



STRATEGIC AND COMMERCIAL INTELLIGENCE

# Project Star

2008 Results

27 May 2009

ADVISORY

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**The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.**

## Basis of preparation

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- This presentation of key findings ('our report') is given in accordance with our agreed written terms of engagement dated 18 October 2007 and our letter to OLAF dated 3 August 2005 detailing the scope of our review of the contraband and counterfeit segments of the tobacco market within the 27 EU Member States. We draw your attention to the limitations in scope set out therein.
- Our work has been ongoing since 1 November 2005. Our fieldwork for 2008 results is now complete.
- In preparing our report, we have used a range of sources. Details of our principal information sources are set out in the Appendix and we have satisfied ourselves, so far as possible, that the information presented in our report is consistent with other information which was made available to us in the course of our work in accordance with the terms of our engagement letter. We have not, however, sought to establish the reliability of the sources by reference to other evidence. The scope of our work was different from that for an audit and, consequently, no assurance is expressed.
- Our report makes reference to 'KPMG Analysis'; this indicates only that we have (where specified) undertaken certain analytical activities on the underlying data to arrive at the information presented.
- Our report is provided solely for the benefit of the parties identified in our engagement letter and should not be copied, quoted or referred to in whole or in part without our prior written consent. We will not accept responsibility to any other party to whom our report may be shown or who may acquire a copy of our report.

# Glossary of terms

## Cigarette industry

<i>Bootlegging</i>	Also called small-scale smuggling, bootlegging is the purchase of tobacco products in one country for illegal consumption or resale in another country without paying the applicable taxes or duties
<i>Cigarette</i>	Any factory-made product that contains tobacco and is intended to be burned or heated under ordinary conditions of use
<i>Contraband (CB)</i>	Genuine product that has been bought in a low-tax country and illegally re-sold (for financial profit) in a higher priced market. There are generally two types of contraband: bootlegging and large scale smuggling/organised crime
<i>Counterfeit (CF)</i>	Cigarettes that are illegally manufactured and sold by a party other than the original trademark owner. For the purposes of this analysis, data relating to Counterfeit is not included within the definition of Contraband. Illicit flows of Philip Morris brands are split into their separate Counterfeit and Contraband components. Illicit volumes of other manufacturer brands are reported as combined Counterfeit and Contraband flows
<i>Duty-free</i>	Purchases made outside the EU that have no state, local or provincial taxes, federal import duties or any other type of taxation added to the cost of the item purchased. Subject to purchase volume restrictions
<i>MPPC</i>	Most popular price category
<i>NMA / TMA</i>	National Manufactures Association / Tobacco Manufacturers Association
<i>OTP</i>	Other Tobacco Products (RYO/MYO, cigarillos, portions, rolls and cigars; excluding smokeless tobacco and water-pipe tobacco)
<i>RYO/MYO</i>	Roll-your-own/Make-your-own - loose tobacco for the purpose of hand rolling / loose tobacco for the purpose of tubing
<i>Smoking prevalence</i>	The percentage of smokers in the total adult population
<i>Tobacco taxes</i>	The sum of all types of taxes levied on tobacco products. There are two basic methods of tobacco taxation: <i>Normal or specific taxes</i> are based on a set amount of tax per unit (e.g. cigarette); these taxes are differentiated according to the type of tobacco. <i>Ad valorem taxes</i> 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

## PMI data sources

<i>EPS</i>	Empty Pack Survey
<i>GCTS</i>	Global Consumer Tracking Survey
<i>IMS</i>	In Market Sales (the primary source of legal domestic sales volumes)

## Project Star

<i>CAGR</i>	Compound Annual Growth Rate
<i>C&amp;C</i>	Counterfeit and Contraband
<i>Consumption</i>	Actual total consumption of cigarettes in a market, including legal IMS and illicit products as well as those purchased overseas to be brought back and smoked in market
<i>Consumption gap</i>	The difference between total consumption and legal domestic consumption
<i>Consumption index</i>	A corroboratory source for estimating the consumption gap in a market. The model compares an index of consumption based on historic smoking prevalence, average consumption and population against legal domestic sales to track changes over time
<i>EU</i>	European Union
<i>EU Flows Model</i>	The primary methodology for measuring consumption in a market. The model details the volume of inflows and outflows of product for a given market by country of origin (the model only specifies flows to EU countries)
<i>Inflows/Outflows</i>	Inflows of non-domestic product into a market/outflows of product from a market
<i>LDS</i>	Sales of genuine domestic product through legitimate, domestic channels based on In Market Sales (IMS) data
<i>LDC</i>	Legal Domestic Consumption is defined as legal domestic sales net of outflows
<i>ND</i>	Non-Domestic product – product that was not originally intended for the market in which it is consumed
<i>ND(L)</i>	Non-Domestic (Legal) – product that is brought into the market legally by consumers, such as during a cross-border trip
<i>OLAF</i>	Office Européen de Lutte Anti-Fraude (European Commission Anti-Fraud Office)
<i>PMI</i>	Philip Morris International
<b>Market research</b>	
<i>CAPI</i>	Computer-aided personal interviewing
<i>CATI</i>	Computer-aided telephone interviewing
<b>Measurements</b>	
<i>Bn</i>	Billion
<i>Mn</i>	Million

- Project overview and timing
- EU cigarette market
- 2008 Project Star results
- Appendices

# Overview of Project Star

The primary deliverable of Project Star is an assessment of the level of counterfeit and contraband cigarettes across the EU markets

## PMI's co-operation with the European Commission

- As per PMI's agreement with the EC, the incidence of Contraband Cigarettes and Counterfeit Cigarettes in any New Member State and in the Initial Participating Member States shall be determined by a methodology agreed to by the Parties
- Phase 1 of the research was conducted in 2006 in the 25 EU Member States
- Phase 2 and subsequent phases include Bulgaria and Romania to reflect the accession of these countries to the EU in January 2007

## KPMG's approach to meet this challenge

- Develop a methodology to measure the size of the legal, contraband and counterfeit markets for tobacco products
- Develop a programme plan for management of delivery
- Carry out, with third party research providers as required, measurement of counterfeit and contraband across all EU Member States



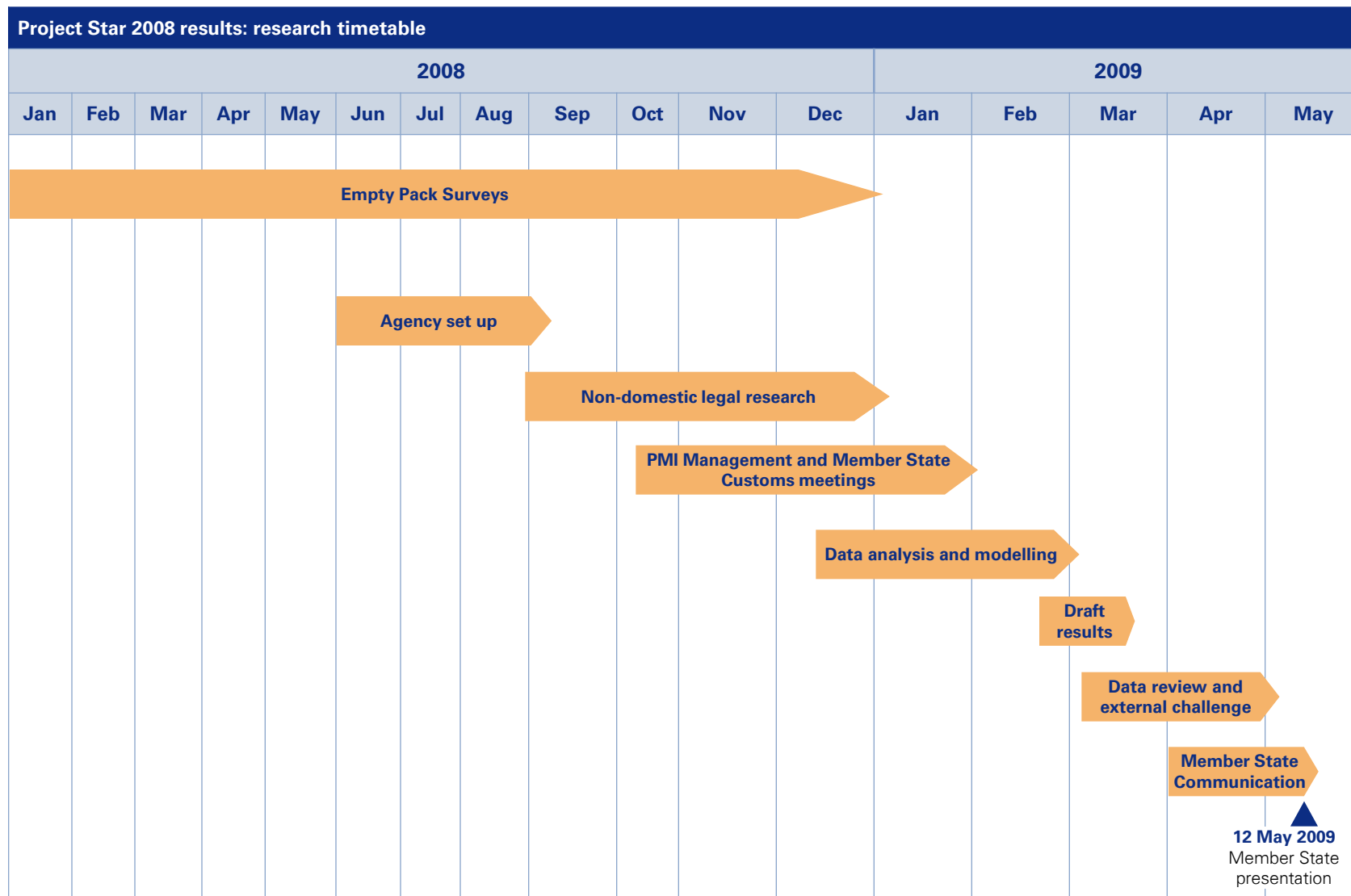
# Project timing

Fieldwork commenced in May 2008 and was completed in January 2009 when full year legal domestic sales data became available

Data analysis and modelling was undertaken during Quarter 1 2009

Preliminary results were then tested with both PMI Country Management Teams and external experts

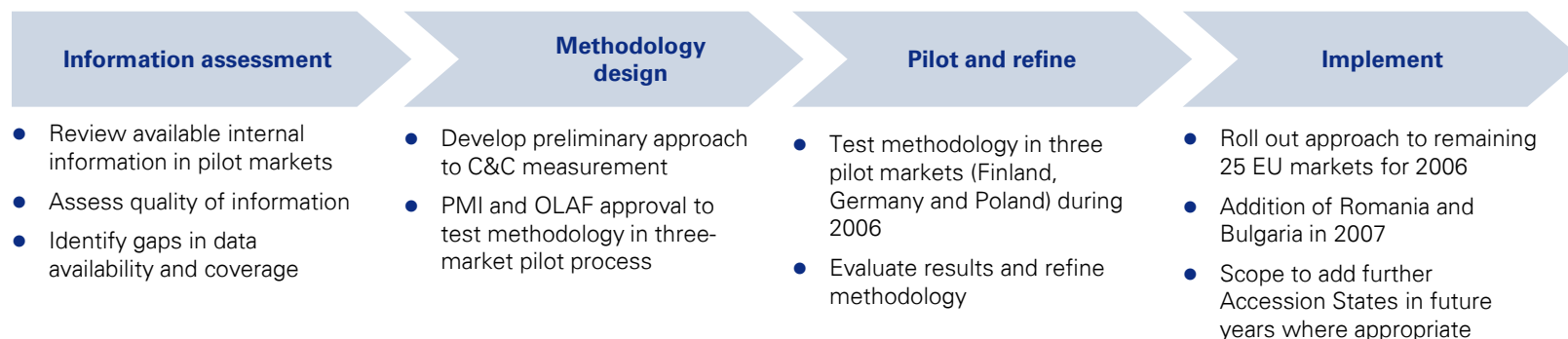
Full 2008 results have now been finalised and are contained in this report



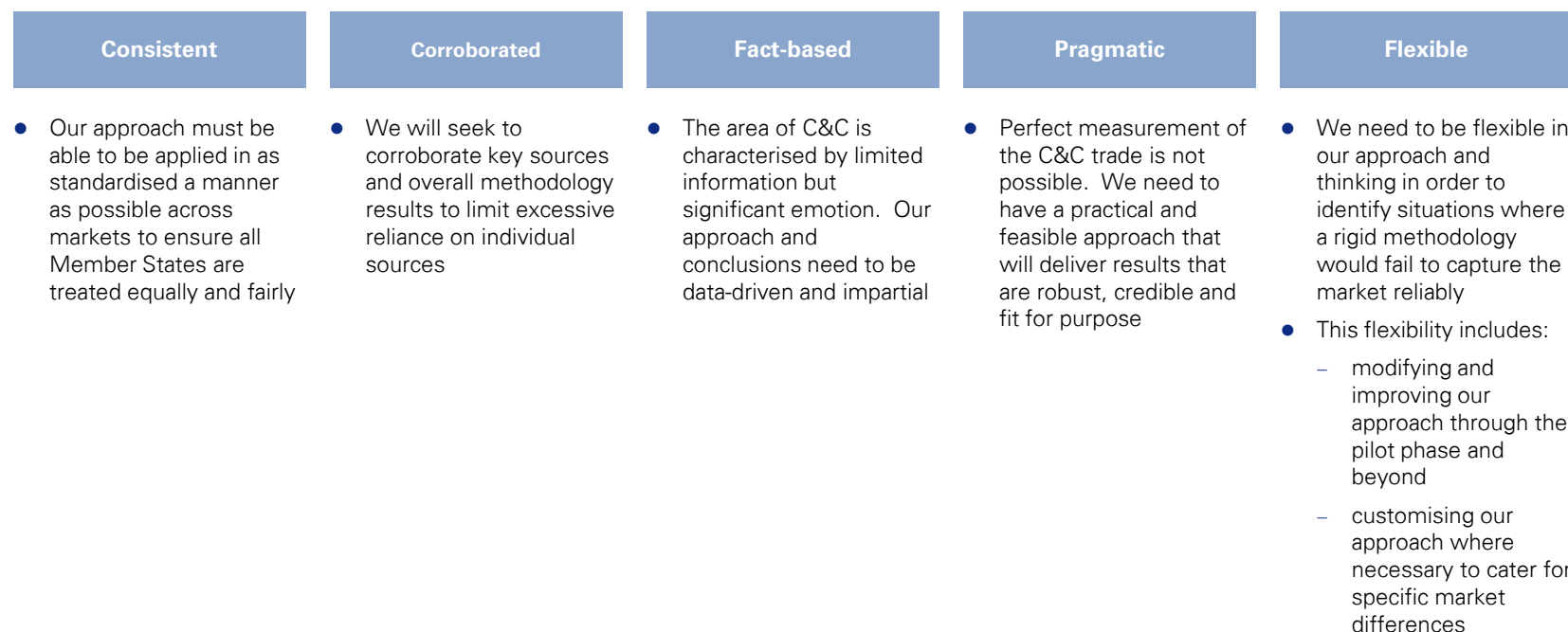
# Design and development of the methodology

The methodology has been designed and tested through several steps and according to five underlying principles

## Methodology design steps



## Methodology design principles



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- EU cigarette market
  - 2008 market overview
  - smoking trends
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## Overview

658 billion cigarettes were sold legally in the EU in 2008

### The eight largest EU markets account for 75% of total cigarette sales

- Of these, Italy, Spain and Germany each accounted for more than 85 billion cigarettes of legal domestic sales in 2008

### Marlboro and L&M together occupy market leading positions in 13 of the 27 EU markets

- Other market leaders are country specific, with no other brand occupying the number one spot in more than one market

Increasing prices and smoking restrictions have contributed to a decline in cigarette consumption

### The pricing and legislative environment for cigarettes has tightened across the EU in recent years

- Over the past two years, prices have increased substantially across the EU27, especially in the 2004 and 2007 Accession States
  - increased prices in many of the 2004 and 2007 Accession States have been driven by pressure to comply with EU minimum taxes of €64 per 1000 cigarettes
- An increasing amount of legislation has been introduced, limiting smoking in public places and preventing manufacturers from advertising their products in a growing number of media formats

### As a result of these changes and other social trends, the majority of the EU27 have experienced a decline in cigarette consumption

- Eighteen of the twenty seven EU countries have encountered declining consumption over the past year, with total EU consumption declining by 2.1% over the period

Cigarette sales have declined at a European level, partly driven by declining consumption

### EU sales have continued to decline at a steady rate in 2008

- EU cigarette sales declined by 2.8% in 2008, driven by an overall decline in sales in both the EU15 countries and 2004 and 2007 Accession States
  - this follows a longer term trend of decreasing sales; EU legal domestic sales declined at an annual rate of 3.2% from 2002 to 2008
- Many of the smaller volume 2004 and 2007 Accession State markets such as Lithuania and Slovakia have experienced growth in legal domestic sales over the period 2006 to 2008, which has corresponded to a decline in non-domestic incidence

However, differences in sales and consumption trends between countries highlight the existence of price-driven cross-border trade

### The relationship between changes in consumption and changes in sales differs substantially between Member States

- Although the majority of markets have experienced a decline in consumption, the impact on legal sales differs markedly between Member States
  - markets such as Germany, France and Poland have experienced more rapid sales declines than can be explained by decreases in consumption alone

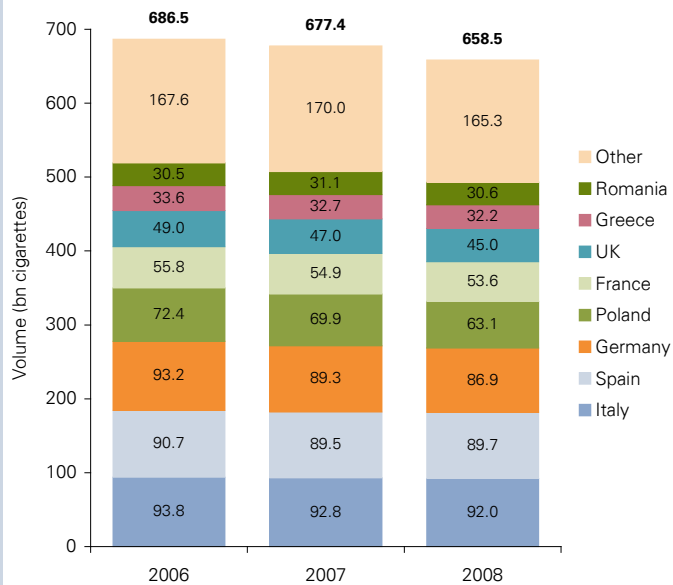
### These differences suggest a significant and fluctuating cross-border trade in manufactured cigarettes

- In the markets where sales have declined more rapidly than consumption there has been growing penetration of non-domestic cigarettes
  - in contrast, markets such as Spain, Hungary and Lithuania, which remain relatively low priced markets despite price increases, have experienced steady or growing sales despite steady or declining consumption

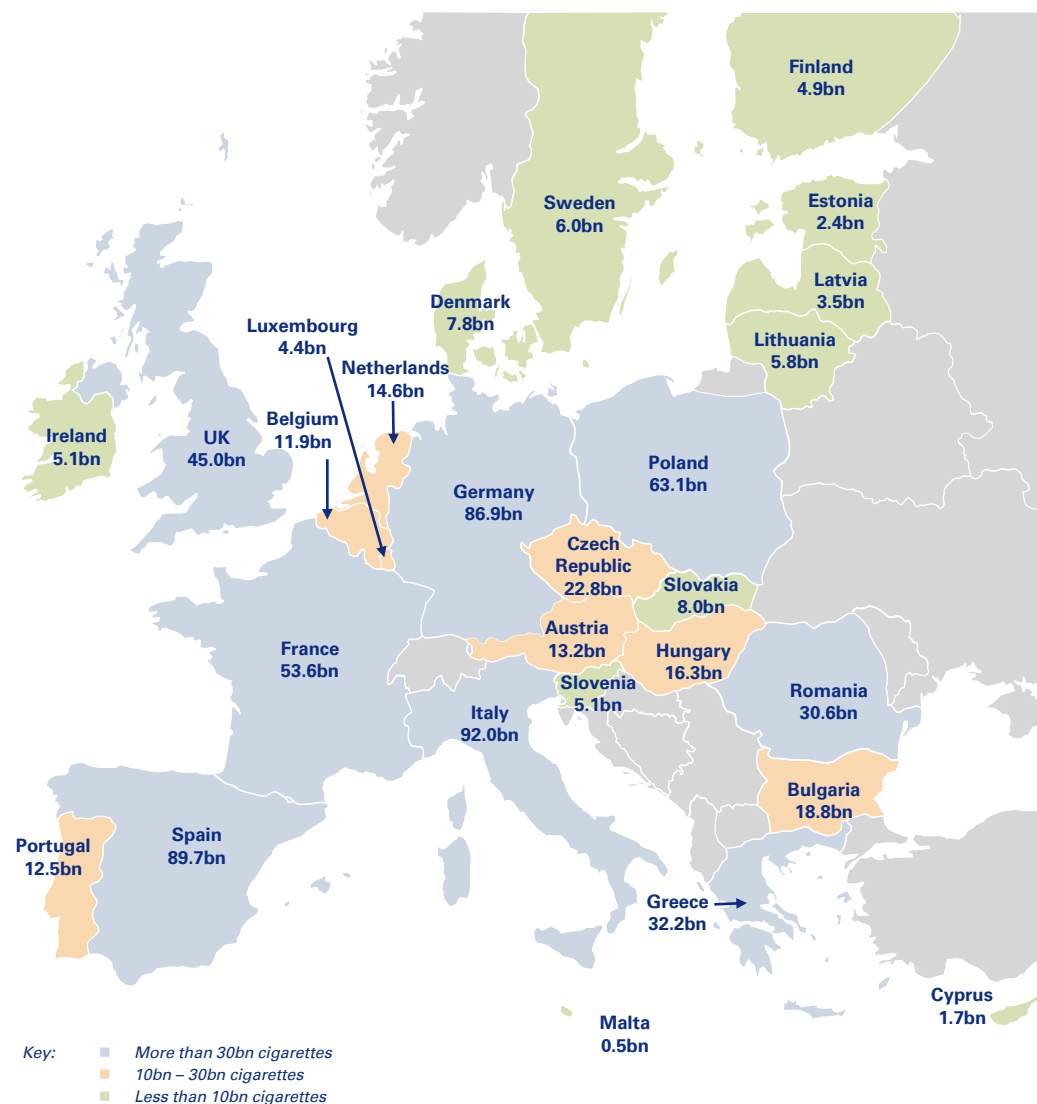
# Legal domestic sales by country

The eight largest markets account for 75% of total EU legal cigarette sales

EU legal domestic cigarette sales, 2006-2008<sup>(1)</sup>



Legal domestic cigarette sales, 2008<sup>(1)</sup>



Source: (1) In Market Sales provided by PMI management

Key:   
■ More than 30bn cigarettes   
■ 10bn – 30bn cigarettes   
■ Less than 10bn cigarettes

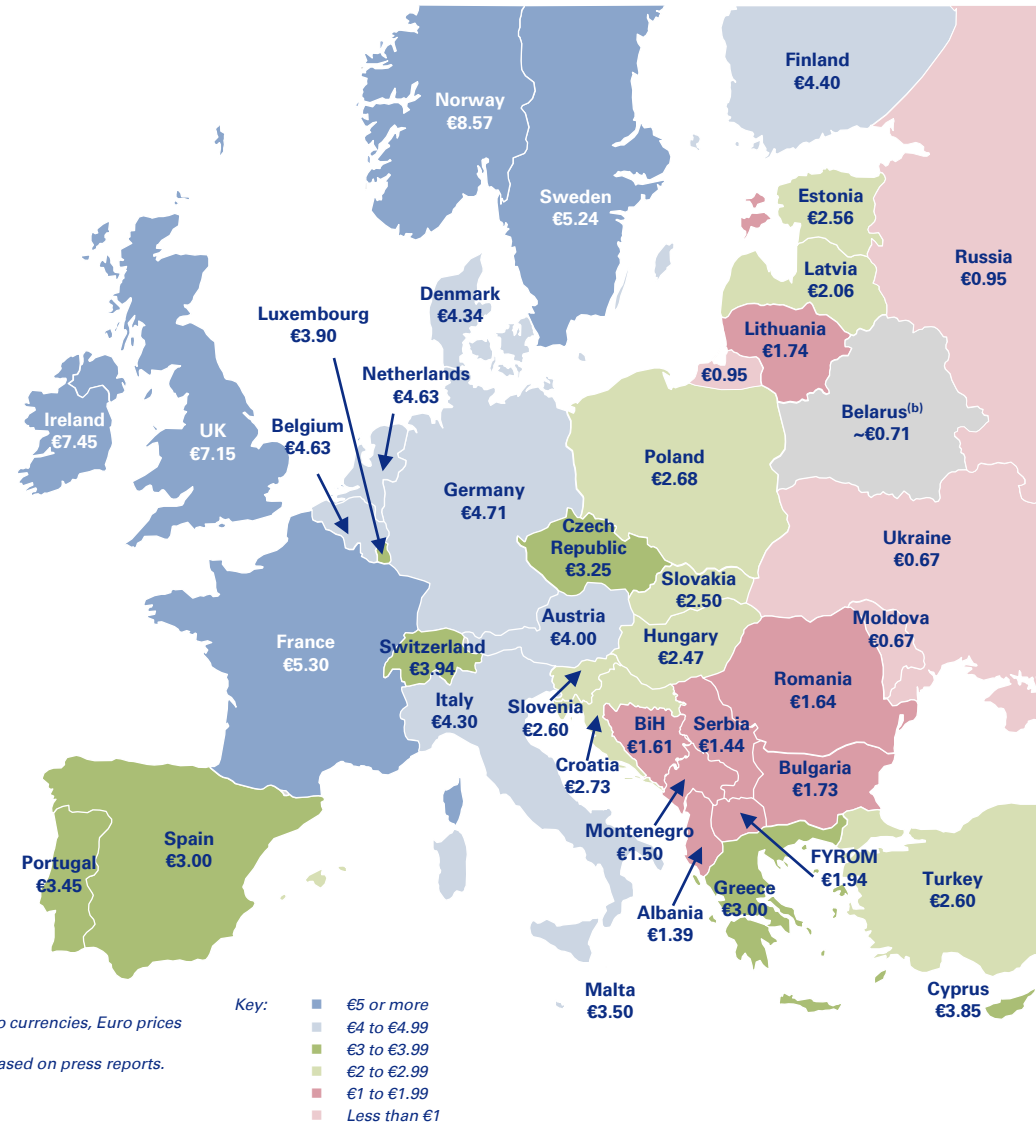
# European cigarette market

## Marlboro price comparison

Despite ongoing moves to align cigarette prices and taxes, retail prices vary widely across the EU, while Ukrainian and Russian prices remain below EU levels

Across the EU, the price of a pack of Marlboro ranges from €1.64 in Romania to €7.45 in Ireland

Map denotes Marlboro price per 20 cigarettes  
1 July 2008<sup>1(a)</sup>

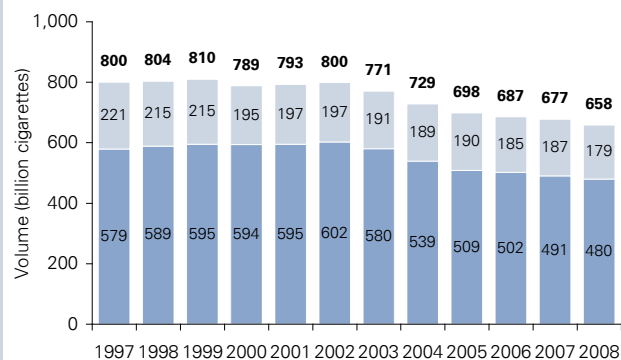


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# Legal sales trends

Legal sales in the EU have declined from 677 billion cigarettes in 2007 to 658 billion cigarettes in 2008

**Historic legal domestic cigarette sales for EU27 1997-2008<sup>(1)(a)</sup>**



CAGR (%)	1997-2006	2006-2007	2006-2008	2007-2008
2004 and 2007 accession countries	(1.9)%	1.0%	(1.7)%	(4.3)%
EU15 legal sales	(1.6)%	(2.2)%	(2.2)%	(2.2)%
<b>Total</b>	<b>(1.7)%</b>	<b>(1.3)%</b>	<b>(2.1)%</b>	<b>(2.8)%</b>

Notes: (a) No data available for Latvia, Lithuania and Malta prior to 2000, therefore 2000 data has been used for 1997-1999. No data available for Romania prior to 2004 and so 2004 data has been used for 1997-2004. Similarly, no data available for Bulgaria prior to 2005, so 2005 data has been used for 1999-2005

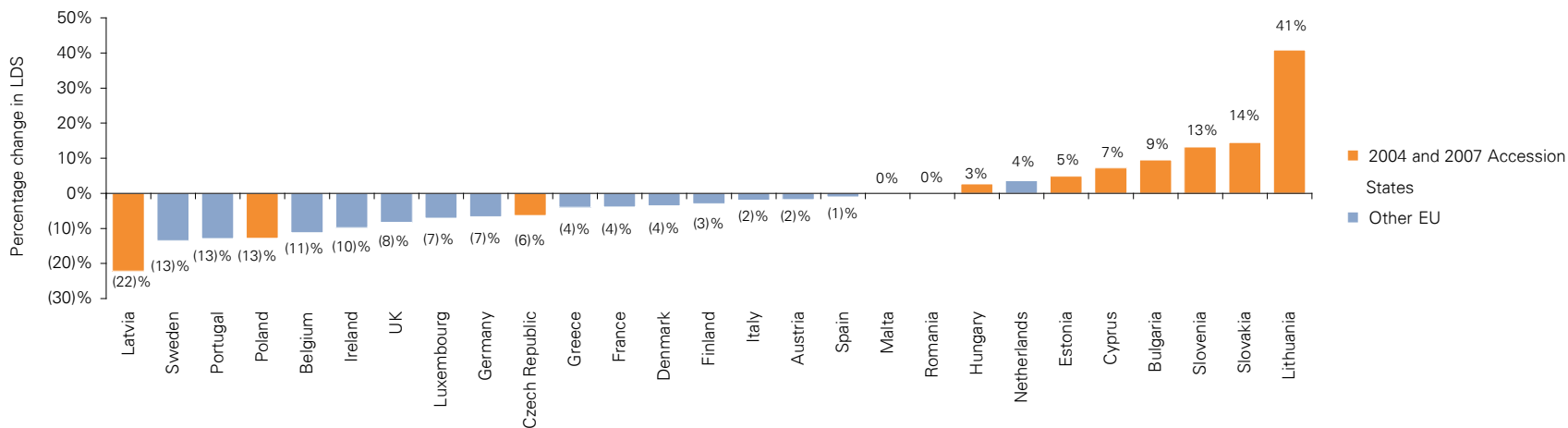
Source: (1) In Market Sales provided by PMI

# Legal sales, price and tax trends

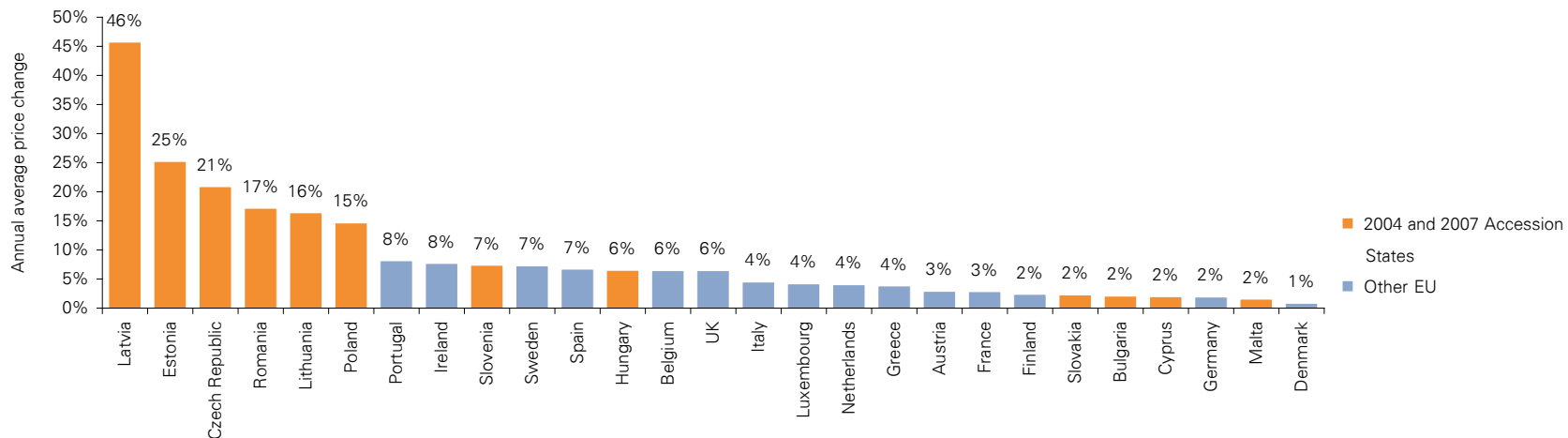
The fall in total EU cigarette sales is driven by a decline in both the EU15 and the 2004 and 2007 Accession States

Prices have increased substantially across the EU from 2006 to 2008, particularly in the 2004 and 2007 Accession States

**Percentage change in legal domestic cigarette sales for EU27 2006-2008<sup>(1)</sup>**



**Average annual price change in local currency 2006-2008<sup>(2)</sup>**



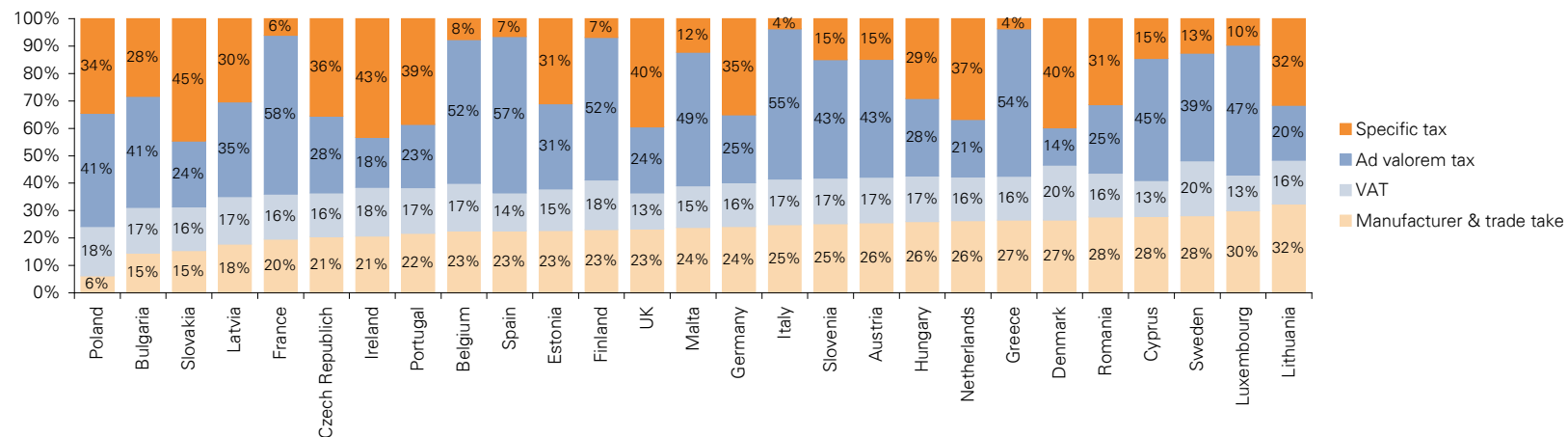
Source: (1) In Market Sales provided by PMI  
 (2) Weighted average price data supplied by PMI management

# Tax breakdown

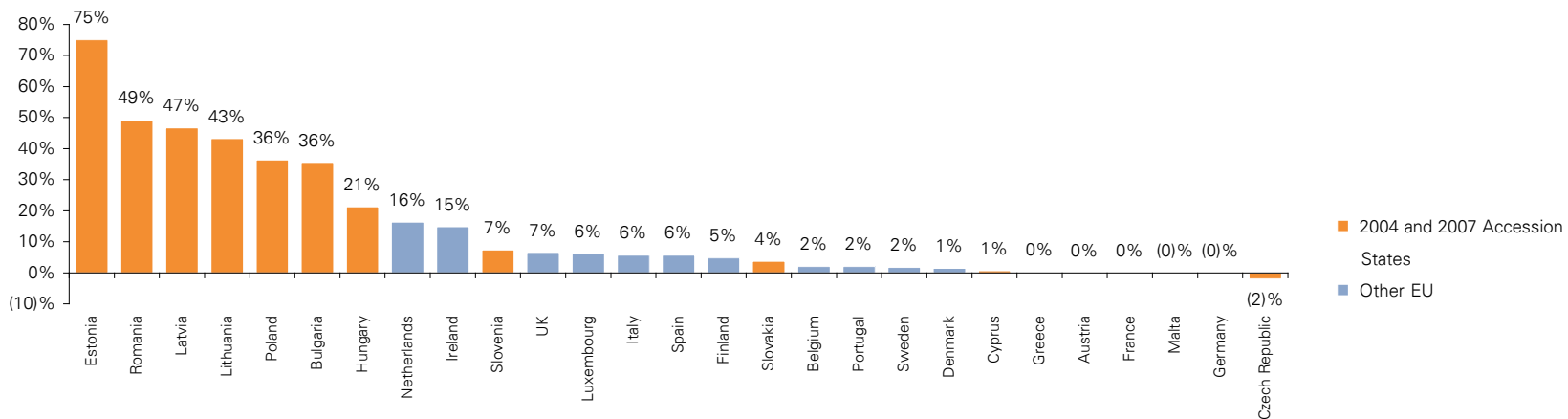
Taxes form a large proportion of the price of cigarettes, though the nature of taxation varies across countries

The 2004 and 2007 Accession States typically experienced the highest growth in tax burden

**Pack price breakdown of the MPPC 2008<sup>(1)(a)</sup>**



**Change in tax burden of MPPC 2007-2009<sup>(1)(a)(b)(c)</sup>**



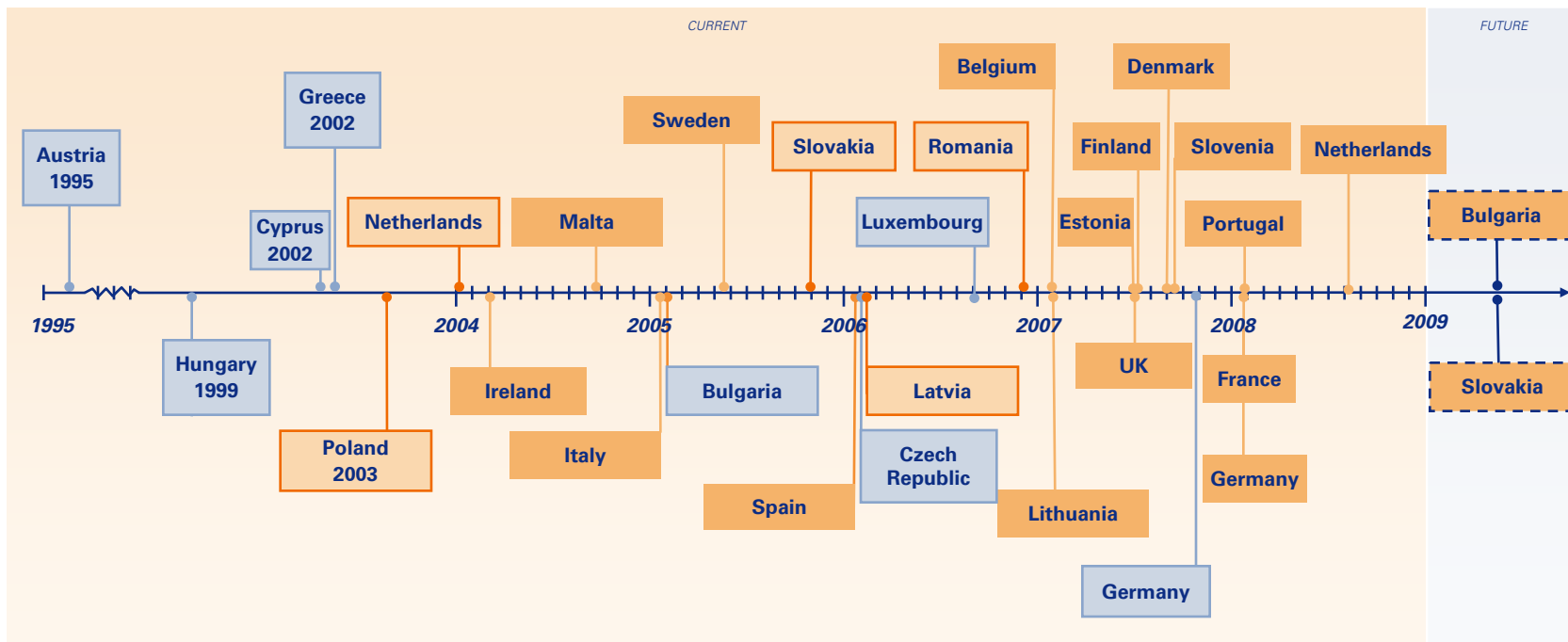
**Note:** (a) MPPC is the Most Popular Price Category  
 (b) MPPC prices in local currencies at 1<sup>st</sup> January 2008 and 1<sup>st</sup> May 2009 and therefore may include some distortion from currency fluctuations  
 (c) Czech Republic shows a decline in tax burden from 2007 to 2009 due to the change of the MPPC to a lower priced category in 2009. Actual taxes increased in the Czech Republic in 2008 in a bid to comply with EU minimum taxes of €64 per 1000 cigarettes

**Source:** (1) European Commission, Excise duty Tables, Part III – Manufactured Tobacco [http://ec.europa.eu.taxation\\_customs/index\\_en.htm#](http://ec.europa.eu.taxation_customs/index_en.htm#)

There has been significant legislation in recent years limiting smoking in public places

This change is ongoing in many Member States, with further restrictions already announced in many markets

Smoking legislation time-line<sup>(1)(a)</sup>



- Key:
- Minimal smoking restrictions – no smoking restrictions
  - Partial smoking restrictions – no smoking in government buildings, public transport, schools
  - Moderate smoking restrictions – partial smoking restrictions plus no workplace smoking
  - Extensive smoking restrictions – moderate smoking restrictions plus limited or no smoking in restaurants, cafes and bars
  - Denotes future smoking restrictions

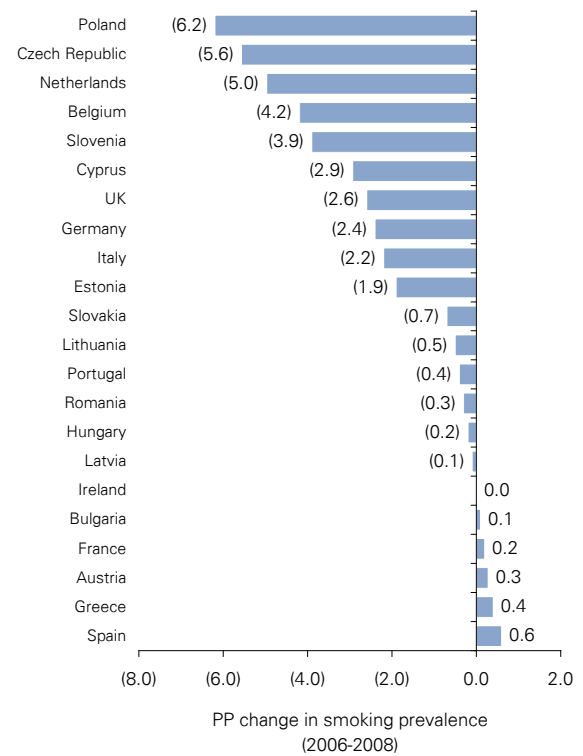
Note: (a) Restrictions shown are most stringent or most recent

Sources: (1) Press articles; "European Trends towards non-smoking provisions", European Network for Smoking Prevention, December 2007; and European Public Health Alliance website



Smoking prevalence has declined across most of the EU Member States since 2006

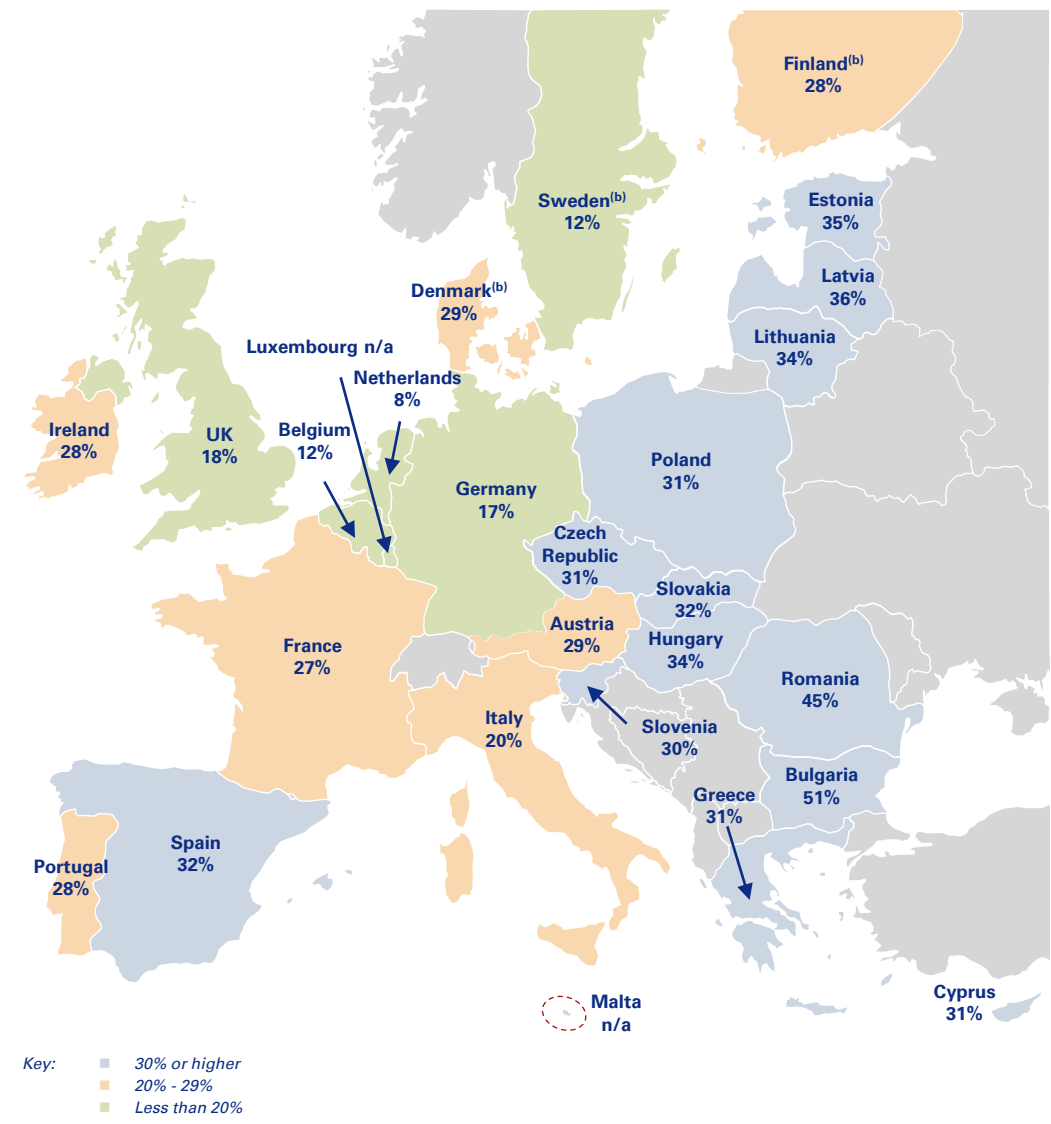
Change in cigarette smoking prevalence (percentage points) 2006-2008<sup>(1)(a)(b)(c)(d)(e)</sup>



- Notes:
- (a) GCTS data based on smokers of legal age to 64 years of age smoking 3 or more cigarettes a day
  - (b) Methodology for collection of smoking prevalence data changed in 2008 for Denmark, Finland, Sweden. Change in daily consumption data is not presented for these countries
  - (c) Data for Luxembourg and Malta is not available
  - (d) There is no 2006 data available for Romania and Cyprus, therefore PP change in smoking prevalence calculated from 2005-2008
  - (e) There is no 2006 or 2008 data available for Ireland, therefore PP change in smoking prevalence calculated from 2005-2007

Source: (1) GCTS, PMI management

Cigarette smoking prevalence 2008<sup>(1)(a)</sup>



Key:

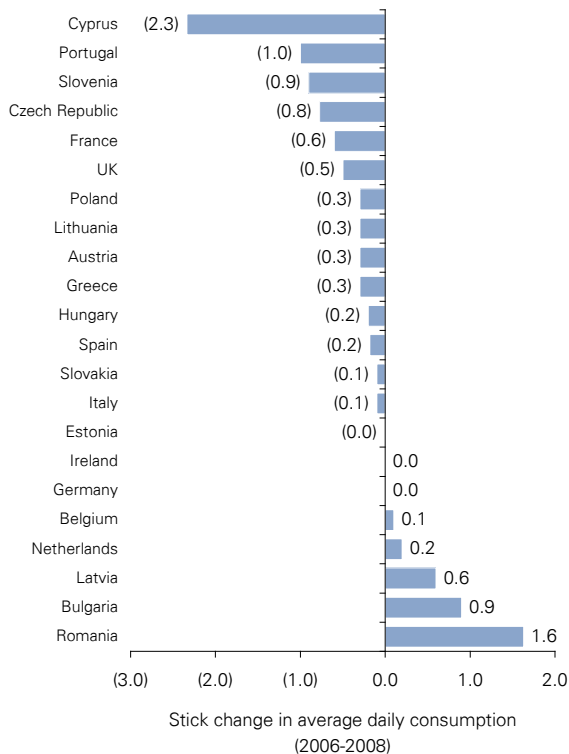
- 30% or higher
- 20% - 29%
- Less than 20%

# Average daily cigarette consumption

Average daily consumption of cigarettes has also been declining in the majority of Member States

## Cigarette change in average daily cigarette consumption 2006-2008<sup>(1)(a)(b)(c)(d)(e)</sup>

2006-2008<sup>(1)(a)(b)(c)(d)(e)</sup>

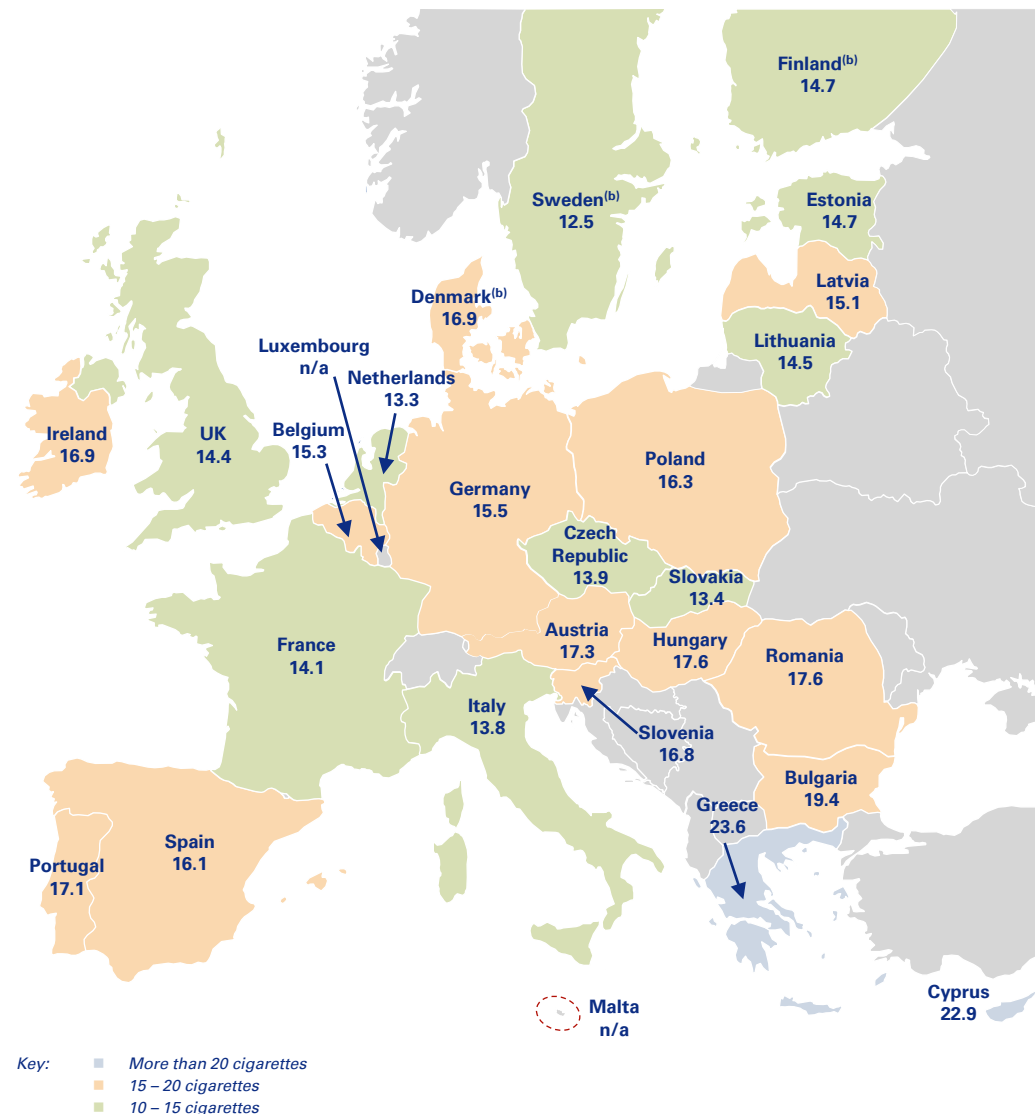


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  - (e) There is no 2006 or 2008 data available for Ireland, therefore cigarette change in average daily consumption calculated from 2005-2007

