	20%
Västra Götaland		1,649	1,649	1,724	13%	12%	9%
<b>Total</b>		<b>10,000</b>	<b>10,000</b>	<b>19,909</b>	<b>12%</b>	<b>13%</b>	<b>11%</b>


Sources: (1) HUI Research Empty Pack Surveys, 2012-2013.



## APPENDICES – EPS RESULTS BY COUNTRY

### UK and Norway EPS results by region, 2012-14<sup>(1)</sup>

UK		Number of packs			ND incidence		
Region		2012	2013	2014	2012	2013	2014
East Midlands		1,803	2,704	3,000	25%	15%	23%
East Of England		2,328	3,492	3,300	21%	17%	20%
London		3,099	4,648	4,500	29%	19%	21%
North East England		1,087	1,630	1,500	19%	17%	20%
North West England		2,908	4,362	3,897	19%	16%	20%
Northern Ireland		728	1,092	1,500	18%	12%	20%
Scotland		2,187	3,281	3,297	11%	10%	14%
South East England		3,457	5,185	6,003	23%	17%	21%
South West England		2,129	3,194	2,700	23%	16%	21%
Wales		1,254	1,881	2,100	14%	13%	25%
West Midlands		2,278	3,416	3,603	22%	15%	24%
Yorkshire And The Humber		2,143	3,214	2,700	23%	14%	22%
<b>Total</b>		<b>25,400</b>	<b>38,099</b>	<b>38,100</b>	<b>21%</b>	<b>15%</b>	<b>21%</b>


Norway		Weighted number of packs		ND incidence	
Region		2014		2014	
Oslo		2,012		45%	
Hordaland		866		50%	
Rogaland		419		42%	
Sor-Trondelag		579		54%	
Vest-Adger		273		45%	
Akershus		376		53%	
Ostfold		248		46%	
Troms		227		40%	
<b>Total</b>		<b>5,000</b>		<b>47%</b>	

Source: (1) MS Intelligence Empty Pack Surveys, 2012-2014.



## APPENDICES – EPS RESULTS BY COUNTRY

### Switzerland EPS results by region, 2012-14<sup>(1)</sup>

Switzerland		Weighted number of packs		ND incidence	
Region		2014		2014	
Basel		400		10%	
Bellinzona		200		17%	
Bern		300		7%	
Biel (Bienne)		200		6%	
Chur		200		7%	
Delemont		200		5%	
Fribourg		200		5%	
Geneva		500		8%	
Koniz		200		3%	
Kreuzlingen		200		13%	
La Chaux De Fonds		200		6%	
Lausanne		300		7%	
Lugano		200		25%	
Luzern		200		9%	
Neuchatel		200		9%	
Rheinfelden		200		14%	
Schaffhausen		200		10%	
Sion		200		5%	
St. Gallen		200		9%	
St. Margrethen		200		21%	
Thun		200		10%	
Uster		200		6%	
Vernier		200		19%	
Winterthur		300		6%	
Zurich		1,000		9%	
<b>Total</b>		<b>6,600</b>		<b>9%</b>	



Source: (1) MS Intelligence Empty Pack Surveys, 2012-2014.

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## APPENDICES – SOURCES

### External data sources

**The sources listed below are those used only in the 2013 analysis in this 2013 Project SUN Report. Sources for analysis and findings for previous years can be found in previous year reports**

#### Other Sources

ABC Sevilla, Desmantelamen el Castillo de las Guardas la mayor fabricade Tabaco ilegal del pais, January 2015

Almares Research Empty Pack Surveys, 2009-2014

Cypriot Statistical Authority

DG ECFIN AMECO

Economist Intelligence Unit, GDP, 2014

Economist Intelligence Unit, Population, 2014

European Commission Excise Duty tables (Part III – Manufactured Tobacco) as at July 2013, January 2014 and July 2014

European Commission Releases for consumption of fine cut tobacco 2002-2012

Euromonitor, Personal Disposable Income (PDI), downloaded March 2014

Euromonitor, Unemployment, downloaded March 2014

Federal Statistics Office of Germany, Migration Statistics, accessed February 2015

Fine Cut tobacco In Market Sales data, 2014

GfK Empty Pack Surveys, 2009-2014

Government of Andorra

Government of Gibraltar

Gov.uk, Border Force transparency data, February 2015

HMRC, Tobacco Bulletin, January 2015

HUI Research Empty Pack Surveys, 2009-2014

HUI Research, Tobaksrapport, 2014

Hungary's tobacco law: Leaked tape causes outrage, BBC News, July 2013

Il Resto del Carlino, Contrabbando sigarette, Mit nel mirino, 16 Dec 2014

Ipsos Empty Pack Surveys, 2009-2014

Ipsos MORI Omnibus Survey

Ipsos Yellow Bag Surveys, 2009-2014 (Germany)

Irish Revenue, Press release, Revenue seizes over 32m cigarettes in Drogheda Port, June 2014