Source: (1) GCTS, PMI management

## Average daily cigarette consumption 2008<sup>(1)(a)</sup>

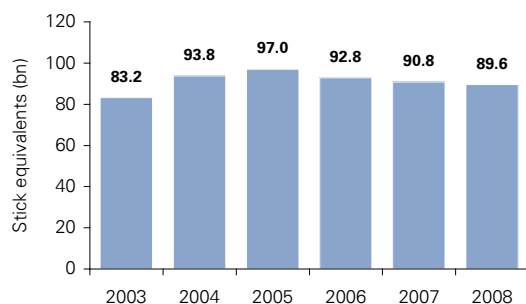
2008<sup>(1)(a)</sup>



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**EU fine cut tobacco sales stood at 89.6 billion stick equivalents in 2008 representing 12.0% of overall EU legal domestic tobacco sales**

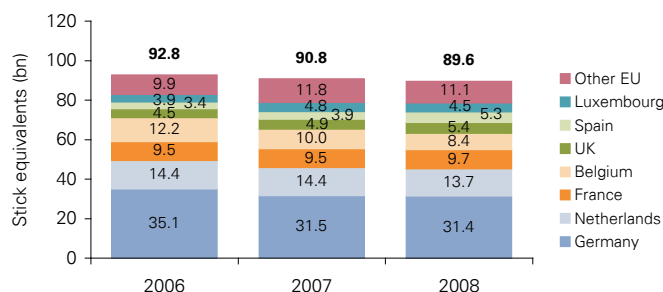
**EU legal domestic sales of OTP smoking tobacco 2003 – 2008<sup>(1)(a)(b)</sup>**



Manufactured cigarettes sales (bn cigarettes)	2003	2004	2005	2006	2007	2008
	771	729	698	687	677	658

CAGR (%)	2003-2005	2005-2008
Fine cut tobacco	8.0%	(1.2)%
Manufactured cigarettes	(4.8)%	(1.9)%

**EU leading markets for fine-cut tobacco by volume, 2006-2008<sup>(1)(a)(b)</sup>**



Notes: (a) Fine cut tobacco calculated based on 0.75 grams per stick  
 (b) Fine cut tobacco includes 'roll your own', 'make your own' and 'portions'  
 Source: (1) In Market Sales provided by PMI  
 (2) PMI UK management

**Sales of fine cut tobacco have steadily declined since 2005 and represented 89.6 billion stick equivalents in 2008**

- Fine cut tobacco sales declined at an annual rate of 1.2% from 2005 to 2008, whilst sales of manufactured cigarette sales declined at an annual rate of 1.9%
  - this reversed the trend observed from 2003 to 2005 where fine cut tobacco increased at an annual rate of 8.0% whilst manufactured cigarette sales declined at an annual rate of 4.8%

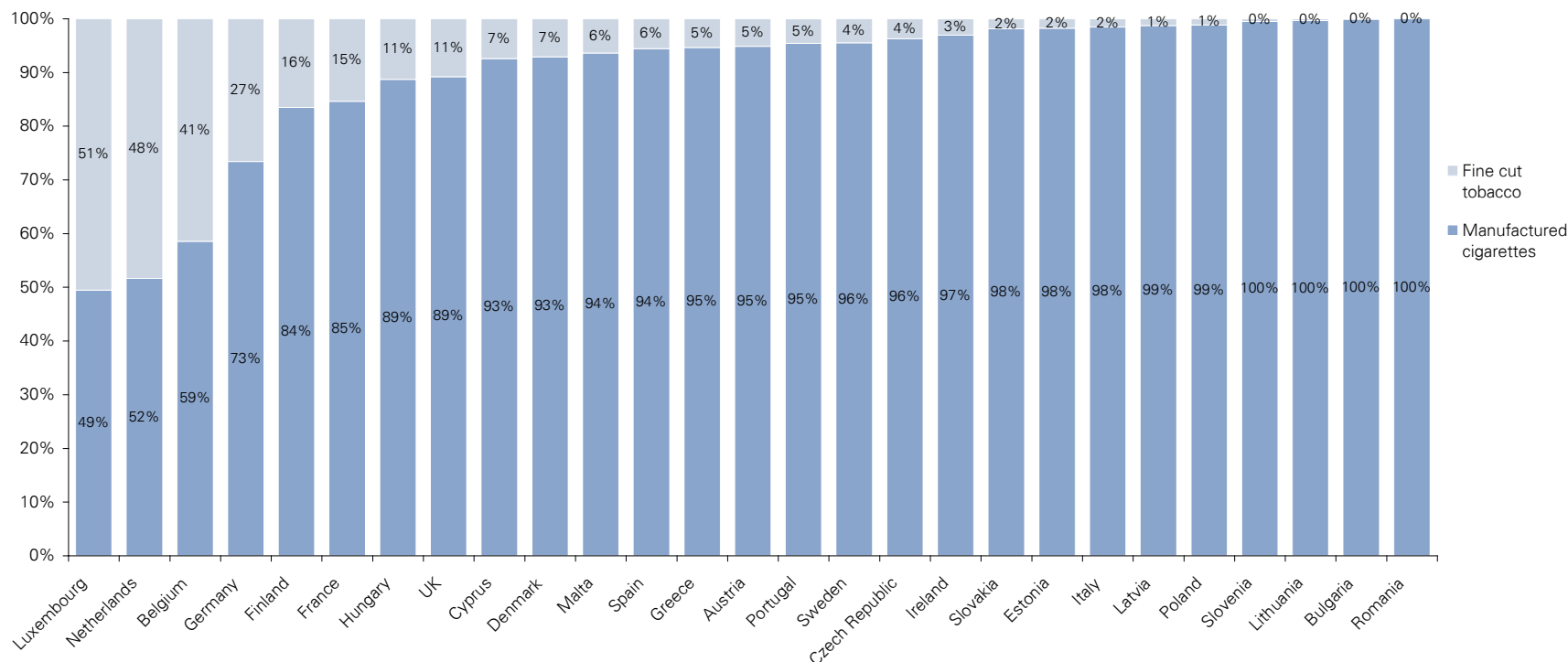
**The five largest markets for fine cut tobacco sales in the EU account for 77% of overall sales**

- Germany and the Benelux countries have the highest sales of fine cut tobacco in Europe, however sales in these countries declined over the three year period 2006 to 2008
  - legal sales in Germany have declined by 3.6 billion stick equivalents from 2006 to 2007
  - France, UK and Spain also have significant sales of fine cut tobacco and each of these countries experienced an increase in legal sales of fine cut tobacco over the three year period 2006 to 2008
  - it is understood that the increase in sales of fine cut tobacco in Spain in 2008 may be partially attributed to higher outflows to the UK<sup>(2)</sup>

# Comparison with manufactured cigarette sales by Member State

The Benelux countries have the largest share of OTP sales relative to the overall tobacco market in Europe

**EU tobacco sales by category 2008<sup>(1)(a)(b)</sup>**



Notes: (a) Fine cut tobacco calculated based on 0.75 grams per stick  
 (b) Fine cut tobacco includes 'roll your own', make your own' and 'portions'  
 Source: (1) In Market Sales provided by PMI

**Fine cut tobacco accounts for over 40% of total tobacco sold in Luxembourg, Netherlands and Belgium**

- Other countries where fine cut tobacco accounts for a substantial proportion of total tobacco sales include Germany, Finland and France
- Legal sales of fine cut tobacco account for very little of total tobacco sales in the majority of the 2004 and 2007 accession states
  - less than 1% of total tobacco consumed in Romania, Bulgaria Lithuania and Slovenia is accounted for by fine cut tobacco

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    - C&C inflows and country comparison
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## Consumption overview: summary

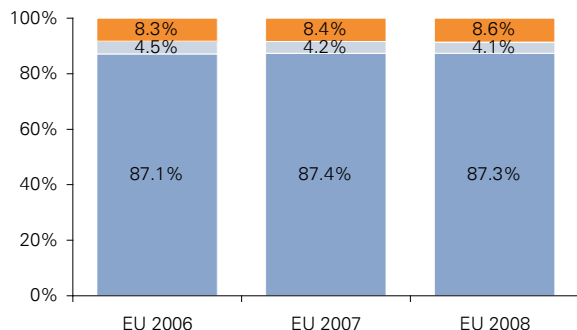
<p><b>Cigarette consumption in the EU declined by 2.0% in 2008 to 706 billion cigarettes</b></p>	<p><b>Legal domestic consumption accounted for 87.3% of consumption in 2008</b></p> <ul style="list-style-type: none"> <li>Legal domestic consumption declined by 2.1% in 2008 to 616 billion cigarettes. Differences between changes in Legal Domestic Sales and Legal Domestic Consumption reflect outflows to other EU and non-EU countries</li> <li>Legal domestic sales of cigarettes in the EU declined by 2.8% to 658 billion cigarettes over the same period</li> </ul>
<p><b>The volume of non-domestic inflows reached 89.5 billion cigarettes in 2008 for the 27 Member States</b></p>	<p><b>Non-domestic cigarettes accounted for 12.7% of EU consumption in 2008 versus 12.6% in 2007</b></p> <ul style="list-style-type: none"> <li>Germany and France, which represent the two largest markets for non-domestic inflows, experienced an increase in volumes in 2008 <ul style="list-style-type: none"> <li>non-domestic volumes in Germany increased by 1.7 billion cigarettes to 20.9 billion cigarettes in 2008</li> <li>non-domestic volumes in France increased by 1.0 billion cigarettes to 16.3 billion cigarettes in 2008</li> </ul> </li> <li>The UK and Netherlands experienced the largest declines in non-domestic inflows <ul style="list-style-type: none"> <li>non-domestic inflows to the UK declined by 3.0 billion cigarettes to 10.5 billion in 2008</li> <li>non-domestic inflows to the Netherlands declined by 2.3 billion cigarettes to 2.8 billion in 2008</li> </ul> </li> </ul>
<p><b>Non-domestic (legal) volumes accounted for 29 billion cigarettes in 2008</b></p>	<p><b>Total non-domestic (legal) accounted for 4.1% of total consumption in 2008</b></p> <ul style="list-style-type: none"> <li>This represented a slight decline from 2007 when ND(L) represented 4.2% of total consumption</li> </ul> <p><b>Declining non-domestic (legal) volumes in the UK and Netherlands were partially offset by increases in Italy and Germany in 2008</b></p> <ul style="list-style-type: none"> <li>Italy and Germany accounted for 11.3 billion cigarettes of EU non-domestic (legal) volumes in 2008, up from 9.4 billion cigarettes the previous year</li> <li>The UK and Netherlands accounted for 3.2 billion cigarettes of EU non-domestic (legal) volumes in 2008, down from 6.5 billion cigarettes the previous year</li> </ul>
<p><b>Total EU C&amp;C volumes amounted to 60.5 billion cigarettes in 2008</b></p>	<p><b>Total C&amp;C volumes accounted for 8.6% of total consumption in 2008</b></p> <ul style="list-style-type: none"> <li>48% of C&amp;C volumes are accounted for by intra-EU flows</li> </ul>

# EU consumption by type

Total EU cigarette consumption patterns have not changed significantly in 2008 with ND(L) and C&C volumes stable as a proportion of total consumption

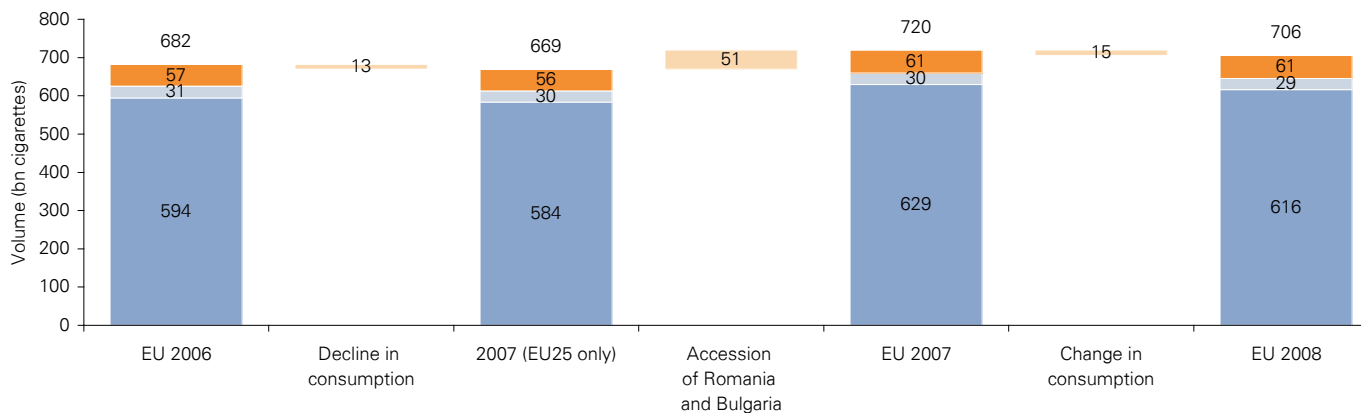
However, whilst ND(L) consumption declined by 4.6% in 2008, C&C consumption remained stable compared to the previous year

EU consumption by type 2006-2008<sup>(1)</sup>



% change	2006-2007	2007-2008
C&C	6.7%	(0.1)%
Non-domestic (legal)	(2.1)%	(4.6)%
Legal domestic consumption	5.9%	(2.1)%
<b>Total consumption</b>	<b>5.6%</b>	<b>(2.0)%</b>

EU consumption by type 2006-2008<sup>(1)</sup>



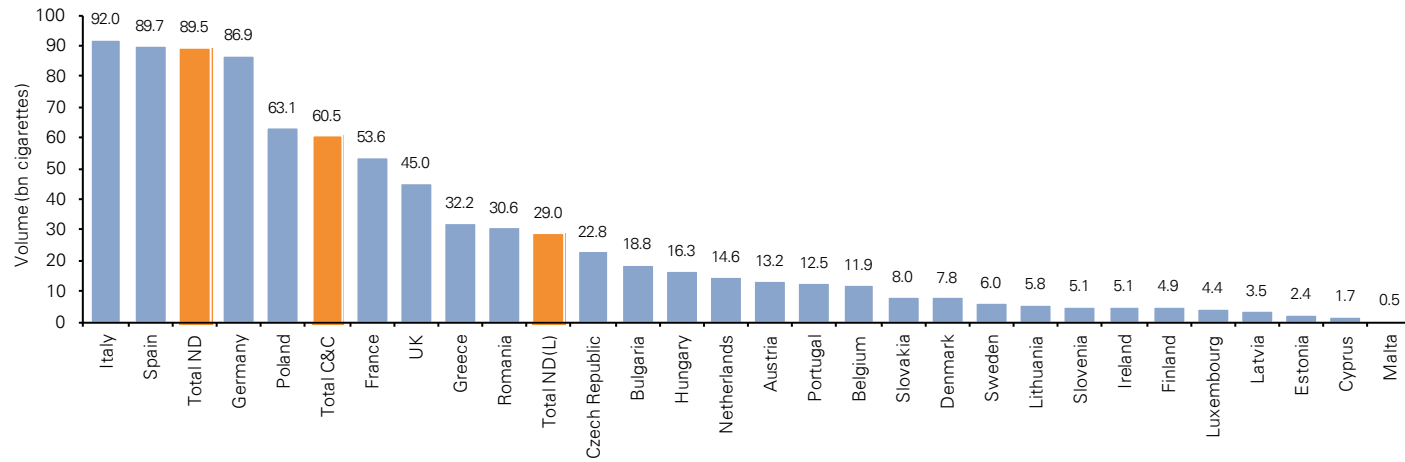
Source: (1) KPMG analysis based on EPS, LDS and ND(L) research



# Legal sales trends

**Total non-domestic flows to the EU of 89.5 billion cigarettes in 2008 are comparable to legal domestic sales in Spain, which is the second largest single market**

**Legal domestic sales by country versus total EU non-domestic cigarette volumes 2008<sup>(1)</sup>**

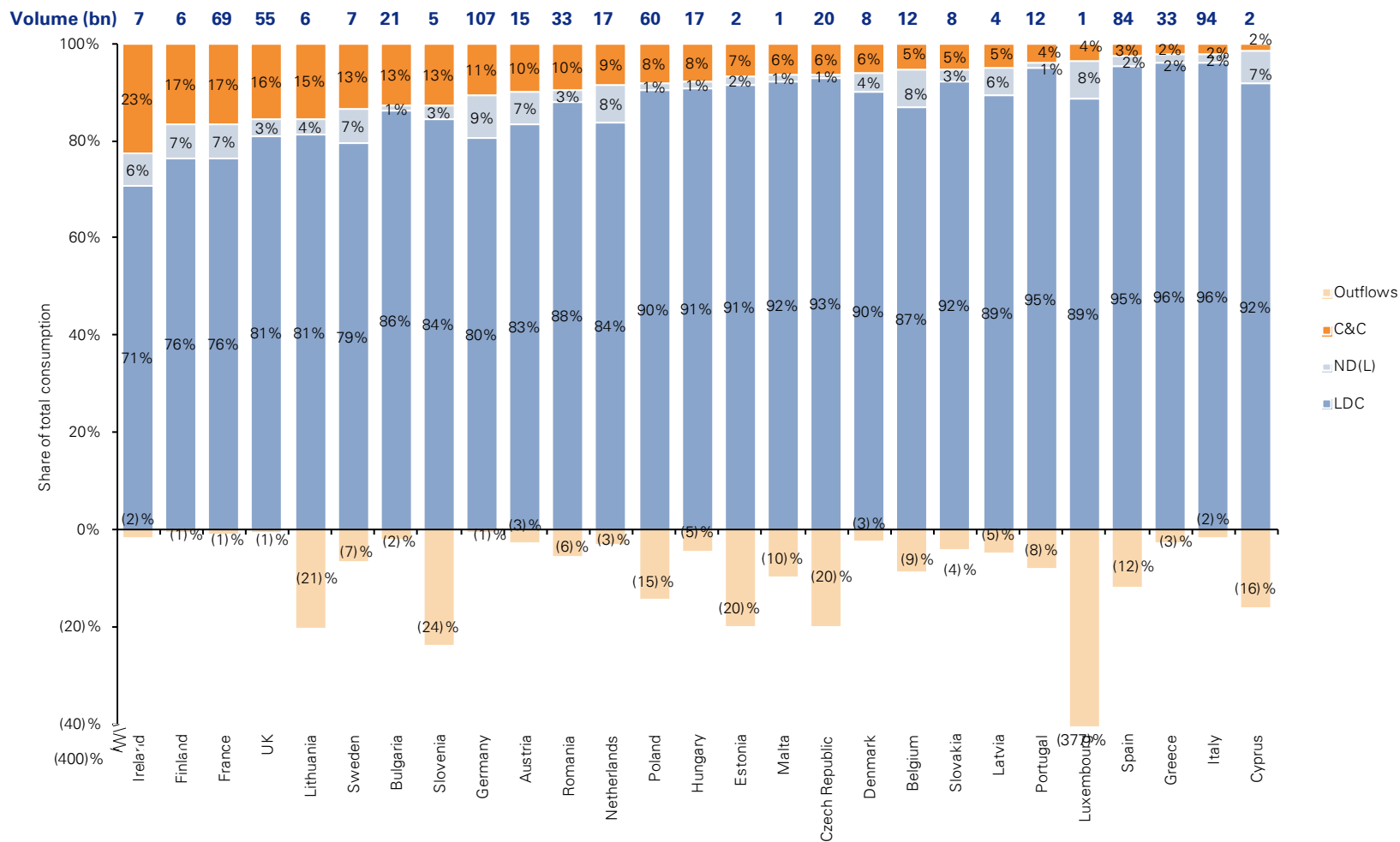


Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

# EU consumption by country

High priced northern European markets typically have higher C&C shares than other Member States

**Total cigarette consumption by type 2008<sup>(1)</sup>**



Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

- Project overview and timing
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  - overall non-domestic inflows
    - non-domestic (legal) inflows
    - C&C inflows and country comparison
  - seizures
- Appendices

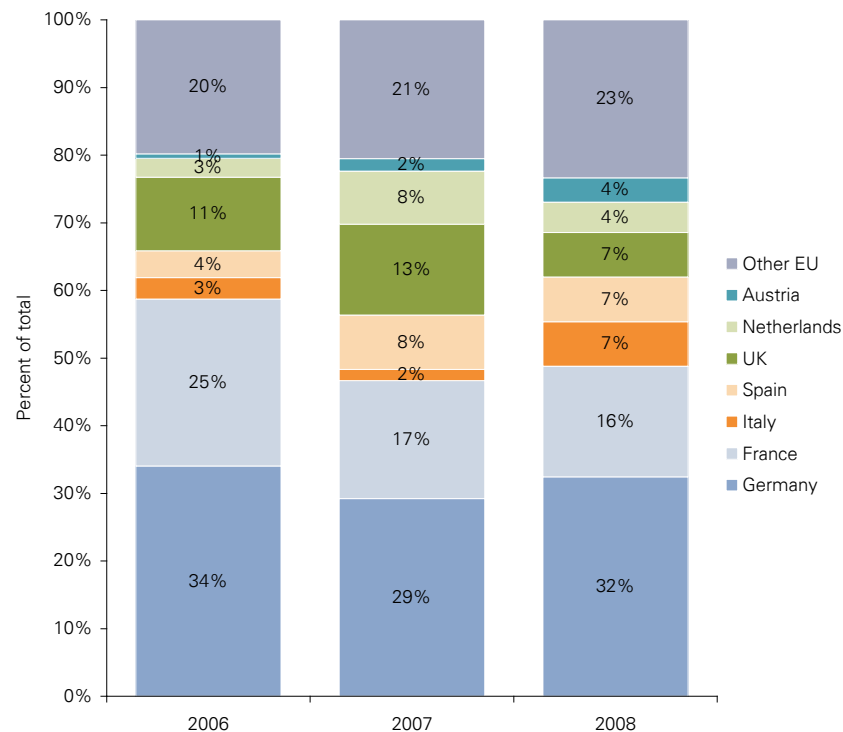
## Non-domestic (legal) overview

<p><b>Non-domestic (legal) volumes accounted for 29 billion cigarettes in 2008</b></p>	<p><b>Total non-domestic (legal) accounted for 4.1% of total consumption in 2008</b></p> <ul style="list-style-type: none"> <li>This represented a slight decline from 2007 when ND(L) represented 4.2% of total consumption</li> </ul> <p><b>Declining non-domestic (legal) volumes in the UK and Netherlands were partially offset by increases in Italy and Germany in 2008</b></p> <ul style="list-style-type: none"> <li>Italy and Germany accounted for 11.3 billion cigarettes of EU non-domestic (legal) volumes in 2008, up from 9.4 billion cigarettes the previous year</li> <li>The UK and Netherlands accounted for 3.2 billion cigarettes of EU non-domestic (legal) volumes in 2008, down from 6.5 billion cigarettes the previous year</li> </ul>
<p><b>Non-domestic (legal) inflows as a proportion of total consumption are typically higher in northern states</b></p>	<p><b>Germany and France accounted for almost 50% of EU ND(L) consumption in 2008</b></p> <ul style="list-style-type: none"> <li>Italy, Spain and the UK are the only other Member States that accounted for over 5% of the EU total</li> </ul> <p><b>Germany had the highest non-domestic (legal) share of consumption in 2008 at 8.8%</b></p> <ul style="list-style-type: none"> <li>ND(L) flows accounted for over 7% of total consumption in Belgium. Netherlands, Luxembourg and Sweden</li> </ul>
<p><b>Flows from EU source countries account for the large majority of non-domestic (legal) consumption</b></p>	<p><b>Non-domestic (legal) flows between the EU27 Member States accounted for 76% of total ND(L) inflows in 2008, compared to 83% in 2007</b></p> <ul style="list-style-type: none"> <li>Spain was the largest single source of non-domestic (legal) inflows, representing 15% of ND(L) flows in 2008</li> </ul>
<p><b>Overall PMI share of legal flows declined from 45% to 39% in 2008</b></p>	<p><b>The decline in PMI share of non-domestic (legal) flows is attributable to a decline in non-domestic (legal) volumes of Marlboro and L&amp;M</b></p> <ul style="list-style-type: none"> <li>Marlboro share of total non-domestic (legal) declined to 26% in 2008 from 32% in 2007</li> <li>L&amp;M share of total non-domestic (legal) declined to 8% in 2008, down from 9% the previous year</li> <li>Non-domestic (legal) accounted for by non-PMI product increased to 61% in 2008, up from 55% in 2007</li> </ul>

# Non-domestic (legal) inflows by destination country

Declining non-domestic (legal) volumes in the UK and Netherlands were partially offset by increases in Italy and Germany in 2008

Non-domestic (legal) inflows by destination countries 2006-2008<sup>(1)</sup>



<b>ND(L) share of consumption:</b>	<b>4.5%</b>	<b>4.2%</b>	<b>4.1%</b>
<b>ND(L) share of non-domestic:</b>	<b>35.3%</b>	<b>33.4%</b>	<b>32.4%</b>

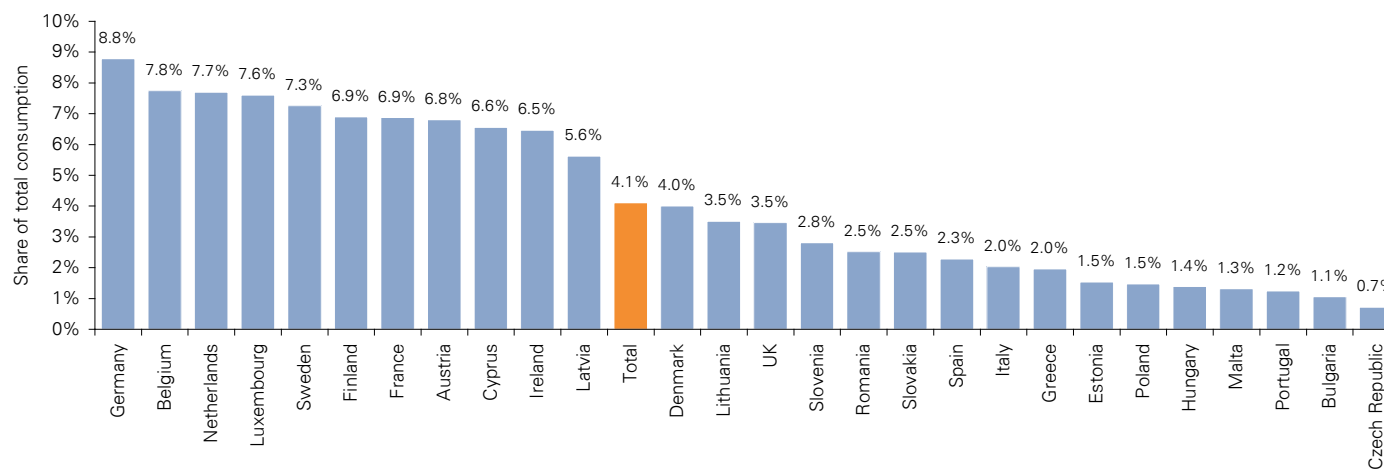
Non-domestic (legal) volume by destination <sup>(1)</sup>			
Destination	2006	2007	2008
Germany	10.6	8.9	9.4
France	7.7	5.3	4.7
Italy	1.0	0.5	1.9
Spain	1.2	2.4	1.9
UK	3.4	4.1	1.9
Netherlands	0.9	2.4	1.3
Austria	0.2	0.6	1.0
Belgium	0.9	0.8	1.0
Poland	0.6	0.6	0.9
Romania	n/a	0.7	0.8
Greece	0.3	0.5	0.6
Sweden	0.7	0.7	0.5
Ireland	1.0	0.8	0.5
Finland	0.7	0.4	0.4
Denmark	0.4	0.4	0.3
Hungary	0.1	0.3	0.2
Bulgaria	n/a	0.1	0.2
Slovakia	0.3	0.1	0.2
Latvia	0.3	0.2	0.2
Lithuania	0.1	0.1	0.2
Portugal	0.3	0.1	0.2
Czech Republic	0.1	0.1	0.1
Slovenia	0.1	0.0	0.1
Cyprus	0.1	0.1	0.1
Luxembourg	0.1	0.1	0.1
Estonia	0.1	0.1	0.0
Malta	0.0	0.0	0.0
<b>Total</b>	<b>31.0</b>	<b>30.3</b>	<b>29.0</b>

Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

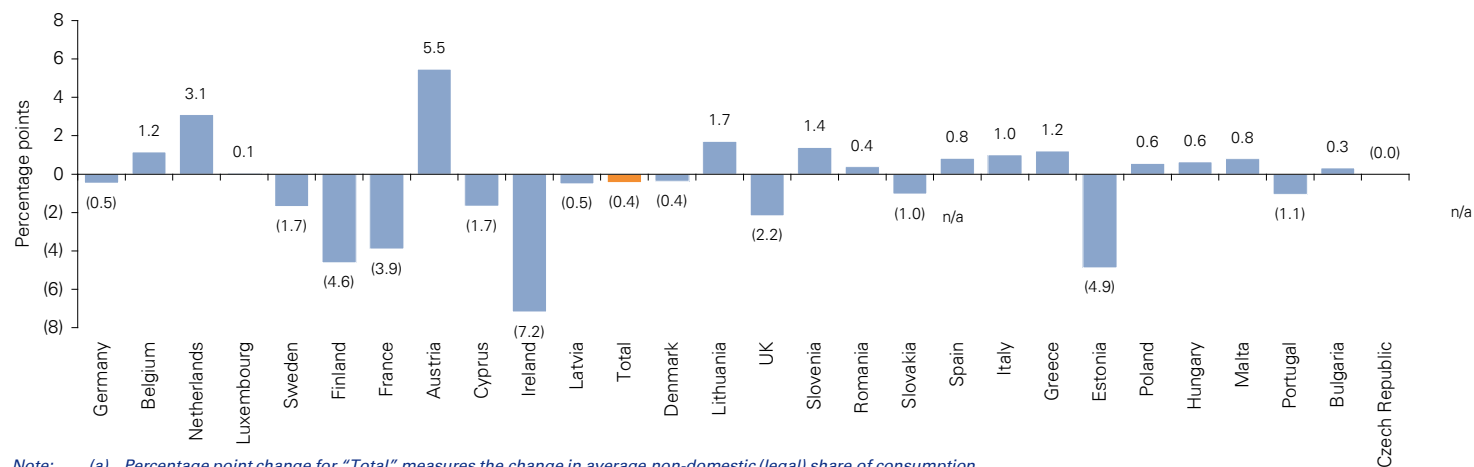
# Non-domestic (legal) share of consumption

Germany had the highest non-domestic (legal) share of consumption in 2008 at 8.8%

**Non-domestic (legal) share of consumption by country 2008<sup>(1)</sup>**



**Percentage point change in non-domestic (legal) share of consumption by country 2006-2008<sup>(1)(a)</sup>**



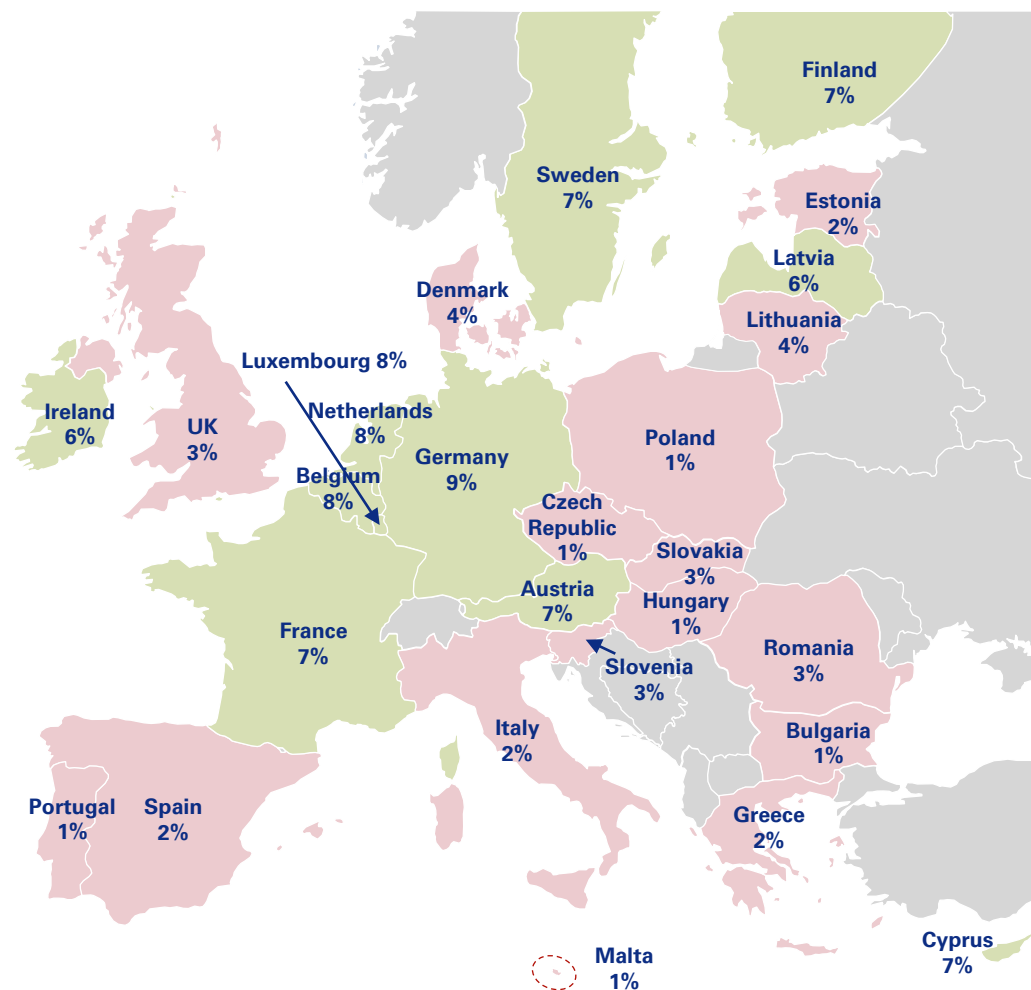
Note: (a) Percentage point change for "Total" measures the change in average non-domestic (legal) share of consumption for the Member States between the 2006 and 2008, with exception of Romania and Bulgaria where this is for 2007 to 2008 only.

Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

# Non-domestic (legal) share of consumption

Non-domestic (legal) flows as a percentage of consumption are typically higher in northern Member States

ND(L) share of total consumption by Member State 2008<sup>(1)</sup>



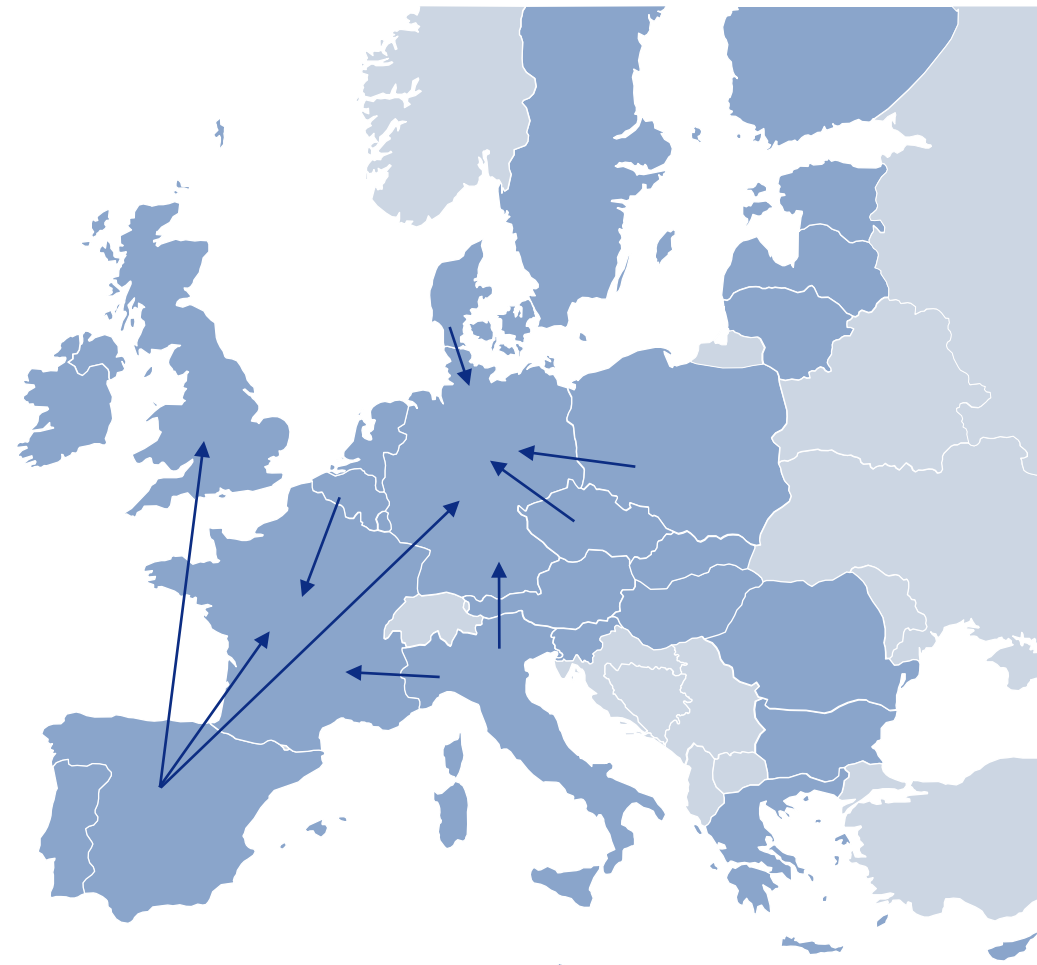
Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

Key:   
■ 5% to 10%   
■ Less than 5%

# Major ND(L) flows

France and Germany are the destination markets for the largest non-domestic (legal) flows by volume

Major ND(L) flows over 0.5 billion cigarettes 2008<sup>(1)</sup>



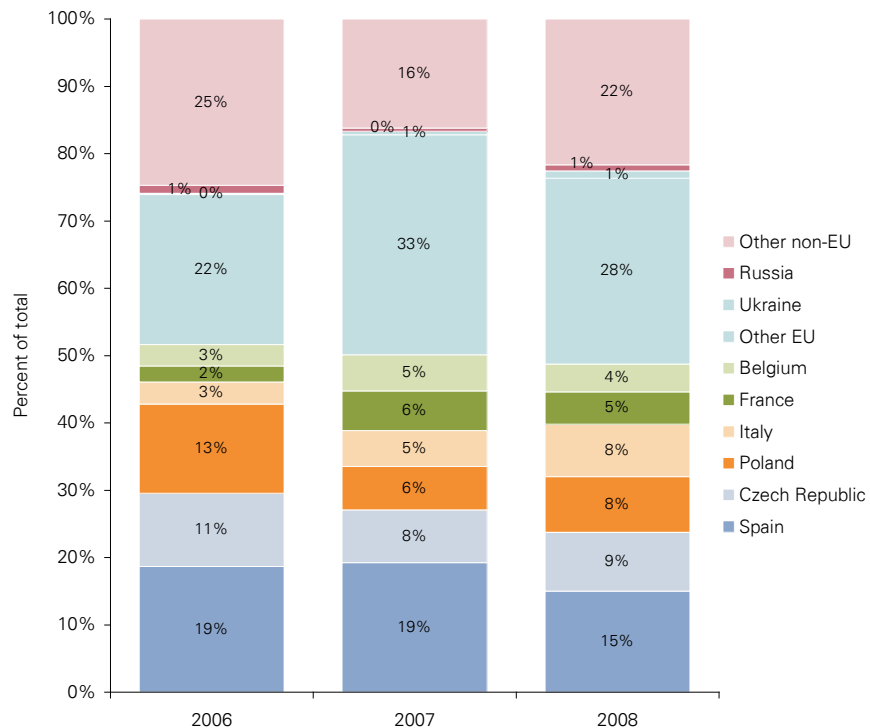
Key: → ND(L) flows over 0.5 billion cigarettes  
Source: (1) KPMG analysis based on EPS, LDS and ND(L) research



# Non-domestic (legal) flows by source

ND(L) flows between the EU27 Member States were 76% of total ND(L) inflows in 2008, compared to 83% in 2007

Non-domestic (legal) flows by country of origin 2006-2008<sup>(1)(a)</sup>



ND(L) inflows by country of origin<sup>(1)</sup>

Source	2006	2007	2008
Spain	18.7%	19.3%	15.0%
Czech Republic	10.9%	7.8%	8.8%
Poland	13.3%	6.5%	8.3%
Italy	3.3%	5.3%	7.8%
France	2.4%	5.9%	4.8%
Belgium	3.1%	5.4%	4.1%
UK	1.2%	3.8%	2.9%
Germany	3.0%	4.5%	2.7%
Greece	2.8%	3.4%	2.6%
Luxembourg	4.7%	4.6%	2.2%
Denmark	0.4%	0.5%	2.1%
Portugal	2.1%	2.1%	2.0%
Slovenia	0.3%	1.0%	1.8%
Netherlands	1.7%	2.1%	1.7%
Austria	0.8%	2.1%	1.6%
Other EU27	5.4%	8.5%	8.1%
<b>Total EU27 Member States</b>	<b>73.9%</b>	<b>82.8%</b>	<b>76.4%</b>
Ukraine	0.2%	0.5%	1.1%
Russia	1.2%	0.5%	0.9%
Switzerland	0.0%	0.3%	0.4%
Turkey	1.0%	0.7%	0.4%
Belarus	0.2%	0.1%	0.3%
Other non-EU	23.6%	15.1%	20.6%
<b>Total non-EU</b>	<b>26.1%</b>	<b>17.2%</b>	<b>23.6%</b>
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Note: (a) ND(L) by origin shares are based on country of purchase rather than variant purchased. As a result, these shares include purchases of Duty Free variants made when travelling outside the EU

Source: (1) KPMG analysis based on EPS, LDS, and ND(L) research

# Non-domestic (legal) flows by brand

Overall PMI share of legal flows declined to 39% in 2008 driven largely by a decline in non-domestic (legal) volumes of Marlboro and L&M

Non-domestic (legal) flows by brand 2006-2008<sup>(1)</sup>



Non-domestic inflows by brand<sup>(1)</sup>

Source	2006	2007	2008
Marlboro	28.7%	32.0%	25.8%
L&M	4.7%	8.7%	7.7%
Philip Morris	1.0%	1.0%	1.0%
Next	0.3%	0.2%	0.8%
Chesterfield	1.2%	1.1%	0.7%
Merit	0.1%	0.2%	0.2%
Other PMI	1.3%	1.5%	2.5%
<b>PMI total</b>	<b>37.3%</b>	<b>44.7%</b>	<b>38.7%</b>
Camel	4.7%	6.2%	5.0%
Pall Mall	3.4%	5.1%	3.9%
West	5.5%	4.1%	3.0%
Lucky Strike	2.3%	2.3%	2.9%
Benson & Hedges	4.0%	4.8%	2.3%
Peter Stuyvesant	0.5%	0.2%	2.3%
Gauloises	2.6%	3.3%	2.1%
Dunhill	1.4%	0.7%	1.7%
Hb	0.9%	0.8%	1.6%
Davidoff	0.9%	0.7%	1.2%
John Player Special	1.6%	2.4%	1.2%
Prince	0.6%	1.6%	1.1%
Fort	0.0%	0.0%	1.1%
Winston	1.1%	1.0%	1.0%
Superkings	1.0%	1.0%	1.0%
Other non-PMI	32.4%	21.0%	29.7%
<b>Non-PMI</b>	<b>62.7%</b>	<b>55.3%</b>	<b>61.3%</b>
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

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## C&C overview

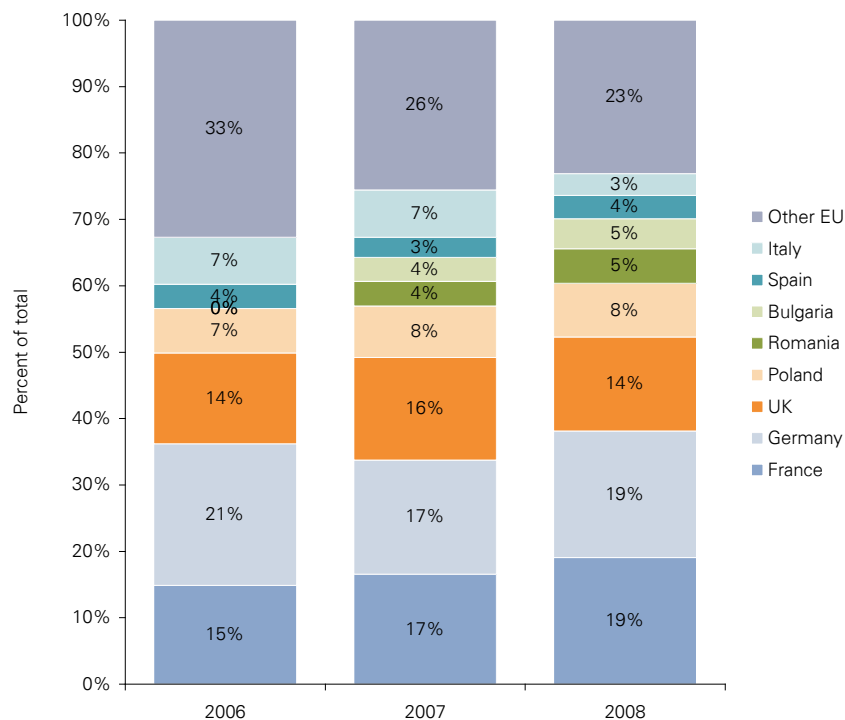
<p><b>Total EU C&amp;C volumes amounted to 60.5 billion cigarettes in 2008</b></p>	<p><b>Total C&amp;C volumes accounted for 8.6% of total consumption in 2008</b></p> <ul style="list-style-type: none"> <li>48% of C&amp;C volumes were accounted for by intra-EU flows</li> </ul>
<p><b>Germany and France are the two largest destination countries for C&amp;C inflows</b></p>	<p><b>Germany and France accounted for over a third of C&amp;C inflows in 2008</b></p> <ul style="list-style-type: none"> <li>Declining C&amp;C volumes in the UK and Italy have been partially offset by increases in France and Germany in 2008</li> <li>Ireland has the highest C&amp;C share of consumption at 22.8% in 2008</li> <li>Lithuania has had the largest decline in C&amp;C share of total consumption from 41% in 2006 to 16% in 2008</li> </ul>
<p><b>Non-EU countries accounted for 46% of counterfeit and contraband flows to the EU in 2008, up from 42% in 2007</b></p>	<p><b>Within the EU, Poland is the largest source country for C&amp;C flows</b></p> <ul style="list-style-type: none"> <li>Poland remains the largest share of intra-EU C&amp;C flows by source country at 11% in 2008 compared to 12% in 2007</li> </ul> <p><b>The largest non-EU source countries for C&amp;C product remain the Ukraine and Russia</b></p> <ul style="list-style-type: none"> <li>The share of C&amp;C flows from Russia increased from 9% in 2007 to 10% in 2008</li> <li>The share of C&amp;C flows from the Ukraine increased from 13% in 2007 to 18% in 2008</li> </ul>

# C&C volumes by destination country

Germany, France and the UK together account for half of total EU C&C consumption

Declining C&C volumes in the UK and Italy have been partially offset by increases in France and Germany

C&C volumes by destination country 2006-2008<sup>(1)</sup>



	2006	2007	2008
C&C share of consumption:	8.3%	8.4%	8.6%
C&C share of non-domestic:	64.7%	66.6%	67.6%

Source: (1) KPMG analysis based on EPS, LDS, and ND(L) research

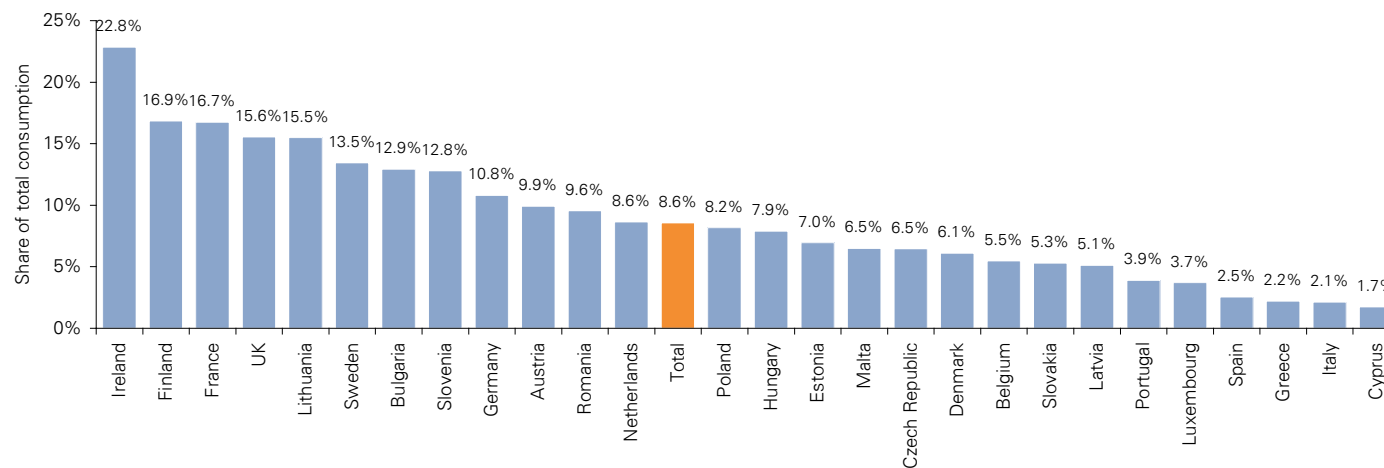
C&C volume by destination <sup>(1)</sup>			
Destination	2006	2007	2008
France	8.5	10.0	11.5
Germany	12.1	10.4	11.5
UK	7.8	9.4	8.6
Poland	3.8	4.7	4.9
Romania	n/a	2.2	3.1
Bulgaria	n/a	2.2	2.7
Spain	2.1	1.8	2.1
Italy	4.0	4.3	2.0
Ireland	0.7	1.2	1.6
Austria	1.7	2.0	1.5
Netherlands	4.6	3.0	1.5
Hungary	3.3	1.7	1.4
Czech Republic	0.1	0.1	1.3
Finland	0.6	1.1	1.1
Sweden	0.9	0.9	0.9
Lithuania	2.3	1.6	0.9
Greece	1.2	1.9	0.7
Belgium	0.9	0.8	0.7
Slovenia	0.3	0.2	0.6
Denmark	0.2	0.2	0.5
Portugal	0.6	0.3	0.5
Slovakia	0.3	0.1	0.4
Latvia	0.3	0.2	0.2
Estonia	0.4	0.2	0.1
Luxembourg	0.0	0.0	0.0
Malta	0.0	0.0	0.0
Cyprus	0.0	0.0	0.0
<b>Total</b>	<b>56.8</b>	<b>60.6</b>	<b>60.5</b>

# C&C inflows share of total consumption

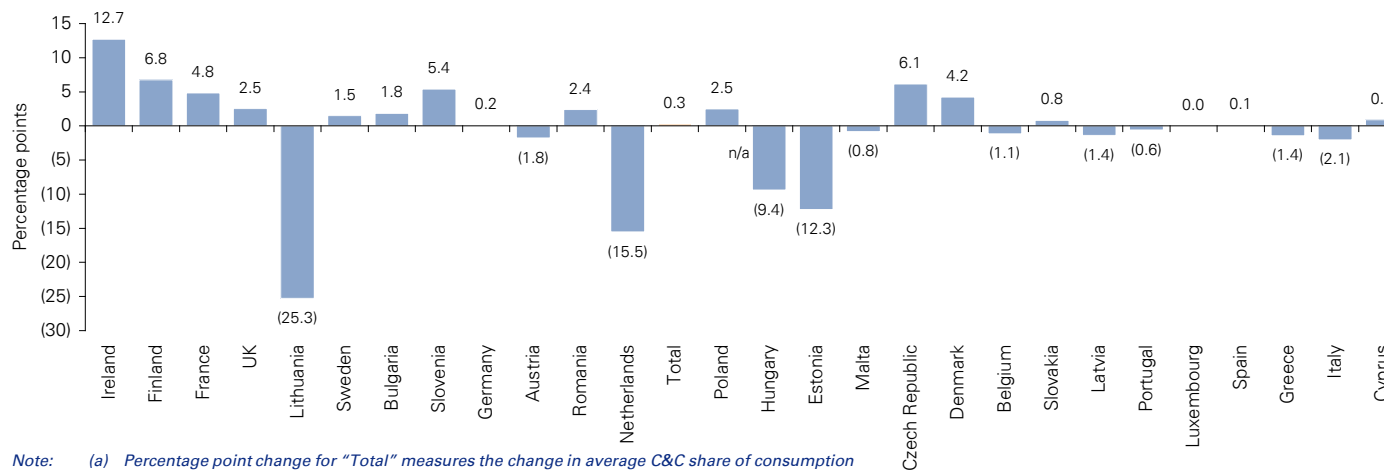
**Ireland has the highest C&C share of consumption at 22.8% in 2008**

**Lithuania has had the largest decline in C&C share of total consumption between 2006 and 2008**

**C&C as a share of consumption by country 2008<sup>(1)</sup>**



**Percentage point change in C&C as a share of consumption by country 2006-2008<sup>(1)(a)</sup>**



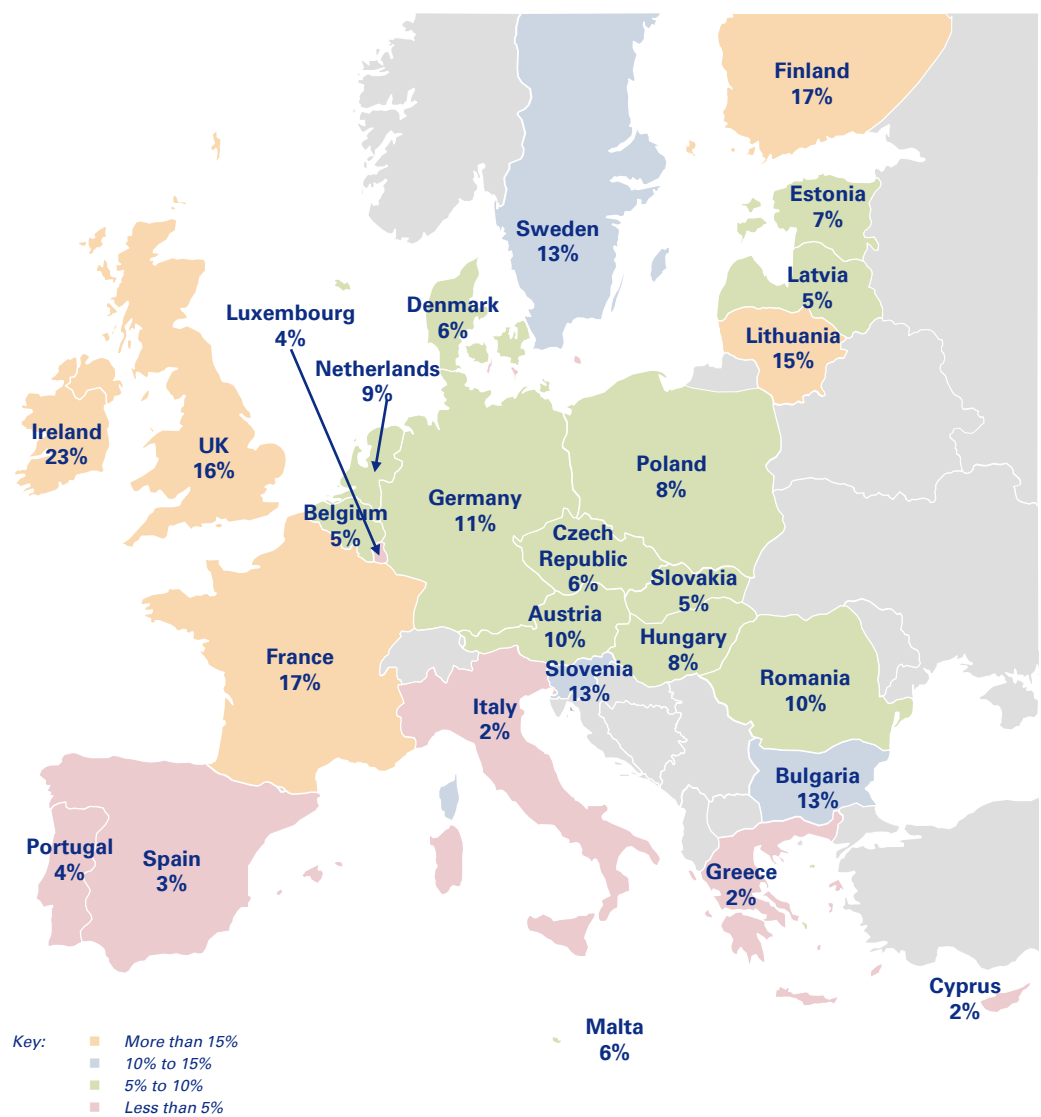
Note: (a) Percentage point change for "Total" measures the change in average C&C share of consumption for the Member States between the 2006 and 2008, with exception of Romania and Bulgaria where this is for 2007 to 2008 only.

Source: (1) KPMG analysis based on EPS, LDS, and ND(L) research

# C&C share of total consumption

C&C as a share of consumption varies across the EU Member States

C&C share of total consumption by Member State 2008<sup>(1)</sup>

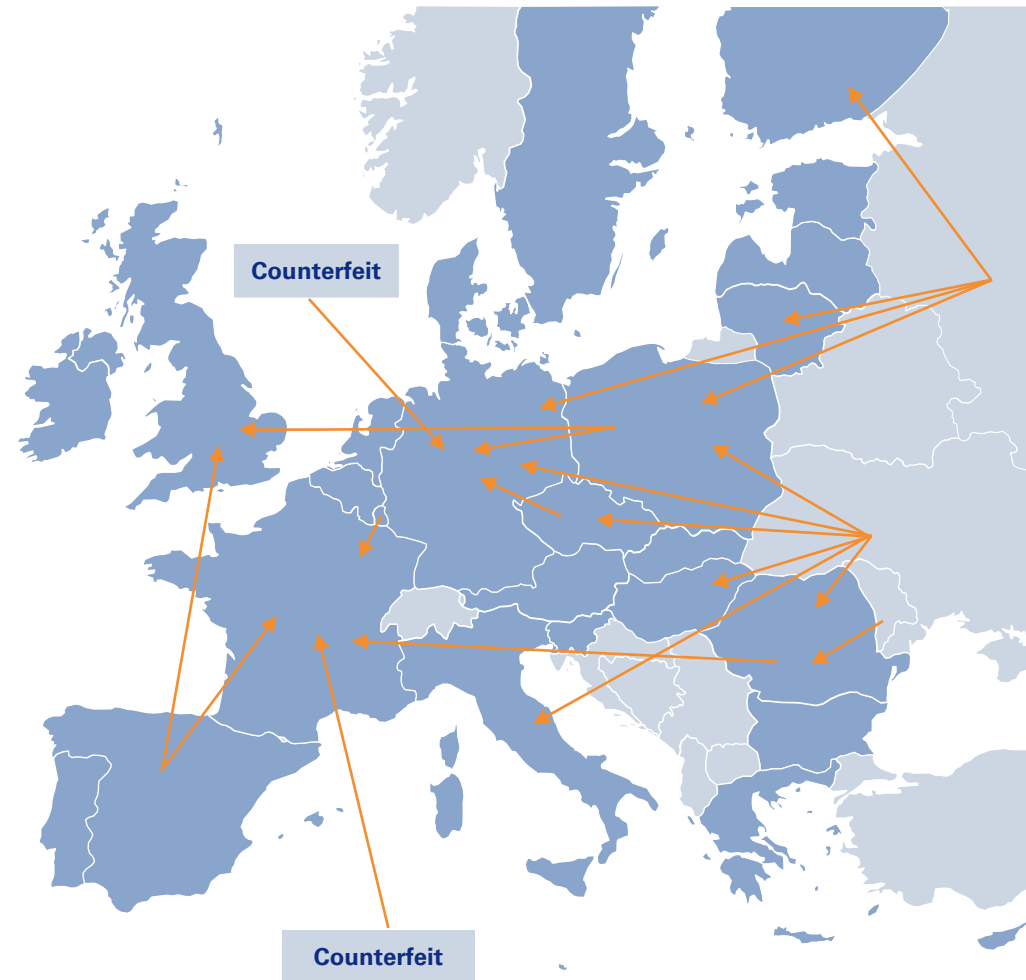


Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

# Major C&C inflows

Russia and Ukraine remain source countries for C&C flows to multiple countries

Major C&C flows greater than 0.5 billion cigarettes 2008<sup>(1)</sup>



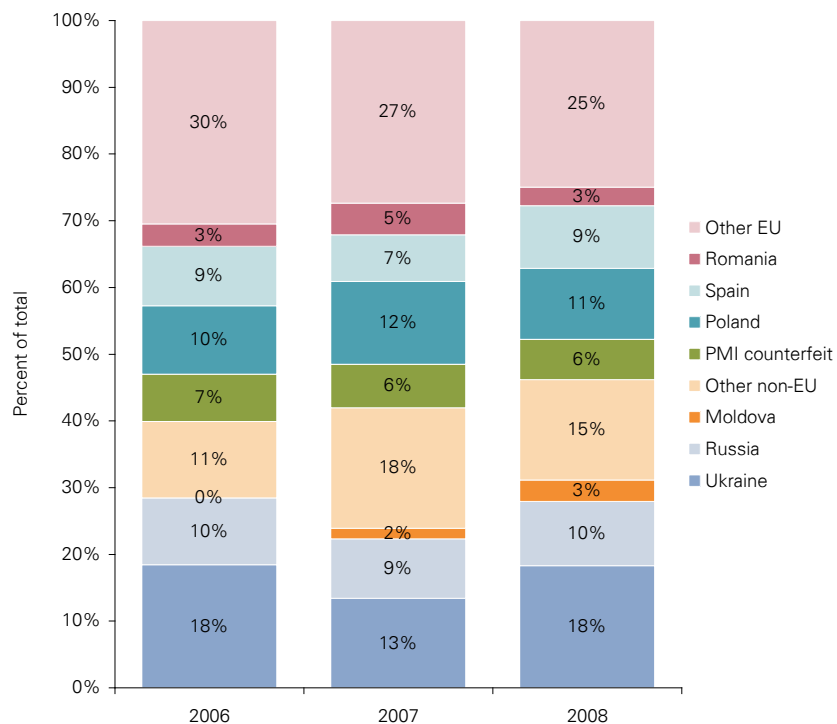
Key: → C&C flows over 0.5 billion cigarettes  
Source: (1) KPMG analysis based on EPS, LDS and ND(L) research



# C&C flows by source

The share of C&C accounted for by intra EU flows decreased to 48% in 2008 compared to 51% in 2007

**C&C inflows by country of origin 2006-2008<sup>(1)(a)</sup>**



Note: (a) C&C by origin shares are based on variant purchased  
 Source: (1) KPMG analysis based on EPS, LDS, and ND(L) research

**Counterfeit and contraband inflows by country of origin<sup>(1)</sup>**

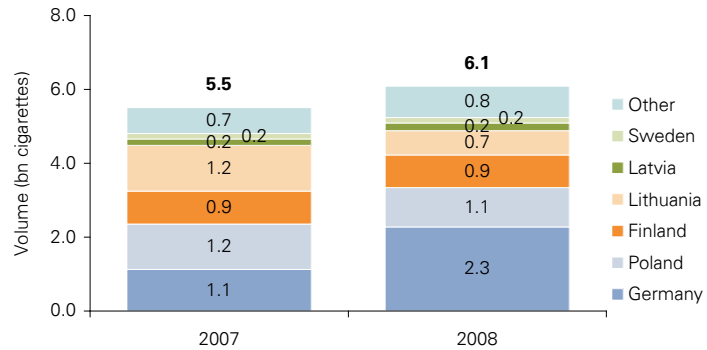
Source	2006	2007	2008
Poland	10.3%	12.4%	10.6%
Spain	8.9%	7.0%	9.4%
Romania	3.3%	4.7%	2.8%
Czech Republic	2.5%	3.0%	2.5%
Luxembourg	0.9%	0.9%	1.7%
Lithuania	1.1%	1.1%	1.6%
Slovenia	1.0%	0.9%	1.0%
Portugal	1.0%	1.0%	0.7%
Hungary	0.6%	0.5%	0.6%
Greece	0.9%	0.7%	0.5%
Estonia	0.6%	0.4%	0.4%
Slovakia	0.8%	0.4%	0.4%
Latvia	1.3%	1.4%	0.2%
Other EU27	19.9%	17.1%	15.4%
Total EU27 Member States	53.0%	51.5%	47.8%
PMI counterfeit	7.1%	6.5%	6.0%
Ukraine	18.5%	13.4%	18.3%
Russia	10.0%	8.9%	9.6%
Moldova	0.0%	1.6%	3.2%
Belarus	0.0%	0.2%	1.0%
Bosnia And Herzegovina	0.5%	0.3%	1.0%
Other non-EU	10.9%	17.6%	13.1%
Total non-EU	39.9%	42.0%	46.2%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

# Outflows from Russia

Russian inflows increased 11% in 2008

There are no legal sales of Jin Ling in the EU

Russian inflows by destination country 2007-2008<sup>(1)</sup>



Source: (1) KPMG analysis based on EPS, LDS, and ND(L) research

# Outflows from Ukraine

**Ukrainian inflows increased 24% in 2008**

**Ukrainian inflows by destination country 2007-2008<sup>(1)</sup>**



Source: (1) KPMG analysis based on EPS, LDS, and ND(L) research

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## Seizure data

Seizure data is weighted towards counterfeit product

### Counterfeit product accounted for 85% of seizure volumes in 2008

- Anecdotal evidence suggests that counterfeit is more likely to be transported in large shipments such as containers
  - average seizure size for counterfeit product was approximately 840,000 cigarettes in 2008, compared to under 100,000 cigarettes for genuine product
  - in addition, smaller seizures of less than five cases and instances of individuals attempting to exceed import allowances may not be reported
- The availability of cheaper genuine product in other markets means this can be moved in large numbers of smaller shipments which may be more difficult to detect and intercept

# Counterfeit share of seizures

**Counterfeit products accounted for 84.9% of PMI seizure volumes in 2008**

**Counterfeit share of cigarette seizures (all EU PMI seizures) 2006-2008<sup>(1)(a)(b)</sup>**



## Counterfeit product accounted for the majority of seized cigarettes in the EU

- Whilst there have been changes in the volume and location of seizures, the composition of seized volumes in terms of counterfeit and genuine products has remained stable in 2008 compared with prior years

## Counterfeit seizures tend to be larger than seizures of genuine product

- The average seizure size (number of cigarettes seized divided by number of seizure events) differs between genuine and counterfeit product
  - the average seizure of PMI counterfeit product was approximately 837,000 cigarettes, compared to 98,000 cigarettes of genuine product
  - in 2008 average size of counterfeit seizures increased by approximately 136,000 cigarettes

## Seizure data is weighted towards counterfeit product

- Smaller seizure volumes and instances of individuals attempting to exceed import allowances may not be reported
- Anecdotal evidence suggests that counterfeit is more likely to be transported in large shipments such as containers
- The availability of cheaper genuine product in other markets means that it can be moved in a large number of smaller quantities which may be more difficult to detect and intercept

*Note: (a) Seizures data presented is based on EU27 countries for 2007 and 2008, and EU25 countries for 2006*

*(b) Seizure data in this report is based upon the most recently available sources. Variances between the Project Star 2007 report and seizure data presented for 2006 and 2007 are attributable to additional seizure data received after publication of the Project Star 2007 report*

*Source: (1) PMI management based on notifications received from local law enforcement as at 4th March 2009*

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  - methodology
  - summary of country flow refinements
  - sources
  - scope of work

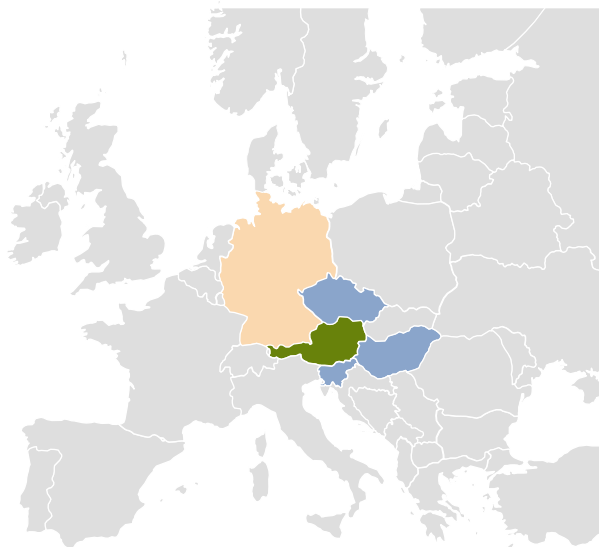
- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK



**Total consumption in Austria declined by 3.1% in 2008 driven by a fall in legal domestic sales**

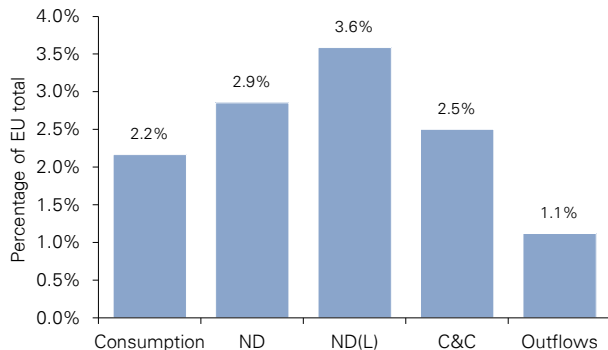
**The share of non-domestic (legal) has increased in 2008 however this has been offset against a decline in counterfeit and consumption share**

**Key source and destination markets<sup>(1)(a)</sup>**

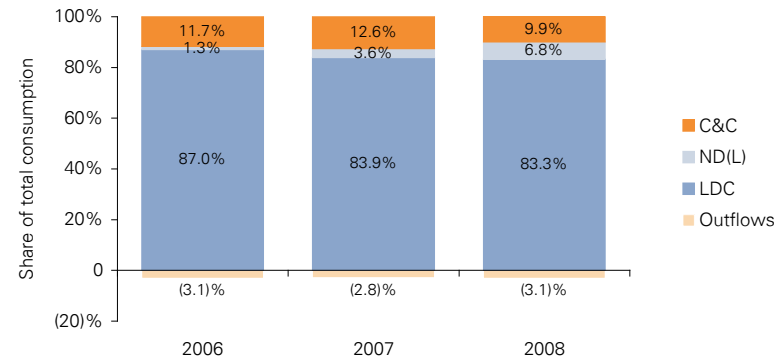


**Key:** ■ Austria ■ Major source countries ■ Major destination country  
**Note:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to larger flow  
**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
 (2) Synovate ND(L) research 2006, 2008

**Proportions of total EU levels<sup>(1)(2)</sup>**

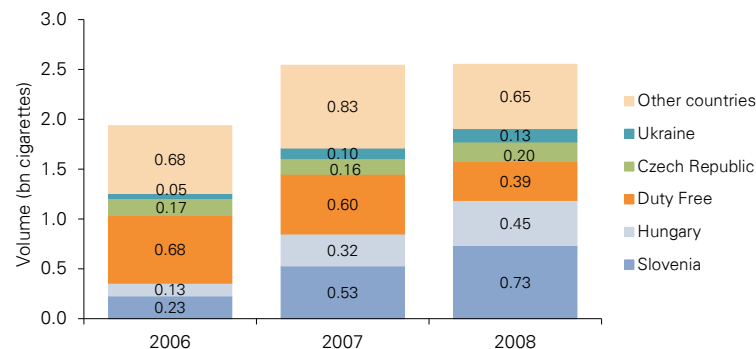


**Total Austrian consumption 2006-2008<sup>(1)(2)(b)</sup>**



Volume (bn cigarettes):	2006	2007	2008
	14.9	15.8	15.3

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2008<sup>(1)(2)(b)</sup>**



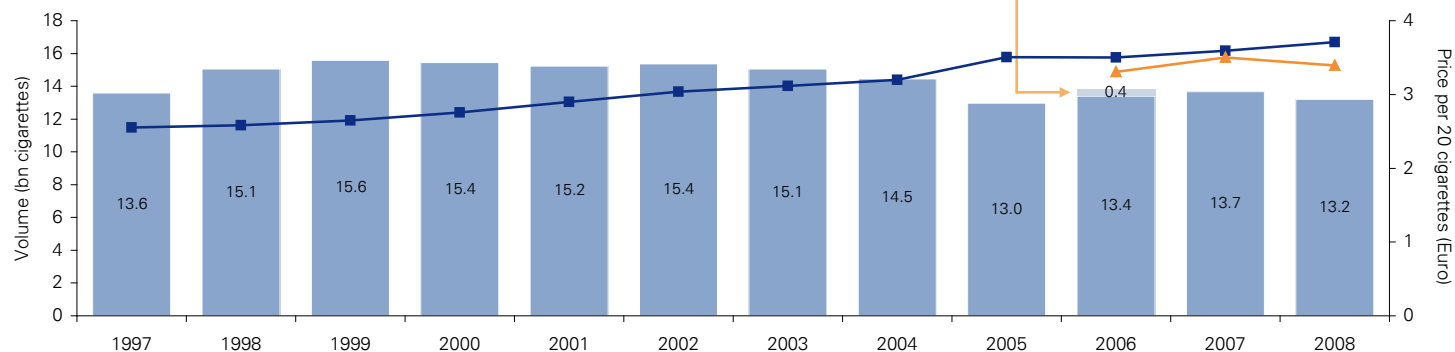
Volume (bn cigarettes):	2006	2007	2008
	1.9	2.5	2.6

**Note:** (b) This report and the Project Star 2006 results use 13.4 billion cigarettes as estimated legal domestic sales (LDS) in Austria during 2006. However, PMI internal estimates suggest that LDS in 2006 was actually 13.8 billion cigarettes. Use of the higher 13.8 billion cigarettes estimate for LDS in 2006 gives implied total consumption of 15.3 billion cigarettes, which is more in line with 2007 results

# Historic sales and pricing trends

**Legal domestic cigarette sales declined by 3.4% in 2008 compared to 2007**

## Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)(a)</sup>



CAGR (%)	1997-1999	1999-2006	2006-2008	2007-2008
Legal domestic sales	7.1%	(2.1)%	(0.8)%	(3.4)%
Average pack price	1.9%	4.1%	2.9%	3.3%
Consumption	n/a	n/a	1.3%	(3.1)%

Note: (a) This report and the Project Star 2006 results use 13.4 billion cigarettes as estimated legal domestic sales (LDS) in Austria during 2006. However, PMI internal estimates suggest that LDS in 2006 was actually 13.8 billion cigarettes

Sources: (1) In Market Sales supplied by PMI

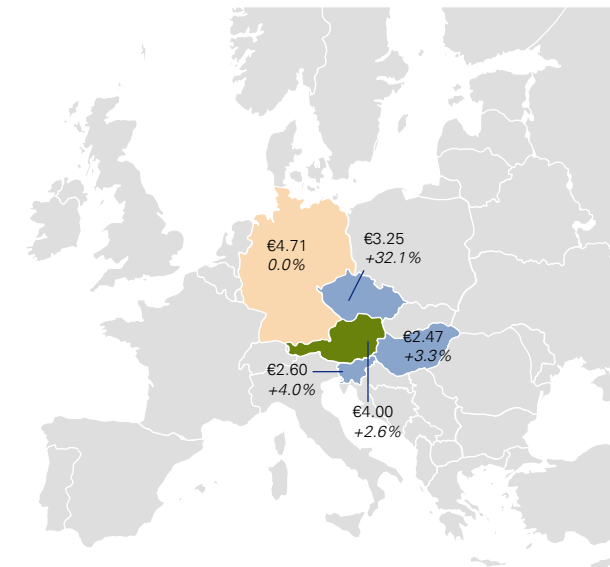
(2) Weighted average pack price supplied by PMI

## The average pack price increased by 3.3% in 2008 compared to 2007

- Price increases were mainly implemented on "super low" price category cigarettes in Q1 2008

There has been a down trading trend in 2008

### Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



Key:

- Austria
- Major source countries
- Major destination country

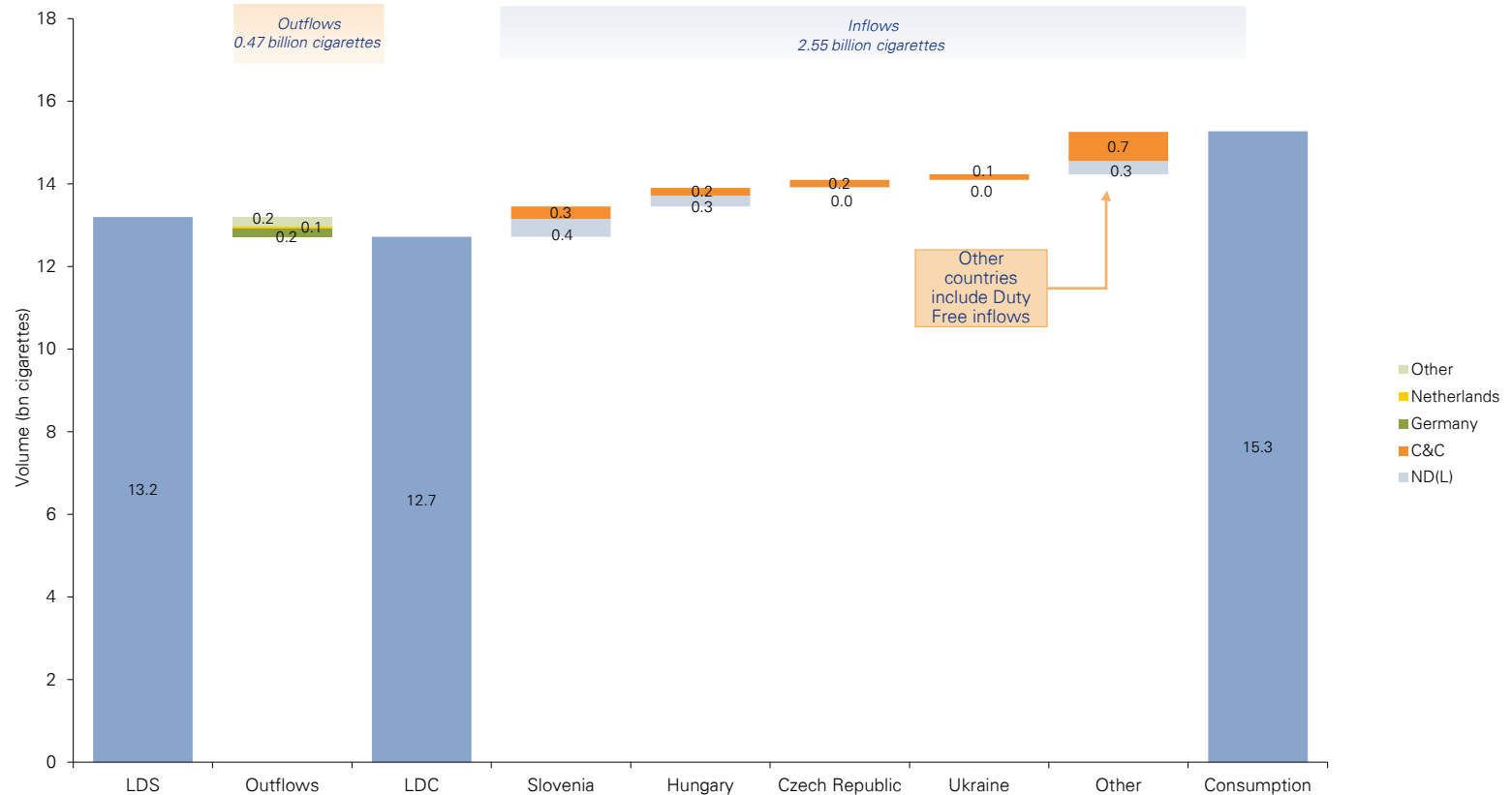
Notes: (a) Based on pack of 20 Marlboro King Size as at July 1<sup>st</sup> 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) KPMG EU Flows Model  
(2) Marlboro retail selling price supplied by PMI based on PMI standard exchange rates as at June 2008 and June 2007

# Outflows and inflows

Austrian consumption is estimated at 15.3 billion cigarettes compared to legal sales of 13.2 billion cigarettes, with a net inflow of 2.1 billion cigarettes

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>



- Notes: (a) LDS – Legal Domestic Sales  
 (b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)
- Sources: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2008  
 (3) In Market Sales supplied by PMI  
 (4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

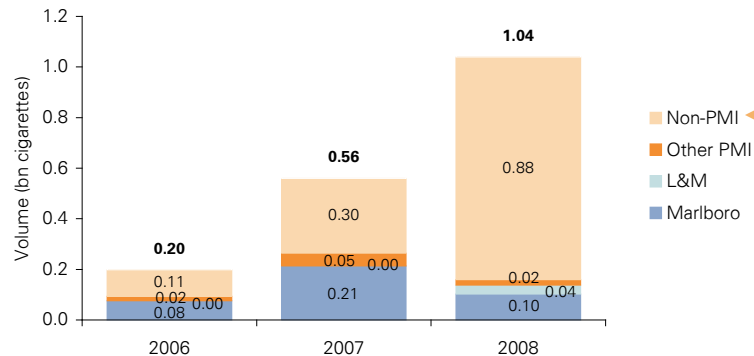
**Non-domestic (legal) inflows accounted for 41% of total non-domestic consumption in 2008 compared to 22% in 2007**

**Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)</sup>**



<b>ND(L) share of consumption:</b>	<b>1%</b>	<b>4%</b>	<b>7%</b>
<b>ND(L) share of non-domestic:</b>	<b>10%</b>	<b>22%</b>	<b>41%</b>

**Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)</sup>**



<b>PMI share of ND(L):</b>	<b>47%</b>	<b>47%</b>	<b>15%</b>
----------------------------	------------	------------	------------

The increase in non-domestic (legal) volumes for non-PMI brands in 2008 is driven by a number of brands including Pall Mall, Peter Stuyvesant and Winston

**ND(L) analysis**

	①	②	③	④		
	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)	
Values 2008	6.6m	69%	19%	2.6	458	
EU rank 2008	15	4	20	12	1	
	x				=	<b>1.04bn</b>

**ND(L) analysis 2007-2008**

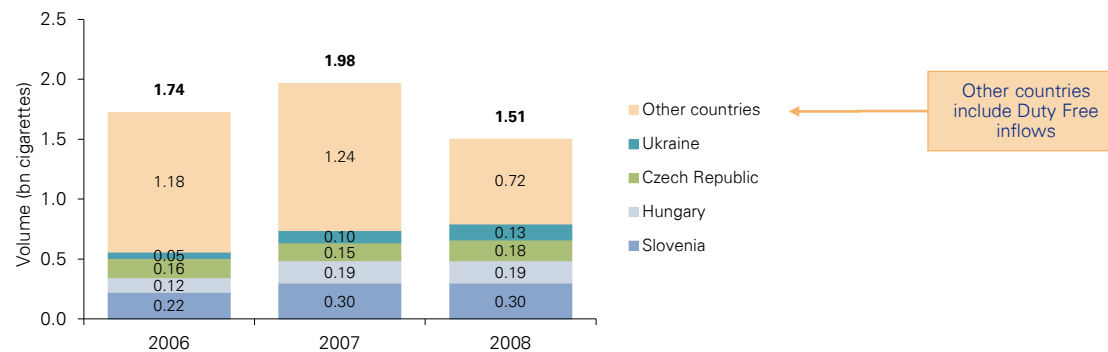
	2007	2008
Propensity to travel and purchase cigarettes	① x ② = 7.7%	13.4%
Average annual cigarettes purchased	③ x ④ = 1109	1175

Sources: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2006, 2008  
 (3) Interviews with PMI Local Management

# Counterfeit and contraband breakdown

Counterfeit & contraband inflows accounted for 59% of total non-domestic consumption in 2008 compared to 78% in 2007

Counterfeit and contraband by origin  
2006-2008<sup>(1)(2)(3)</sup>



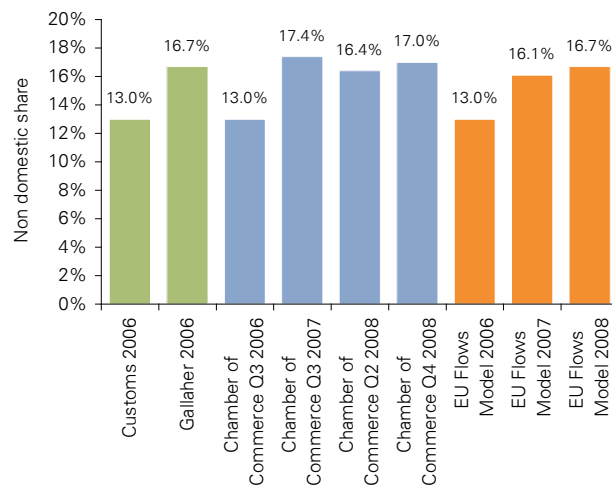
<b>C&amp;C share of consumption:</b>	<b>12%</b>	<b>13%</b>	<b>10%</b>
<b>C&amp;C share of non-domestic:</b>	<b>90%</b>	<b>78%</b>	<b>59%</b>

Sources: (1) KPMG EU Flows Model  
(2) Synovate ND(L) research 2006, 2008  
(3) Interviews with PMI Local Management

# Comparison of external sources for non-domestic estimates

The EU Flows Model estimate for non-domestic consumption in 2008 uses an average of the second and fourth quarter results of the Austrian Chamber of Commerce Empty Pack Survey

Non-domestic market volume estimates<sup>(1)(2)(3)(4)</sup>



Sources: (1) KPMG EU Flows Model  
 (2) Interview with Austrian Customs  
 (3) Austrian Chamber of Commerce Empty Pack Survey, Q3 2006, Q3 2007 and Q2 and Q4 2008. Full PMI results were available along with total non-domestic share  
 (4) Gallaher EPS 2006

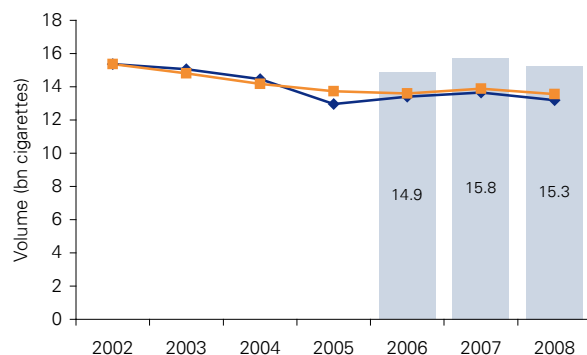
## The 2008 EU Flows Model results for Austria are in line with the Austrian Chamber of Commerce Empty Pack Survey

- The EU Flows model estimates non-domestic incidence to be 16.7% in 2008 and this is comparable to the two estimates provided by the Austrian Chamber of Commerce of 16.4% and 17.0%

# Consumption modelling

Consumption modelling results suggest that non-domestic consumption has increased slightly from 2006 to 2008

## Consumption index modelling 2002-2008<sup>(1)(2)(3)</sup>



CAGR (%)	2002-2006	2006-2008	2002-2008
■ LDS	(3.4)%	(0.8)%	(2.5)%
■ KPMG consumption index	(3.0)%	(0.1)%	(2.1)%
■ KPMG consumption estimate	n/a	1.3%	n/a

Note: (a) GCTS refers to the Global Consumer Tracking Survey to estimate smoking prevalence and average smoking volume by country

Sources: (1) KPMG Consumption Index model  
(2) In Market Sales supplied by PMI  
(3) KPMG EU Flows Model

## The gap between LDS and the KPMG consumption index for Austria remained reasonably stable between 2006 and 2008

- Consumption has declined at a slightly slower rate than legal domestic sales in Austria from 2006 to 2008
- This result suggests that non-domestic consumption in Austria has become more important in 2008
  - this is consistent with the EU Flows Model results showing an increase of net inflows from 1.5 billion cigarettes in 2006 to 2.1 billion cigarettes in 2008

## Consumption index modelling is undertaken to identify discrepancies between the legal domestic sales trend and other consumption estimates and potentially provides an indication of changes in non-domestic inflows and outflows

- The KPMG consumption index is calculated using the incidence of smoking and the average daily consumption and the population of each market (from OEF)
  - these figures are then indexed to the earliest year for which we have data from the both GCTS<sup>(a)</sup> and LDS data available, 2002 for Austria
- Please note that consumption modelling can only identify market trends and cannot be used to quantify total consumption
  - the gap between indexed consumption and LDS in the final year is therefore only a broad indication of the extent to which the market has changed over the analysed period
  - in many markets, some level of inflows or outflows are likely to be present in the first analysed year

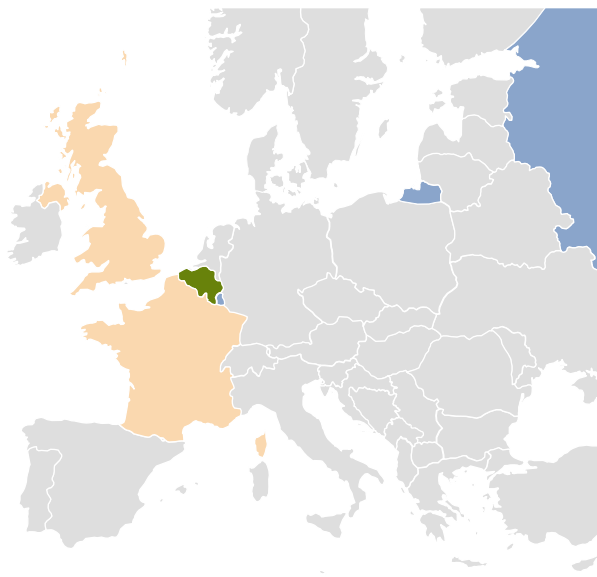


- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

**Total consumption has remained stable in Belgium in 2008 compared to 2007**

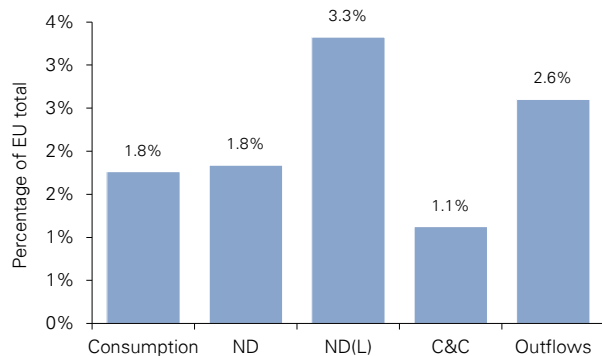
**Non-domestic inflows to Belgium increased in 2008 and offset lower legal domestic sales**

## Key source and destination markets<sup>(1)(a)</sup>

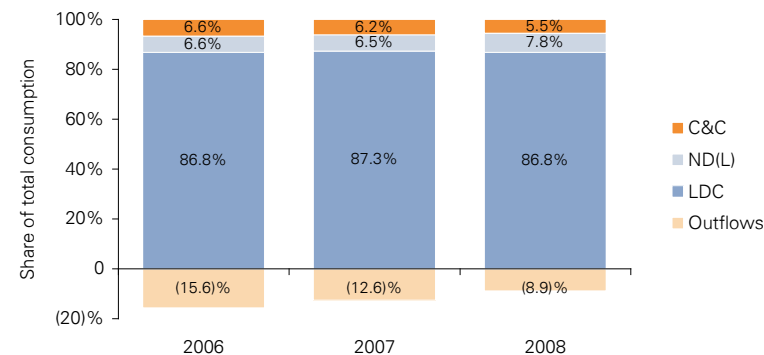


**Key:** ■ Belgium ■ Major source countries ■ Major destination countries  
**Note:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow  
**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
 (2) Synovate ND(L) research 2006, 2007 and 2008

## Proportion of total EU levels<sup>(1)(2)</sup>



## Total Belgian consumption 2006-2008<sup>(1)(2)(b)</sup>



Volume (bn cigarettes):	2006	2007	2008
	13.1	12.5	12.4

## Total non-domestic inflows by origin (ND(L) and C&C) 2006-2008<sup>(1)(2)(c)</sup>



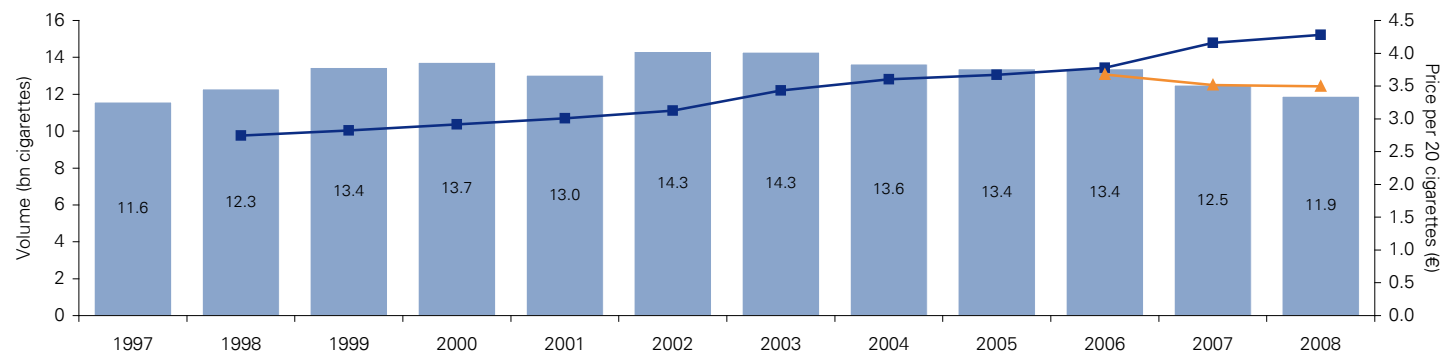
Volume (bn cigarettes):	2006	2007	2008
	1.73	1.58	1.64

**Notes:** (b) 2006 legal domestic share of total consumption differs slightly from what was shown in the 2006 Project Star Results presentation due to a technical change in approach to the calculation of consumption share (2006 LDC was shown as 86% in the 2006 Results presentation compared to 86.8% in this presentation)  
 (c) 2006 Luxembourg share of non-domestic was incorrectly labelled as 22% in the 2006 Project Star Results presentation. The correct 2006 share for Luxembourg is 26% i.e. 0.47 billion cigarettes divided by 1.73 billion cigarettes

# Historic sales and pricing trends

Sales of manufactured cigarettes have declined since 2003

Historic cigarette prices and legal domestic sales  
1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-1999	1999-2006	2006-2008	2007-2008
Legal domestic sales	7.8%	(0.1)%	(5.8)%	(4.9)%
Average pack price	n/a	4.5%	6.5%	3.0%
Total consumption	n/a	n/a	(2.5)%	(0.6)%

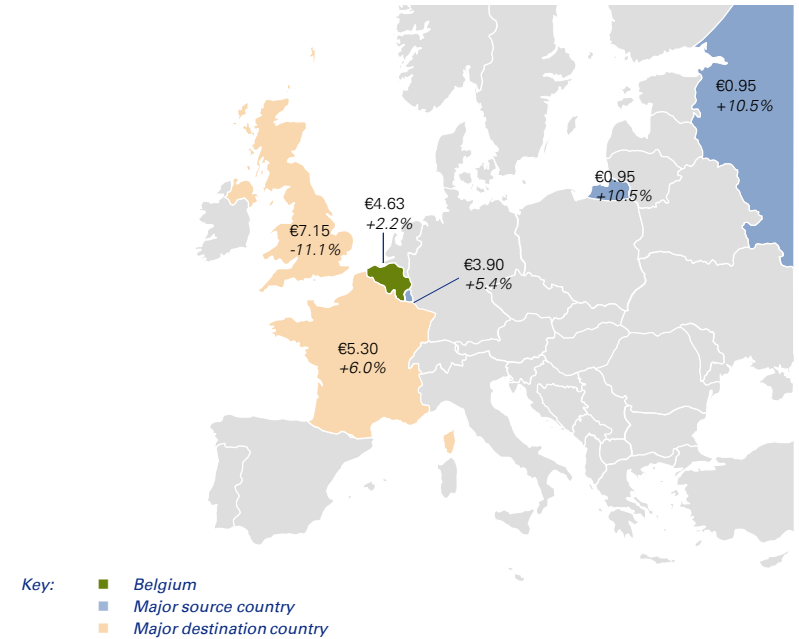
Sources: (1) In Market Sales supplied by PM Local Management  
(2) Weighted average pack price supplied by PMI

## Legal domestic sales declined by 4.9% in 2008 following an increase in average pack price of 3.0% in 2008 compared to 2007

- Prices for most brands rose in the first quarter of 2008 driven by tax increases
- Belgium has had anti-smoking legislation in place since January 2007
  - smoking is only permitted in restaurants in separate rooms that are completely closed off from the rest of the building and where no food is served
  - bars and cafes are exempt from the ban, although they must have adequate ventilation as well as a no-smoking zone

Price differentials between Belgium and France have widened

**Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>**



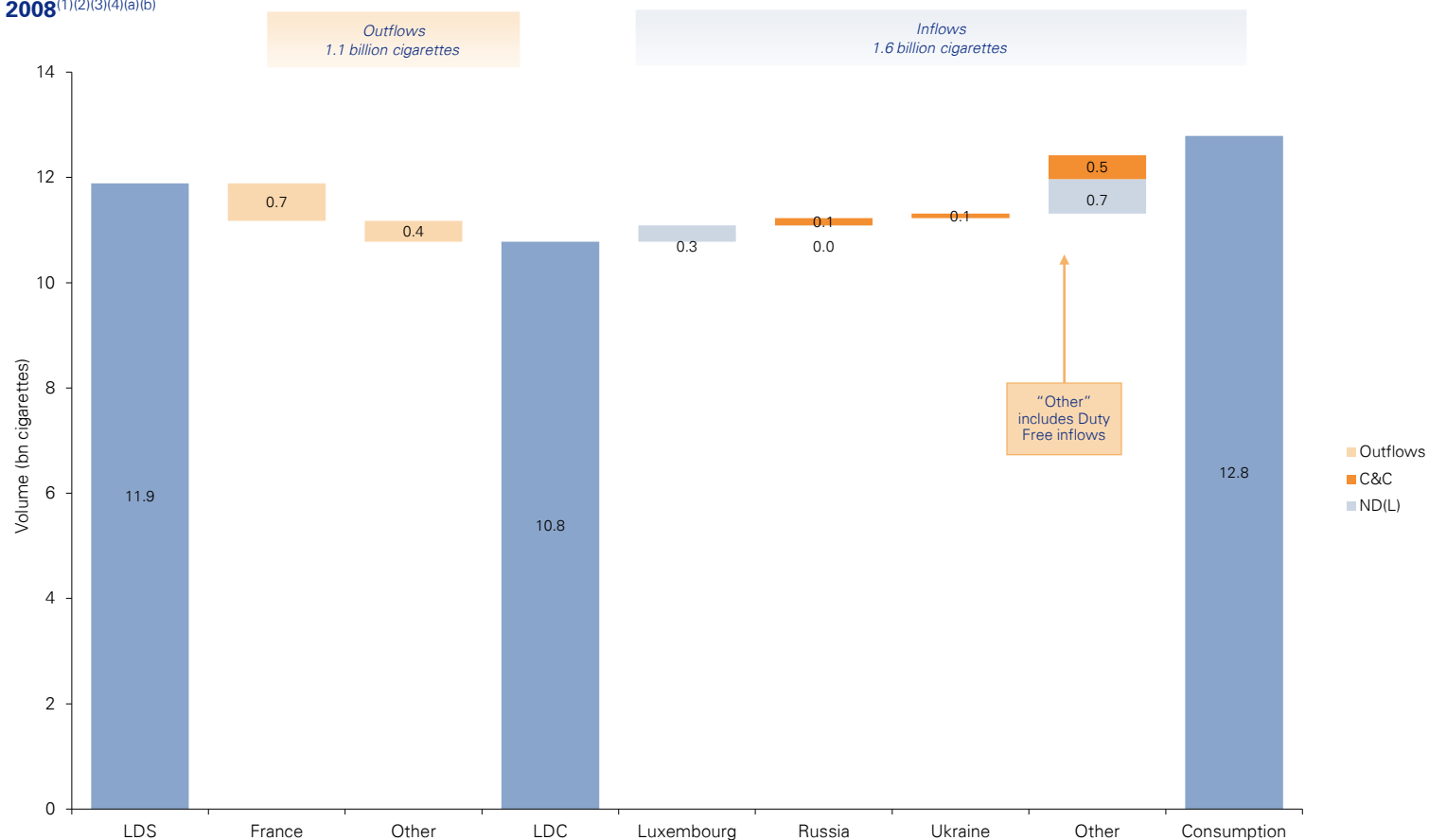
Notes: (a) Based on pack of 20 Marlboro King Size as at July 1<sup>st</sup> 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) KPMG EU Flows Model  
 (2) Marlboro retail selling price supplied by PMI based on PMI standard exchange rates as at June 2008 and June 2007

# Outflows and inflows

Belgian consumption is estimated at 12.4 billion cigarettes compared to legal domestic sales of 11.9 billion cigarettes, with a net inflow of 0.5 billion cigarettes

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>

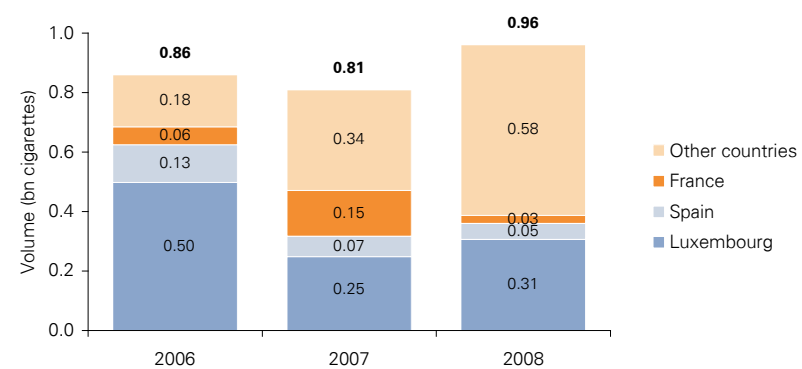


Notes: (a) LDS – Legal Domestic Sales  
 (b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)  
 Sources: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2008  
 (3) Tax stamp data supplied by PMI Local Management  
 (4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