Irish Examiner, Fears Gangs to Produce Counterfeit Cigarettes in Ireland, February 2014

Irish Examiner, Price to Blame as Seizures of Illegal Cigarettes Soar, January 2015

Istat

Istec





## APPENDICES – SOURCES

### External data sources

Other Sources
JTI Pack Swap Survey Results 2009-2014
JTI tracker
La Nouvelle République, Un inspecteur principal des Douanes membre du réseau, Mar 2014
La mayor fabrica ilegal de Tabaco, en Vitoria
La Provence, Marché parallèle du tabac : la traque des revendeurs, à Marseille, grâce à une brigade spécialisée, Feb 2015
La Repubblica, La finanza contro Yesmoke, fabbrica di sigarette raccontata in un film, Nov 2014
Logista
Maritime Transport & Agencies 2013 – 2016 Strategic Plan
MS Intelligence Empty Pack Surveys, 2009-2014
National Institute of Economic and Social Research, Potential impacts on the UK of future migration from Bulgaria and Romania, 2013
Nielsen Empty Pack Surveys, 2009-2014
Nielsen offtake data
Novel Study, 2014
Office for National Statistics, UK
Oxford Economic Forecast, GDP per capita, 2014
Oxford Economic Forecast, Inflation, 2014
Polish Customs Service
Price data from PMI
Statistics Finland
Statistics Lithuania
Swiss Federal Statistics Office
Swiss State Secretariat of Economic Affairs
Tourists per origin, Frontur, 2014
Ultex Empty Pack Surveys, 2009-2014
UNWTO Tourism Factbook 2009-13, UNWTO
World Customs Journal, Tackling cigarette smuggling with enforcement, July 2012



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## APPENDICES – SCOPE OF WORK

The scope of work below forms the basis of our contract with the Beneficiaries

1. This study will report on the estimated size and composition of the total cigarette market (including counterfeit and contraband products), as detailed below, for each of the 28 EU Member States, Norway and Switzerland.
2. The findings from the work on the 30 countries will be used to produce a report which includes a consolidated section covering an overall view of the total market for (i) the 28 EU Member States, and separately (ii) Norway and Switzerland. We will also provide a section in the report on counterfeit and contraband flows for each of the 30 countries.
3. Our analysis of the cigarette market will be based on a methodology that incorporates primary research, market analysis, local expert interview programmes, and existing industry surveys.
  - For each of the 30 countries, we will use in market sales data provided by all engaging parties to estimate legal domestic sales and estimate Legal Domestic Consumption by subtracting outflows to other countries based on the results of Empty Pack Surveys.
  - Non domestic inflows for each country will be based on the results of Empty Pack Surveys and added to Legal Domestic Consumption to estimate Total Consumption.
  - Analysis of tourism flows and border sales data provided by all engaging parties will be used to estimate the proportion of non-domestic inflows that are counterfeit and contraband for each of the 30 countries
  - The bespoke Project STAR/SUN methodology and model will be used to analyse the inflows and outflows between all of the 30 countries, based on the data sources above.
  - Additional data sources (as per section 11 below) will be used to refine our analysis
4. KPMG will also conduct analysis on illicit whites which will be analysed in the same way as section 3 above. This will be reported in the consolidated section of the report.
5. Upon finalisation of our work, KPMG will provide to BAT, ITL, JTI and PMI data tables containing the following information;
  - Summary of EU total counterfeit and contraband inflows by source and destination market;
  - Detailed analysis of total non-domestic outflows to the EU split by destination market and brand for the following source countries: Ukraine; Russia; Moldova; Belarus; Serbia; Poland; and the Czech Republic.
6. KPMG will present our initial findings to you at interim stages in the project as required. The KPMG Project SUN team will also be made available to support up to two other external stakeholder presentations following the publication of the report under the terms of this agreement. Additional presentations or interviews, translation costs and the costs of KPMG personnel from other KPMG network firms are outside the scope of this letter and we would agree the costs of such services with you separately and in addition to the fee as per section 5 of the Engagement Letter.
7. BAT, ITL, JTI and PMI will form a Steering Group as the primary point of contact for KPMG, which will oversee the project from the client side, and will be responsible for data provision, arranging country meetings or calls where appropriate, collating central feedback where appropriate and overseeing the timetable. Data will be provided directly to KPMG separately by each of BAT, ITL, JTI and PMI. A dashboard which tracks data provided and highlights delays will be provided each week separately to BAT, ITL, JTI and PMI, so that each of BAT, ITL, JTI and PMI can identify missing data and deadlines and be aware of potential fee implications.
8. KPMG will facilitate three country clustered workshops with each of BAT, ITL, JTI and PMI country leaders for 10 priority markets to help build a shared understanding of: data sources and their limitations; indicative results and their possible implications for the country's anti-illicit trade activity; fact gaps and hypotheses; and additional research requirements.
  - The 10 priority countries are: Baltics; France; Germany; Greece; Ireland and the UK; Italy; Poland; Romania; Spain
  - The three cluster workshops will be determined by each of BAT, ITL, JTI and PMI.