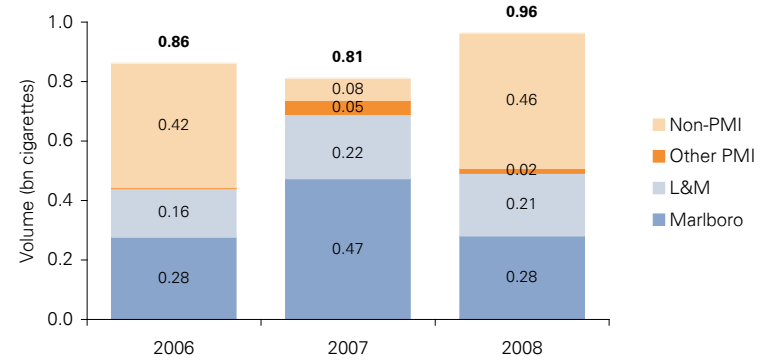
**Non-domestic (legal) inflows represent 8% of consumption in 2008 compared to 6% in 2007**

**Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)</sup>**



<b>ND(L) share of consumption:</b>	<b>7%</b>	<b>6%</b>	<b>8%</b>
<b>ND(L) share of non-domestic:</b>	<b>50%</b>	<b>51%</b>	<b>59%</b>

**Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)</sup>**



<b>PMI share of ND(L):</b>	<b>51%</b>	<b>91%</b>	<b>53%</b>
----------------------------	------------	------------	------------

**ND(L) analysis**

	①	②	③	④	
	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)
Values 2008	8.2	39%	46%	3.9	166
EU rank 2008	12	18	3	6	12
	x				<b>Total ND(L) (cigarettes)</b>
					<b>0.96bn</b>

**ND(L) analysis 2007-2008**

	2007	2008
Propensity to travel and purchase cigarettes	① x ②	11.7%
Average annual cigarettes purchased	③ x ④	883
		652

As in prior years, this includes Duty Free and small volumes of legal inflows from a number of different countries

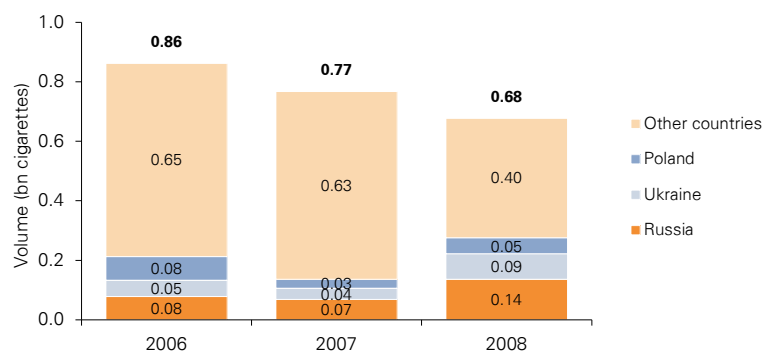
Gauloises, Kent, Belga and Bastos represent approximately 50% of Non-PMI brands in 2008

Sources: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2006, 2007 and 2008  
 (3) Interviews with PMI local management

# Counterfeit and contraband breakdown

Russian, Ukrainian and Polish variant products accounted for the majority of counterfeit and contraband consumption in Belgium in 2008

Counterfeit and contraband by origin  
2008-2008<sup>(1)(2)(3)</sup>



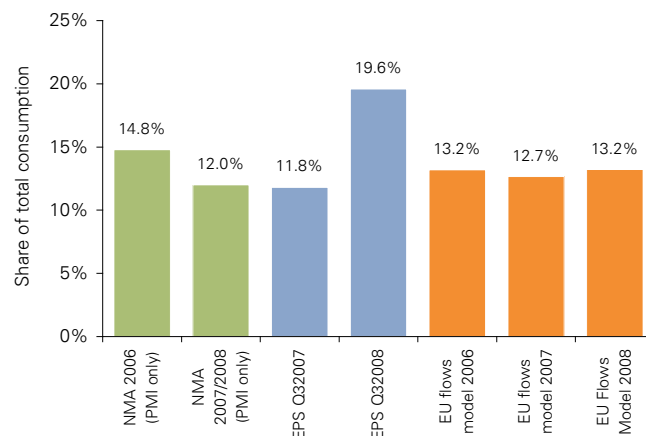
<b>C&amp;C share of consumption:</b>	<b>7%</b>	<b>6%</b>	<b>5%</b>
<b>C&amp;C share of non-domestic:</b>	<b>50%</b>	<b>49%</b>	<b>41%</b>

Sources: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2006, 2007 and 2008  
 (3) Interviews with PMI local management

# Comparison of external sources for non-domestic estimates

The 2008 EU Flows Model shows a relatively stable non-domestic incidence level in Belgium

Non-domestic market volume estimates<sup>(1)(2)(3)(a)</sup>



Note: (a) NMA survey results are for PMI brands only  
 (b) 2008 legal domestic sales volumes for Belga not available and therefore 2007 volumes have been used for the purpose of this adjustment

Sources: (1) KPMG EU Flows Model  
 (2) NMA market survey, Q2 2006 and Q4 2007  
 (3) PMI EPS Q3 2007, Q3 2008

The EU Flows Model estimate for non-domestic share of total consumption in 2008 is lower than PMI EPS results due to an adjustment to inflows from Luxembourg and Spain

- The 2008 EPS results implied an inflow of Belga of 0.87 billion cigarettes from Luxembourg and 0.27 billion cigarettes from Spain
  - these volumes exceed the total legal sales of the Belga brand in both of the countries and consequently Belga inflows have been adjusted downwards to the total legal sales volumes of Belga in Luxembourg and Spain<sup>(b)</sup>

NMA survey results show a decline in non-domestic consumption in contrast to a slight increase indicated by the EU Flows Model results

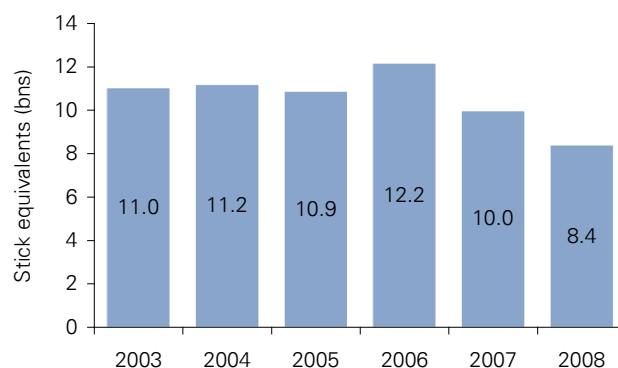
- Differences in non-domestic incidence may reflect seasonality as the NMA survey was undertaken between October 2007 and February 2008 whilst the PMI EPS was undertaken in September 2008



# OTP market size and growth

**Sales of fine cut tobacco declined by 15.7% in 2008 to 8.4 billion stick equivalents**

**Fine cut tobacco sales in billion stick equivalents, 2003-2008<sup>(1)(a)(b)</sup>**



Year	2003	2004	2005	2006	2007	2008
<b>Manufactured cigarette sales (bn cigarettes)</b>	14.3	13.6	13.4	13.4	12.5	11.9

CAGR (%)	2003-2005	2005-2007	2007-2008
■ Fine cut tobacco	(0.7)%	(4.3)%	(15.7)%
Manufactured cigarettes	(3.2)%	(3.4)%	(4.9)%

Notes: (a) Smoking tobacco volumes have been calculated at one stick per 0.75 grams, while cigars and cigarillos have been calculated on a stick for stick basis

(b) Smokeless tobacco has been excluded from this analysis

Source: (1) OTP volumes supplied by PMI

## Sales of fine cut tobacco have declined at a faster rate than sales of manufactured cigarettes

- Sales of fine cut tobacco declined by 15.7% between 2007 to 2008
  - sales of manufactured cigarettes declined by 4.9% over the same time period

## Fine cut tobacco sales increased in 2006 driven by increases in inventory levels before tax increases took effect in the first quarter of 2007

- High inventory levels in 2006 were also a contributing factor to the relatively large decline in 2007 sales

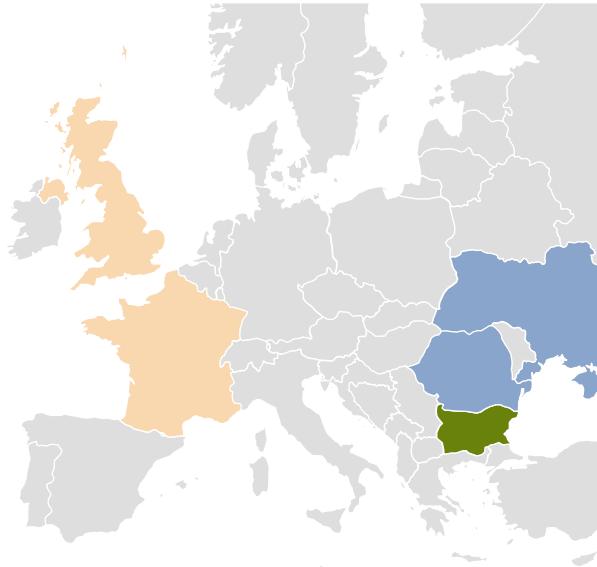
## Fine cut tobacco is the largest category of OTP and accounted for 95% of OTP sales (excluding smokeless tobacco) in Belgium in 2007

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

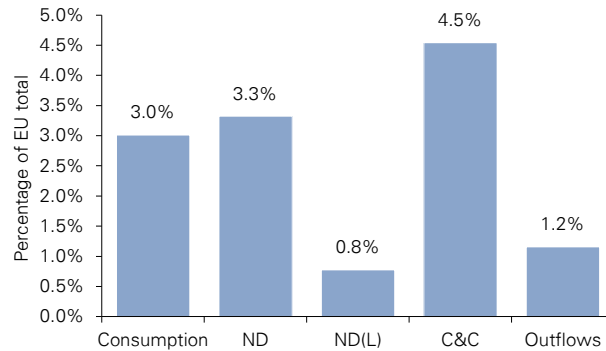
**Total consumption in Bulgaria has increased in 2008 to 21.3 billion cigarettes**

**Non-domestic inflows into Bulgaria increased to 3.0 billion cigarettes in 2008 with Duty Free representing the main source of inflows**

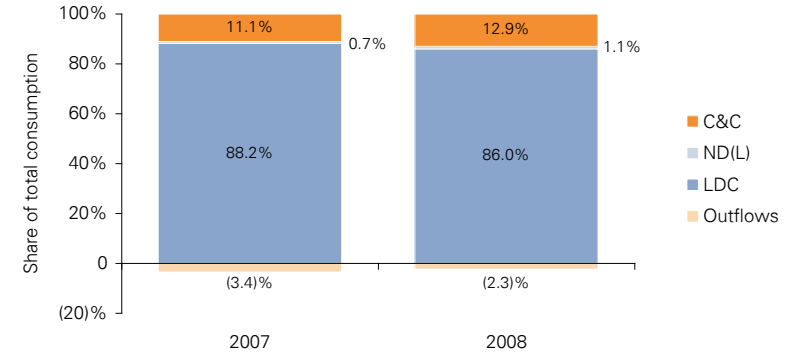
## Key source and destination markets<sup>(1)</sup>



**Key:** ■ Bulgaria ■ Top two source countries ■ Top two destination countries  
**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
 (2) Synovate ND(L) research 2007, 2008

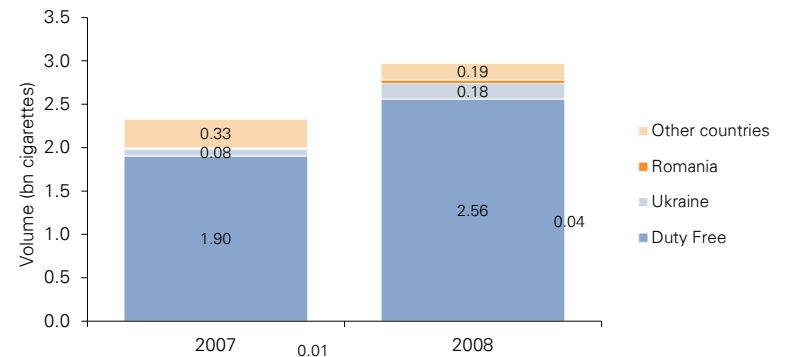


## Total Bulgarian consumption 2007-2008<sup>(1)(2)</sup>



**Volume (bn cigarettes): 19.7 21.3**

## Total non-domestic inflows (ND(L) and C&C) by origin 2007-2008<sup>(1)(2)</sup>

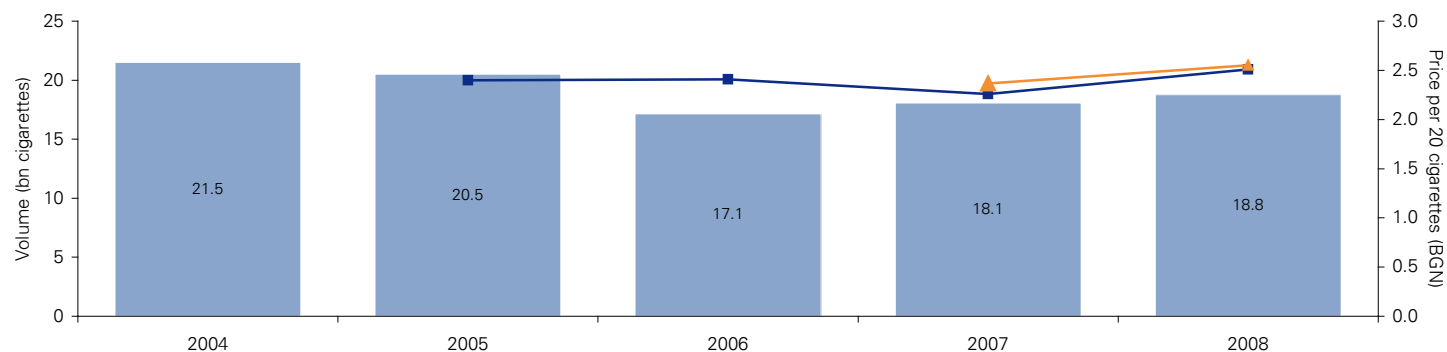


**Volume (bn cigarettes): 2.3 3.0**

# Historic sales and pricing trends

Legal domestic sales in Bulgaria increased by 4.0% in 2008 but remain below the 2005 levels

Historic cigarette prices and legal domestic sales 2004-2008<sup>(1)(2)</sup>



CAGR (%)	2004-2007	2007-2008
Legal domestic sales	(5.7)%	4.0%
Average pack price	(3.0)% <sup>(a)</sup>	11.1%
Consumption	n/a	7.8%

Note: (a) CAGR is from 2005 to 2007 as average pack price data for 2004 was not available

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PMI

(3) Discussion with Bulgarian National Customs Agency

## Legal domestic sales increased by 4.0% in 2008 compared to 2007 based on In Market Sales data

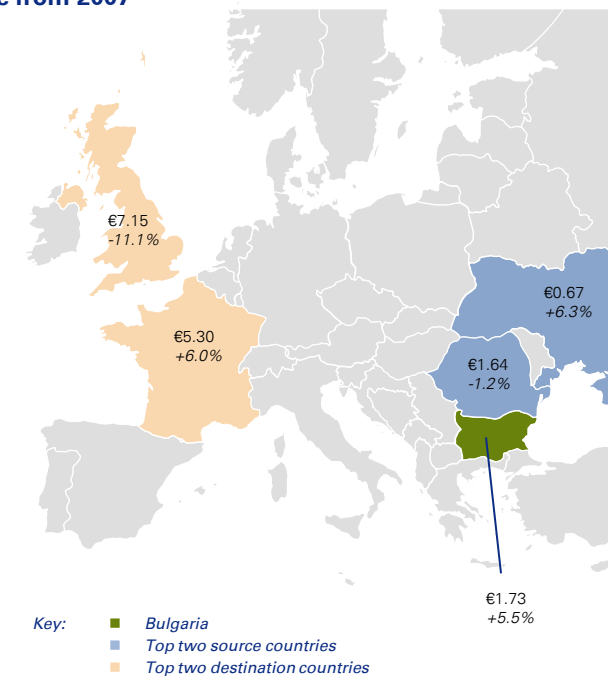
- Tax driven price increases were implemented in January 2008, however, Philip Morris Bulgaria observed that the price increases did not have an immediate impact on retail prices due to inventories

## Government data for sales of cigarette tax stamps in 2008 suggests sales of 21.9 billion cigarettes

- For reasons of consistency across Member States, Project Star uses In Market Sales data in order to measure legal domestic sales as it reflects actual retail sales to consumers during a calendar year. Alternative sources of data may be measured at a different points in the supply chain (such as ex-warehouse or factory) and therefore be subject to inventory fluctuations which would otherwise distort year on year trends and comparability between countries
- Monthly analysis of tax stamp data indicates substantial inventory levels in January 2008 and in the last six months of the year
  - sales of tax stamps were significantly lower between February and May 2008 as a result of high inventory levels towards the end of 2007 and beginning of 2008 in advance of the price increases implemented in January 2008
  - sales of tax stamps increased during the last six months of 2008 due to inventories held in advance of the January 2009 price increase
- Discussion with the Bulgarian National Customs Agency indicates that there is also a likelihood of outflows from Bulgaria to Russia and Turkey. Russia and Turkey are not covered within the scope of Project Star and therefore it is not possible to estimate the level and impact of these outflows on the consumption estimate for Bulgaria

The price differential has narrowed with the UK and Romania, but widened with France and Ukraine

Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



Notes: (a) Based on pack of 20 Marlboro King Size as at July 1<sup>st</sup> 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

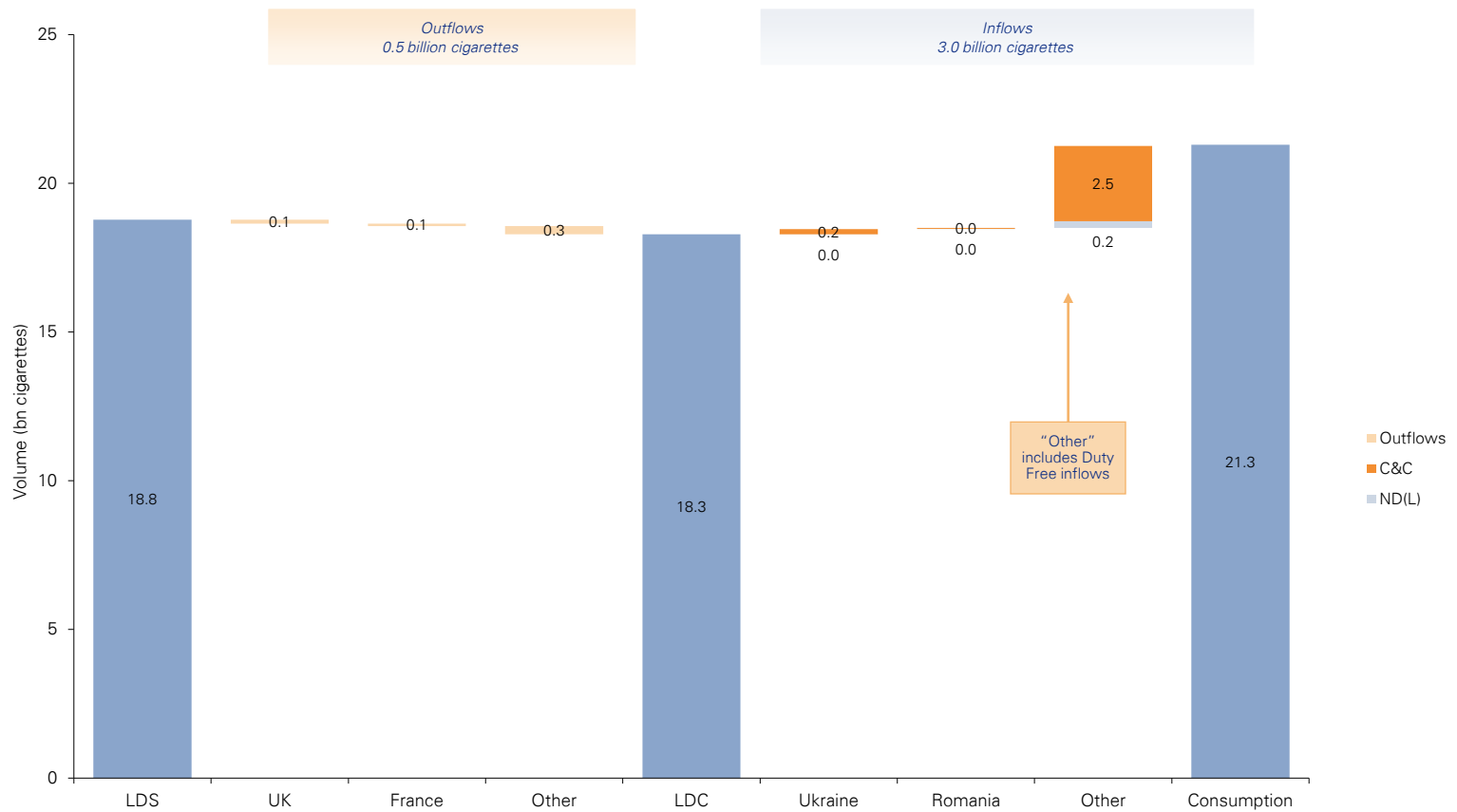
Sources: (1) KPMG EU Flows Model

(2) Marlboro retail selling price supplied by PMI based on PMI standard exchange rates as at June 2008 and June 2007

# Outflows and inflows

**Bulgarian consumption is estimated at 21.3 billion cigarettes compared to legal domestic sales of 18.8 billion cigarettes, with a net inflow of 2.5 billion cigarettes**

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)(c)</sup>



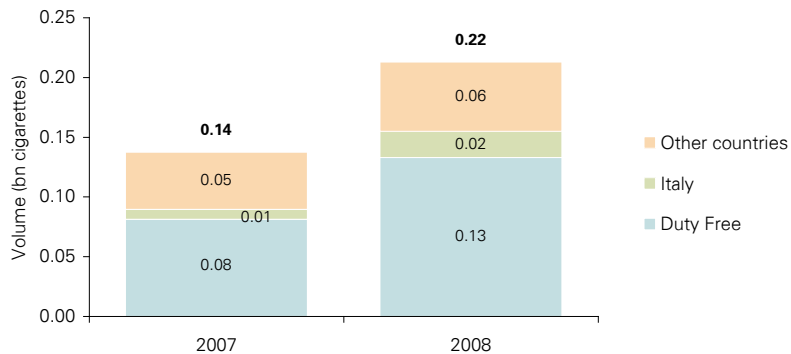
**Notes:** (a) LDS – Legal Domestic Sales  
 (b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)  
 (c) For the purposes of Project Star, Duty Free includes all packs that were classified as Duty Free, Duty Paid or had labels that could not be identified

**Sources:** (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2008  
 (3) In Market Sales supplied by PMI  
 (4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

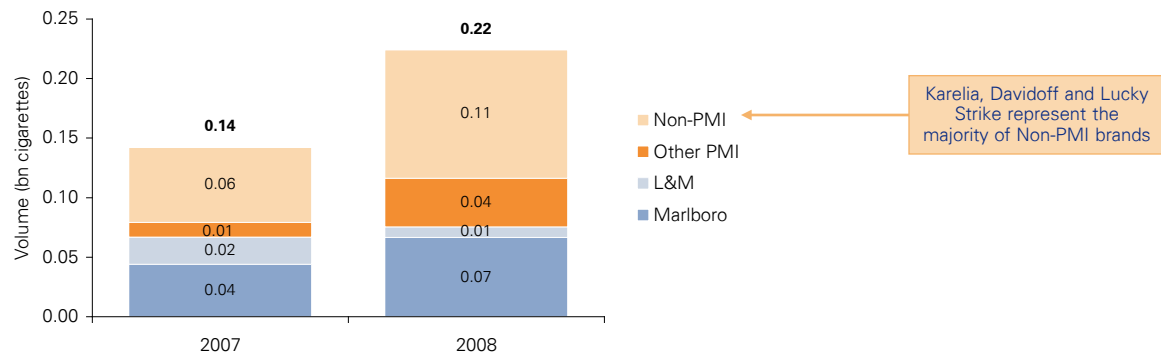
**Legal inflows accounted for 8% of non-domestic consumption in 2008 compared to 6% in 2007**

## Non-domestic (legal) by origin 2007-2008<sup>(1)(2)(3)</sup>



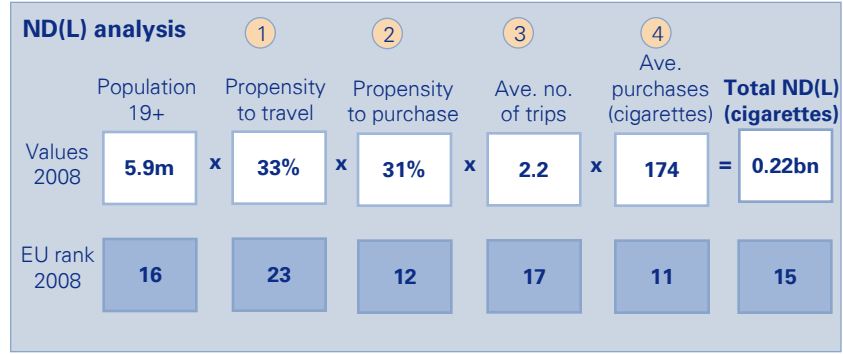
<b>ND(L) share of consumption:</b>	<b>1%</b>	<b>1%</b>
<b>ND(L) share of non-domestic:</b>	<b>6%</b>	<b>8%</b>

## Non-domestic (legal) by brand 2007-2008<sup>(1)(2)(3)</sup>



<b>PMI share of ND(L):</b>	<b>56%</b>	<b>52%</b>
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Source: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2007, 2008  
 (3) Interviews with PMI Local Management



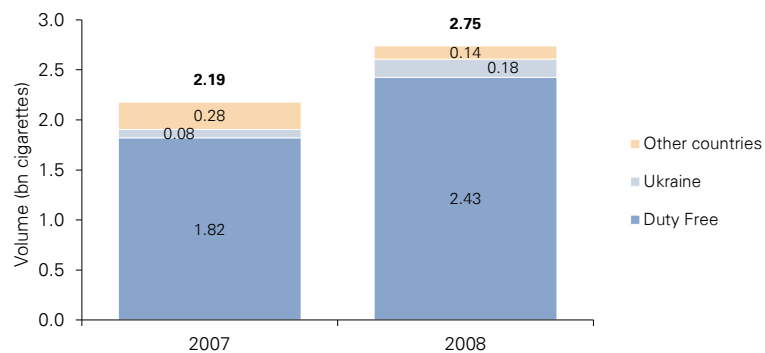
### ND(L) analysis 2007-2008

	2007	2008
Propensity to travel and purchase cigarettes	4.4%	10.1%
Average annual cigarettes purchased	545	375

# Counterfeit and contraband breakdown

**Duty Free variant and Ukrainian origin products accounted for the majority of counterfeit and contraband consumption in 2008**

**Counterfeit and contraband by origin 2007-2008<sup>(1)(2)(3)</sup>**



<b>C&amp;C share of consumption:</b>	<b>11%</b>	<b>13%</b>
<b>C&amp;C share of non-domestic:</b>	<b>94%</b>	<b>92%</b>

## Duty Free flows continue to account for the majority of counterfeit and contraband flows despite the closure of Duty Free points of sale in Bulgarian border shops in July 2008

- Project Star estimates are based on the Empty Pack Survey, which was conducted in May 2008 i.e. before the closure
- However, Duty Free sales analysis in neighbouring Non-EU markets and discussion with local Philip Morris management indicates that the Project Star estimate for Duty Free inflows into Bulgaria is representative for 2008
  - analysis of Duty Free sales on Turkey/Bulgaria and Serbia/Bulgaria borders shows an increase in sales volumes on the Turkish and Serbian sides of the border. This suggests that Bulgarian Duty Free product was replaced by Turkish and Serbian Duty Free products following the closure in July 2008
  - Philip Morris Bulgaria also observed that inventory held before the closure was available for sale through alternative retail outlets after July 2008
- Seizure data from the Bulgarian National Customs Agency shows that of 10.6 million cigarettes seized in 2008, 85% were of domestic or Duty Free variant of either Turkish, Serbian or FYROM origin<sup>(4)</sup>

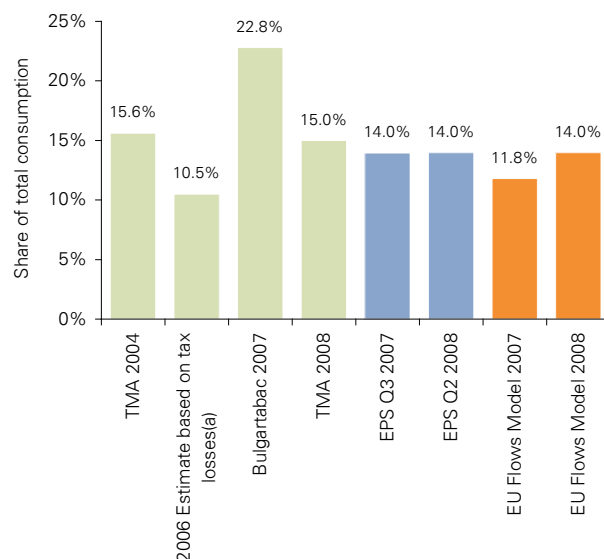
Source: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2007, 2008  
 (3) Interviews with PMI Local Management  
 (4) Discussion with Bulgarian National Customs Agency



# Comparison of external sources for non-domestic estimates

The EU Flows Model estimate for non-domestic incidence is comparable to the Bulgarian TMA estimate in 2008

Non-domestic market volume estimates<sup>(1)(2)(3)(4)(5)(a)</sup>



Note: (a) TMA estimate is for smuggled cigarettes share of total consumption  
 (b) An additional BGN 50 million in Government revenue is estimated to be lost through incorrect invoicing

Sources: (1) KPMG EU Flows Model  
 (2) World Cigarette Production and Consumption Report – 2005 Edition, Tobacco Merchant Association, 3rd January 2006  
 (3) "BGN 150 million lost from illegal cigarette trade, PARI Daily, 6<sup>th</sup> June 2007  
 (4) PMI EPS Q3 2007 and Q2 2008  
 (5) "Association of Producers and Traders of Tobacco estimates as quoted in "Share of Contraband Cigarettes on Bulgarian Market Is 15%", Bulgaria News Agency, Nov 2008

## KPMG's estimate for non-domestic incidence is comparable to the Bulgarian TMA estimate

- The TMA estimate contraband cigarettes account for 15% of the Bulgarian market in 2008<sup>(5)</sup>
  - this is based on a survey carried out amongst approximately 5,000 adults in October 2008

## Bulgartabac's study in 2007 defined "illegal cigarettes" as cigarette packs without a tax sticker, those with a foreign tax sticker and those with a Duty Free label

- Bulgartabac's estimate is based on an Empty Pack Count carried out by the Bulgarian Academy of Science (BAS) covering the 8 largest cities in Bulgaria
  - the study took place in July and August and analysed a total of 10,000 discarded packs
  - of the 22.8% of packs classified as illegal, a total of 10.1% of packs collected appeared to be of Bulgarian origin but did not have a tax sticker and were therefore assumed to be illicit in nature
- A total of 12.7% of non-domestic packs were identified by the study, which is directly comparable with the 2007 and 2008 EU Flows Model results of 11.8% and 14.0% respectively
  - of packs identified by Bulgartabac, 2.8% had a foreign tax sticker, while 9.5% were from Duty Free. A further 0.3% did not have any indication of origin and were assumed to be "illegal"

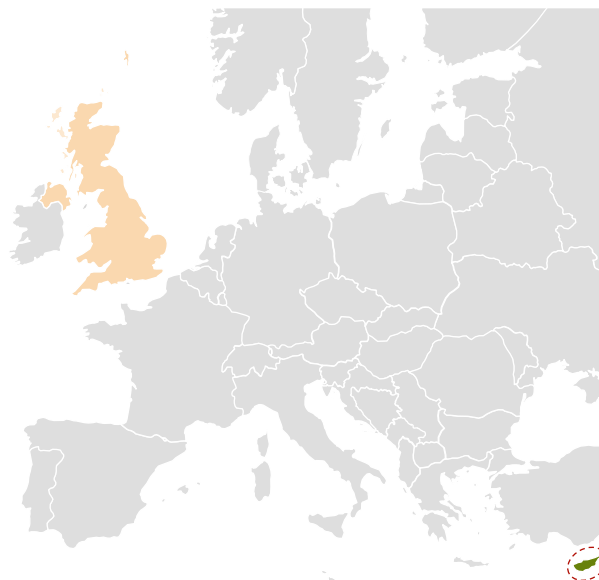
- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

**Total consumption in Cyprus increased by 3.2% in 2008 driven by lower non-domestic inflows**

**Legal domestic sales increased by 3.0% in 2008**

**Outflows from Cyprus remained stable in 2008, and the UK has remained the main destination country**

**Key destination market<sup>(1)(a)(b)</sup>**

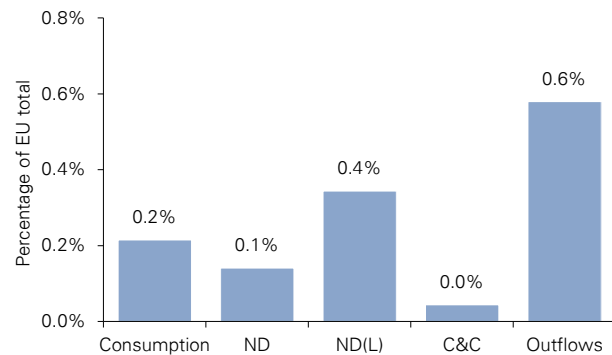


**Key:** ■ Cyprus ■ Major destination country

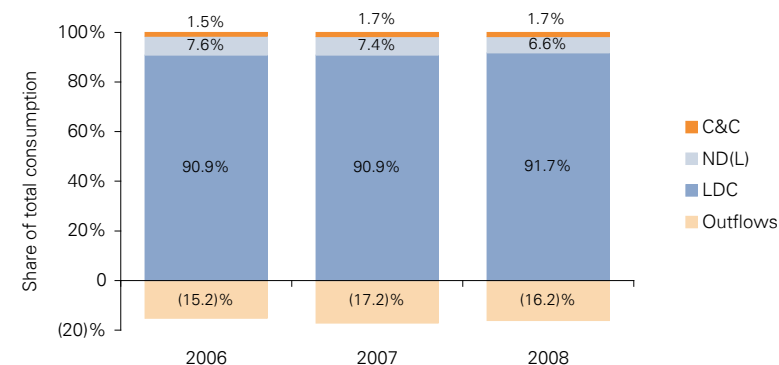
**Notes:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow  
 (b) ND(L) research was not updated in 2007 and 2008 but corroborating research has not indicated any significant changes to 2006 results

**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
 (2) AC Nielsen ND(L) research 2006

**Proportion of total EU levels<sup>(1)(2)</sup>**

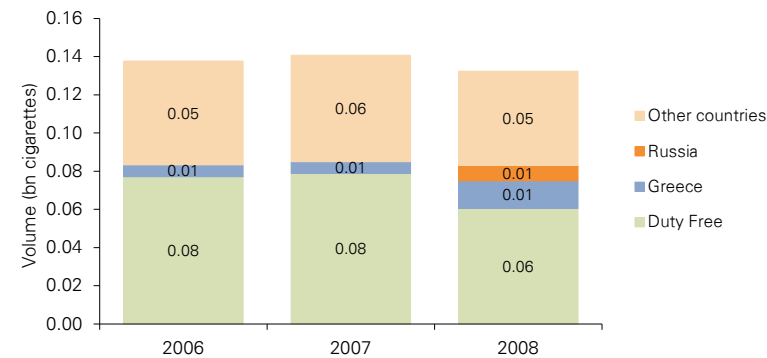


**Total Cypriot consumption by origin 2006-2008<sup>(1)(2)(b)</sup>**



Volume (bn cigarettes):	2006	2007	2008
	1.51	1.55	1.59

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2008<sup>(1)(2)(b)</sup>**

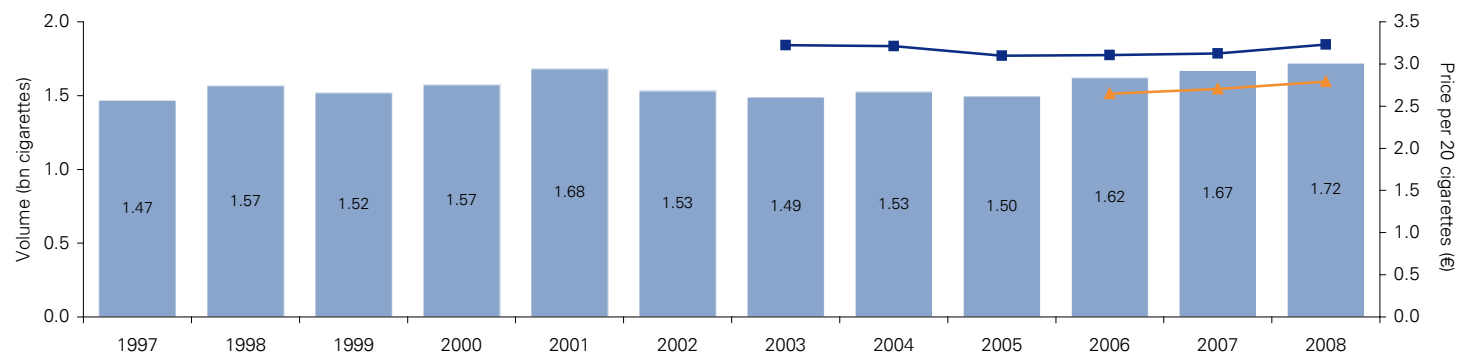


Volume (bn cigarettes):	2006	2007	2008
	0.14	0.14	0.13

# Historic sales and pricing trends

Legal domestic sales have been increasing since 2005 to reach 1.72 billion cigarettes in 2008

## Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)(a)</sup>



CAGR (%)	1997-2001	2001-2005	2005-2008	2007-2008
Legal domestic sales	3.5%	(2.9)%	4.7%	3.0%
Average pack price	n/a	n/a	1.4%	3.4%
Consumption	n/a	n/a	2.7% <sup>(b)</sup>	3.2%

Note: (a) The decrease between 2001 and 2002 was due to a methodology change rather than a decrease in sales. The new methodology now covers approximately 100% of the market and measures actual shipment data for PMI brands and provides an estimate on competitor volumes

(b) CAGR trend of consumption calculated from 2006 to 2008

Sources: (1) In Market Sales supplied by PMI

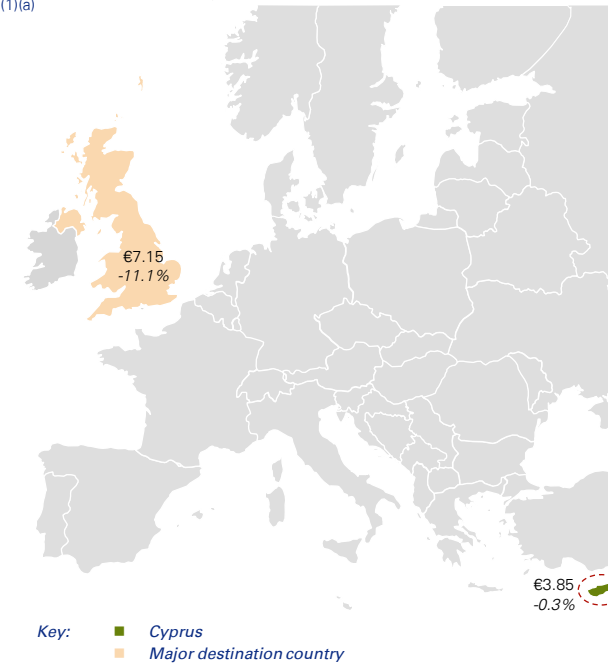
(2) Weighted average pack price supplied by PMI

## Legal domestic sales and average price per pack both increased in 2008

- Legal domestic sales increased by 3.0% in 2008
  - the weighted average pack price increased by 3.4% compared to 2007
- Cypriot anti-smoking laws currently prevent smoking in all public places, including public transport
  - smoking is also banned in private cars carrying passengers under 16 years of age

The Cypriot market has experienced up-trading in 2008

### Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



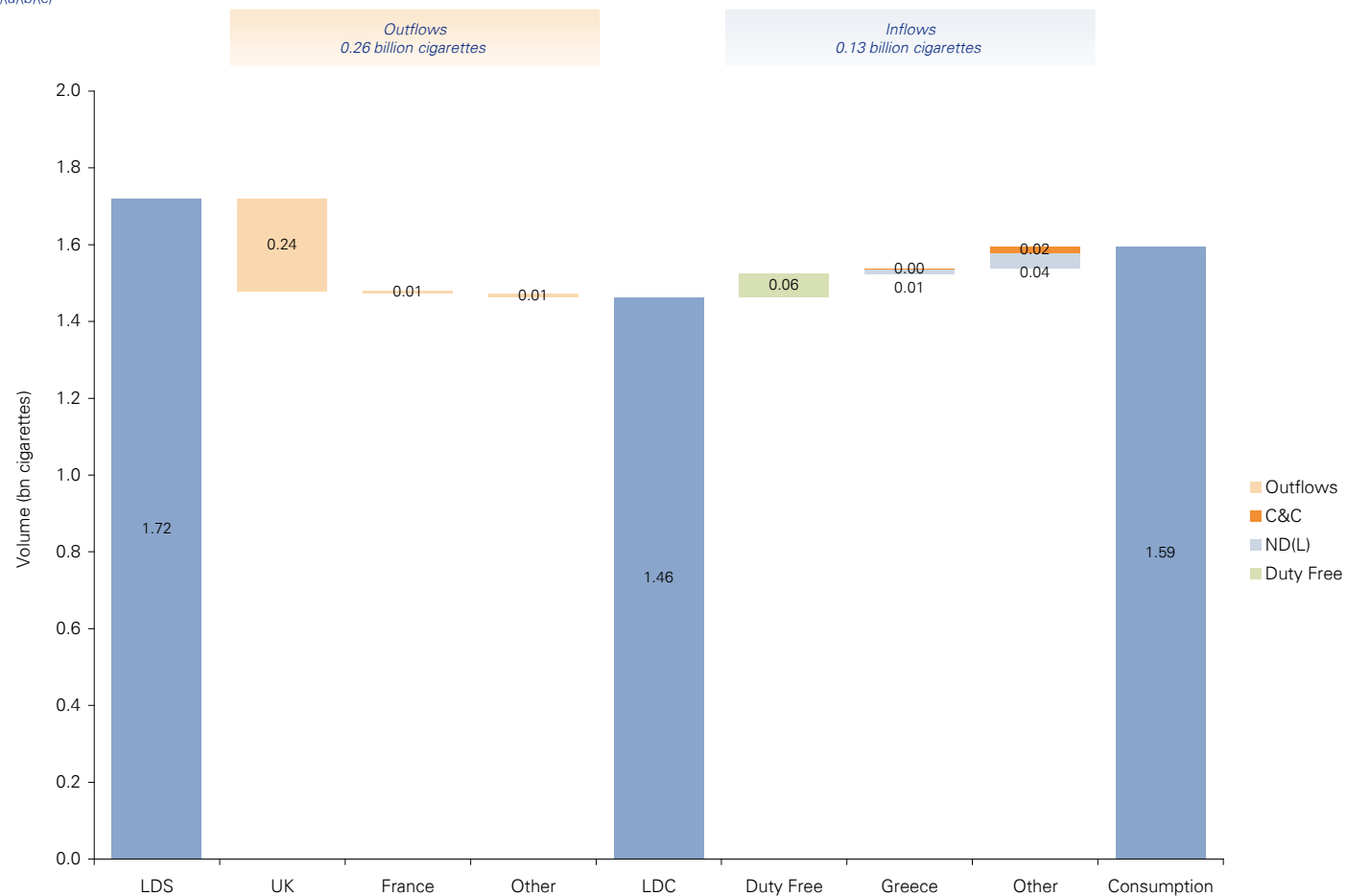
Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) Marlboro retail selling price supplied by PMI

# Outflows and inflows

Cypriot consumption is estimated at 1.59 billion cigarettes versus legal sales of 1.72 billion cigarettes, with a net outflow of 0.13 billion cigarettes

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)(c)</sup>



Notes: (a) LDS – Legal Domestic Sales

(b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)

(c) For the purposes of Project Star, Duty Free includes all packs that were classified as Duty Free, Duty Paid or had labels that could not be identified

Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research 2006

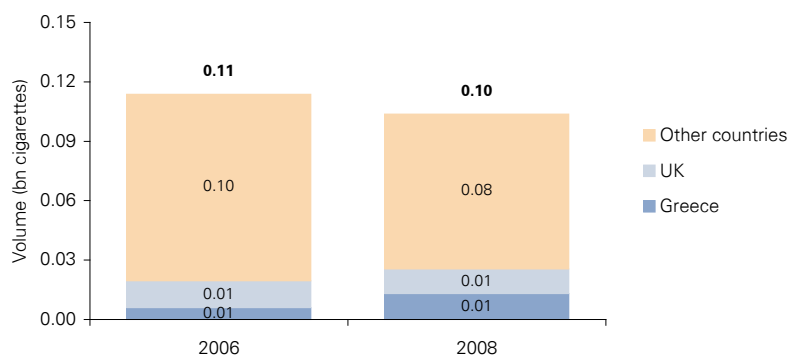
(3) In Market Sales supplied by PMI

(4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

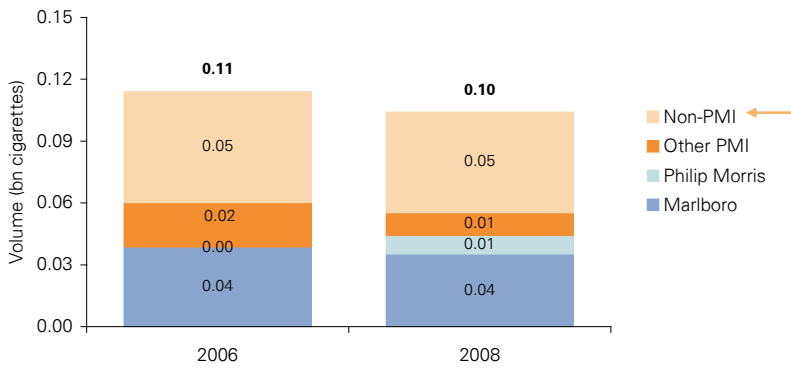
**Non-domestic legal volumes declined to 0.10 billion cigarettes in 2008**

**Non-domestic (legal) by origin**  
2006, 2008<sup>(1)(2)(3)(a)</sup>



<b>ND(L) share of consumption:</b>	<b>8%</b>	<b>7%</b>
<b>ND(L) share of non-domestic:</b>	<b>83%</b>	<b>79%</b>

**Non-domestic (legal) by brand**  
2006, 2008<sup>(1)(2)(3)(a)</sup>



<b>PMI share of ND(L):</b>	<b>53%</b>	<b>53%</b>
----------------------------	------------	------------

**ND(L) analysis**

	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)	<b>Total ND(L) (cigarettes)</b>
Values 2008	0.6m	64%	41%	1.8	382	= 0.10bn
EU rank 2008	25	8	6	22	3	22

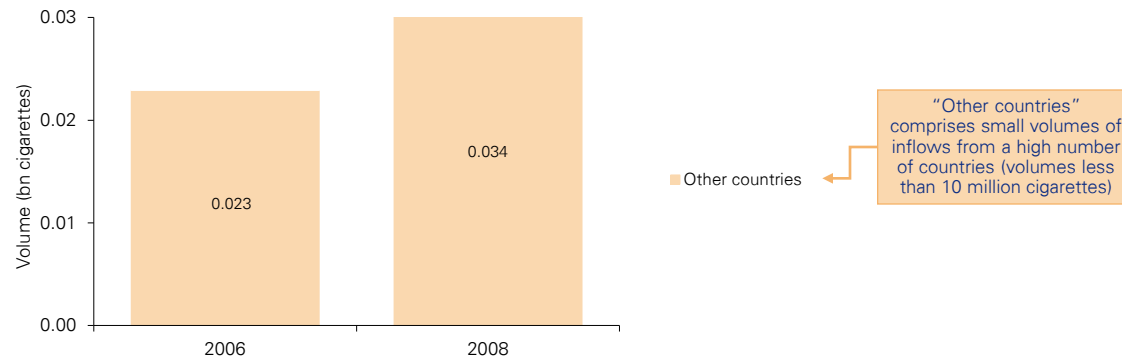
"Other countries" comprises small flows from a number of source countries

Non-PMI includes a number brands such as Rothmans, Silk Cut and Davidoff

*Note:* (a) Non-domestic (legal) research has not been updated in 2008. ND(L) inflows to Cyprus in 2008 are estimated to have changed in proportion to changes in total non-domestic inflows  
*Sources:* (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2006  
 (3) Interviews with PMI Local Management

## Counterfeit and contraband breakdown

Counterfeit and contraband by origin  
2006, 2008<sup>(1)(2)(3)</sup>



<b>C&amp;C share of consumption:</b>	<b>2%</b>	<b>2%</b>
<b>C&amp;C share of non-domestic:</b>	<b>17%</b>	<b>21%</b>

Sources: (1) KPMG EU Flows Model  
(2) AC Nielsen ND(L) research 2006  
(3) Interviews with PMI Local Management



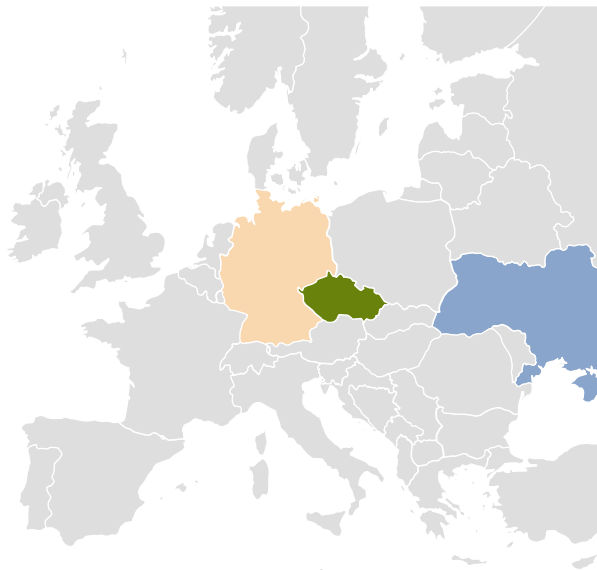
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- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

**Total consumption in the Czech Republic increased by 0.8% in 2008**

**The increase in non-domestic inflows in 2008 was partially offset by a decline in legal domestic sales**

**Outflows from the Czech Republic remained stable in 2008 at 4.1 billion cigarettes**

## Key source and destination markets<sup>(1)(a)(b)</sup>

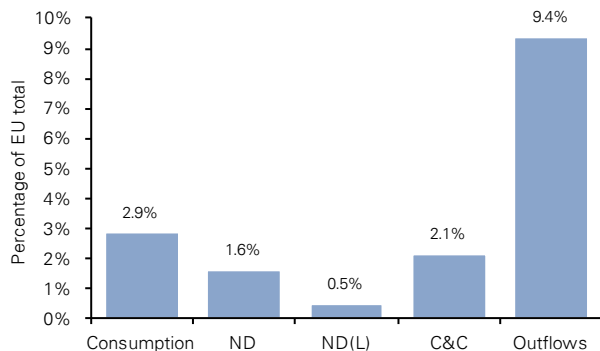


**Key:** ■ Czech Republic ■ Major source country ■ Major destination country

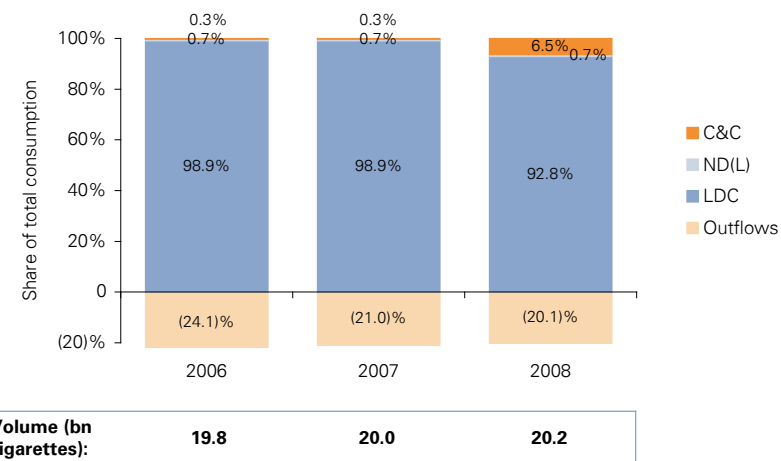
**Notes:** (a) Map shows flows over 1% of consumption

**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
(2) AC Nielsen ND(L) research 2006, 2008

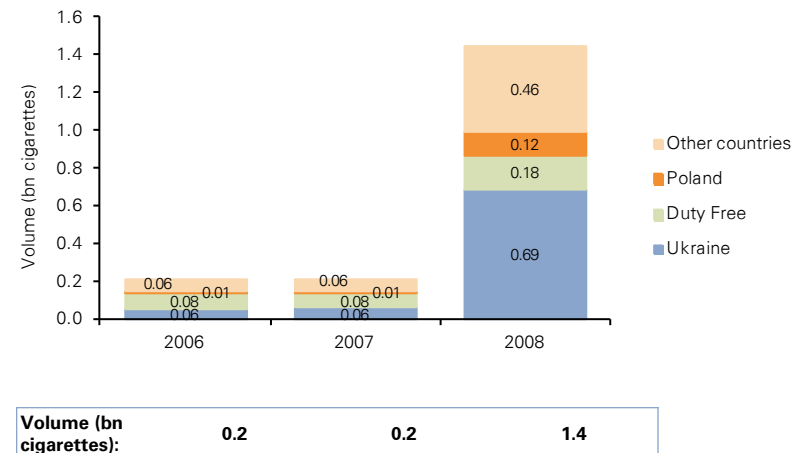
## Proportion of total EU levels<sup>(1)(2)</sup>



## Total Czech consumption 2006-2008<sup>(1)(2)(b)</sup>



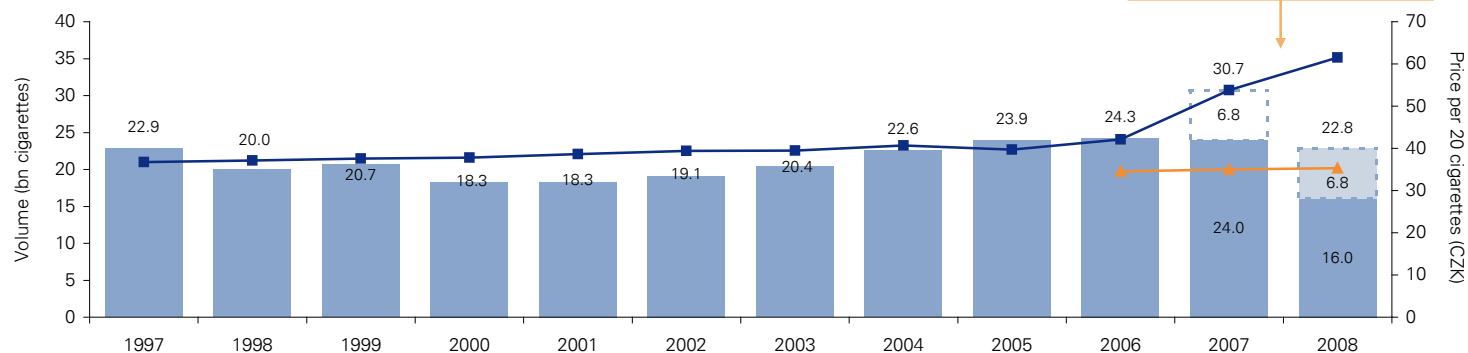
## Total non-domestic inflows (ND(L) and C&C) by origin 2006-2008<sup>(1)(2)(b)</sup>



# Historic sales and pricing trends

Legal domestic sales increased from 2000 to 2007, however legal sales in 2007 and 2008 are affected by inventory holdings

## Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-2000	2000-2006	2006-2008	2007-2008
Legal domestic sales <sup>(a)</sup>	(7.2)%	4.8%	(3.2)%	(4.9)%
Average pack price	n/a	1.8%	20.9%	14.4%
Consumption	n/a	n/a	1.0%	0.8%

Note: (a) Legal domestic sales CAGR based on sales adjusted for the impact of inventories in 2007 and 2008

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PMI

### Adjusted legal domestic sales declined to 22.8 billion cigarettes in 2008, from 24.0 billion cigarettes in 2007

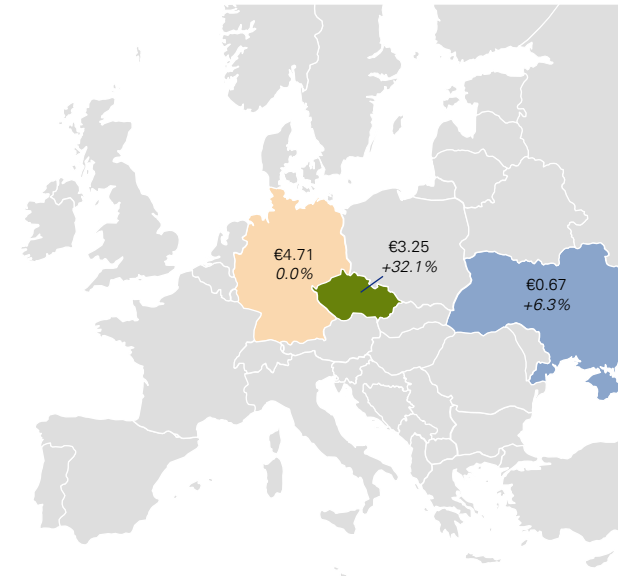
- Legal domestic sales in 2007 were adjusted downwards by 6.8 billion cigarettes in the EU Flows Model to control for the impact of inventories held prior to the January 2008 excise price increase
  - a corresponding upward adjustment has been made to the EU Flows Model in 2008
  - adjusted volumes were calculated by applying the 2007 AC Nielsen growth rate to 2006 IMS volumes

### Average weighted prices increased by 14.4% in 2008 driven by the excise tax increase in January 2008

- The Czech Republic reached compliance with EU minimum taxes of €64 per 1000 cigarettes following the excise tax increase
- In 2008 the Czech Republic has continued to experience market down-trading to lower priced brands
  - the super low segment increased market share to 42% in 2008, compared to 35% in 2007
- The Czech Republic joined the Schengen zone in December 2007

PMI market share declined between 2006 and 2008

**Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>**



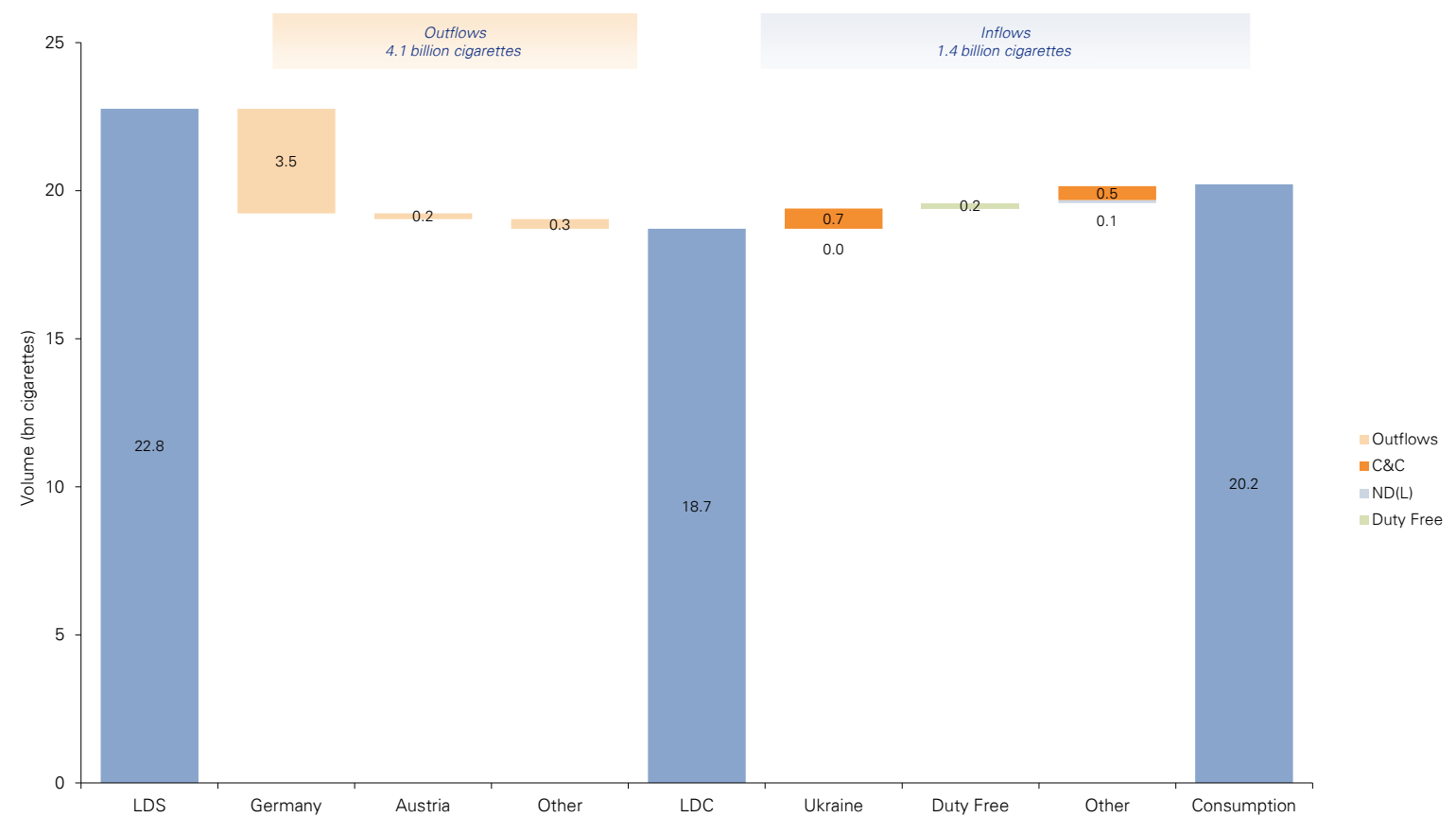
Key:   
■ Czech Republic   
■ Major source country   
■ Major destination country

Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) Marlboro retail selling price supplied by PMI

**Consumption in the Czech Republic is estimated at 20.2 billion cigarettes versus adjusted legal sales of 22.8 billion cigarettes, with a net outflow of 2.6 billion cigarettes**

**Consumption breakdown 2008**<sup>(1)(2)(3)(4)(a)(b)(c)(d)</sup>



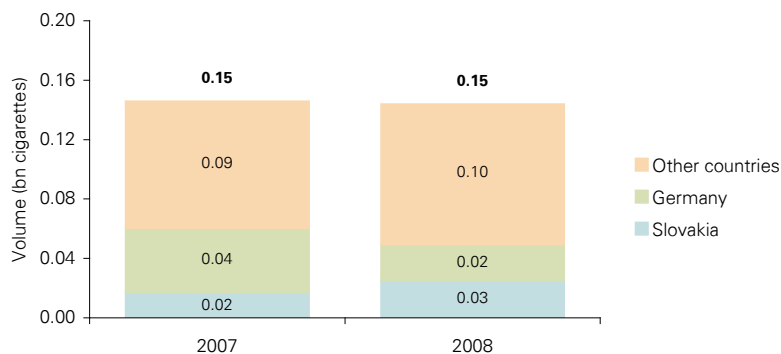
**Notes:** (a) LDS – Legal Domestic Sales  
 (b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)  
 (c) IMS indicates legal domestic sales of 16.0 billion cigarettes in 2008. However, Project Star 2008 results uses legal domestic sales of 22.8 billion cigarettes which reflects an adjustment for higher inventories of 6.8 billion cigarettes  
 (d) For the purposes of Project Star, Duty Free includes all packs that were classified as Duty Free, Duty Paid or had labels that could not be identified

**Sources:** (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2008  
 (3) Legal domestic sales for 2008 have been adjusted for the EU Flows Model to control the impact of inventories  
 (4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

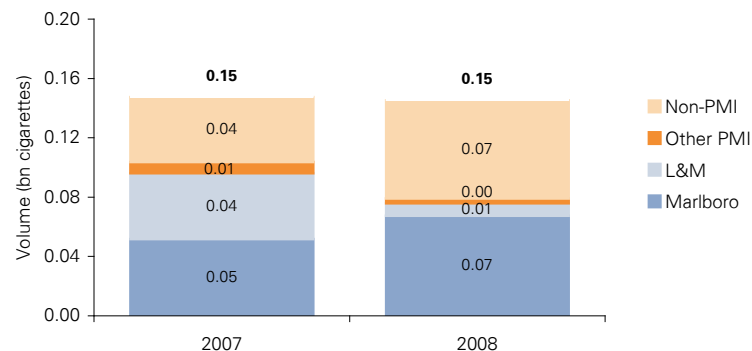
At 0.7%, non-domestic (legal) inflows account for a low share of consumption compared with other EU Member States

**Non-domestic (legal) by origin 2007-2008<sup>(1)(2)(3)</sup>**



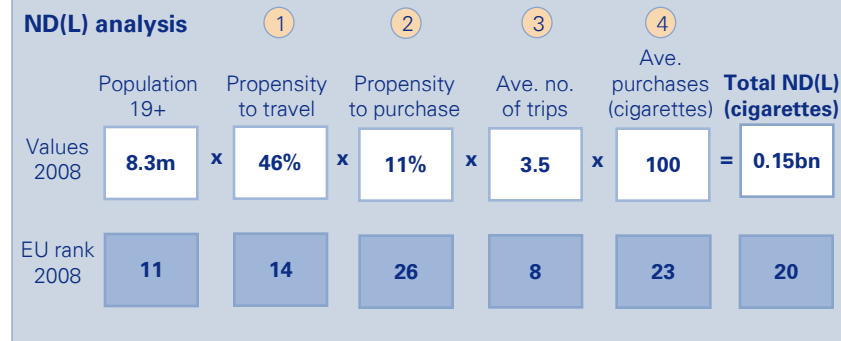
<b>ND(L) share of consumption:</b>	<b>0.7%</b>	<b>0.7%</b>
<b>ND(L) share of non-domestic:</b>	<b>69.9%</b>	<b>10.0%</b>

**Non-domestic (legal) by brand 2007-2008<sup>(1)(2)(3)</sup>**



<b>PMI share of ND(L):</b>	<b>70.7%</b>	<b>54.4%</b>
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Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2006, 2008  
 (3) Interviews with PMI Local Management



**ND(L) analysis 2007-2008**

	2007	2008
Propensity to travel and purchase cigarettes	4.6%	5.0%
Average annual cigarettes purchased	387	349

# Counterfeit and contraband breakdown

Counterfeit and contraband flows increased to 1.3 billion cigarettes in 2008 driven largely by higher inflows from Ukraine

Counterfeit and contraband by origin  
2007-2008<sup>(1)(2)(3)</sup>



<b>C&amp;C share of consumption:</b>	<b>0.3%</b>	<b>6.5%</b>
<b>C&amp;C share of non-domestic:</b>	<b>30.1%</b>	<b>90.0%</b>

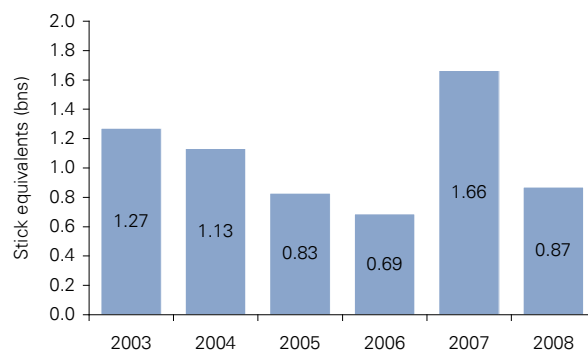
Sources: (1) KPMG EU Flows Model  
(2) AC Nielsen ND(L) research 2006, 2008  
(3) Interviews with PMI Local Management

# OTP market size and growth

**Sales of Other Tobacco Products (OTP) declined in 2008 following the significant increase in 2007**

**Part of the increase in OTP sales in 2007 was driven by higher inventories before tax increases took effect in January 2008**

## Smoking tobacco sales in billion stick equivalents 2003-2008<sup>(1)(a)(b)(c)</sup>



Manufactured cigarette sales (bn cigarettes)	2003	2004	2005	2006	2007 <sup>(d)</sup>	2008 <sup>(d)</sup>
	20.4	22.6	23.9	24.3	30.7	16.0

CAGR (%)	2003-2006	2006-2008	2007-2008
Smoking tobacco	(18.5)%	12.5%	(47.6)%
Manufactured cigarettes	6.0%	(18.8)% <sup>(e)</sup>	(47.8)% <sup>(e)</sup>

- Notes:
- (a) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams
  - (b) Cigars/cigarillos and smokeless tobacco has been excluded from this analysis
  - (c) Smoking tobacco volumes are based on actual data until 2007, whilst the 2008 volume is based on forecast data
  - (d) Manufactured cigarette sales from In Market Sales supplied by PMI based on shipment data. Sales of manufactured sales in 2007 were adjusted downwards by 6.8 billion cigarettes to reflect higher inventories, with a corresponding upwards adjustment made to sales in 2008
  - (e) CAGR calculated from In Market Sales supplied by PMI based on shipment data. After adjusting for higher inventories CAGR 2006-2008 is (3.2)%, and 2007-2008 is (4.9)%

Source: (1) OTP volumes based on information supplied by local PMI, GCTS data, European Cigar Manufacturers Association, and La Revue des Tabacs

## The trend of smoking tobacco sales in 2007 and 2008 has been dictated by inventories

- In 2008 smoking tobacco sales declined by 47.6%, which includes the impact of inventories held before tax increases took effect in January 2008
  - sales of manufactured cigarettes declined by 47.8% in 2008, before adjusting for the impact of higher inventories
  - no adjustment has been made to OTP sales due to unavailability of inventory information

## Between 2003 and 2006, OTP sales declined at an average rate of 19% a year

- By contrast, sales of manufactured cigarettes increased by 6% per year over the same time period

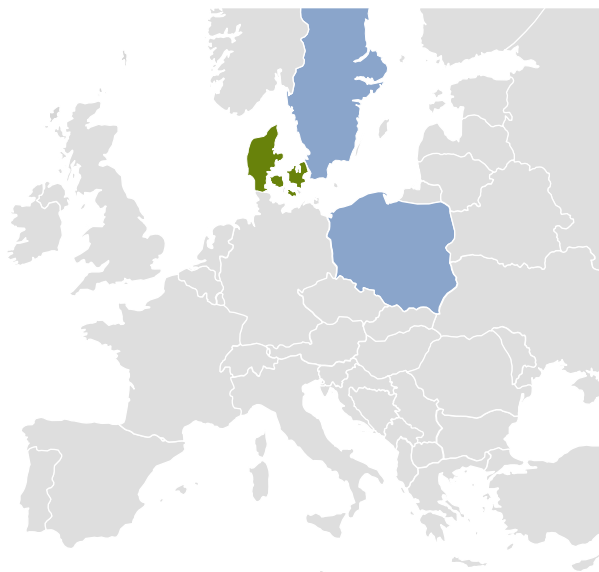


- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

Despite a decline in legal domestic sales in Denmark, total consumption in Denmark increased by 1.7% in 2008

Non-domestic consumption in Denmark increased in 2008 driven by higher inflows from many EU and non-EU markets

Key source and destination markets<sup>(1)(a)(b)</sup>

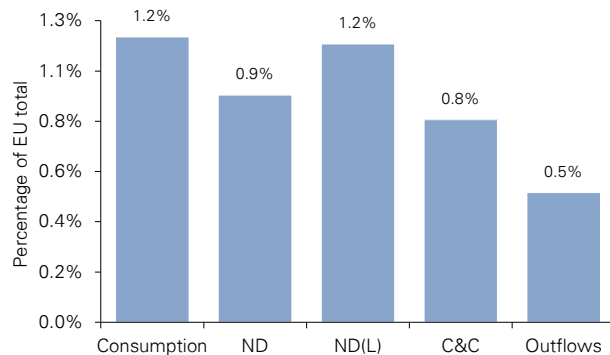


Key: ■ Denmark ■ Top two source countries

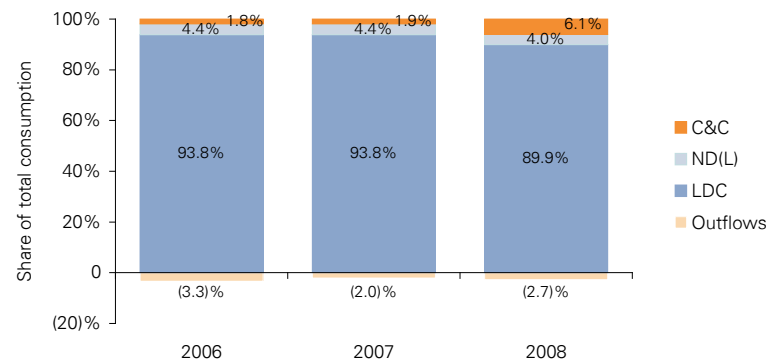
Notes: (a) Map shows top two source countries. Countries which are both source and destination countries are coded according to the larger flow  
(b) ND(L) and EPS research for 2007 uses 2006 information. Corroborating research did not indicate any significant changes to 2006 results

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management  
(2) Synovate ND(L) research 2006, 2008

Proportion of total EU levels<sup>(1)(2)</sup>



Total Danish consumption 2006-2008<sup>(1)(2)(b)</sup>



<b>Volume (bn cigarettes):</b>	<b>8.3</b>	<b>8.3</b>	<b>8.4</b>
--------------------------------	------------	------------	------------

Total non-domestic inflows (ND(L) and C&C) 2006-2008<sup>(1)(2)(b)</sup>

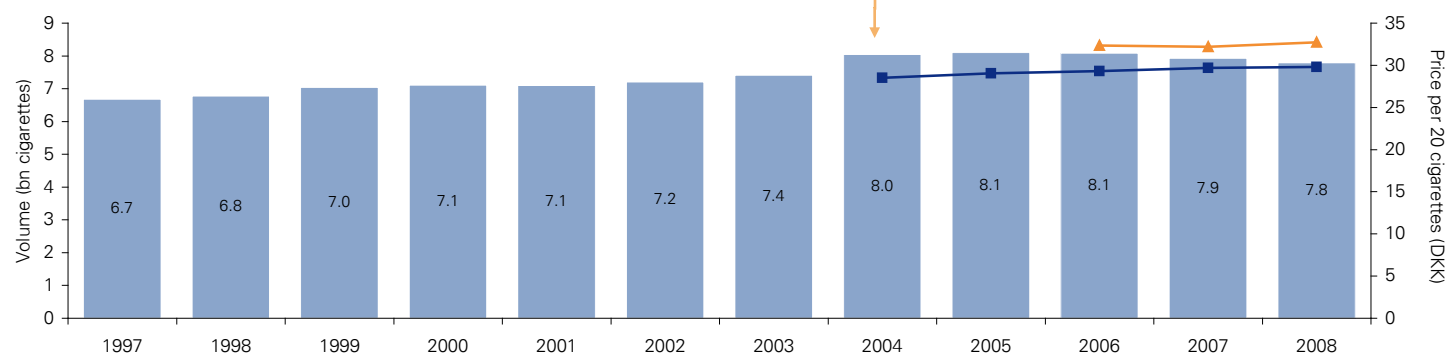


<b>Volume (bn cigarettes):</b>	<b>0.5</b>	<b>0.5</b>	<b>0.8</b>
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# Historic sales and pricing trends

Legal domestic cigarette sales have been steadily trending downwards since 2006 as prices have continued to rise

## Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-2001	2001-2006	2006-2008	2007-2008
Legal domestic sales	1.6%	2.6%	(1.8)%	(1.7)%
Average pack price	n/a	1.4% <sup>(a)</sup>	0.8%	0.4%
Consumption	n/a	n/a	0.6%	1.7%

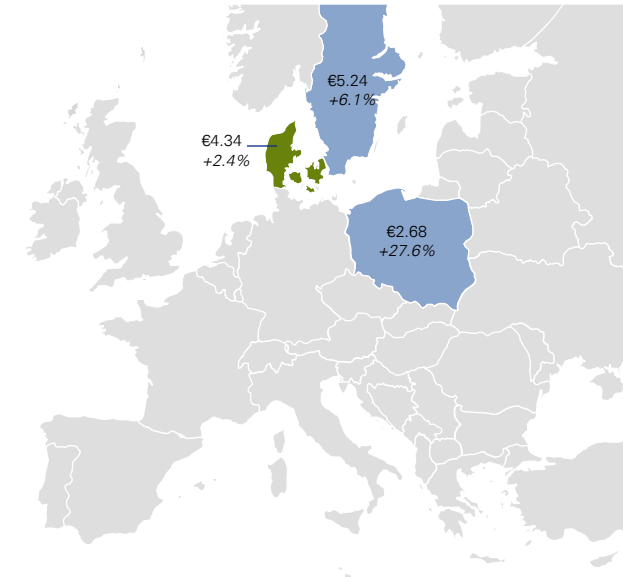
Notes: (a) Average pack price CAGR percentage is calculated from 2004 to 2006  
 (b) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams

Sources: (1) In Market Sales supplied by PMI  
 (2) Weighted average pack price supplied by PMI  
 (3) In 2007, OTP volumes are supplied by PMI

### Legal domestic sales declined by 1.7% in 2008 whilst average pack prices increased by 0.4%

- 2008 is the first full year in Denmark in which the anti-smoking legislation has been enforced
  - the anti-smoking legislation was introduced in August 2007 banning smoking in bars and restaurants. Some exceptions are permitted such as smoking rooms and bars smaller than 40 square metres
- Price increases were implemented in February 2008
- Legal domestic sales of smoking tobacco declined by 13.1% to 1.1 billion stick equivalents in 2008<sup>(3)(b)</sup>

**Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>**



Key: ■ Denmark  
■ Top two source countries

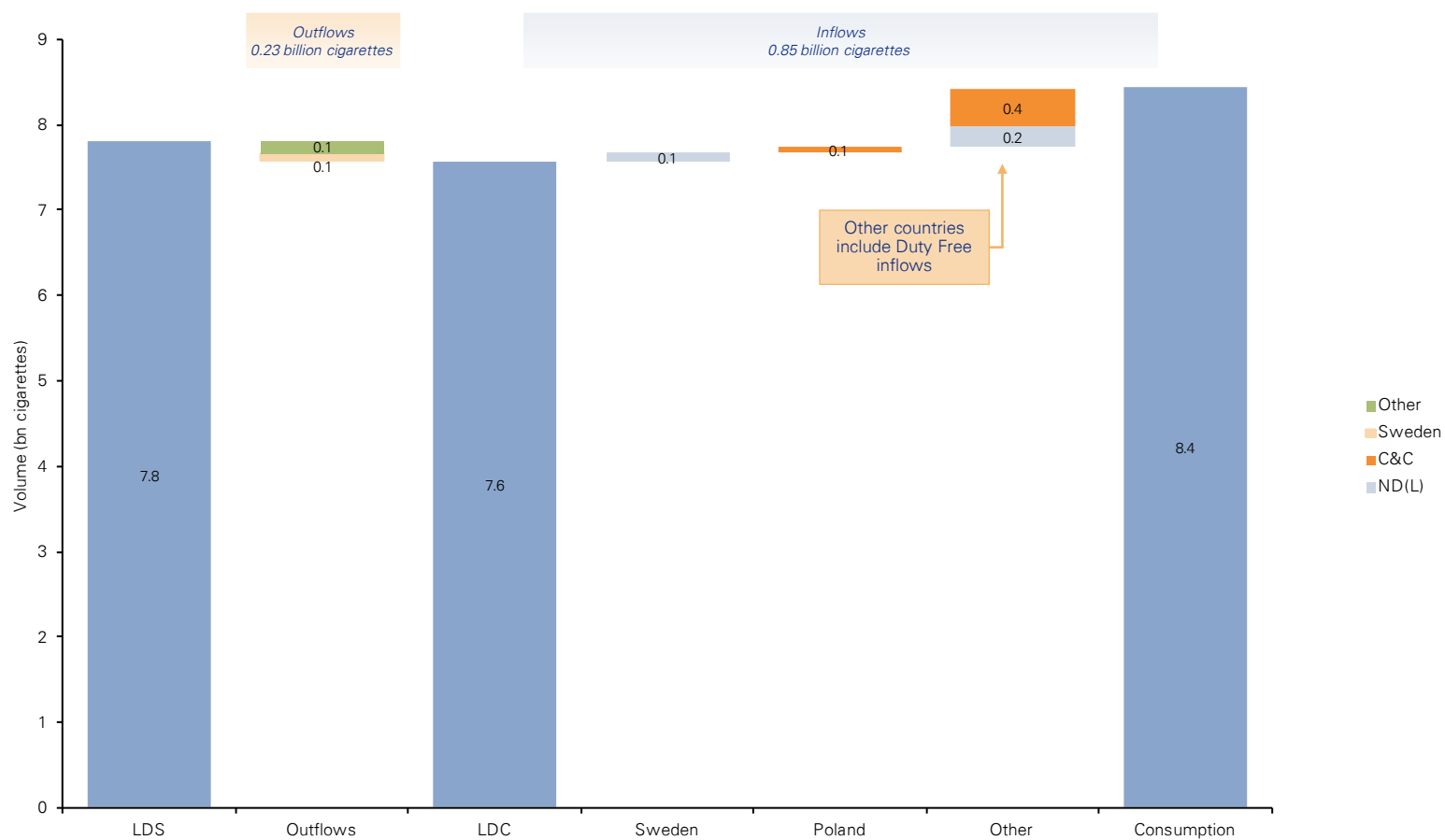
Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) Marlboro retail selling price supplied by PMI

# Outflows and inflows

Danish consumption is estimated at 8.4 billion cigarettes compared to legal domestic sales of 7.8 billion cigarettes, with a net inflow of 0.6 billion cigarettes in 2008

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>



Notes: (a) LDS – Legal Domestic Sales

(b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)

Sources: (1) KPMG EU Flows Model

(2) Synovate ND(L) research 2008

(3) In Market Sales supplied by PMI

(4) Interviews with PMI local management

# Non-domestic (legal) breakdown

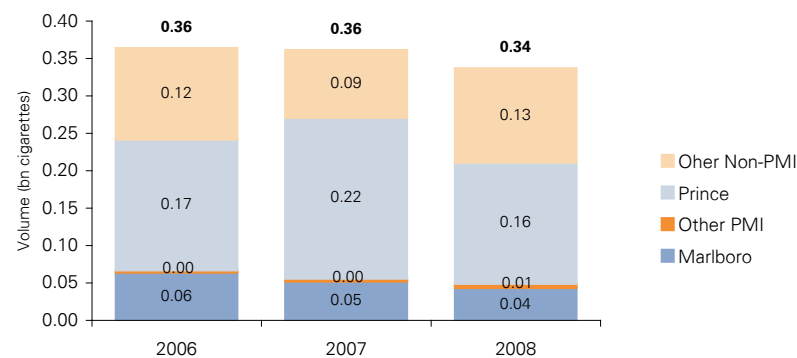
Non-domestic legal flows declined in 2008 with the main source markets remaining Sweden, Spain and Greece

## Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)(a)</sup>



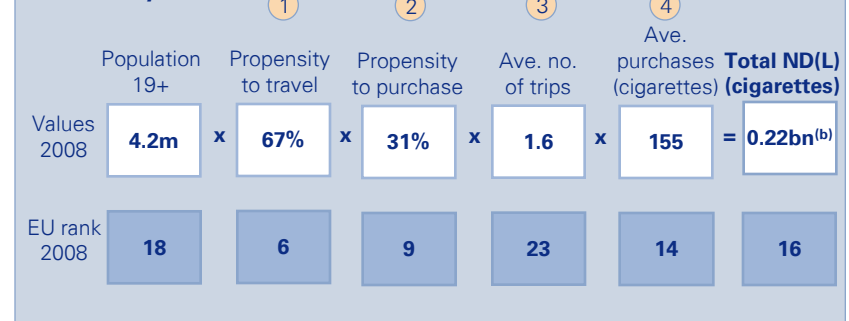
ND(L) share of consumption:	4%	4%	4%
ND(L) share of non-domestic:	70%	70%	40%

## Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)(a)</sup>



PMI share of ND(L):	18%	15%	15%
---------------------	-----	-----	-----

## ND(L) analysis<sup>(b)</sup>



## ND(L) analysis 2007-2008

	2007	2008
Propensity to travel and purchase cigarettes	13.4%	21.0%
Average annual cigarettes purchased	567	244

Note: (a) ND(L) and EPS research for 2007 uses 2006 information. Corroborating research did not indicate any significant changes to 2006 results

(b) ND(L) analysis from Synovate excludes adjustments for inbound tourism flows. Total ND(L) including these inbound tourism inflows is 0.34 billion cigarettes

Sources: (1) KPMG EU Flows Model

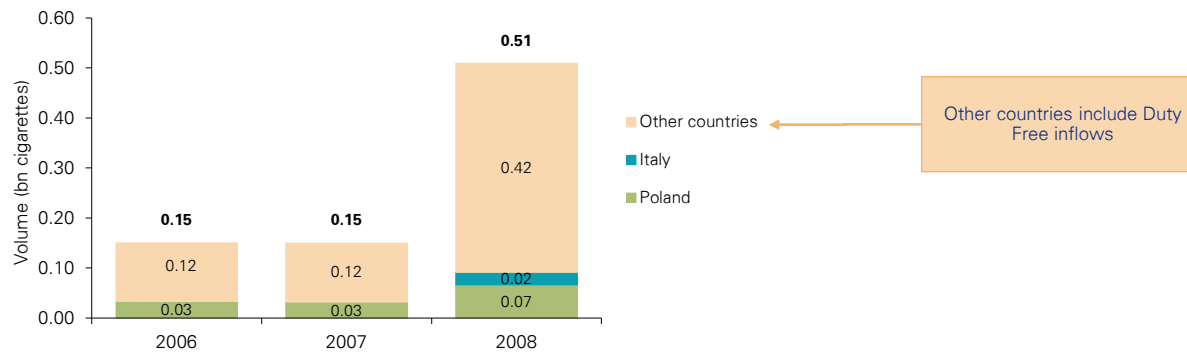
(2) Synovate ND(L) research 2006, 2008

(3) Interviews with PMI local management

# Counterfeit and contraband breakdown

**Counterfeit and Contraband inflows to Denmark increased to represent 60% of non-domestic consumption in 2008**

**Counterfeit and contraband by origin**  
2006-2008<sup>(1)(2)(3)(a)</sup>



<b>C&amp;C share of consumption:</b>	<b>2%</b>	<b>2%</b>	<b>6%</b>
<b>C&amp;C share of non-domestic:</b>	<b>30%</b>	<b>30%</b>	<b>60%</b>

Note: (a) ND(L) and EPS research for 2007 uses 2006 information. Corroborating research did not indicate any significant changes to 2006 results

Sources: (1) KPMG EU Flows Model

(2) Synovate ND(L) research 2006, 2008

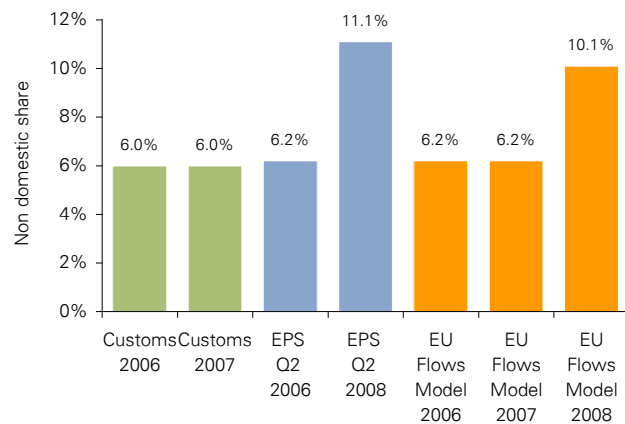
(3) Interview with PMI local management

# Comparison of external sources for non-domestic estimates

EU Flows Model results for non-domestic incidence in 2008 is slightly lower than observed in the Empty Pack Survey

However, both sources do indicate an increase in non-domestic incidence in 2008

Non-domestic market volume estimates<sup>(1)(2)(3)(a)</sup>



Note: (a) EPS research was not updated in 2007 but corroborating research did not indicate any significant changes for the 2006 level

Sources: (1) "Status over Graensehandel", Ministry of Finance, June 2007

(2) KPMG EU Flows Model

(3) PMI EPS Q3 2006 and Q3 2008

Both the EU Flows Model and the PMI EPS results estimate a sizeable increase in non-domestic share of total consumption in 2008

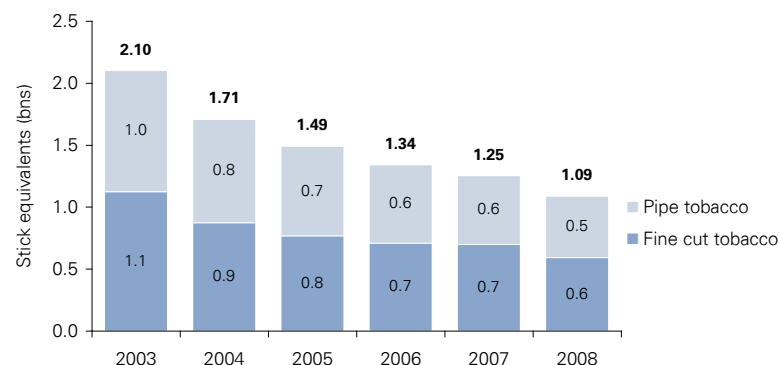
- EPS results for 2008 have been adjusted for Project Star to reflect a stable trend of Swedish inflows in 2008 as compared to 2007
  - Swedish inflows have been reduced by 0.1 billion cigarettes to reflect a stable level in 2008 compared to 2007



# OTP market size and growth

Sales of smoking tobacco declined in 2008 to represent 1.09 billion stick equivalents

## Smoking tobacco sales in billion stick equivalents 2003-2008<sup>(1)(a)(b)</sup>



Manufactured cigarette sales (bn cigarettes)	2003	2004	2005	2006	2007	2008
	7.4	8.0	8.1	8.1	7.9	7.8

CAGR (%)	2003-2005	2005-2007	2007-2008
Pipe tobacco	(14.0)%	(12.5)%	(10.4)%
Fine cut tobacco	(17.4)%	(4.5)%	(15.2)%
<b>Total Smoking tobacco</b>	<b>(15.8)%</b>	<b>(8.3)%</b>	<b>(13.1)%</b>
<b>Manufactured cigarettes</b>	<b>4.5%</b>	<b>(1.1)%</b>	<b>(1.7)%</b>

Notes: (a) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams  
(b) Cigars/cigarillos and smokeless tobacco has been excluded from this analysis

Source: (1) Until 2007, OTP volumes are supplied by PMI based on data from Mac Baren Tobacco Co, PM Scandinavia and NMA. 2008 volumes are estimates provided by PMI

## Legal domestic sales of smoking tobacco and manufactured cigarettes have been trending downwards since 2005

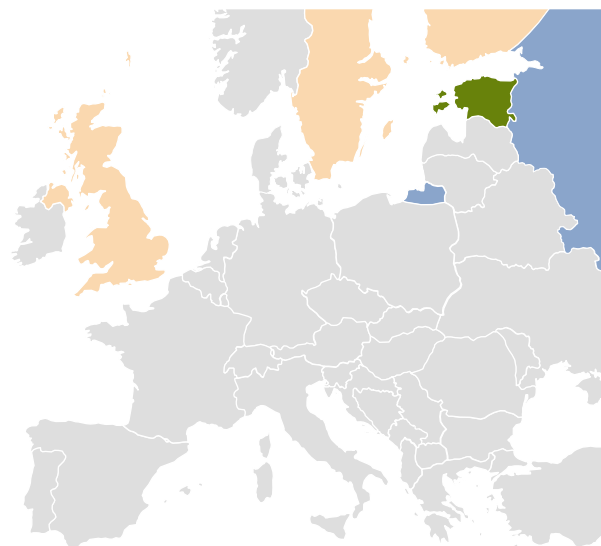
- Smoking tobacco sales have however declined at a faster rate than sales of manufactured cigarettes
  - smoking tobacco sales declined at an annual rate of 8.3% from 2005 to 2007 while manufactured cigarette sales declined by 1.1% over the same period
  - in 2008 smoking tobacco sales declined by 13.1% while manufactured cigarette sales decline by 1.7% over the same period
- This reversed the trend observed since 2003 when rising manufactured cigarettes sales corresponded to a period of falling fine cut tobacco sales
  - fine cut tobacco sales decreased between 2003 and 2005, while manufactured cigarettes increased over the same period

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

Consumption in Estonia declined by 5.3% driven by lower non-domestic inflows

Outflows declined to 20.3% of total consumption in 2008

Key source and destination markets<sup>(1)(a)(b)</sup>



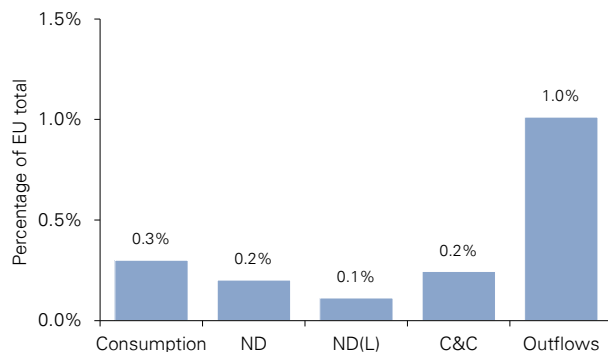
Key: ■ Estonia ■ Major source country ■ Major destination countries

Note: (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow

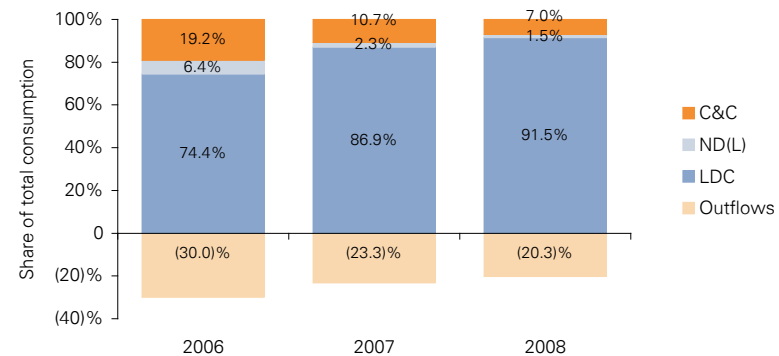
(b) ND(L) research has not been updated in 2008, but corroborating research has not indicated any significant changes to 2007 results

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management  
(2) AC Nielsen ND(L) research 2006, 2007

Proportion of total EU levels<sup>(1)(2)</sup>

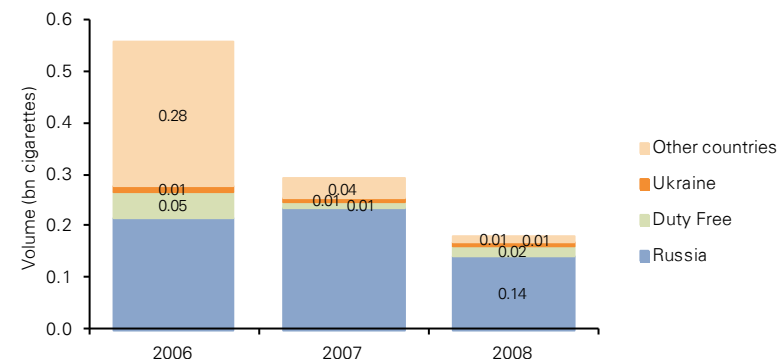


Total Estonian consumption 2006-2008<sup>(1)(2)</sup>



Volume (bn cigarettes):	2.16	2.23	2.12
-------------------------	------	------	------

Total non-domestic inflows (ND(L) and C&C) by origin 2006-2008<sup>(1)(2)</sup>



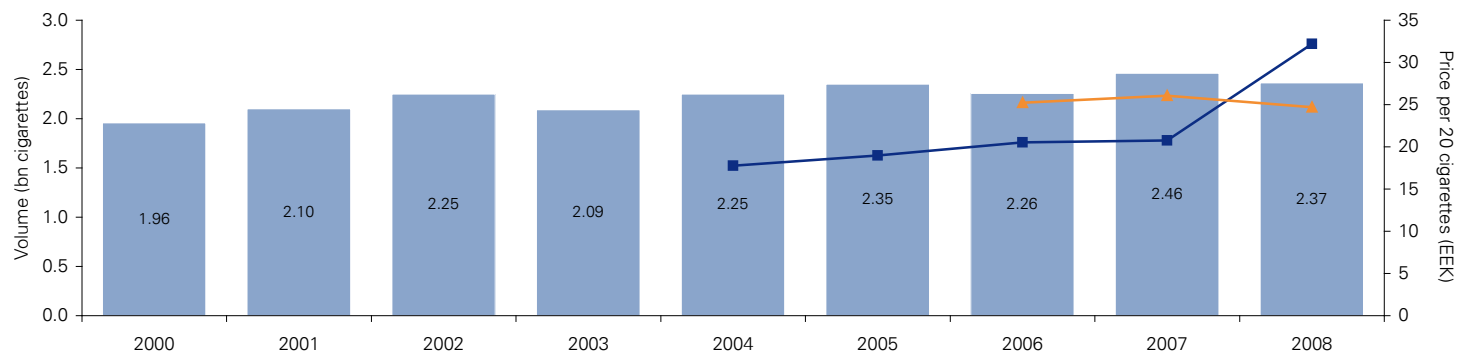
Volume (bn cigarettes):	0.55	0.29	0.18
-------------------------	------	------	------

0.22 0.23

# Historic sales and pricing trends

**Legal domestic sales declined by 3.9% to 2.37 billion cigarettes in 2008**

**Historic cigarette prices and legal domestic sales<sup>(1)(2)(3)</sup> 2000-2008**



CAGR (%)	2000-2005	2006-2008	2007-2008
Legal domestic sales	3.7%	2.4%	(3.9)%
Average pack price	n/a	25.2%	55.0%
Consumption	n/a	(1.0)%	(5.2)%

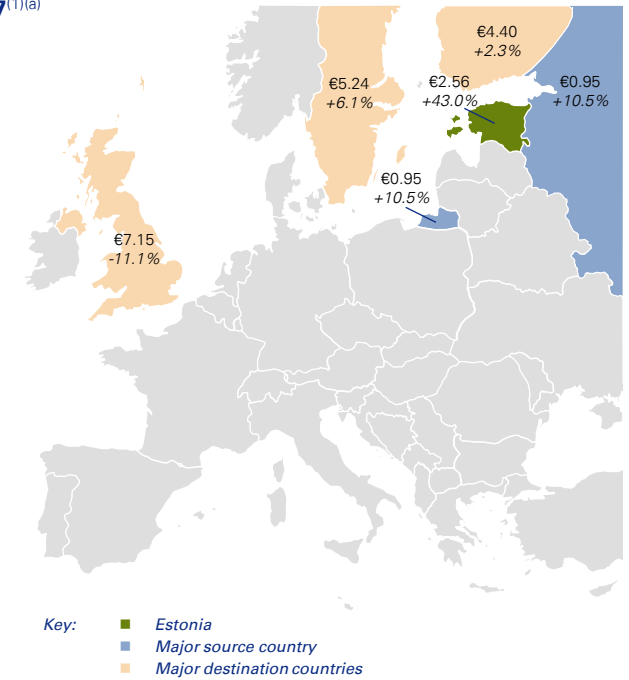
Sources: (1) In Market Sales supplied by PMI  
 (2) Weighted average pack price supplied by PMI  
 (3) Estonian Ministry of Finance average pack price data

## Legal domestic sales decreased by 3.9% in 2008 whilst average pack price increased by 55.0%

- Estonia increased the excise tax on cigarettes in 2008 in order to comply with EU minimum taxes
  - two excise tax increases were passed through in January and July 2008
- Anti-forestalling legislation was introduced in Estonia in July 2008
- Smoking bans in enclosed public places and workplaces were introduced in 2005
  - wider-ranging restrictions, including a ban on smoking in the hospitality sector, came into force in June 2007
- Estonia joined the Schengen zone in December 2007

PMI market share in  
Estonia has remained  
stable

Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



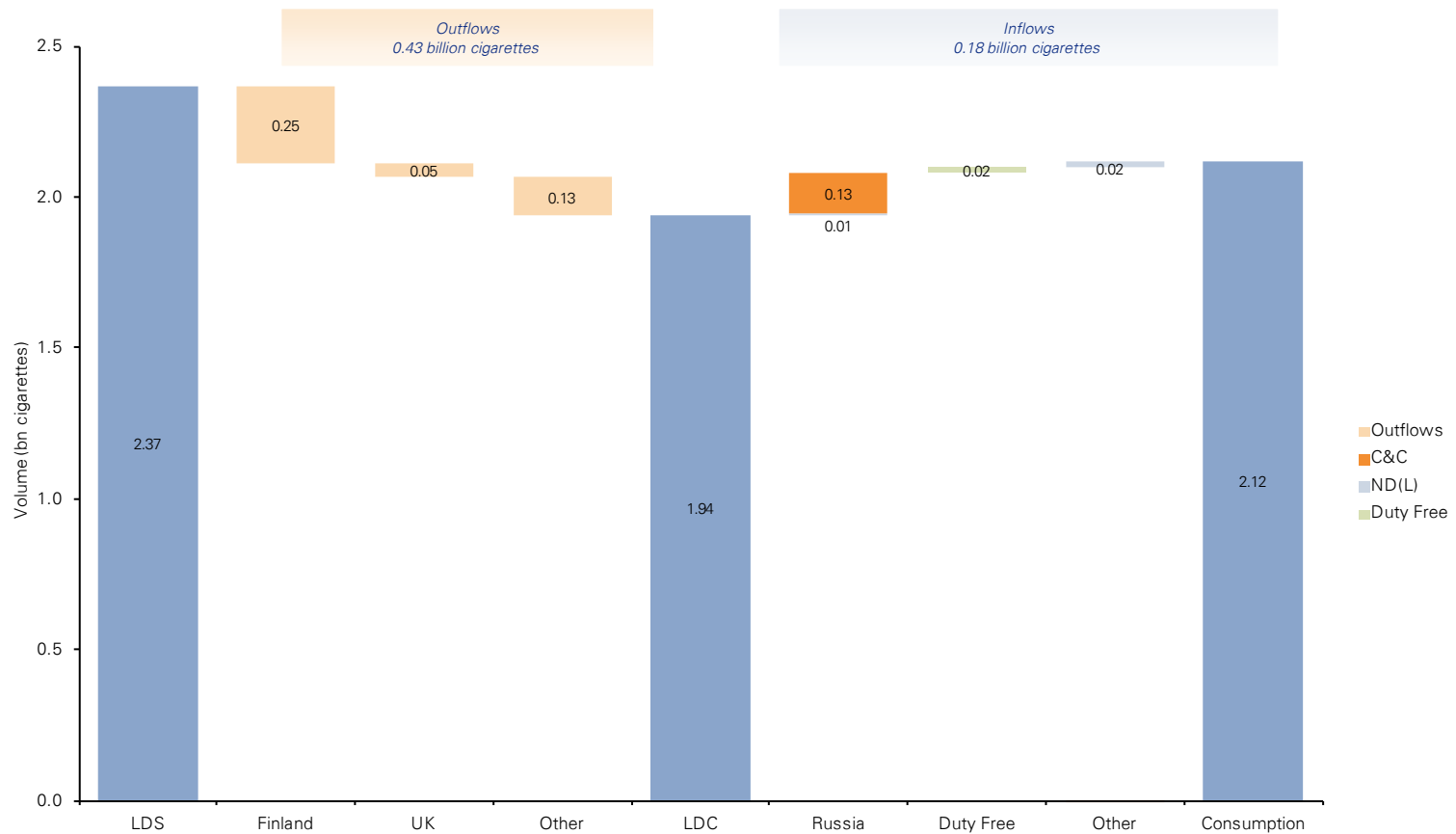
Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) Marlboro retail selling price supplied by PMI