Note: BAT: British American Tobacco plc  
ITL: Imperial Tobacco Limited  
JTI: JT International SA  
PMI: Philip Morris International Management SA





9. KPMG will share country specific preliminary results separately with the management teams of BAT, ITL, JTI and PMI for each of the priority EU Member States as outlined in section 8 above and provide opportunity for feedback and comment from each of those management teams within the agreed timetable. Each company will be in charge of reviewing its content and commenting on it within 10 working days. We will communicate the updated results to each of those management teams and provide opportunity for one further set of comments before finalising our results.
- For the remaining 20 non-priority countries, KPMG will share preliminary findings of our analysis with the management teams of BAT, ITL, JTI and PMI for each non-priority country via a central point of contact for each of BAT, ITL, JTI and PMI. Feedback from non-priority countries will be collected centrally by a point of contact for each of BAT, ITL, JTI and PMI and communicated to us within the agreed timetable. KPMG will communicate directly with the management teams of non-priority countries on an exceptions basis.
- It should be noted that changes requested by BAT, ITL, JTI or PMI which KPMG agree to make will also have to be agreed with the other engaging parties. KPMG will be responsible for managing the transparency and alignment of the revision process. Each of BAT, ITL, JTI and PMI will be provided with the final report and will be responsible for reviewing its content and commenting on it within 10 working days (including legal reviews). It should be noted that KPMG will determine which comments and amendments to make to our report.
10. In addition to the detailed report and management meetings, KPMG will also undertake to manage and lead key intervention sessions between the BAT, ITL, JTI, PMI Steering Group and KPMG team, these being:
- Project Kick Off (to take place week commencing 12th January 2015) to agree detailed project process and approach, reporting format and highlight potential communication considerations;
  - A review of preliminary EU and country level findings for each of the 30 countries and address key challenges and actions, to take place in early March 2015;
  - A review of updated EU and Member State level findings for each of the 30 EU Member States and address key challenges and actions, to take place in late March 2015.
11. Information from several independent sources will be used. These sources will include:
- Tobacco industry research and statistics;
    - Sales data provided by BAT, ITL, JTI and PMI and/or Tobacco Manufacturers' Associations. Sales data will be provided separately for BAT, ITL, JTI and PMI and will remain confidential. The Project SUN report will only provide aggregated sales data that cannot be attributed to any of BAT, ITL, JTI or PMI;
    - Where available, regional sales data will be provided to help corroborate cross border trends between neighbouring countries. This will be provided separately by BAT/ITL/JTI and PMI and will remain confidential (not to be published in the report);
    - BAT, ITL, JTI and PMI consumer survey data will be provided to help corroborate consumption trends arising from Project SUN results and identify further areas of analysis (e.g. extent of smokers switching to roll-your-own (RYO) products).
  - Estimates of non-domestic consumption used by BAT, ITL, JTI and PMI management teams in each market (where available). These estimates will be provided to us separately by BAT, ITL, JTI and PMI to provide evidence-based support for observed trends in each of the EU Member States and will remain confidential.
    - Detailed survey results will be made available by BAT, ITL, JTI and PMI to KPMG in a timely manner for analysis purposes;
    - Information regarding the methodology and sampling plan will be provided by BAT, ITL, JTI and PMI to KPMG for our work.
  - EPSs commissioned jointly and/or individually by BAT, ITL, JTI and PMI will be conducted by third party research providers in a majority of Member States and the results thereof will be provided to KPMG as soon as they are available to allow us to consider these alongside market-specific information provided separately by BAT, ITL, JTI and PMI.

Note: BAT: British American Tobacco plc  
 ITL: Imperial Tobacco Limited  
 JTI: JT International SA  
 PMI: Philip Morris International Management SA

- Independent third party non-domestic research;
    - Whilst no independent third party research is to be carried out in 2015, KPMG will continue to use the 2014 research results to corroborate the 2015 non-domestic legal methodology.
  - Expert opinions and expert panel data;
    - In areas where information provided may be inconclusive we will undertake structured interview programmes designed to capture and quantify the opinions of relevant expert groups including, among others, customs and law enforcement officials.
  - Existing public studies and statistics;
    - Research and data published by government agencies (including Ministries of Finance), health bodies, customs authorities, market researchers and academics will be provided by BAT, ITL, JTI and PMI management teams to help corroborate findings.
12. Interviews and data from external sources will be obtained on a best efforts basis. We will work with BAT, ITL, JTI and PMI to identify and contact key customs and Manufacturer's Associations members. We will require access to identified BAT, ITL, JTI and PMI personnel throughout this project and our ability to deliver this scope depends on this access being made available.



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*Note:*     *BAT: British American Tobacco plc*  
          *ITL: Imperial Tobacco Limited*  
          *JTI: JT International SA*  
          *PMI: Philip Morris International Management SA*

If you would like further information, please talk to your usual KPMG contact or contact:

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