# Outflows and inflows

Estonian consumption is estimated at 2.12 billion cigarettes versus legal sales of 2.37 billion cigarettes, with a net outflow of 0.25 billion cigarettes

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>



Notes: (a) LDS – Legal Domestic Sales

(b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)

Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research 2007

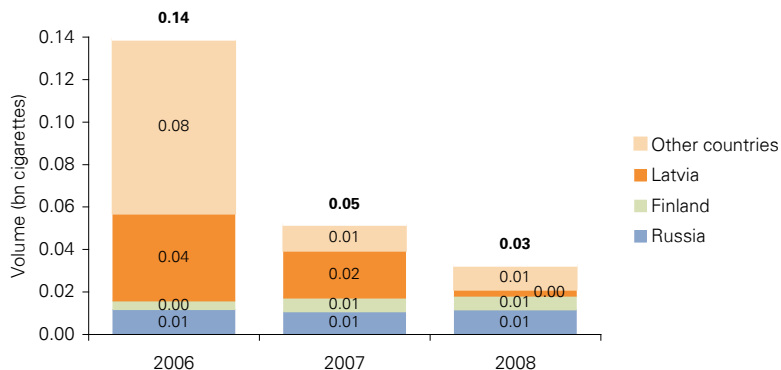
(3) In Market Sales supplied by PMI

(4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

**Legal inflows to Estonia declined to 0.03 billion cigarettes in 2008**

**Non-domestic (legal) by origin 2006-2008**<sup>(1)(2)(3)</sup>



<b>ND(L) share of consumption:</b>	<b>6%</b>	<b>2%</b>	<b>2%</b>
<b>ND(L) share of non-domestic:</b>	<b>25%</b>	<b>18%</b>	<b>18%</b>

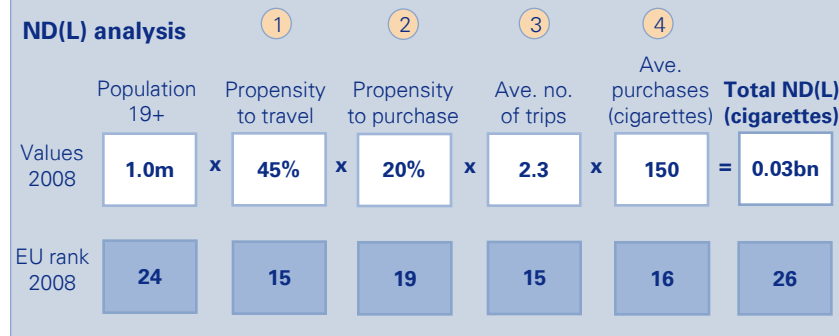
**Non-domestic (legal) by brand 2006-2008**<sup>(1)(2)(3)</sup>



<b>PMI share of ND(L):</b>	<b>54%</b>	<b>59%</b>	<b>58%</b>
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Note: (a) Non-domestic (legal) research has not been updated in 2008. ND(L) inflows to Estonia in 2008 are estimated to have changed in proportion to changes in total non-domestic inflows

**ND(L) analysis**



**ND(L) analysis 2007-2008**

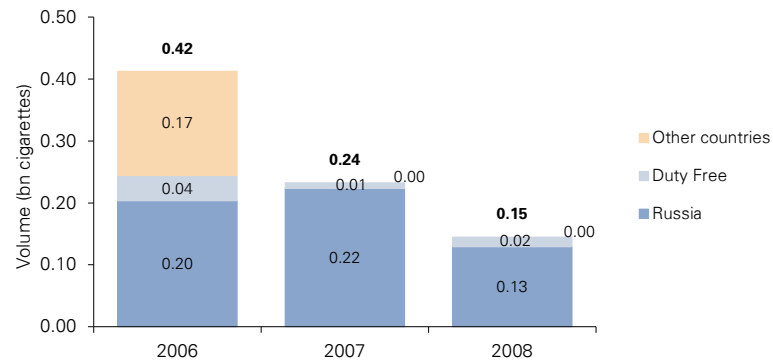
	2007	2008
Propensity to travel and purchase cigarettes	9.0%	9.0%
Average annual cigarettes purchased	556	349

Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research, 2006, 2007  
 (3) Interviews with PMI Local Management

# Counterfeit and contraband breakdown

Counterfeit and contraband consumption in Estonia decreased to 0.15 billion cigarettes in 2008 driven by falling inflows from Russia

Counterfeit and contraband by origin  
2006-2008<sup>(1)(2)(3)</sup>



<b>C&amp;C share of consumption:</b>	<b>19%</b>	<b>11%</b>	<b>7%</b>
<b>C&amp;C share of non-domestic:</b>	<b>75%</b>	<b>82%</b>	<b>82%</b>

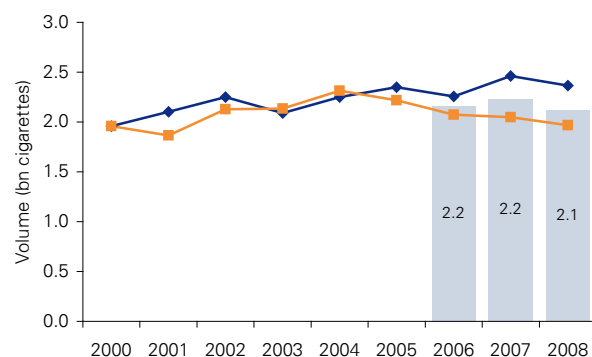
Sources: (1) KPMG EU Flows Model  
(2) AC Nielsen ND(L) research 2006, 2007  
(3) Interviews with PMI Local Management



# Consumption modelling

Consumption modelling suggests that net outflows have remained similar to 2007, which is consistent with EU Flows Model results

## Consumption index modelling 2000-2008<sup>(1)(2)(3)</sup>



CAGR (%)	2000-2006	2006-2007	2007-2008
■ LDS	2.4%	9.1%	(3.9)%
■ KPMG consumption index	1.0%	(1.8)%	(3.8)%
■ KPMG consumption estimate	n/a	n/a	(5.3)%

Note: (a) GCTS refers to the Global Consumer Tracking Survey to estimate smoking prevalence and average smoking volume by country

Sources: (1) KPMG Consumption Index model  
 (2) In Market Sales supplied by PMI  
 (3) KPMG EU Flows Model

## The gap between LDS and the KPMG consumption index for Estonia was relatively stable between 2007 and 2008

- This suggests that net outflows were relatively stable between 2007 and 2008
- This is consistent with EU Flows Model results which shows a net outflow of 0.25 billion cigarettes in 2008, compared to 0.23 billion cigarettes in 2007

## Consumption index modelling is undertaken to identify discrepancies between the legal domestic sales trend and other consumption estimates and potentially provides an indication of changes in non-domestic inflows and outflows

- The KPMG consumption index is calculated using the incidence of smoking and the average daily consumption and the population of each market (from OEF)
  - these figures are then indexed to the earliest year for which we have data from the both GCTS<sup>(a)</sup> and LDS data available, 2000 for Estonia
- Please note that consumption modelling can only identify market trends and cannot be used to quantify total consumption
  - the gap between indexed consumption and LDS in the final year is therefore only a broad indication of the extent to which the market has changed over the analysed period
  - in many markets, some level of inflows or outflows are likely to be present in the first analysed year

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

Consumption has remained relatively stable in recent years and stands at 6.4 billion cigarettes in 2008

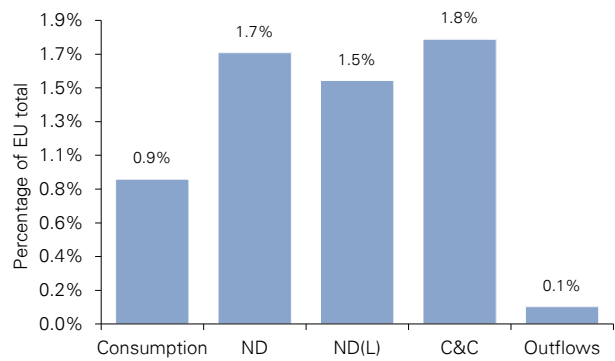
Non-domestic inflows remain stable at 1.5 billion cigarettes, driven primarily by inflows from Russia

Key source and destination markets<sup>(1)(a)</sup>

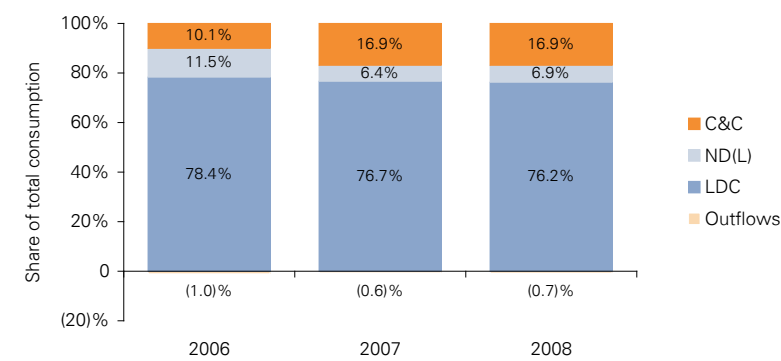


Key: ■ Finland ■ Major source countries  
 Note: (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow  
 Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management  
 (2) GFK ND(L) research, 2006. Synovate ND(L) research 2007, 2008

Proportion of total EU levels<sup>(1)(2)</sup>

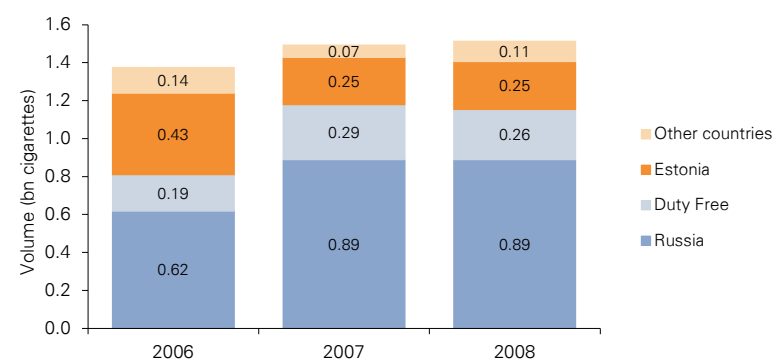


Total Finnish consumption 2006-2008<sup>(1)(2)</sup>



Volume (bn cigarettes):	2006	2007	2008
	6.4	6.4	6.4

Total non-domestic inflows (ND(L) and C&C) 2006-2008<sup>(1)(2)</sup>

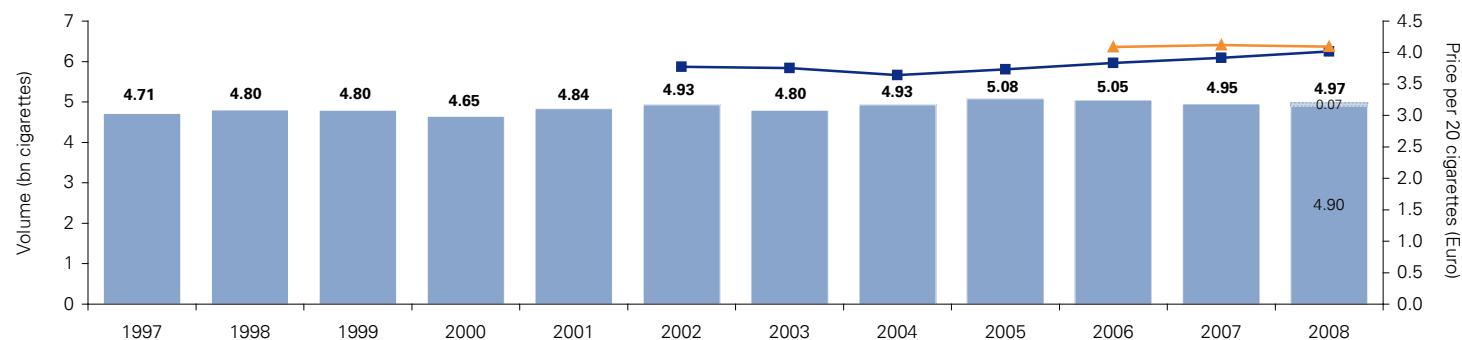


Volume (bn cigarettes):	2006	2007	2008
	1.4	1.5	1.5

# Historic sales and pricing trends

Legal domestic cigarette sales have remained relatively stable since 2002

Historic cigarette prices and legal domestic sales<sup>(1)(2)(a)</sup>  
1997-2008



CAGR (%)	1997-2002	2002-2006	2006-2008	2007-2008
Legal domestic sales	0.9%	0.6%	(1.5)% <sup>(a)</sup>	(1.0)% <sup>(a)</sup>
Average pack price	n/a	0.4%	2.4%	2.6%
Consumption	n/a	n/a	0.1%	(0.6)%

Notes: (a) IMS indicates legal domestic sales of 4.97 billion cigarettes in 2008. However, Project Star 2008 results uses legal domestic sales of 4.90 billion cigarettes which reflects an adjustment of 0.7 billion cigarettes to account for additional inventories held in 2008

(b) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PMI

(3) 2007 OTP volumes supplied by PMI. 2008 volumes are estimates provided by PMI

## Legal domestic cigarette sales have remained relatively stable since 2002

- 2008 is the first full year in Finland in which the anti-smoking legislation has been enforced
  - the anti-smoking legislation was introduced in June 2007 banning smoking in bars and restaurants. Some exceptions are permitted such as smoking rooms with a separate ventilation system
- Legal domestic sales of smoking tobacco declined by 4.5% in 2008 to 1.0 billion stick equivalents<sup>(3)(b)</sup>

## Monthly analysis of In Market Sales (IMS) suggests additional inventories held of 0.07 billion cigarettes in December 2008<sup>(a)</sup>

- IMS sales were higher in December 2008 as a result of inventory build up in advance of the price increases implemented in January 2009
- EU Flows Model results in 2008 reflect the adjusted legal domestic sales volume of 4.90 billion

Price differentials between Finland and key source markets have narrowed slightly in 2008

### Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



Key: ■ Finland  
■ Major source countries

Notes: (a) Based on pack of 20 Marlboro King Size as at July 1<sup>st</sup> 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

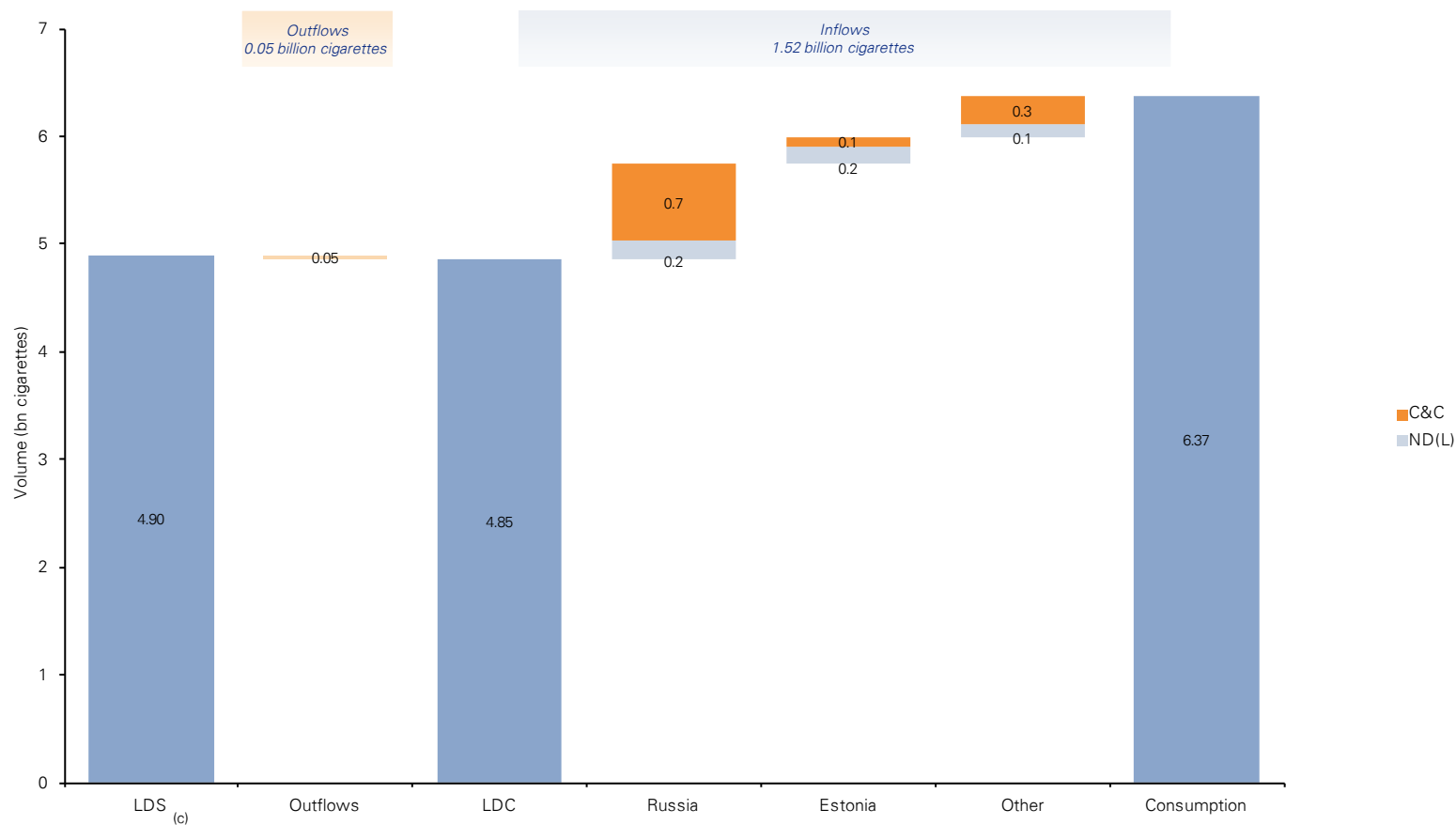
Sources: (1) KPMG EU Flows Model

(2) Marlboro retail selling price supplied by PMI based on PMI standard exchange rates as at June 2008 and June 2007

# Outflows and inflows

Finnish consumption is estimated at 6.4 billion cigarettes versus legal sales of 4.9 billion cigarettes, with a net inflow of 1.5 billion cigarettes in 2008

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>

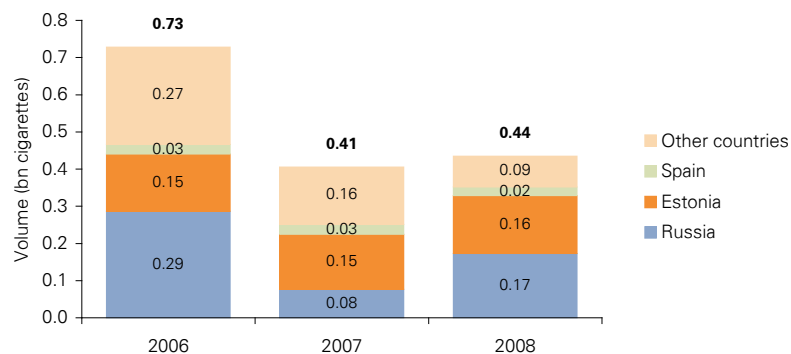


- Notes: (a) LDS – Legal Domestic Sales  
 (b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)  
 (c) The Project Star 2008 results use legal domestic sales of 4.9 billion cigarettes. This reflects the legal domestic sales picture after adjusting for additional inventories held in 2008
- Sources: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2008  
 (3) In Market Sales, supplied by PMI  
 (4) Interviews with local PMI management

# Non-domestic (legal) breakdown

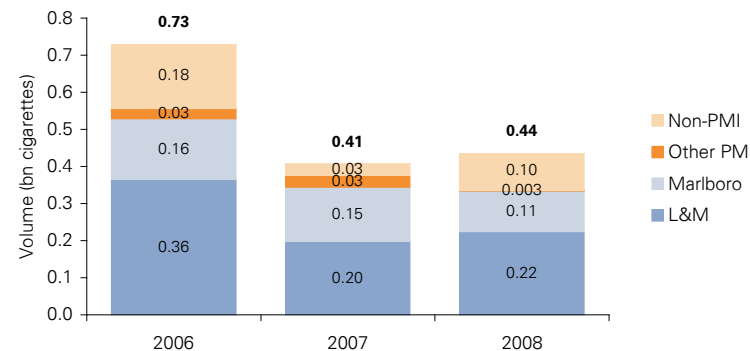
**Non-domestic legal inflows account for 29% of non-domestic consumption in 2008**

**Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)</sup>**



<b>ND(L) share of consumption:</b>	<b>12%</b>	<b>6%</b>	<b>7%</b>
<b>ND(L) share of non-domestic:</b>	<b>53%</b>	<b>27%</b>	<b>29%</b>

**Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)</sup>**



<b>PMI share of ND(L):</b>	<b>76%</b>	<b>91%</b>	<b>77%</b>
----------------------------	------------	------------	------------

Sources: (1) KPMG EU Flows Model  
 (2) GFK ND(L) research, 2006. Synovate ND(L) research 2007, 2008  
 (3) Interviews with PMI local management

**ND(L) analysis**

	①	②	③	④	
	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)
Values 2008	4.1m	x 55%	x 41%	x 3.0	x 158
	= 0.44bn				
EU rank 2008	19	11	5	10	13
	Total ND(L) (cigarettes) 13				

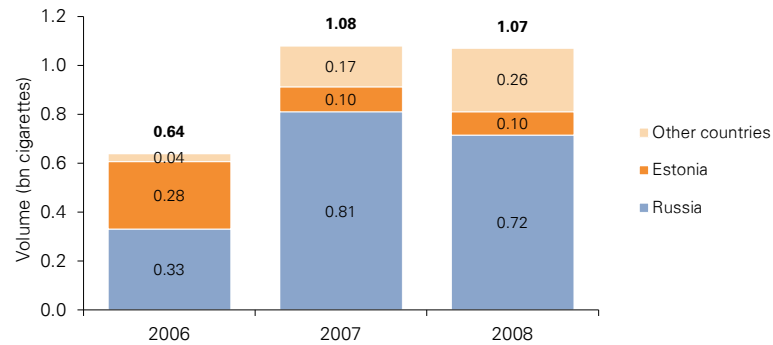
**ND(L) analysis 2007-2008**

	2007	2008
Propensity to travel and purchase cigarettes	① x ② = 14.0%	22.5%
Average annual cigarettes purchased	③ x ④ = 718	475

# Counterfeit and contraband breakdown

Total counterfeit and contraband inflows to Finland have remained stable in 2008

Counterfeit and contraband by origin  
2006-2008<sup>(1)(2)(3)</sup>



<b>C&amp;C share of consumption:</b>	<b>10%</b>	<b>17%</b>	<b>17%</b>
<b>C&amp;C share of non-domestic:</b>	<b>47%</b>	<b>73%</b>	<b>71%</b>

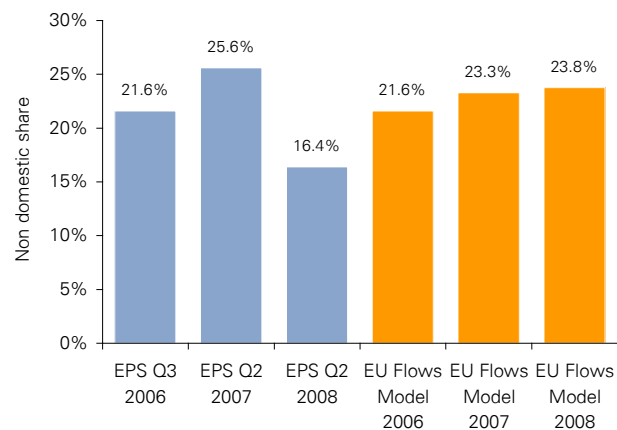
Sources: (1) KPMG EU Flows Model  
(2) GFK ND(L) research, 2006. Synovate ND(L) research 2007, 2008  
(3) Interviews with PMI local management



# Comparison of external sources for non-domestic estimates

EU Flows Model results for non-domestic incidence in 2008 is higher than that observed in the Empty Pack Survey

Non-domestic market volume estimates<sup>(1)(2)(a)</sup>



Sources: (1) KPMG EU Flows Model

(2) PMI EPS research, Q3 2006; Q2 2007 and Q2 2008

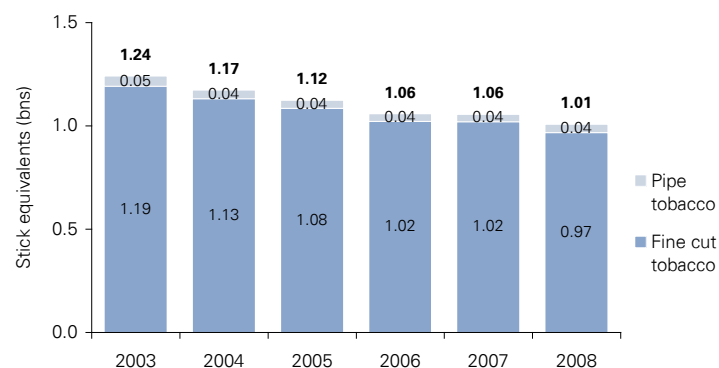
**KPMG's estimate for non-domestic share of total consumption is higher than the Empty Pack Survey results to control for an unexpected decline in Russian inflows**

- PMI EPS results for 2008 show a 63% decline in Russian inflows which is not supported by external sources such as relative price changes, visitor numbers and sales force observations
- Based on corroborating data, inflows from Russia have been increased to provide a stable level in 2008 compared to 2007

# OTP market size and growth

Legal sales of fine cut tobacco have been trending downwards since 2003

OTP sales in billion stick equivalents  
2003-2008<sup>(1)(a)(b)</sup>



Year	2003	2004	2005	2006	2007	2008
<b>Manufactured cigarette sales (bn cigarettes)<sup>(c)</sup></b>	4.8	4.9	5.1	5.1	5.0	4.9

CAGR (%)	2003-2004	2004-2007	2007-2008
Pipe tobacco	(13.7)%	(5.9)%	13.6%
Fine cut tobacco	(5.2)%	(3.4)%	(5.1)%
<b>Total Smoking tobacco</b>	<b>(5.5)%</b>	<b>(3.5)%</b>	<b>(4.5)%</b>
<b>Manufactured cigarettes</b>	<b>2.7%</b>	<b>0.2%</b>	<b>(1.0)%</b>

Notes: (a) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams  
 (b) Cigars/cigarillos and smokeless tobacco has been excluded from this analysis  
 (c) IMS indicates legal domestic sales of 4.97 billion cigarettes in 2008. However, Project Star 2008 results uses legal domestic sales of 4.90 billion cigarettes which reflects a loading adjustment of 0.7 billion cigarettes

Sources: (1) Until 2007, OTP volumes supplied by PMI. 2008 volumes are estimates provided by PMI

Legal sales of smoking tobacco have declined since 2003 while sales of manufactured cigarettes have increased marginally over the same period

- From 2003 to 2008, sales of smoking tobacco declined from 1.2 billion stick equivalents to 1.0 billion stick equivalents while sales of manufactured cigarettes increased to 4.9 billion sticks from 4.8 billion sticks in 2003

OTP categories account for a relatively large share of overall tobacco consumption in Finland

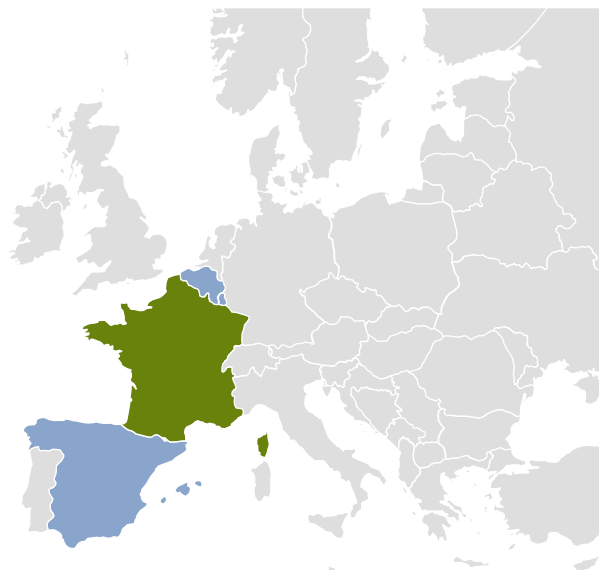
- Smoking tobacco accounts for 17% of overall tobacco legal domestic sales in 2008<sup>(b)</sup>

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

**Consumption in France has remained stable in 2008 at 69.0 billion cigarettes**

**Non-domestic inflows to France increased to 16.3 billion cigarettes in 2008, driven by higher flows from Spain**

**Key source and destination markets<sup>(1)(a)</sup>**

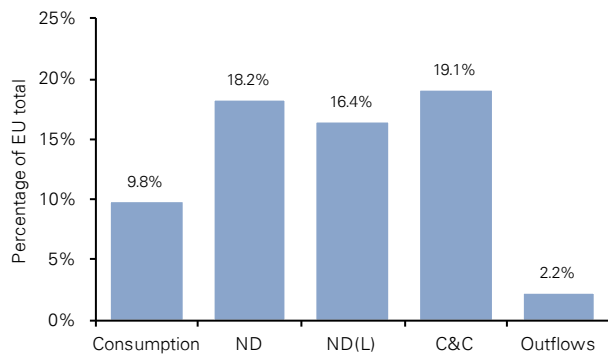


**Key:** ■ France ■ Major source countries

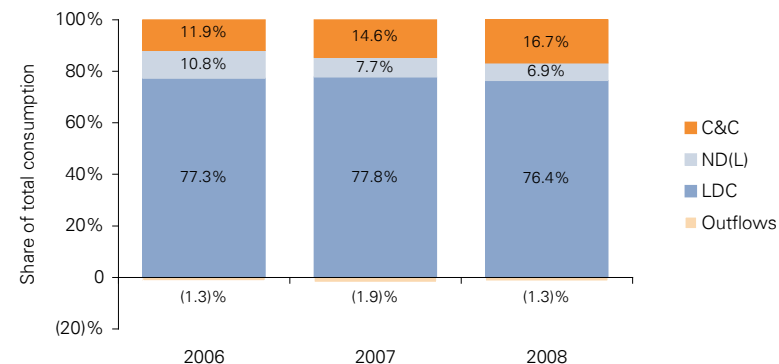
**Note:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow

**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
(2) AC Nielsen ND(L) research 2006, 2007 and 2008

**Proportion of total EU levels<sup>(1)(2)</sup>**

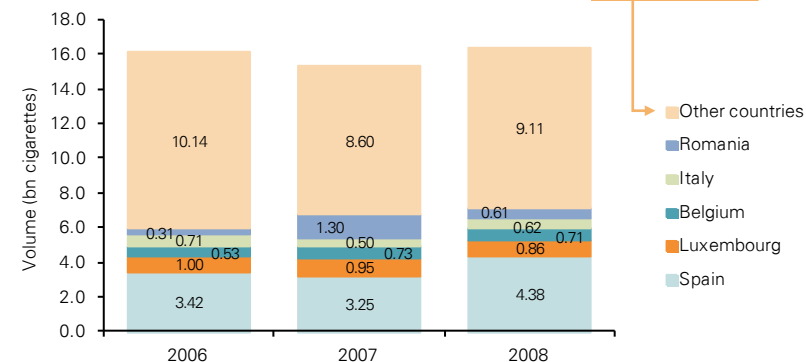


**Total French consumption 2006-2008<sup>(1)(2)</sup>**



Volume (bn cigarettes):	2006	2007	2008
	71.0	69.0	69.0

**Total non-domestic inflows (ND(L) and C&C) 2006-2008<sup>(1)(2)</sup>**

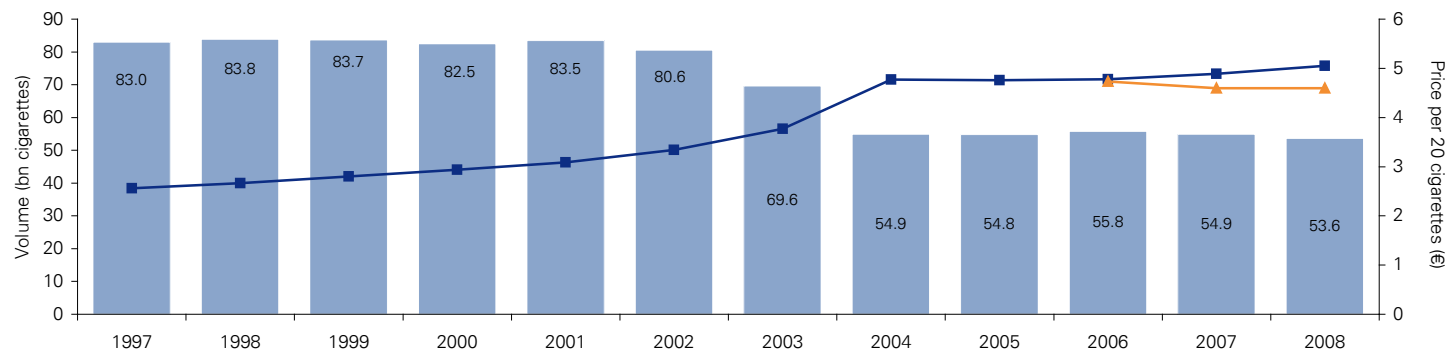


Volume (bn cigarettes):	2006	2007	2008
	16.1	15.3	16.3

# Historic sales and pricing trends

Legal domestic sales have been steadily trending downwards since 2006 as prices have risen

Historic cigarette prices and legal domestic sales  
1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-2001	2001-2005	2005-2008	2007-2008
Legal domestic sales	0.1%	(10.0)%	(0.7)%	(2.5)%
Average pack price	4.8%	11.4%	2.0%	3.3%
Consumption	n/a	n/a	(1.4)% <sup>(a)</sup>	0.0%

Note: (a) Consumption CAGR is from 2006 to 2008

(b) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams

Sources: (1) In Market Sales supplied by PMI based on Altadis Distribution

(2) Weighted average pack price supplied by PMI based on Altadis Distribution

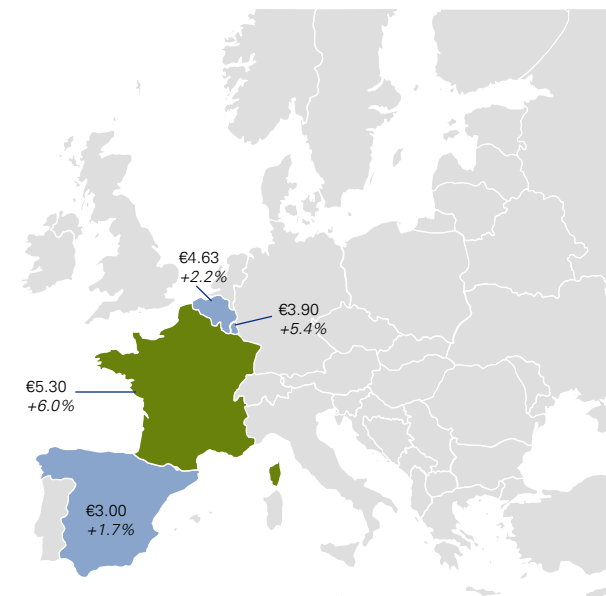
(3) Fine cut tobacco volumes provided by PMI France

## Legal domestic sales declined by 2.5% in 2008

- Phase II of the anti-smoking legislation was implemented in January 2008
  - the anti-smoking legislation prohibits smoking in all workplaces, hotels, restaurants, cafes and discos in France
- The average pack price in 2008 was 3.3% higher than in 2007
  - this was due to an increase in minimum retail price in France to €4.79 for 20 cigarettes in October 2007. Consequently the average pack price for 2007 only includes two months of the higher price
- Legal domestic sales of fine cut tobacco increased by 2.6% in 2008 to represent 9.7 billion stick equivalents<sup>(3)(b)</sup>

Price differentials between France and key source markets have widened in 2008

### Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



Key: ■ France  
■ Major source countries

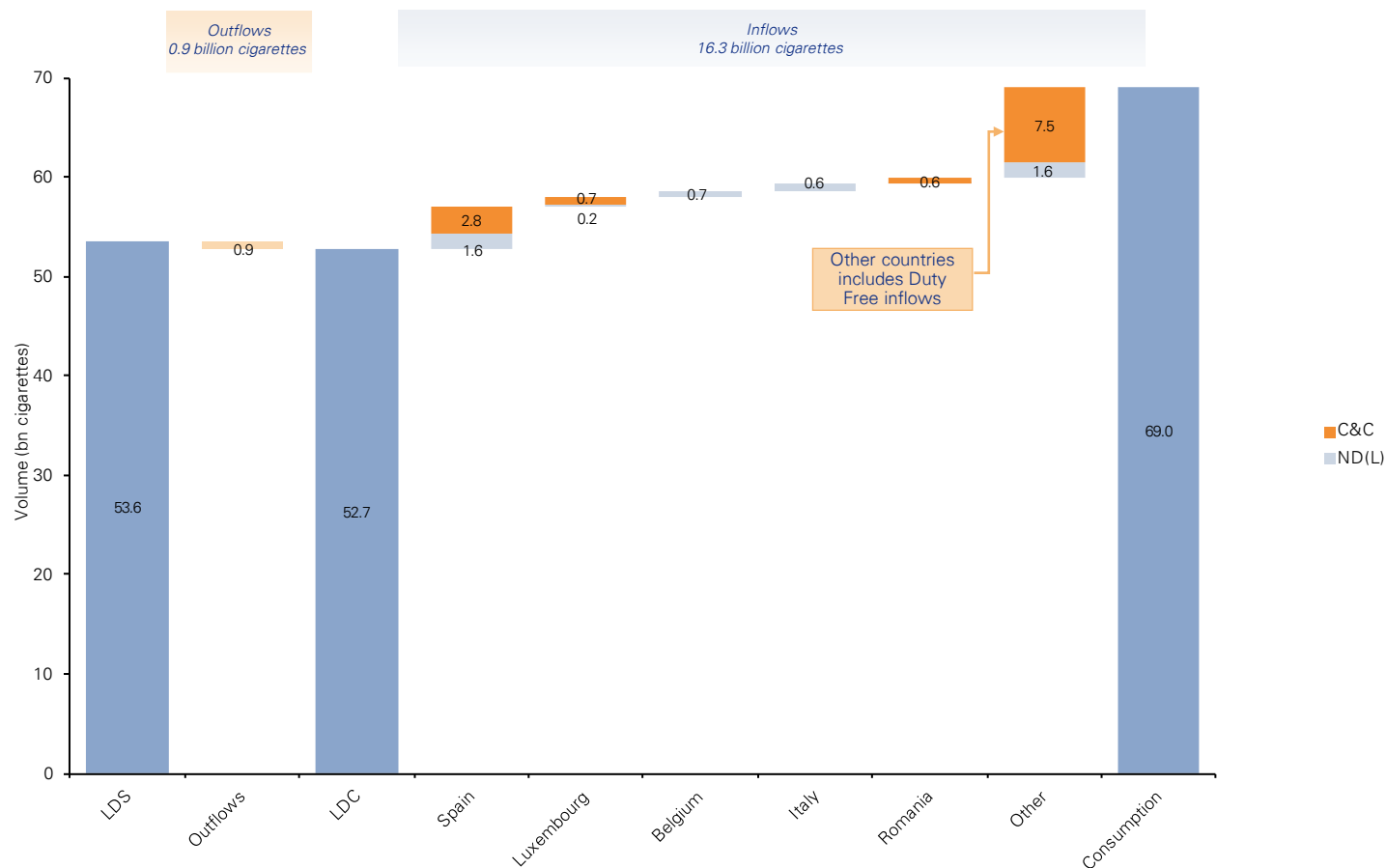
Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) Marlboro retail selling price supplied by PMI

# Outflows and inflows

French consumption is estimated at 69.0 billion cigarettes compared to legal domestic sales of 53.6 billion cigarettes, with a net inflow of 15.4 billion cigarettes

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>



Notes: (a) LDS – Legal Domestic Sales

(b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)

Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research 2008

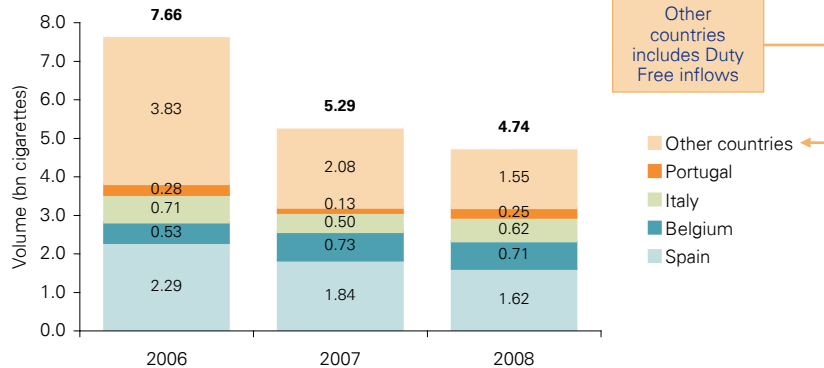
(3) In Market Sales supplied by PMI

(4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

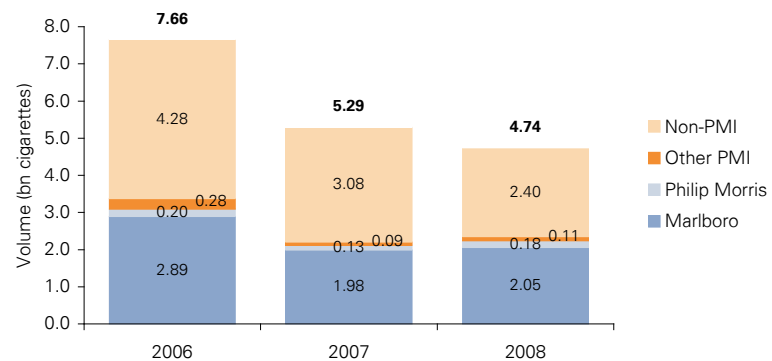
**Non-domestic (legal) inflows to France decreased to 4.7 billion cigarettes in 2008**

**Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)</sup>**



<b>ND(L) share of consumption:</b>	<b>11%</b>	<b>8%</b>	<b>7%</b>
<b>ND(L) share of non-domestic:</b>	<b>48%</b>	<b>34%</b>	<b>29%</b>

**Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)</sup>**



<b>PMI share of ND(L):</b>	<b>44%</b>	<b>42%</b>	<b>49%</b>
----------------------------	------------	------------	------------

Notes: (a) ND(L) analysis from AC Nielsen excludes adjustments for inbound tourism flows. Total ND(L) including these inbound tourism inflows is 4.74 billion cigarettes  
 Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2006, 2007 and 2008  
 (3) Interviews with PMI Local Management

**ND(L) analysis<sup>(a)</sup>**

	①	②	③	④		
	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)	
Values 2008	49.0m	41%	31%	2.5	255	
EU rank 2008	2	17	10	13	6	
	x				=	<b>4.05bn<sup>(a)</sup></b>
					<b>Total ND(L) (cigarettes)</b>	

**ND(L) analysis 2007-2008**

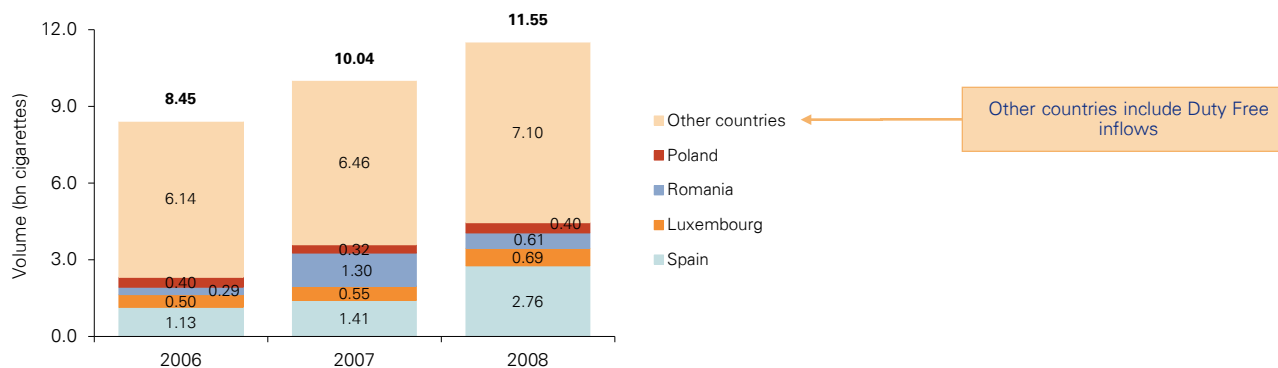
	2007	2008
Propensity to travel and purchase cigarettes	① x ② = 8.9%	12.8%
Average annual cigarettes purchased	③ x ④ = 1092	646



# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows to France increased to represent 71% of non-domestic inflows in 2008**

**Counterfeit and contraband by origin 2006-2008<sup>(1)(2)(3)</sup>**



<b>C&amp;C share of consumption:</b>	<b>12%</b>	<b>15%</b>	<b>17%</b>
<b>C&amp;C share of non-domestic:</b>	<b>52%</b>	<b>66%</b>	<b>71%</b>

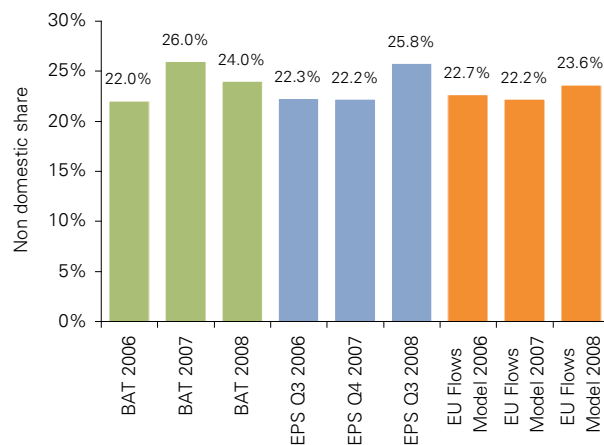
Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2006, 2007 and 2008  
 (3) Interviews with PMI Local Management

# Comparison of external sources for non-domestic estimates

**EU Flows Model results for non-domestic incidence in 2008 are lower than observed in the Empty Pack Survey**

**However, both sources do indicate an increase in non-domestic incidence in 2008**

Non-domestic market volume estimates<sup>(1)(2)(3)(4)</sup>



Sources: (1) "Un paquet de blondes sur cinq selon BAT/EPSEY", Revue de Tabacs, March 2007  
 (2) "Origine des paquets de cigarettes et de tabac a rouler fumes en France Etude EPSEY, September 2008  
 (3) KPMG EU Flows Model  
 (4) PMI EPS Q3 2006, Q4 2007 and Q3 2008

## EU Flows Model and PMI EPS results both show a small increase in non-domestic incidence in 2008

- PMI EPS results for 2008 show an increase in Spanish inflows predominantly driven by high Spanish non-domestic incidence in cities in the South West region of France
  - inflows from Spain have been adjusted downwards by 0.7 billion cigarettes to reduce the variability by city of Spanish non-domestic incidence in the South West region

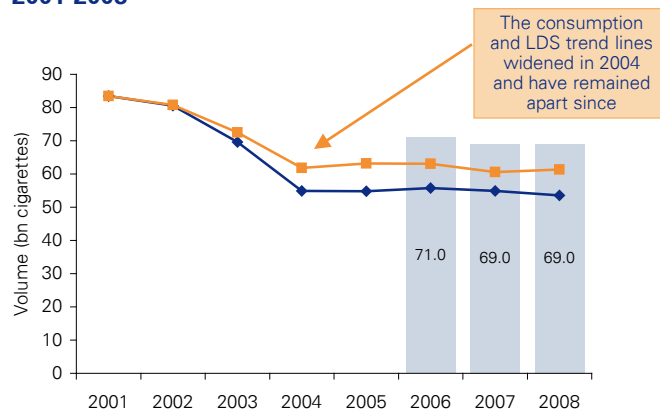
## BAT estimates for non-domestic incidence since 2006 have consistently fallen in the range from 22% to 26% of consumption

- BAT's non-domestic estimate is based on a packet swap methodology

# Consumption modelling

Consumption modelling results suggest non-domestic consumption increased in 2008, which is consistent with EU Flows Model results

## Consumption index modelling 2001-2008<sup>(1)(2)(3)</sup>



CAGR (%)	2001-2004	2004-2008	2007-2008
■ LDS	(13.0)%	(0.6)%	(2.5)%
■ KPMG consumption index	(9.5)%	(0.2)%	1.2%
■ KPMG consumption estimate	n/a	n/a	0.0%

Note: (a) GCTS refers to the Global Consumer Tracking Survey to estimate smoking prevalence and average smoking volume by country

Sources: (1) KPMG Consumption Index model  
(2) In Market Sales supplied by PMI  
(3) KPMG EU Flows Model

## Consumption index modelling results suggest that legal sales have declined at a faster rate than consumption since 2001

- GCTS data indicates an increase in consumption in 2008 whilst legal sales have decreased. This suggests increasing importance of inflows relative to outflows
  - this is consistent with EU Flows Model results showing an increase in net inflows from 14.0 billion cigarettes in 2007 to 15.4 billion cigarettes in 2008

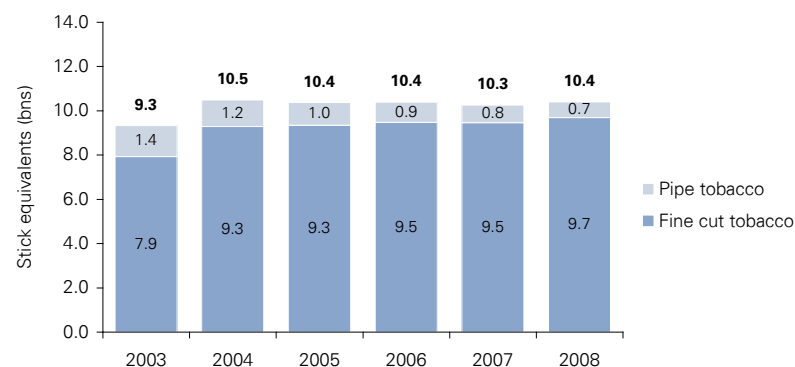
## Consumption index modelling is undertaken to identify discrepancies between the legal domestic sales trend and other consumption estimates and potentially provides an indication of changes in non-domestic inflows and outflows

- The KPMG consumption index is calculated using the incidence of smoking and the average daily consumption and the population of each market (from OEF)
  - these figures are then indexed to the earliest year for which we have data from the both GCTS<sup>(a)</sup> and LDS data available, 2001 for France
- Please note that consumption modelling can only identify market trends and cannot be used to quantify total consumption
  - the gap between indexed consumption and LDS in the final year is therefore only a broad indication of the extent to which the market has changed over the analysed period
  - in many markets, some level of inflows or outflows are likely to be present in the first analysed year

# OTP market size and growth

Legal domestic sales of fine cut tobacco and pipe tobacco have remained stable since 2004

OTP sales in billion stick equivalents  
2003-2008<sup>(1)(a)(b)</sup>



Year	2003	2004	2005	2006	2007	2008
<b>Manufactured cigarette sales (bn cigarettes)</b>	69.6	54.9	54.8	55.8	54.9	53.6

CAGR (%)	2003-2004	2004-2007	2007-2008
■ Pipe tobacco	(14.3)%	(12.4)%	(12.5)%
■ Fine cut tobacco	17.1%	(0.6)%	2.6%
<b>Total Smoking tobacco</b>	<b>12.4%</b>	<b>(0.7)%</b>	<b>1.5%</b>
<b>Manufactured cigarettes</b>	<b>(21.1)%</b>	<b>0.0%</b>	<b>(2.5)%</b>

Notes: (a) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams

(b) Cigars, cigarillos and smokeless tobacco have been excluded from this analysis

Source: (1) Until 2007, OTP volumes supplied by PMI. 2008 volumes are provided by PMI France

Legal domestic sales of fine cut tobacco have increased from 2007 to 2008 whereas sales of manufactured cigarettes have showed a declining trend

- Fine cut tobacco sales increased by 2.6% between 2007 and 2008 while manufactured cigarette sales declined by 2.5% over the same period
- Fine cut tobacco sales increased substantially between 2003 and 2004, while manufactured cigarette sales declined at a faster rate over the same period

OTP categories account for a relatively large share of overall tobacco sales in France

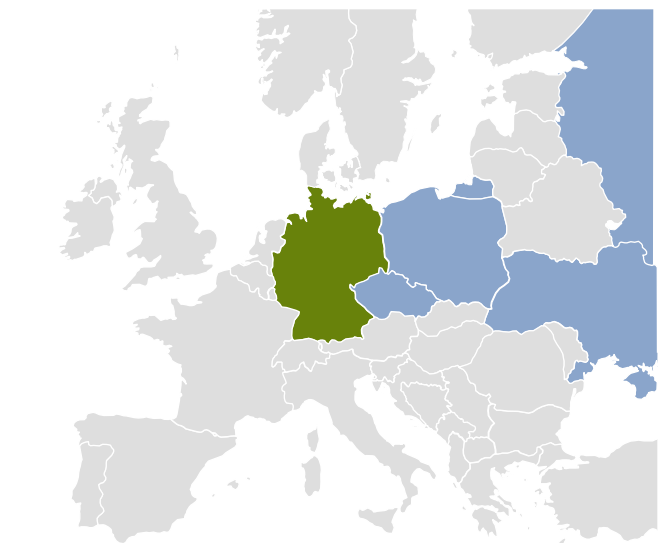
- Smoking tobacco accounts for approximately 16% of overall tobacco sales in France<sup>(b)</sup>

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

**Total consumption in Germany remained relatively stable at 106.9 billion cigarettes in 2008**

**A decline in legal domestic sales in Germany was offset by a increase in non-domestic inflows over the same period**

**Key source and destination markets<sup>(1)(a)</sup>**



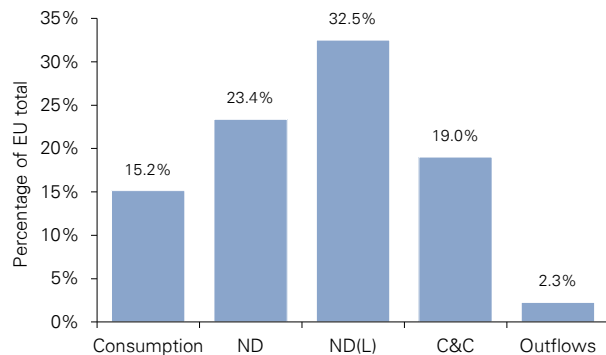
**Key:** ■ Germany ■ Major source countries

**Note:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow

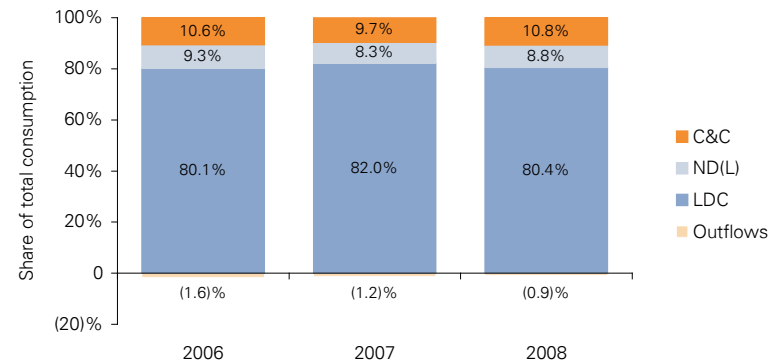
(b) Non-domestic consumption has been calculated on a 'packet' basis rather than on a cigarette basis. This reflects lack of availability of cigarettes per packet data in the full year Yellow Bag Survey.

**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
(2) GfK ND(L) research 2006. Synovate ND(L) research 2007, 2008

**Proportions of total EU levels<sup>(1)(2)</sup>**

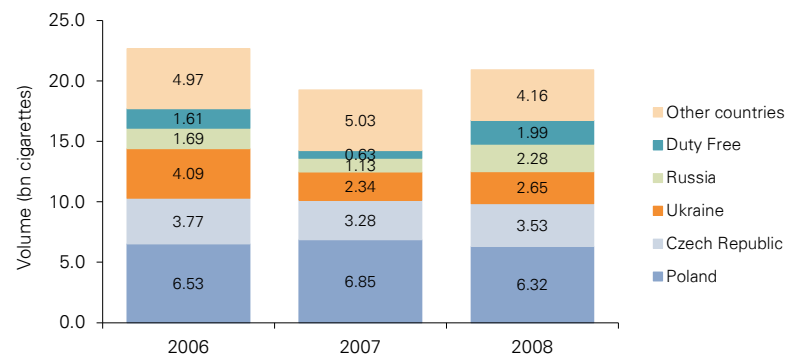


**Total German consumption 2006-2008<sup>(1)(2)(b)</sup>**



Volume (bn cigarettes):	2006	2007	2008
	114.0	107.3	106.9

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2008<sup>(1)(2)(b)</sup>**

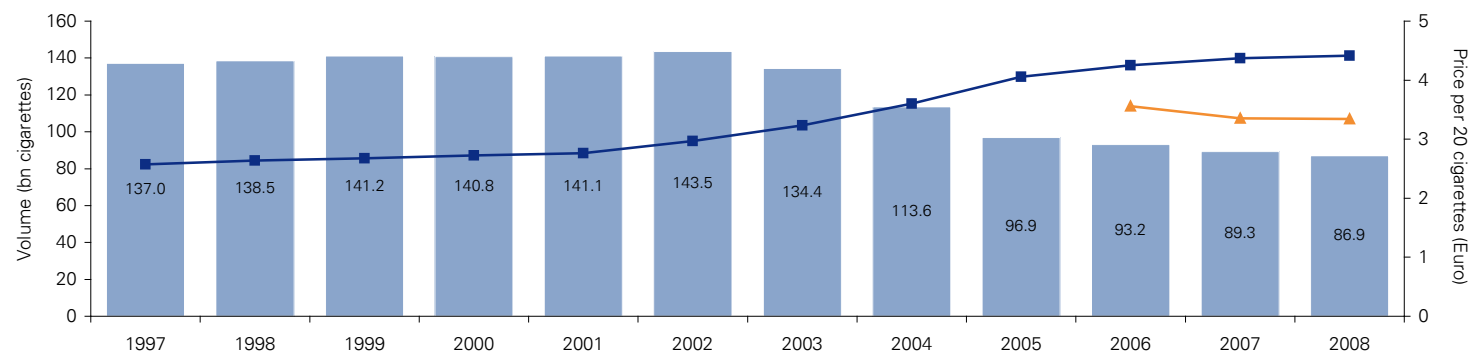


Volume (bn cigarettes):	2006	2007	2008
	22.7	19.3	20.9

# Historic sales and pricing trends

Legal domestic sales have been trending downwards since 2002 as prices have risen

## Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-2002	2002-2005	2005-2008	2007-2008
Legal domestic sales	0.9%	(12.3)%	(3.6)%	(2.7)%
Average pack price	2.9%	11.0%	2.9%	1.1%
Consumption	n/a	n/a	(3.2)% <sup>(a)</sup>	(0.4)%

Notes: (a) Consumption CAGR is from 2006 to 2008

(b) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams

(c) This price is based on a recalculated packet of 20 cigarettes to provide ease of comparability with other European markets

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PMI

(3) 2007 smoking tobacco volumes are supplied by PMI. 2008 volumes are estimates provided by PMI

### Legal domestic sales declined by 2.7% in 2008

- The federal ban on smoking in public transport, taxis, airports and government offices that came into effect in some states on September 1<sup>st</sup> 2007 has been extended to encompass the rest of the country in 2008
  - the anti-smoking legislation was implemented in the remaining states in January and February 2008, however some exceptions are permitted and enforcement level varies between states
- Legal domestic sales of fine cut tobacco declined by 0.3% in 2008 to represent 31.4 billion sticks<sup>(3)(b)</sup>
  - price increases on Other Tobacco Products were implemented in May 2008, however they remain significantly cheaper than cigarettes

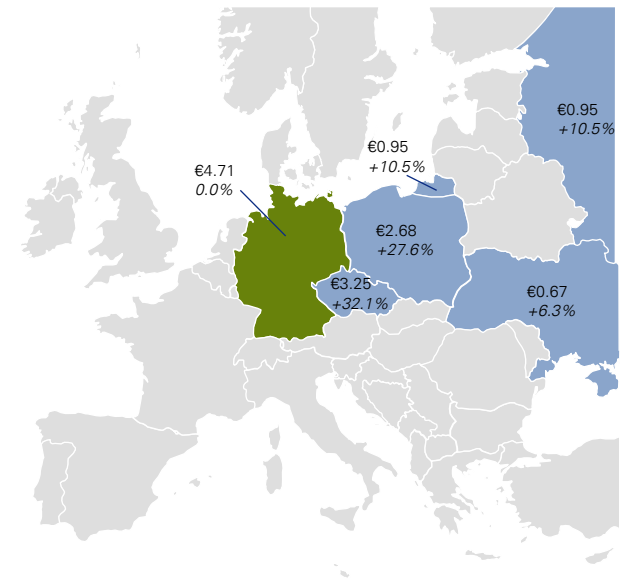
### Average pack price has increased by 1.1% in 2008

- A price increase of €0.10 per packet was implemented mainly on the “Super Low” price category cigarettes in February 2008
- The price of a packet of Marlboro cigarettes (recalculated on a 20 cigarette per packet basis) remained the same at €4.71 on 1<sup>st</sup> July 2007 and 1<sup>st</sup> July 2008<sup>(c)</sup>
  - the price of a standard 17 stick pack of Marlboro was €4.00 on 1<sup>st</sup> July 2007 and 1<sup>st</sup> July 2008

Price differentials between Germany and Poland and the Czech Republic have narrowed in 2008

There has been an apparent down-trading trend in 2008

**Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>**



Key: ■ Germany  
■ Major source countries

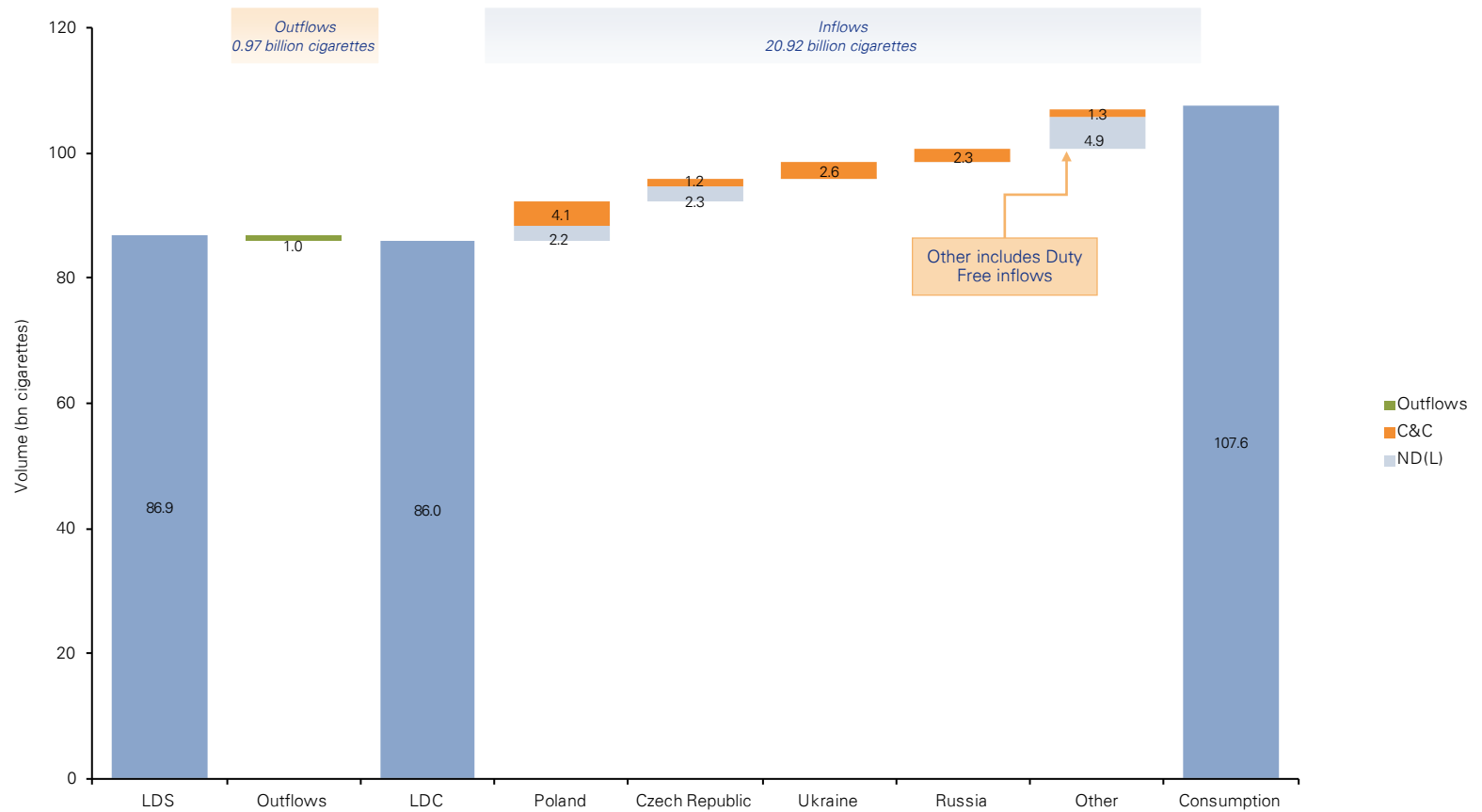
Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) Marlboro retail selling price supplied by PMI



German consumption is estimated at 106.9 billion cigarettes compared to legal domestic sales of 86.9 billion cigarettes, with a net inflow of 20.0 billion cigarettes

**Consumption breakdown 2008**<sup>(1)(2)(3)(4)(a)(b)(c)</sup>



Notes: (a) LDS – Legal Domestic Sales  
 (b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)  
 (c) Non-domestic consumption has been calculated on a ‘packet’ basis rather than on a cigarette basis. This reflects lack of availability of cigarettes per packet data in the full year Yellow Bag Survey.

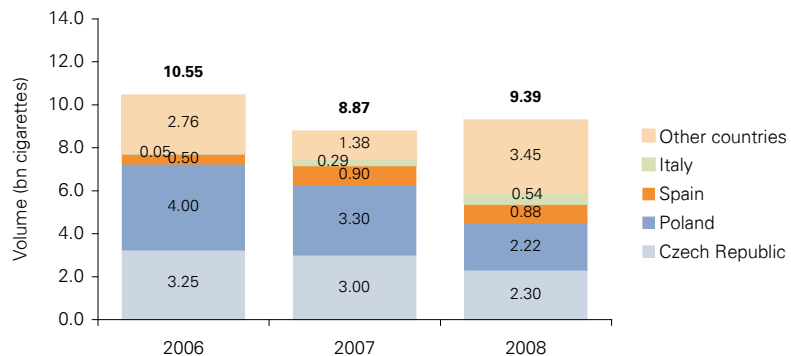
Sources: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2008  
 (3) In Market Sales supplied by PMI  
 (4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

**Non-domestic (legal) inflows to Germany increased to 9.4 billion cigarettes in 2008**

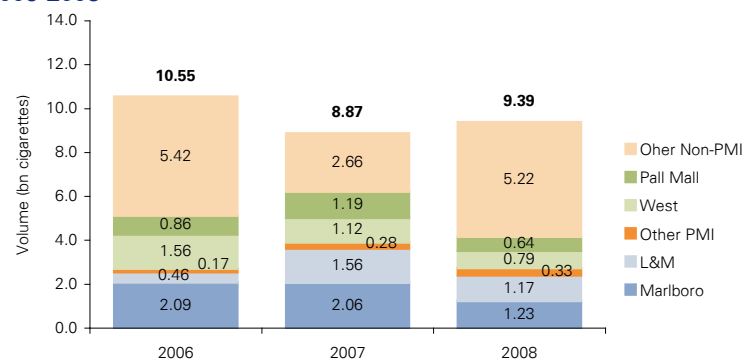
**Non-domestic (legal) inflows from Poland and Czech Republic have declined in 2008, however these countries remain the largest source markets for non-domestic (legal) inflows**

**Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)</sup>**



<b>ND(L) share of consumption:</b>	<b>9%</b>	<b>8%</b>	<b>9%</b>
<b>ND(L) share of non-domestic:</b>	<b>47%</b>	<b>46%</b>	<b>45%</b>

**Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)</sup>**



<b>PMI share of ND(L):</b>	<b>26%</b>	<b>44%</b>	<b>29%</b>
----------------------------	------------	------------	------------

Sources: (1) KPMG EU Flows Model  
 (2) GfK ND(L) research 2006. Synovate ND(L) research 2007, 2008  
 (3) Interviews with PMI Local Management

**ND(L) analysis**

	①	②	③	④		
	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)	
Values 2008	67.3m	67%	27%	2.1	370	
EU rank 2008	1	5	14	19	4	
	x				=	<b>9.39bn</b>
					<b>Total ND(L) (cigarettes)</b>	

**ND(L) analysis 2007-2008**

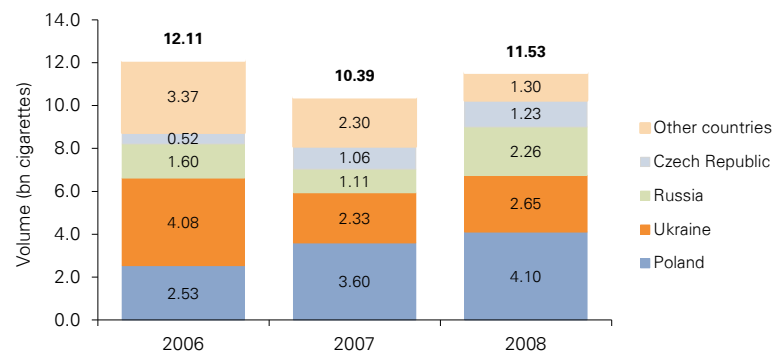
	2007	2008
Propensity to travel and purchase cigarettes	① x ②	11.8%
Average annual cigarettes purchased	③ x ④	771

# Counterfeit and contraband breakdown

Counterfeit and contraband inflows to Germany increased slightly in 2008 to represent 11% of consumption

Incidence of brands not officially sold in the German market (such as Jin Ling) increased in 2008

Counterfeit and contraband by origin  
2006-2008<sup>(1)(2)(3)(a)(b)</sup>



<b>C&amp;C share of consumption:</b>	<b>11%</b>	<b>10%</b>	<b>11%</b>
<b>C&amp;C share of non-domestic:</b>	<b>53%</b>	<b>54%</b>	<b>55%</b>

Notes: (a) In 2008, we have analysed both the Yellow Bag Survey results and PMI's own Empty Pack Survey (EPS) study. Total non-domestic inflows and their breakdown by origin and brand have been based on the Yellow Bag Survey. The PMI counterfeit incidence has also been deduced by using the Yellow Bag Survey results in 2008 as this survey reported a higher level of PMI counterfeit incidence than that found in the EPS. In 2007 however, the EPS study reported a higher level of PMI counterfeit incidence in Germany and was therefore used to estimate PMI counterfeit volumes in 2007

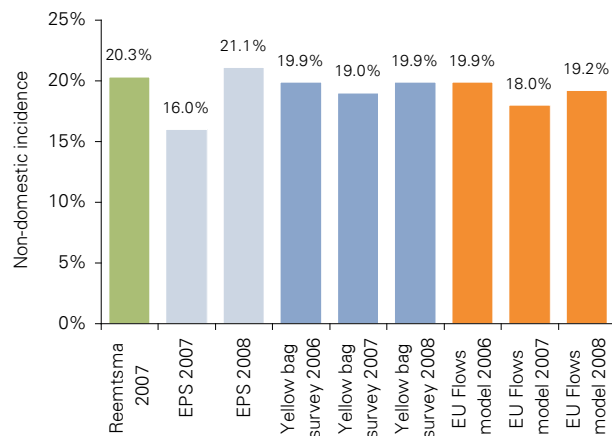
(b) Counterfeit and contraband volumes for individual non-PMI brands is not available for 2006

Sources: (1) KPMG EU Flows Model  
(2) GfK ND(L) research 2006. Synovate ND(L) research 2007, 2008  
(3) Interviews with PMI Local Management

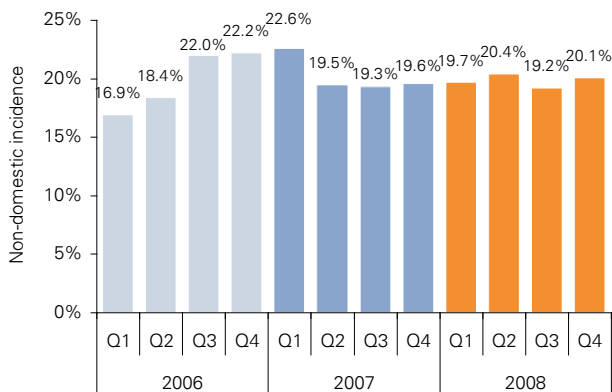
# Comparison of external sources for non-domestic estimates

The EU Flows Model results are broadly in line with Yellow Bag Survey results from 2006 to 2008

Non-domestic market volume estimates<sup>(1)(2)(3)(4)(a)</sup>



Yellow Bag survey results 2006-2008<sup>(2)</sup>



Notes (a) The EPS in 2007 was carried out in Q4. All of the remaining EPS and Yellow Bag estimates are based on Q1-Q4 results

Sources: (1) KPMG EU Flows Model

(2) "Yellow Bag" survey, an empty pack survey undertaken by the German Cigarette Industry Association (VDC), 2006 to 2007 and by TFT in 2008.

(3) PMI EPS Q4 2007, Q1-Q4 2008

(4) "Cigarette sales seen down 3.0 – 5.0 pct on smoking ban in Germany", German News Digest, 11<sup>th</sup> April 2008

## KPMG estimates for non-domestic consumption are consistent with the trends highlighted by the Yellow Bag Survey results

- We have analysed both the Yellow Bag Survey and PMI's Empty Pack Survey (EPS). In 2008 we have used the Yellow Bag Survey as the source of our non-domestic consumption estimates for the following reasons:
  - the Project Star results were predominantly based on the Yellow Bag Survey in 2006 and 2007. Use of the Yellow Bag Survey in 2008 enables greater comparability with the previous years data
  - the Yellow Bag Survey has a higher sample size

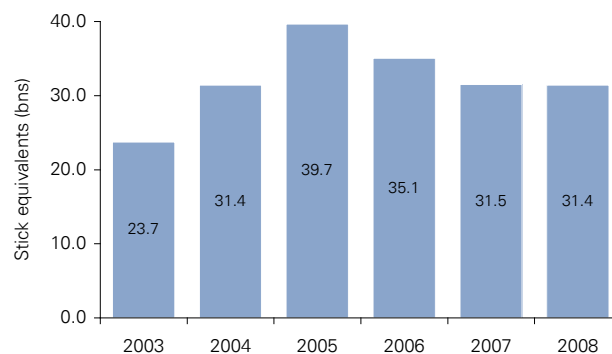
## KPMG's estimate for non-domestic consumption is slightly lower than the Yellow Bag results for 2008

- Polish inflows have been reduced by 0.51 billion cigarettes to reflect analysis of Polish and German border data
  - this adjustment is corroborated by the estimates for consumption trend in Poland and Germany

# OTP market size and growth

**Sales of fine cut tobacco declined slightly in 2008 to represent 31.4 billion stick equivalents**

**Fine cut tobacco sales in billion stick equivalents 2003-2008<sup>(1)(a)(b)</sup>**



Manufactured cigarette sales (bn cigarettes)	2003	2004	2005	2006	2007	2008
	134.4	113.6	96.9	93.2	89.3	86.9

CAGR (%)	2003-2005	2005-2007	2007-2008	2003-2008
Fine cut tobacco	29.3%	(10.9)%	(0.3)%	5.8%
Manufactured cigarettes	(15.1)%	(4.0)%	(2.7)%	(8.3)%

Notes: (a) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams

(b) Cigars/cigarillos, pipe tobacco and smokeless tobacco has been excluded from this analysis

Source: (1) Until 2007, OTP volumes are supplied by PMI. 2008 volumes are estimates provided by PMI Germany

## Legal domestic sales of fine cut tobacco have remained relatively stable in 2008 at 31.4 billion stick equivalents

- Fine cut tobacco sales declined by 0.3% from 2007 to 2008 while manufactured cigarette declined by 2.7% over the same period
- Fine cut sales have increased from 2003 levels while manufactured cigarette sales have trended downwards in each consecutive year from 2003
  - sales of fine cut tobacco grew at an annual rate of 5.8% between 2003 and 2008, while manufactured cigarette sales declined by 8.3% over the same time period

## OTP categories account for a relatively large share of tobacco consumption in Germany

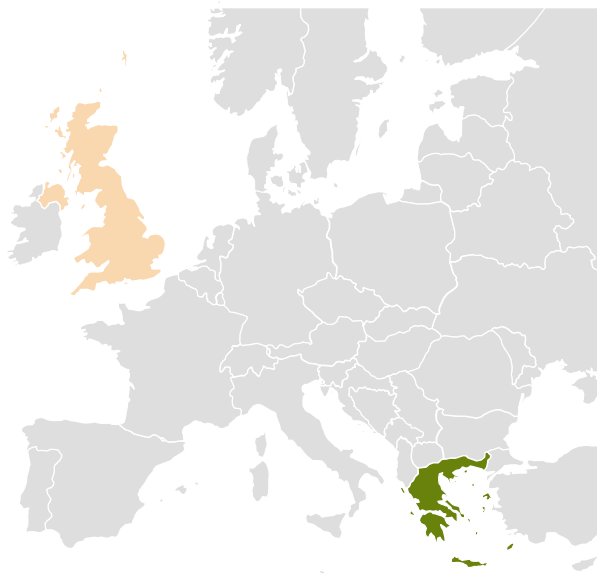
- Fine cut tobacco accounts for approximately 28% of overall tobacco legal domestic sales in 2008

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

**Total consumption in Greece declined by 2.9% in 2008 driven by a decrease in non-domestic inflows**

**Outflows declined in 2008 driven primarily by lower outflows to the UK**

**Key destination market<sup>(1)(a)</sup>**

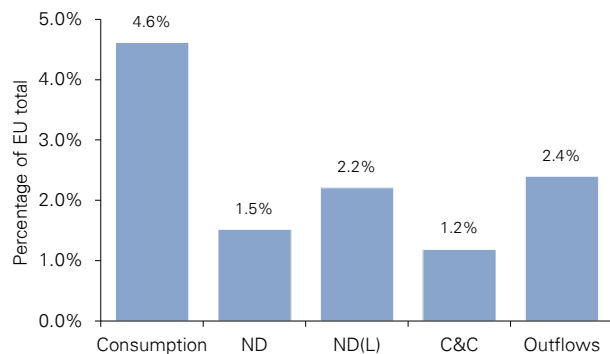


**Key:** ■ Greece ■ Major destination country

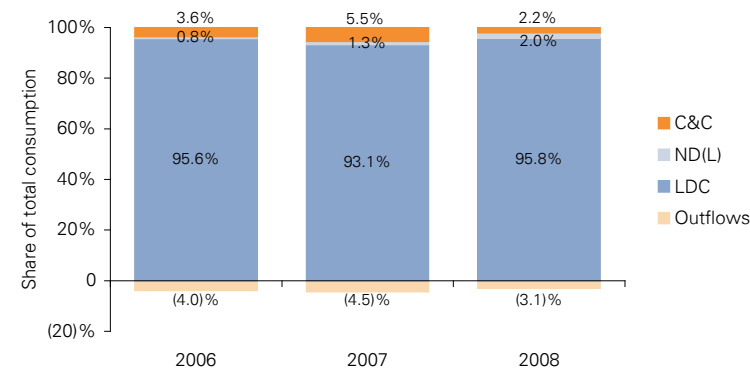
**Note:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow

**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
(2) Synovate ND(L) research 2006, 2008

**Proportion of total EU levels<sup>(1)(2)</sup>**



**Total Greek consumption 2006-2008<sup>(1)(2)</sup>**



Volume (bn cigarettes):	2006	2007	2008
	33.7	33.6	32.6

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2008<sup>(1)(2)</sup>**

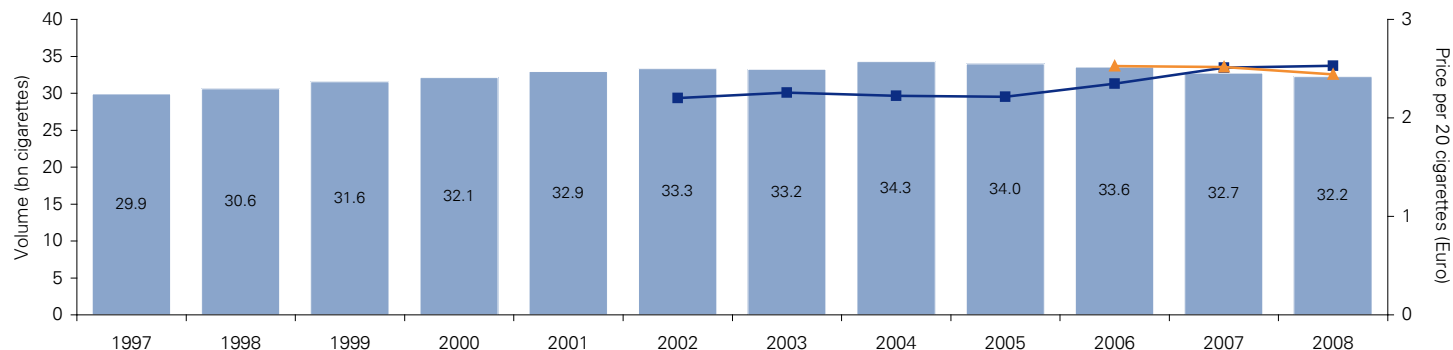


Volume (bn cigarettes):	2006	2007	2008
	1.5	2.3	1.4

# Historic sales and pricing trends

Legal domestic sales have declined from 2005 to 2008 whilst average prices have increased

## Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-2001	2001-2008	2006-2008	2007-2008
■ Legal domestic sales	2.4%	(0.3)%	(2.0)%	(1.6)%
■ Average pack price	n/a	2.3% <sup>(a)</sup>	3.8%	0.8%
▲ Consumption	n/a	n/a	(1.7)%	(2.9)%

Note: (a) Weighted average pack price CAGR is from 2002 to 2008

(b) The 2008 fine cut tobacco volume is supplied by PMI

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PMI

(3) OTP volumes supplied by PMI

(4) "Arrivals of non-residents at hotels and similar establishments", Eurostat, accessed April 2009

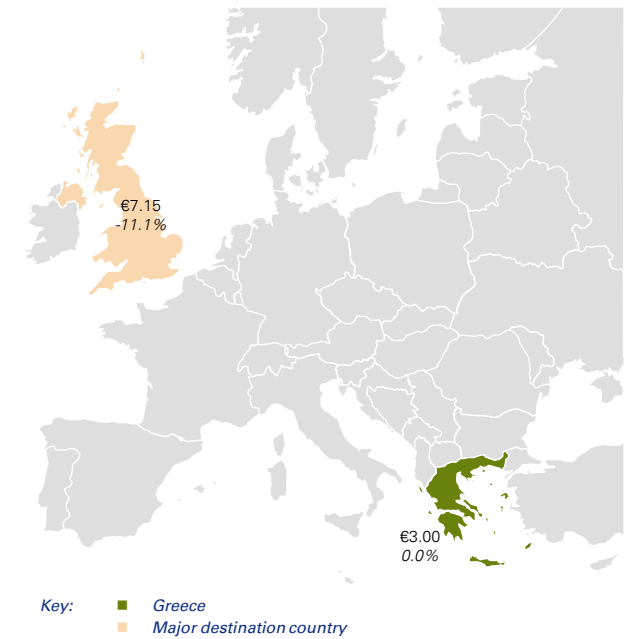
### Legal domestic sales of manufactured cigarettes declined by 1.6% in 2008, whilst average pack price increased by 0.8%

- Legal sales of smoking tobacco increased by 10.0% in 2008<sup>(3)(b)</sup>
- Average pack price increased by 0.8% in 2008, driven by the change in Most Popular Price Category from €2.80 to €3.00 per 20 cigarettes and the subsequent increase of the minimum excise tax rate for cigarettes from January 2008
- Greece's anti-smoking legislation bans smoking in most public buildings. Bars and restaurants must allocate space for non-smokers
- Selling cigarettes through vending machines was banned from December 2008



In 2008 the market share by price category has remained stable

### Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



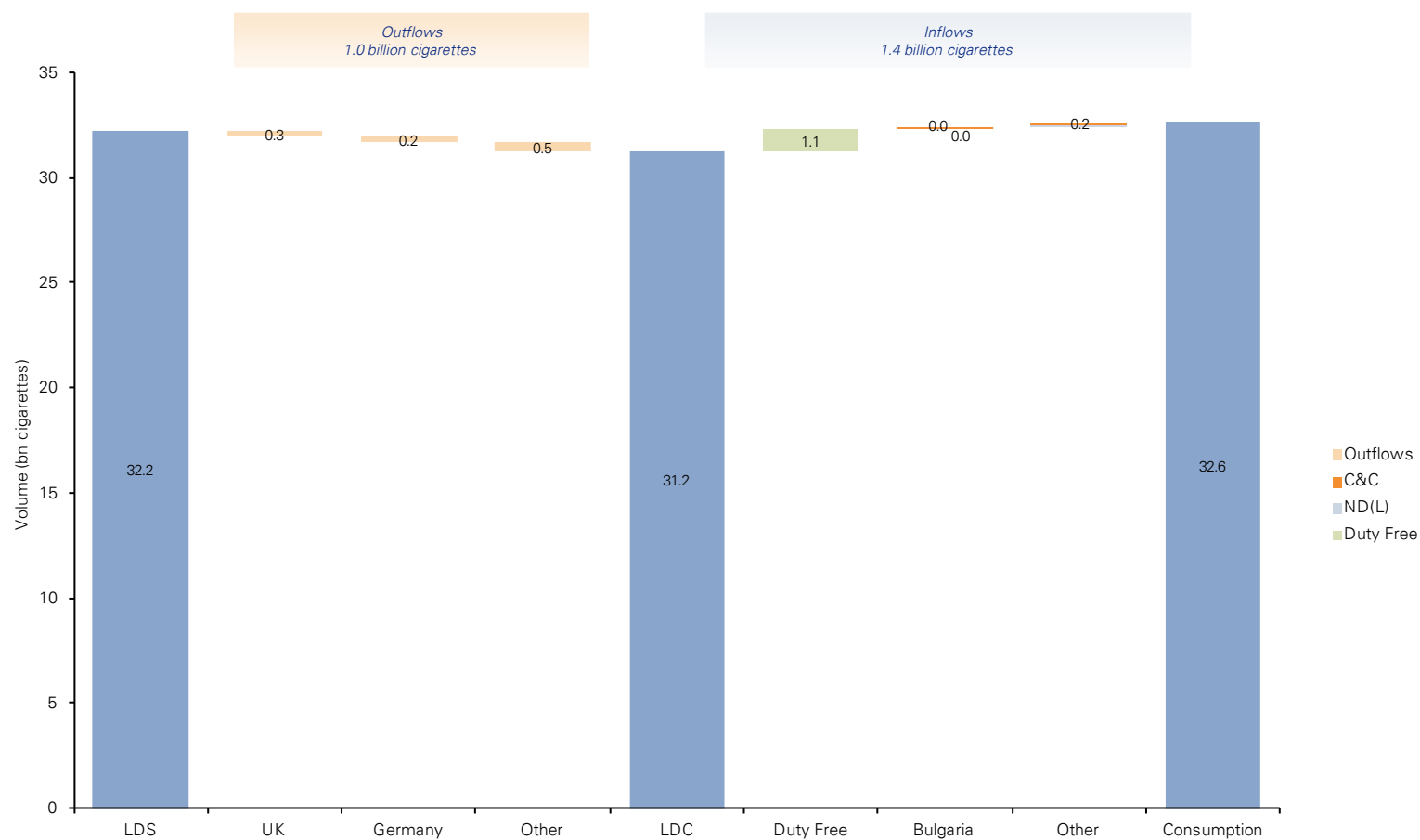
Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) Marlboro retail selling price supplied by PMI

# Outflows and inflows

**Greek consumption is estimated at 32.6 billion cigarettes versus legal sales of 32.2 billion cigarettes, with a net inflow of 0.4 billion cigarettes in 2008**

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)(c)</sup>



Notes: (a) LDS – Legal Domestic Sales

(b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)

(c) For the purposes of Project Star, Duty Free includes all packs that were classified as Duty Free, Duty Paid or had labels that could not be identified

Sources: (1) KPMG EU Flows Model

(2) Synovate ND(L) research 2008

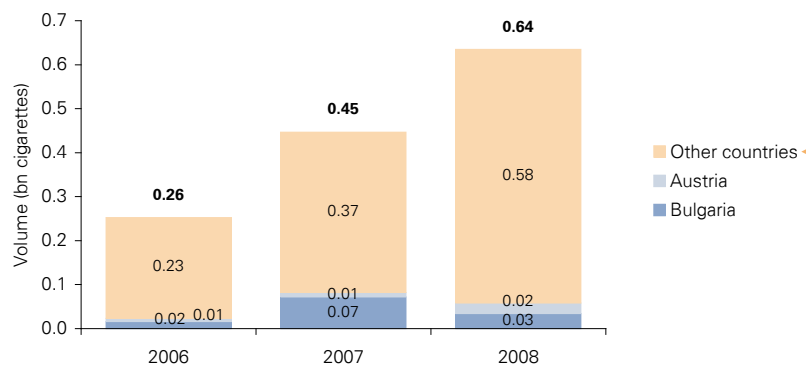
(3) In Market Sales supplied by PMI

(4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

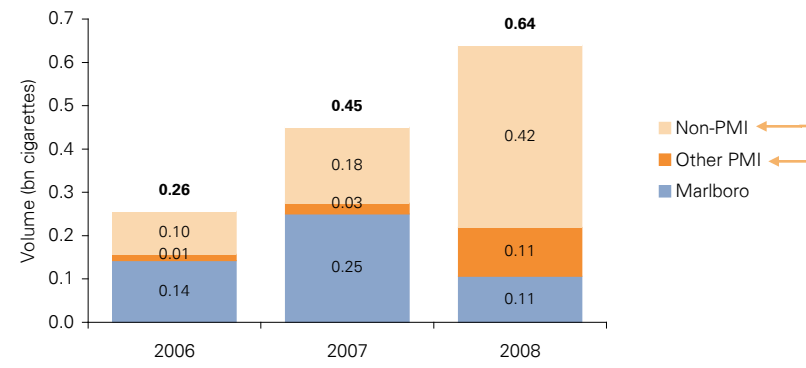
**Non-domestic (legal) inflows increased to 0.64 billion cigarettes in 2008 and accounted for 47% of non-domestic consumption**

**Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)</sup>**



<b>ND(L) share of consumption:</b>	<b>1%</b>	<b>1%</b>	<b>2%</b>
<b>ND(L) share of non-domestic:</b>	<b>17%</b>	<b>20%</b>	<b>47%</b>

**Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)</sup>**



<b>PMI share of ND(L):</b>	<b>61%</b>	<b>61%</b>	<b>34%</b>
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Sources: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2006, 2008  
 (3) Interviews with PMI Local Management

**ND(L) analysis**

	1	2	3	4	Total ND(L) (cigarettes)
Population 19+	8.8m				
Propensity to travel		38%			
Propensity to purchase			67%		
Ave. no. of trips				1.3	
Ave. purchases (cigarettes)					227
<b>Total ND(L) (cigarettes)</b>	<b>0.64bn</b>				
EU rank 2008	9	19	1	27	7

**ND(L) analysis 2007-2008**

	2007	2008
Propensity to travel and purchase cigarettes	8.8%	25.2%
Average annual cigarettes purchased	585	290

Other countries is mainly driven by Duty Free inflows, and also includes flows from Romania, Czech Republic and Belgium

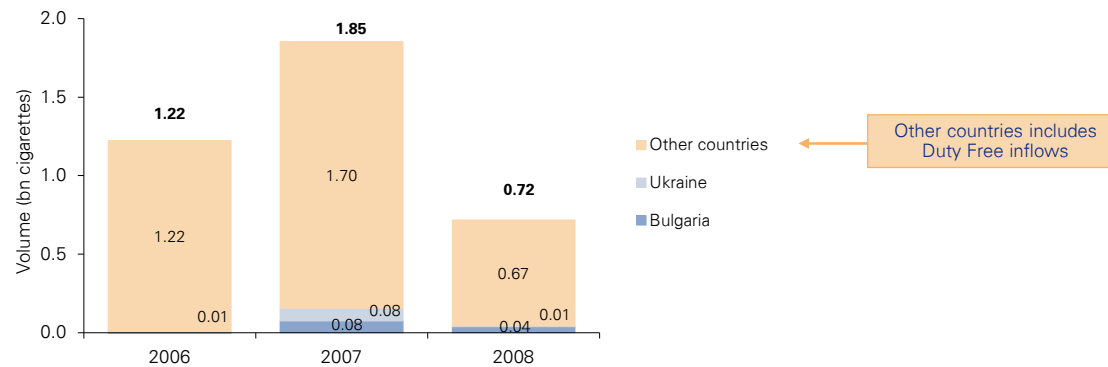
Non-PMI includes small volumes of a number of brands such as Rothmans, GR, Karelia and Peter Stuyvesant

Other PMI brands principally include Assos International, Assos and Muratti

# Counterfeit and contraband breakdown

Counterfeit and contraband inflows decreased to 0.72 billion cigarettes in 2008

Counterfeit and contraband by origin  
2006-2008<sup>(1)(2)(3)</sup>



<b>C&amp;C share of consumption:</b>	<b>4%</b>	<b>6%</b>	<b>2%</b>
<b>C&amp;C share of non-domestic:</b>	<b>83%</b>	<b>80%</b>	<b>53%</b>

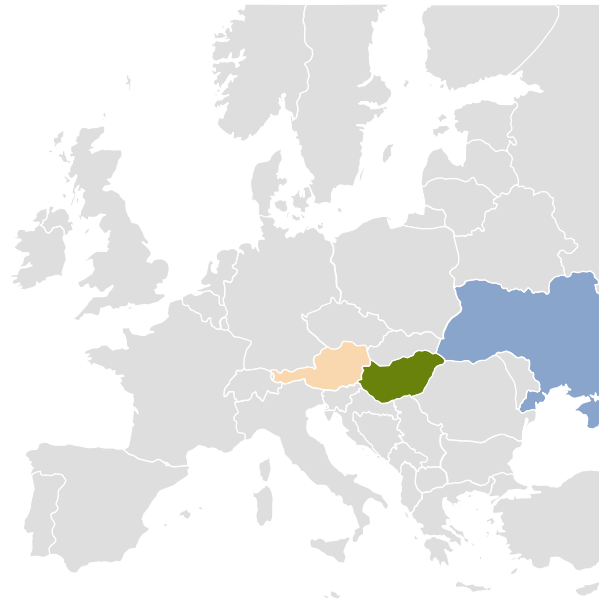
Sources: (1) KPMG EU Flows Model  
(2) Synovate ND(L) research 2006, 2008  
(3) Interviews with PMI Local Management

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

**Total consumption in Hungary declined by 3.7% in 2008 driven by higher outflows and a decrease in non-domestic inflows**

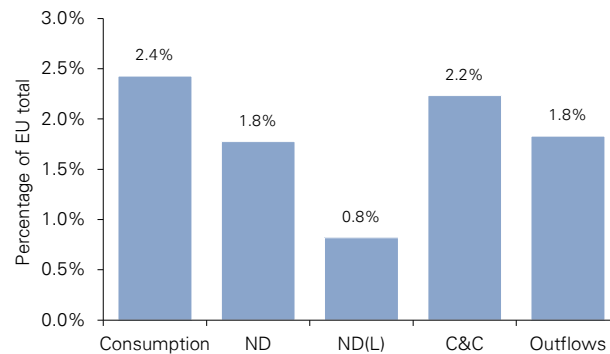
**Non-domestic inflows to Hungary fell by 0.4 billion cigarettes in 2008 due largely to falling inflows from Ukraine**

## Key source and destination markets<sup>(1)(a)</sup>

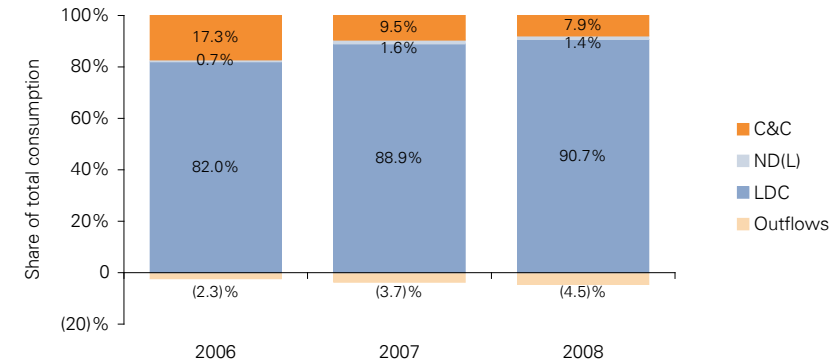


**Key:** ■ Hungary ■ Major source country ■ Major destination country  
**Note:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow  
**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
 (2) AC Nielsen ND(L) research 2006, 2007 and 2008

## Proportion of total EU levels<sup>(1)(2)</sup>



## Total Hungarian consumption 2006-2008<sup>(1)(2)</sup>



Volume (bn cigarettes):	2006	2007	2008
	18.8	17.8	17.1

## Total non-domestic inflows (ND(L) and C&C) 2006-2008<sup>(1)(2)</sup>

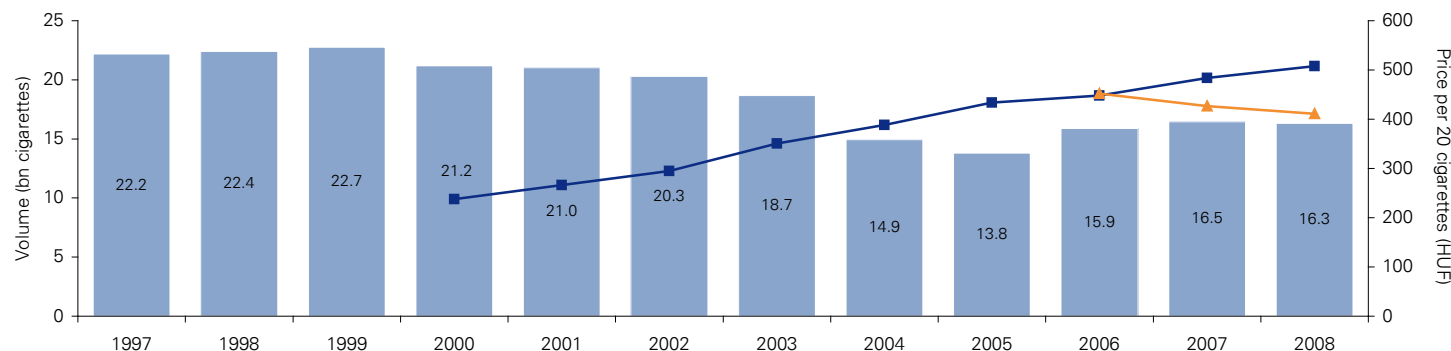


Volume (bn cigarettes):	2006	2007	2008
	3.4	2.0	1.6

# Historic sales and pricing trends

Legal domestic sales declined to 16.3 billion cigarettes in 2008, following a period of sales growth between 2005 and 2007

## Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)(a)</sup>



CAGR (%)	1997-2003	2003-2005	2005-2007	2007-2008
Legal domestic sales	(2.8)%	(14.1)%	9.3%	(1.0)%
Average pack price	n/a	11.3%	5.6%	4.9%
Consumption	n/a	n/a	(5.6)% <sup>(b)</sup>	(3.7)%

Note: (a) For reasons of consistency across Member States, Project Star uses In Market Sales data in order to measure legal domestic sales as it reflects actual retail sales to consumers during a calendar year. Alternative sources of data may be measured at a different points in the supply chain (such as ex-warehouse or factory) and therefore be subject to inventory fluctuations which would otherwise distort year on year trends and comparability between countries

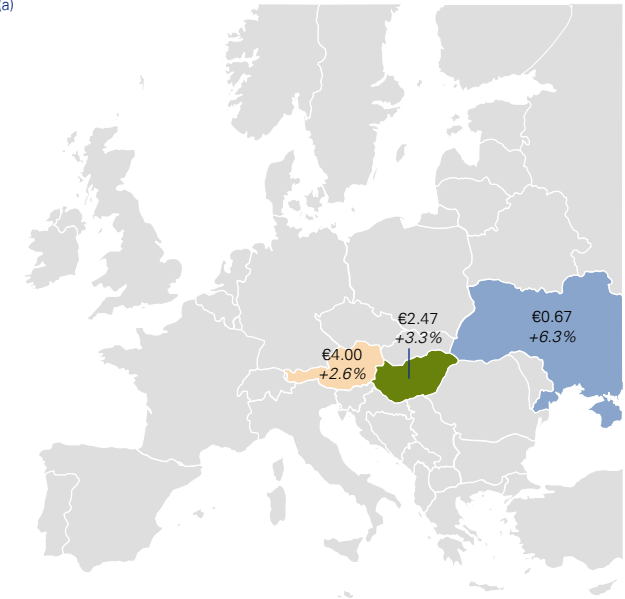
(b) Consumption CAGR calculated between 2006 and 2007

Sources: (1) In Market Sales supplied by PMI  
 (2) Weighted average pack price supplied by PMI  
 (3) Interview with Hungarian Customs and Finance Guard  
 (4) Information on imports of cigarettes, Hungarian Customs and Finance Guard website, accessed April 2009

## Legal domestic sales of manufactured cigarettes declined by 1.0% in 2008, whilst average pack price increased by 4.9%

- In Market Sales data is based on data from the Hungarian Association of Tobacco Industry and includes a PM Hungary estimate for inventory levels at the end of 2008, prior to the January 2009 excise tax increase
  - free circulation of cigarettes in Hungary was 17.4 billion cigarettes in 2008<sup>(3)</sup>
- Average pack price increased by 4.9% in 2008, driven by the excise tax increases implemented in April and September 2008
- Anti-forestalling legislation was in place during 2008 to limit the volume of tax stamps manufacturers could purchase prior to an excise tax increase
- In 2008 individuals bringing in more than 40 cigarettes to Hungary were required to complete a declaration for the cigarettes imported<sup>(4)</sup>
  - from 2009 the cigarette limits for arrivals from non-EU locations has been reduced to 40 cigarettes, unless via aircraft where the limit is 200 cigarettes<sup>(3)</sup>
- In December 2007 Hungary joined the Schengen zone

Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



Key: ■ Hungary  
■ Major source country  
■ Major destination country

Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

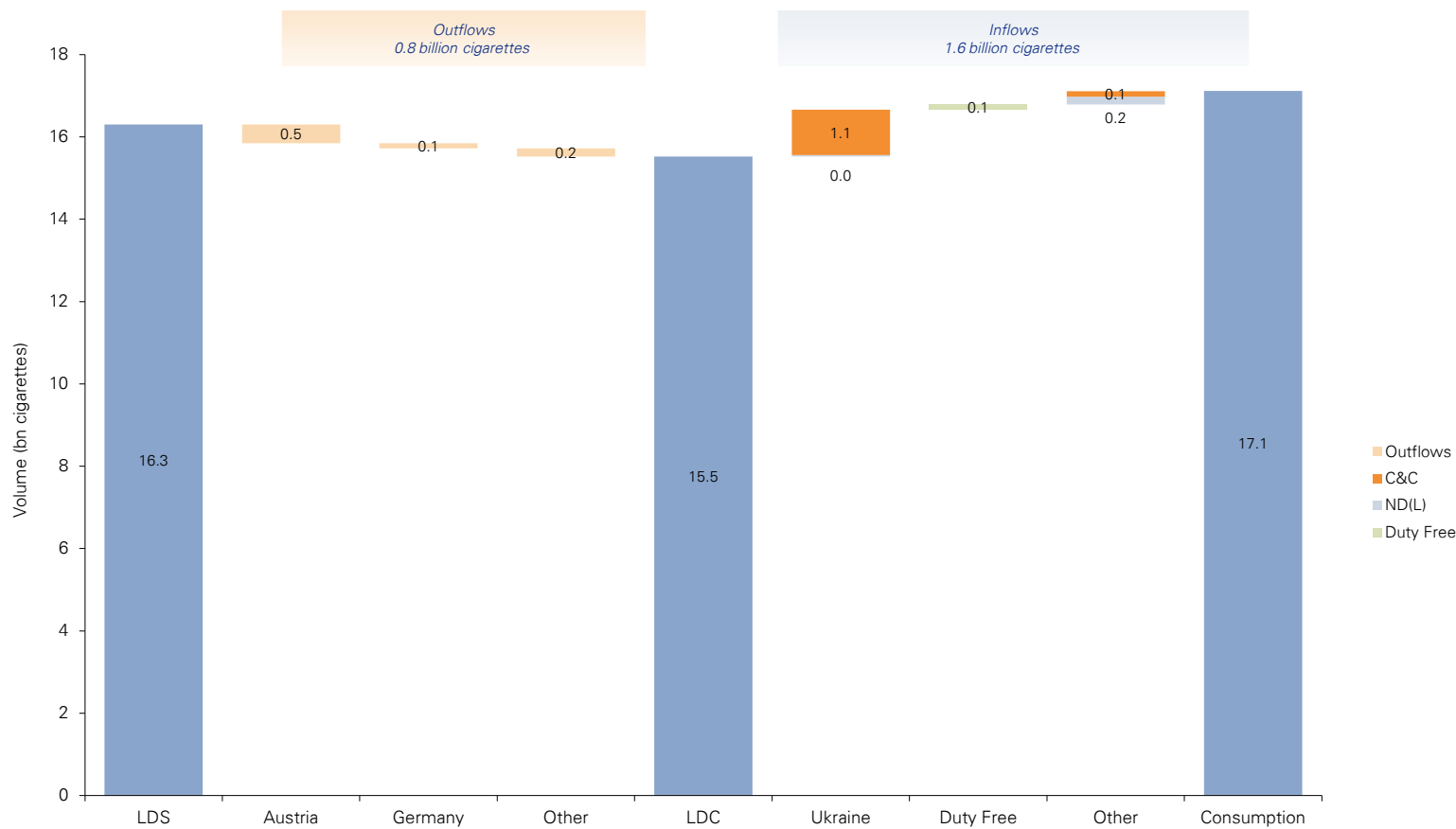
Sources: (1) Marlboro retail selling price supplied by PMI



# Outflows and inflows

**Hungarian consumption is estimated at 17.1 billion cigarettes versus legal sales of 16.3 billion cigarettes, with a net inflow of 0.8 billion cigarettes**

**Consumption breakdown 2008**<sup>(1)(2)(3)(4)(a)(b)</sup>

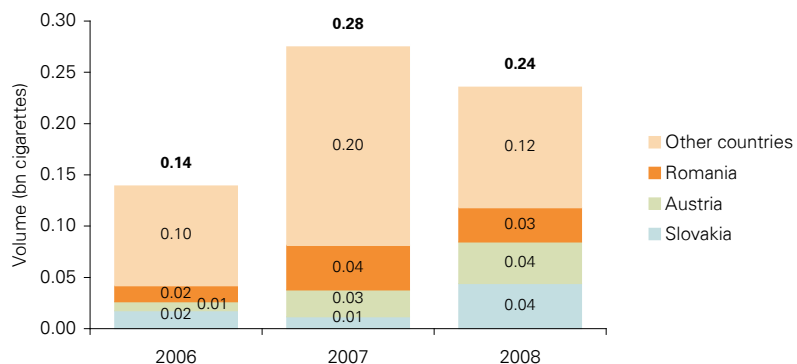


Notes: (a) LDS – Legal Domestic Sales  
 (b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)  
 Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2008  
 (3) In Market Sales supplied by PMI  
 (4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

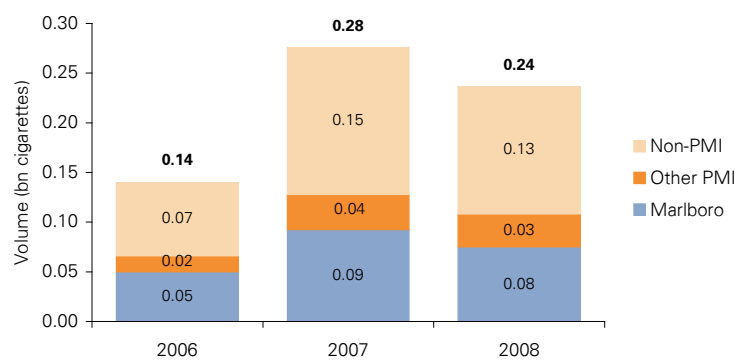
**Non-domestic (legal) consumption declined to 0.24 billion cigarettes in 2008, and accounted for 1% of total consumption**

**Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)</sup>**



<b>ND(L) share of consumption:</b>	<b>1%</b>	<b>2%</b>	<b>1%</b>
<b>ND(L) share of non-domestic:</b>	<b>4%</b>	<b>14%</b>	<b>15%</b>

**Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)</sup>**



<b>PMI share of ND(L):</b>	<b>47%</b>	<b>46%</b>	<b>46%</b>
----------------------------	------------	------------	------------

Note: (a) ND(L) analysis from AC Nielsen excludes adjustments to inbound tourism flows. Total ND(L) including these adjustments is 0.24 billion cigarettes

**ND(L) analysis<sup>(a)</sup>**

	1	2	3	4	Total ND(L) (cigarettes)
Population 19+	7.9m				
Propensity to travel		31%			
Propensity to purchase			16%		
Ave. no. of trips				4.9	
Ave. purchases (cigarettes)					92
<b>Total ND(L) (cigarettes)</b>	<b>0.18bn<sup>(a)</sup></b>				
EU rank 2008	13	24	23	4	24

**ND(L) analysis 2007-2008**

	2007	2008
Propensity to travel and purchase cigarettes	4.9%	4.9%
Average annual cigarettes purchased	394	451

Non-domestic (legal) volumes from 'other' countries are driven by Ukraine and Italy

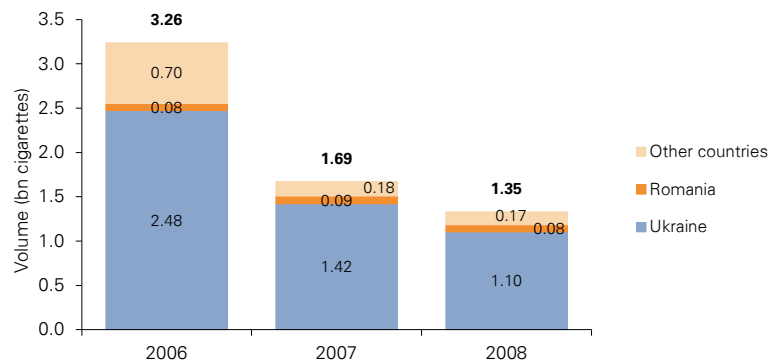
Pall Mall was the main non-PMI brand in 2008. In addition there are small volumes of a number of brands including Kent, Priluki and Camel. Pall Mall was also the main non-PMI brand in 2007

Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2006, 2007 and 2008  
 (3) Interviews with PMI Local Management

# Counterfeit and contraband breakdown

**C&C inflows to Hungary decreased by 20% in 2008 driven by lower inflows from Ukraine**

**Counterfeit and contraband by origin 2006-2008<sup>(1)(2)(3)</sup>**



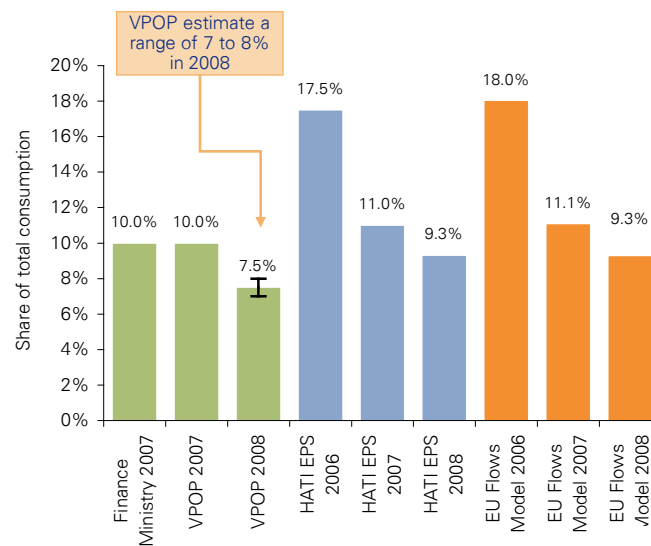
<b>C&amp;C share of consumption:</b>	<b>17%</b>	<b>10%</b>	<b>8%</b>
<b>C&amp;C share of non-domestic:</b>	<b>96%</b>	<b>86%</b>	<b>85%</b>

Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2006, 2007 and 2008  
 (3) Interviews with PMI Local Management

# Comparison of external sources for non-domestic estimates

In 2008, the EU Flows Model shows a decline in non-domestic incidence compared to previous years

Non-domestic market volume estimates<sup>(1)(2)(3)(4)</sup>



- Sources:
- (1) KPMG EU Flows Model
  - (2) "Illicit Cigarette Market", Empty Pack Surveys carried out by GFK for Hungarian Association of Tobacco Industry; 2006, 2007 and 2008
  - (3) "Hungary black economy clampdown yields results", Reuters News, 10<sup>th</sup> July 2007
  - (4) Meeting with Hungarian Customs and Finance Guard (VPOP), April 2009

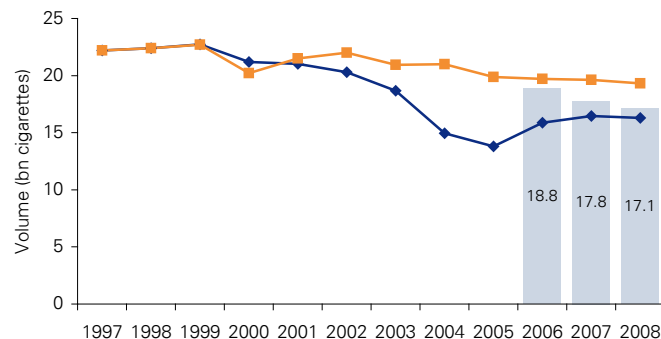
## KPMG results for non-domestic share are in line with Empty Pack Survey results conducted for the Hungarian Association of Tobacco Industry

- These results are also comparable to the Hungarian Customs and Finance Guard (VPOP) estimates in 2007 and 2008

Consumption modelling results suggest that non-domestic consumption peaked in 2005 but has been declining over the last three years

The decline in non-domestic consumption is consistent with results from the EU Flows Model

### Consumption index modelling 1997-2008<sup>(1)(2)(3)</sup>



CAGR (%)	1997-2003	2003-2005	2005-2007	2007-2008
■ LDS	(2.8)%	(14.1)%	9.3%	(1.0)%
■ KPMG consumption index	(1.0)%	(2.6)%	(0.6)%	(1.7)%
■ KPMG consumption estimate	n/a	n/a	n/a	(3.7)%

Note: (a) GCTS refers to the Global Consumer Tracking Survey to estimate smoking prevalence and average smoking volume by country

Sources: (1) KPMG Consumption Index model  
(2) In Market Sales supplied by PMI  
(3) KPMG EU Flows Model

### Consumption modelling results suggest that non-domestic consumption peaked in 2005 but has subsequently been in decline

- The gap between LDS and the KPMG consumption index for Hungary increased between 2001 and 2005 and has since decreased
- Legal sales have increased by 5.7% per year since 2005 while consumption has declined slightly
- This suggests that non-domestic consumption has decreased since 2005 which is consistent with results from the EU Flows Model

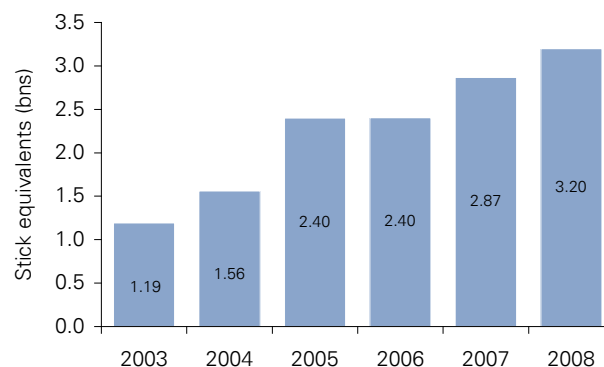
### Consumption index modelling is undertaken to identify discrepancies between the legal domestic sales trend and other consumption estimates and potentially provides an indication of changes in non-domestic inflows and outflows

- The KPMG consumption index is calculated using the incidence of smoking and the average daily consumption and the population of each market (from OEF)
  - these figures are then indexed to the earliest year for which we have data from the both GCTS<sup>(a)</sup> and LDS data available, 1997 for Hungary
- Please note that consumption modelling can only identify market trends and cannot be used to quantify total consumption
  - the gap between indexed consumption and LDS in the final year is therefore only a broad indication of the extent to which the market has changed over the analysed period
  - in many markets, some level of inflows or outflows are likely to be present in the first analysed year

# OTP market size and growth

Smoking tobacco sales in Hungary have been increasing since 2003, whilst legal sales of manufactured cigarettes have declined over the same period

## Smoking tobacco sales in billion stick equivalents 2003-2008<sup>(1)(a)(b)</sup>



Manufactured cigarettes (bn cigarettes)	2003	2004	2005	2006	2007	2008
	18.7	14.9	13.8	15.9	16.5	16.3

CAGR (%)	2003-2005	2005-2007	2007-2008
Smoking tobacco	41.8%	9.3%	11.6%
Manufactured cigarettes	(14.1)%	9.3%	(1.0)%

Notes: (a) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams  
 (b) Total OTP sales will include cigars, cigarillos and smokeless tobacco, these volumes are not included in this analysis

Source: (1) OTP volumes based on information supplied by local PMI, AC Nielsen, La Revue des Tabacs

## Smoking tobacco sales increased between 2003 and 2005, and between 2006 and 2008

- The increase may have been driven by tobacco consumers trading down to lower cost OTP products, following excise tax increases on manufactured cigarettes
- Smoking tobacco accounts for virtually all OTP sales in Hungary

## The rapid growth of OTP products during 2003 to 2005 corresponded with a significant decline in manufactured cigarette sales

- Total OTP sales increased at an average of 41.8% per annum over the period 2003 to 2005, compared with a decline of 14.1% per annum for manufactured cigarettes

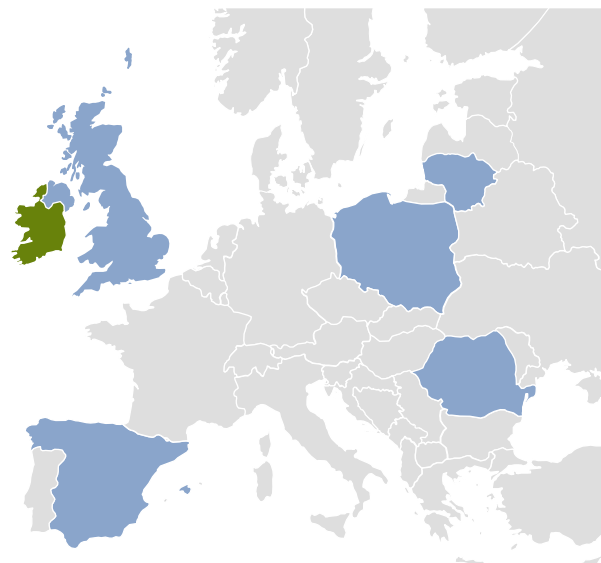
## Sales of both manufactured cigarettes and smoking tobacco remain significantly higher than 2005 levels

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

**Total consumption in Ireland declined by 3.0% in 2008 driven by lower legal domestic sales**

**Non-domestic inflows remain stable at 2.1 billion cigarettes in 2008**

**Key source and destination markets<sup>(1)(a)</sup>**

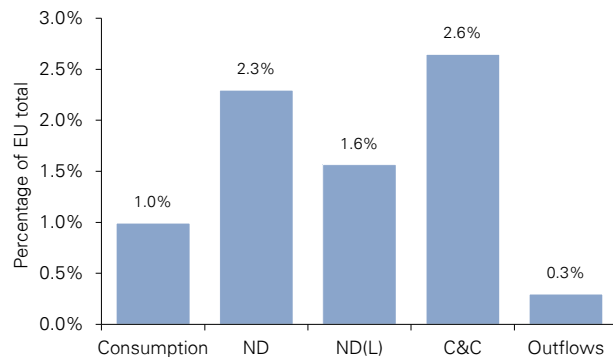


**Key:** ■ Ireland ■ Major source countries

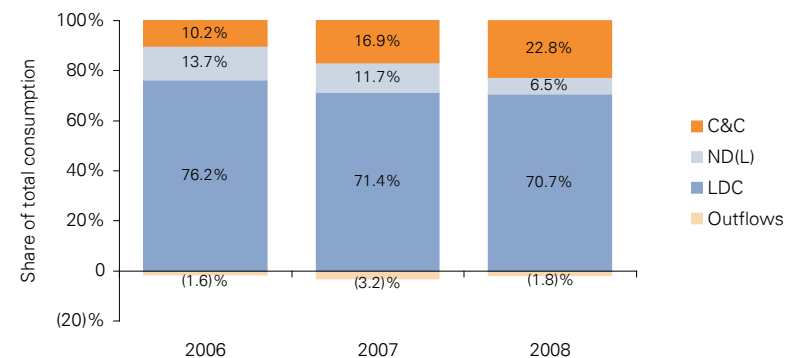
**Note:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow

**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
(2) Synovate ND(L) research 2006, 2007 and 2008

**Proportion of total EU levels<sup>(1)(2)</sup>**



**Total Irish consumption 2006-2008<sup>(1)(2)</sup>**



Volume (bn cigarettes):	2006	2007	2008
	7.2	7.2	7.0

**Total non-domestic inflows (ND(L) and C&C) 2006-2008<sup>(1)(2)</sup>**



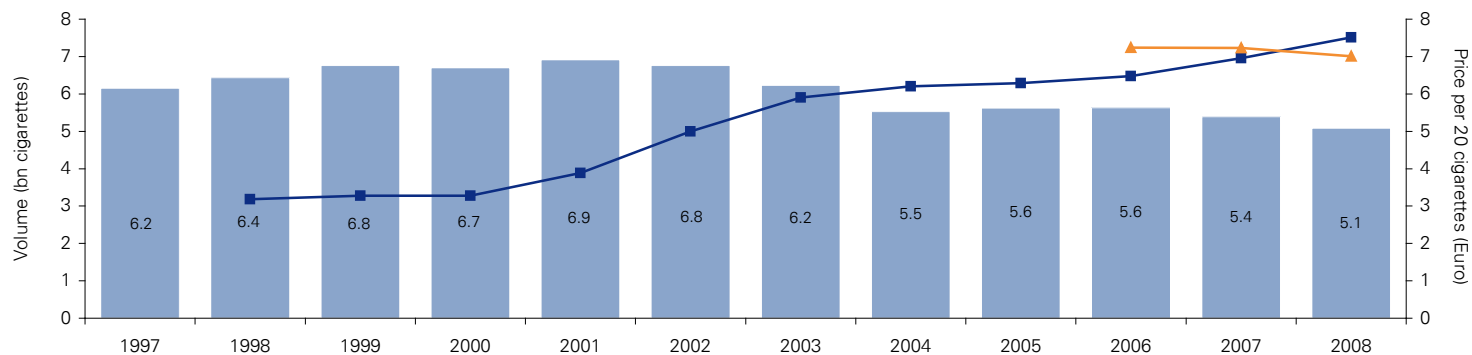
Volume (bn cigarettes):	2006	2007	2008
	1.7	2.1	2.1



# Historic sales and pricing trends

Legal domestic sales have been trending downwards since 2006 as prices have risen

Historic cigarette prices and legal domestic sales  
1997-2008<sup>(1)(2)(a)</sup>



CAGR (%)	1997-2001	2001-2006	2006-2008	2007-2008
■ Legal domestic sales	2.9%	(4.0)%	(5.0)%	(5.7)%
■ Average pack price	6.8% <sup>(b)</sup>	10.8%	7.7%	7.9%
▲ Consumption	n/a	n/a	(1.6)%	(3.0)%

Note: (a) For reasons of consistency across Member States, Project Star uses In Market Sales data in order to measure legal domestic sales as it reflects actual retail sales to consumers during a calendar year. Alternative sources of data may be measured at a different points in the supply chain (such as ex-warehouse or factory) and therefore be subject to inventory fluctuations which would otherwise distort year on year trends and comparability between countries

(b) Price CAGR is from 1998 to 2001

Sources: (1) In Market Sales supplied by PMI

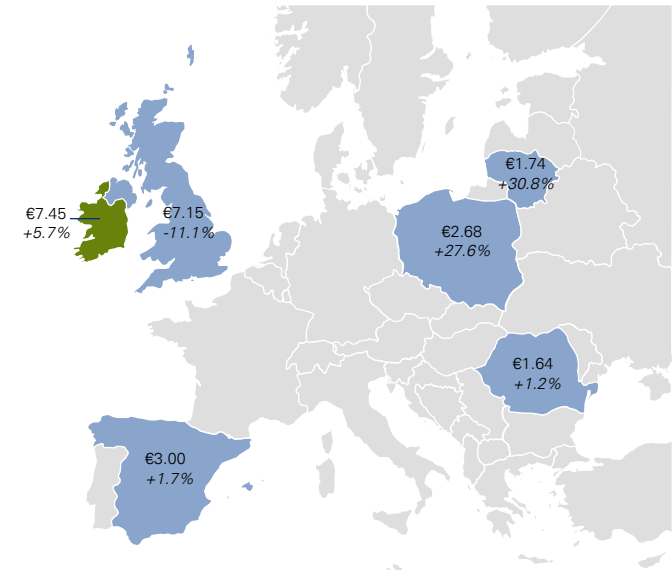
(2) Weighted average pack price supplied by PMI

**In the period 2006 to 2008, legal domestic sales decreased at an annual rate of 5.0% as average prices rose by nearly 7.7% each year**

- Ireland has a Minimum Retail Price policy which limits the minimum price of cigarettes to 97% of the weighted average price in the market
  - this has effectively prevented the development of the low and super-low price segments which have gained market share in many other markets, including the UK
- In 2007, Ireland banned the sale of ten cigarette packs and changed the maximum pack size to twenty cigarettes

The price differential between Ireland and the UK has grown driven by the weakening of the British Pound against the Euro

### Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



Key: ■ Ireland  
■ Major source countries

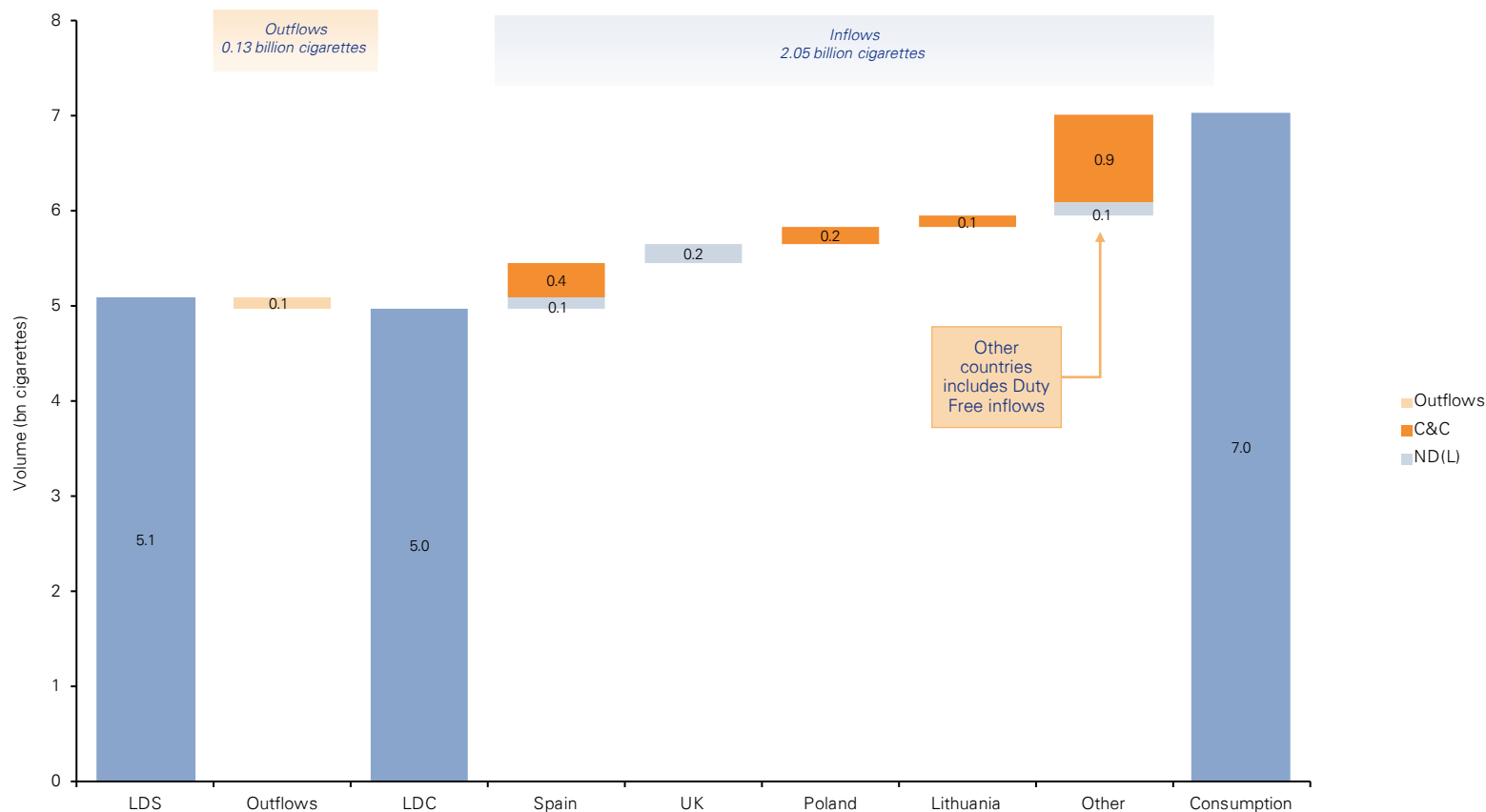
Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) Marlboro retail selling price supplied by PMI

# Outflows and inflows

Irish consumption is estimated at 7.0 billion cigarettes compared to legal domestic sales of 5.1 billion cigarettes, with a net inflow of 1.9 billion cigarettes

Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>



Notes: (a) LDS – Legal Domestic Sales

(b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)

Sources: (1) KPMG EU Flows Model

(2) Synovate ND(L) research 2008

(3) In Market Sales supplied by PMI

(4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

**Non-domestic (legal) inflows to Ireland declined to represent 0.45 billion cigarettes in 2008**

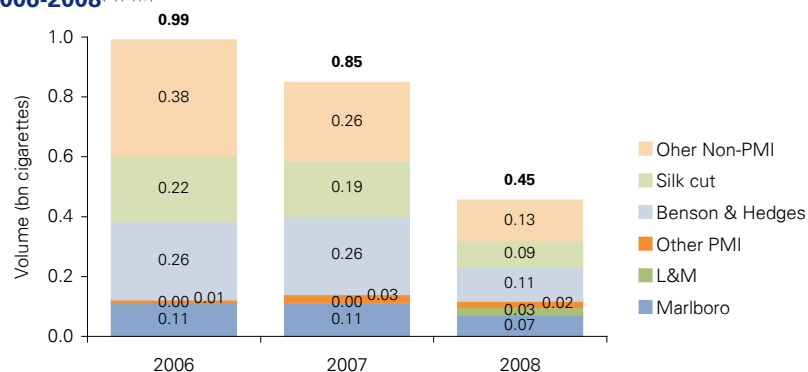
**Non-domestic (legal) inflows from the UK have increased in 2008, reflecting an increase in the price differential between the UK and Ireland**

## Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)</sup>



<b>ND(L) share of consumption:</b>	<b>14%</b>	<b>12%</b>	<b>6%</b>
<b>ND(L) share of non-domestic:</b>	<b>57%</b>	<b>41%</b>	<b>22%</b>

## Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)</sup>



<b>PMI share of ND(L):</b>	<b>13%</b>	<b>17%</b>	<b>26%</b>
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Sources: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2006, 2007 and 2008  
 (3) Interviews with PMI Local Management

## ND(L) analysis

	①	②	③	④	
	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)
Values 2008	3.1m	60%	35%	1.5	447
EU rank 2008	20	9	7	24	2
<b>Total ND(L) (cigarettes)</b>	<b>0.45bn</b>				

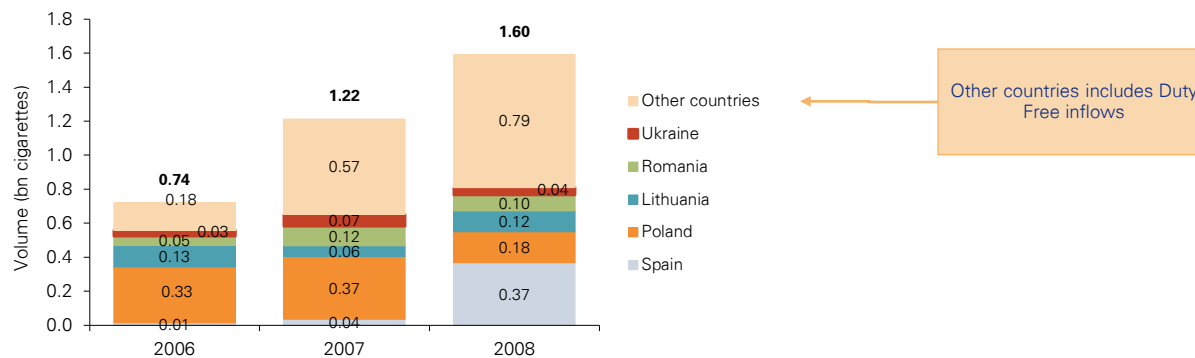
## ND(L) analysis 2007-2008

	2007	2008
Propensity to travel and purchase cigarettes	① x ② = 16.3%	21.4%
Average annual cigarettes purchased	③ x ④ = 1739	692

# Counterfeit and contraband breakdown

Counterfeit and contraband inflows to Ireland increased in 2008 to represent 23% of consumption

Counterfeit and contraband by origin  
2006-2008<sup>(1)(2)(3)</sup>



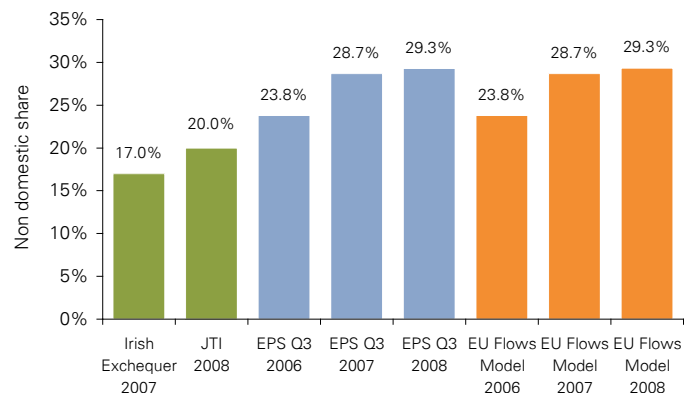
<b>C&amp;C share of consumption:</b>	<b>10%</b>	<b>17%</b>	<b>23%</b>
<b>C&amp;C share of non-domestic:</b>	<b>43%</b>	<b>59%</b>	<b>78%</b>

Sources: (1) KPMG EU Flows Model  
(2) Synovate ND(L) research 2006, 2007 and 2008  
(3) Interviews with PMI Local Management

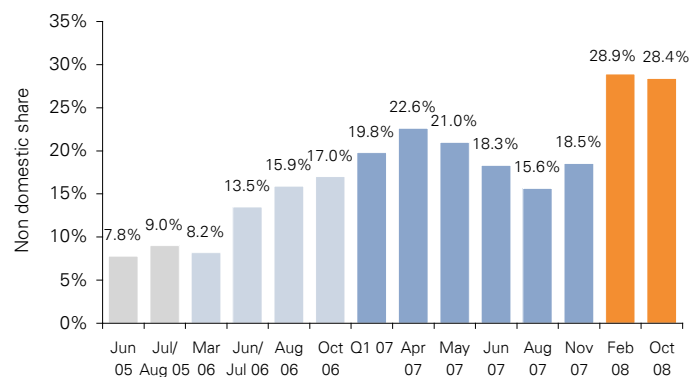
# Comparison of external sources for non-domestic estimates

**EU Flows Model estimate for non-domestic incidence is in line with PMI EPS results for 2008**

**Non-domestic market volume estimates<sup>(1)(2)</sup>**



**Imperial Tobacco Limited event collection EPS results<sup>(3)</sup>**



Sources: (1) KPMG EU Flows Model  
 (2) Interview with Irish Customs  
 (3) Imperial Tobacco Limited Event Collection EPS, 2005-2008

## Both the EU Flows Model and PMI EPS suggest non-domestic incidence increased in 2008

- However, the rate of increase in 2008 is smaller than the increase seen between 2006 and 2007
- Imperial Tobacco Limited (ITL) data suggests a more significant increase in non-domestic incidence than EU Flows Model in 2008
  - ITL data is based on pack collections at sporting events and in bars and may therefore not be fully representative of the population
- Irish customs seized 135 million cigarette cigarettes in 2008, of which 57 million cigarettes were counterfeit<sup>(2)</sup>
  - Irish customs have observed inflows of John Player Blue in 2008, arriving on consignment from China<sup>(2)</sup>

## JTI estimate that 20% of consumption in Ireland is accounted for by the illicit trade

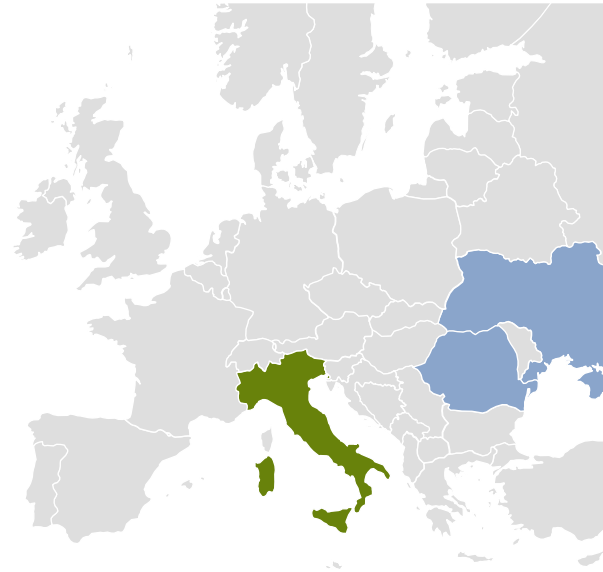
- This compares to a 22.8% counterfeit and contraband share for Project Star in 2008

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

**Total consumption in Italy declined by 1.6% in 2008 driven by lower legal domestic sales and lower inflows from Ukraine and Romania**

**Non-domestic (legal) and counterfeit and contraband shares of consumption are comparable at 2.0% and 2.1% respectively in 2008**

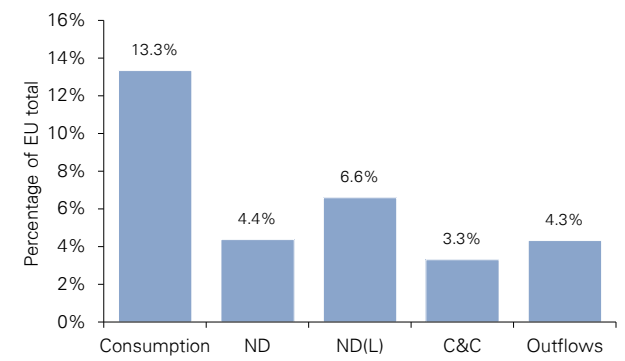
**Key source and destination markets<sup>(1)</sup>**



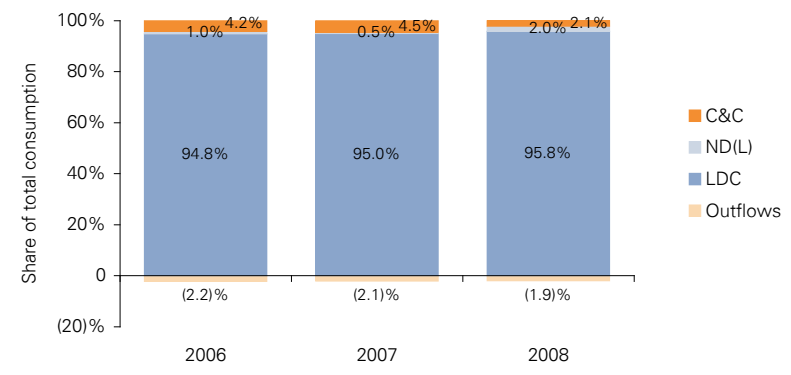
Key: ■ Italy ■ Top two source countries

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management  
(2) Synovate ND(L) research 2006, 2007; AC Nielsen ND(L) research, 2008

**Proportion of total EU levels<sup>(1)(2)</sup>**

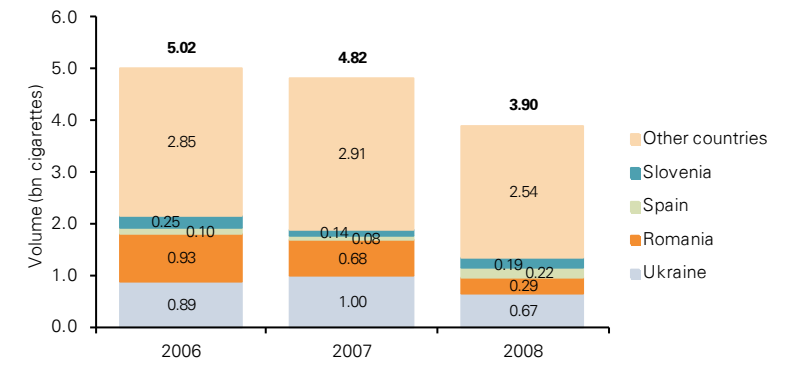


**Total Italian consumption 2006-2008<sup>(1)(2)</sup>**



Volume (bn cigarettes):	2006	2007	2008
	96.7	95.6	94.1

**Total non-domestic inflows (ND(L) and C&C) 2006-2008<sup>(1)(2)</sup>**



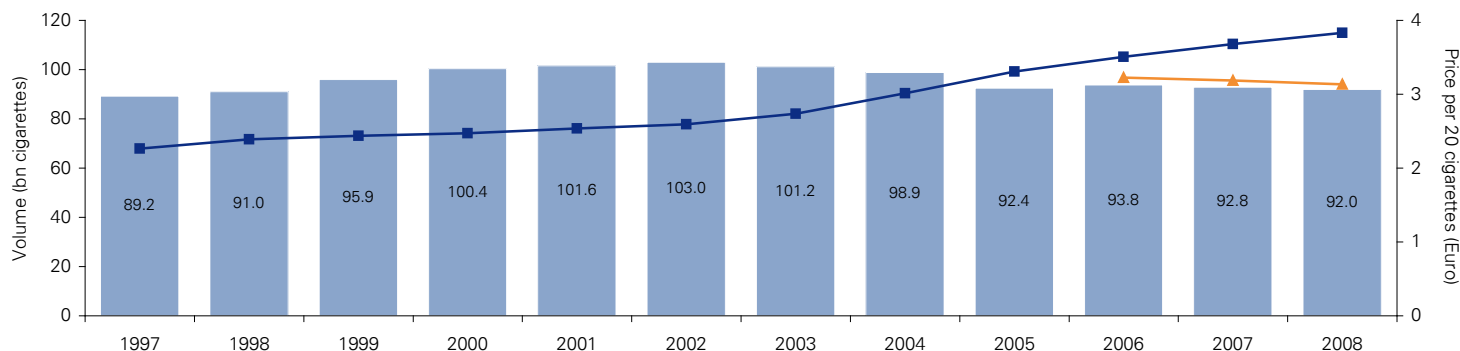
Volume (bn cigarettes):	2006	2007	2008
	5.0	4.8	3.9



# Historic sales and pricing trends

Legal domestic sales have been steadily trending downwards since 2006 as prices have risen

Historic cigarette prices and legal domestic sales  
1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-2002	2002-2005	2005-2008	2007-2008
Legal domestic sales	2.9%	(3.6)%	(0.2)%	(0.9)%
Average pack price	2.7%	8.5%	5.0%	4.1%
Consumption	n/a	n/a	(1.4)% <sup>(a)</sup>	(1.6)%

Notes: (a) Consumption CAGR is from 2006 to 2008

Sources: (1) In Market Sales supplied by PMI

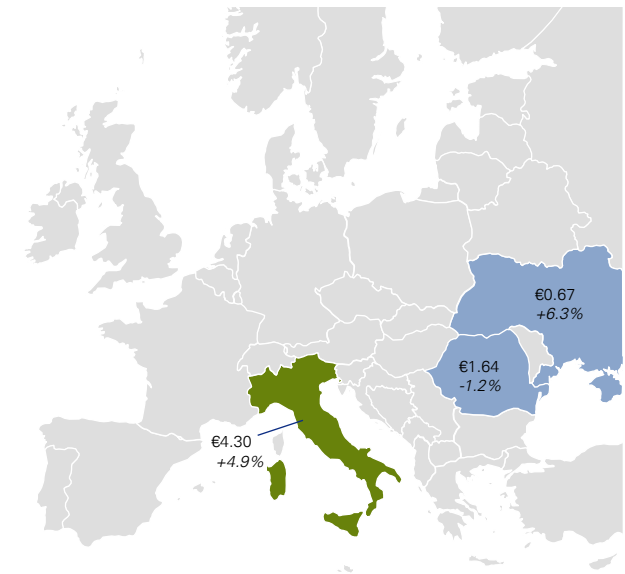
(2) Weighted average pack price supplied by PMI

## Legal domestic sales declined by 0.9% in 2008 following an increase in average pack price of 4.1% compared to 2007

- Manufacturer driven price increases were implemented in Q1 and Q3 2008
- The introduction of new fiscal measures in 2004, including a minimum excise tax, had the effect of amplifying the levels and the frequency of the tax-driven price increases
  - in 2005, the government introduced a minimum reference price for cigarettes
- A law banning smoking in enclosed public places came into force in Italy in January 2005
  - all enclosed places open to the public are prohibited from allowing smoking on their premises unless a dedicated smoking area responding to stringent technical requirements is provided

PMI market share in Italy  
has remained stable  
between 2006 and 2008

### Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



Key: ■ Italy  
■ Top two source countries

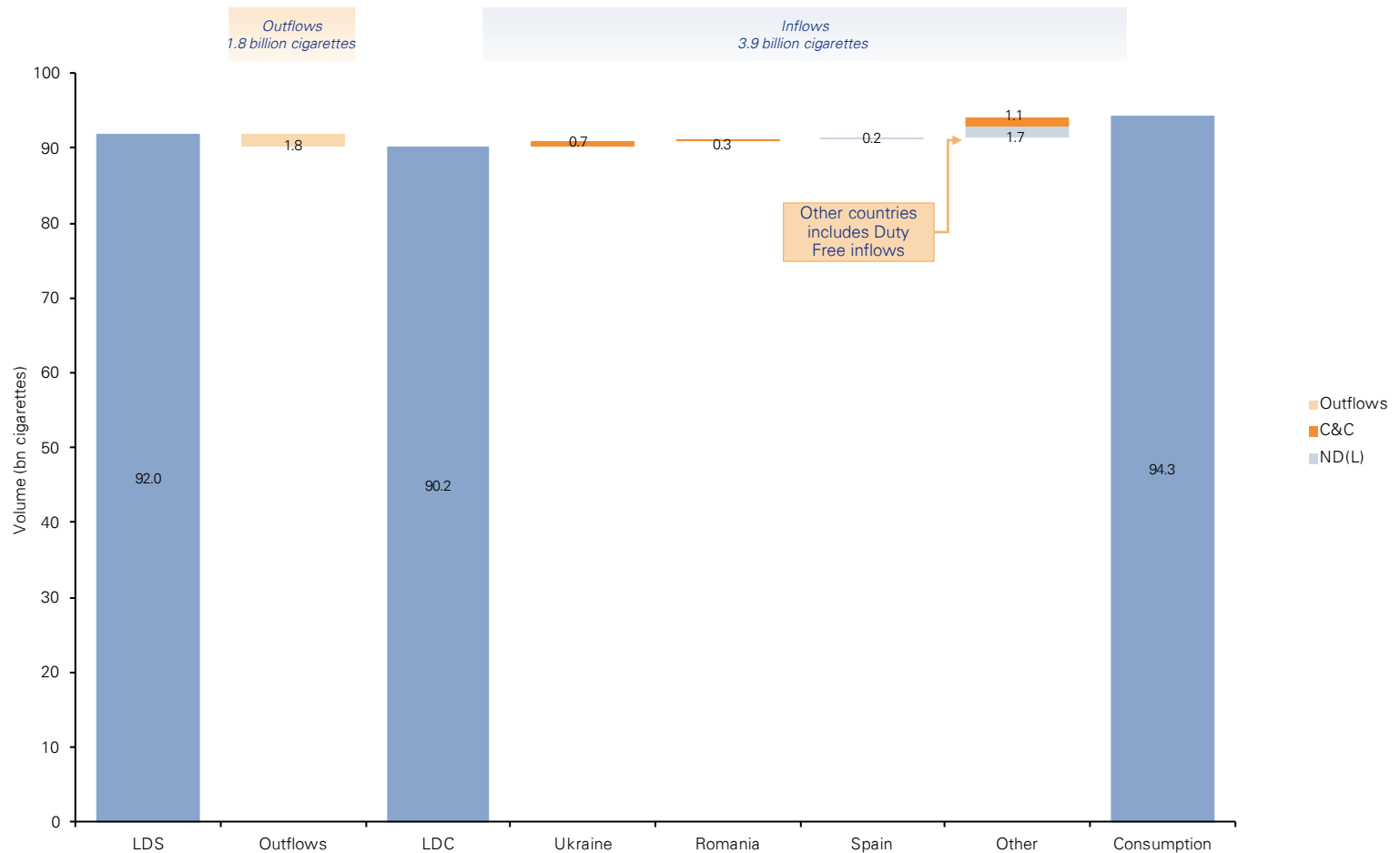
Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) Marlboro retail selling price supplied by PMI

# Outflows and inflows

Italian consumption is estimated at 94.1 billion cigarettes compared to legal domestic sales of 92.0 billion cigarettes, with a net inflow of 2.1 billion cigarettes in 2008

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>



Notes: (a) LDS – Legal Domestic Sales

(b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)

Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research, 2008

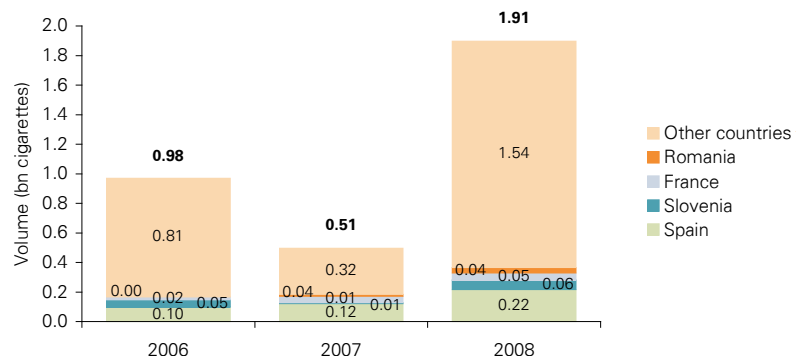
(3) In Market Sales supplied by PMI

(4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

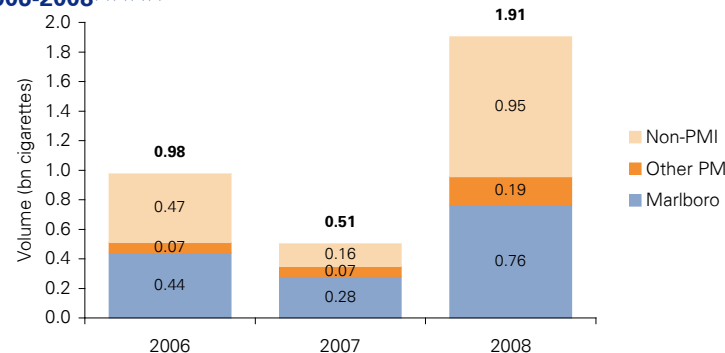
**Non-domestic (legal) inflows into Italy accounted for 2% of consumption in 2008**

## Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)(a)</sup>



<b>ND(L) share of consumption:</b>	<b>1%</b>	<b>1%</b>	<b>2%</b>
<b>ND(L) share of non-domestic:</b>	<b>20%</b>	<b>11%</b>	<b>49%</b>

## Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)(a)</sup>



<b>PMI share of ND(L):</b>	<b>52%</b>	<b>69%</b>	<b>50%</b>
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**Notes** (a) In 2008 there has been a change in the agency used for the ND(L) research. Additionally, the 2008 results are based on a much larger sample size than previous years and are therefore deemed more statistically significant.

## ND(L) analysis

	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)	Total ND(L) (cigarettes)
Values 2008	48.0m	33%	43%	1.5	180	1.91bn
EU rank 2008	3	22	4	25	10	3

## ND(L) analysis 2007-2008

	2007	2008
Propensity to travel and purchase cigarettes	3.5%	14.3%
Average annual cigarettes purchased	303	279

Other countries include Duty Free inflows

The increase in non-PMI non-domestic (legal) in 2008 was driven by increased volumes of many brands, primarily Camel

The increase in other PMI non-domestic (legal) in 2008 was driven by increased volumes of the brands Merit and Chesterfield

Sources: (1) KPMG EU Flows Model

(2) Synovate ND(L) research 2006, 2007; AC Nielsen ND(L) research, 2008

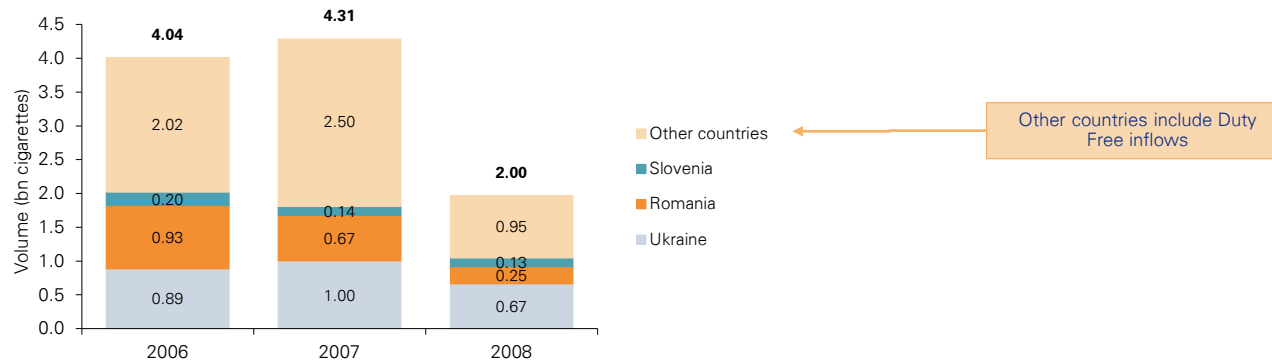
(3) Interview with PMI Local Management

# Counterfeit and contraband breakdown

Counterfeit and contraband inflows into Italy accounted for 2% of consumption in 2008

PMI share of counterfeit and contraband declined in 2008

Counterfeit and contraband by origin  
2006-2008<sup>(1)(2)(3)</sup>



<b>C&amp;C share of consumption:</b>	<b>4%</b>	<b>5%</b>	<b>2%</b>
<b>C&amp;C share of non-domestic:</b>	<b>80%</b>	<b>89%</b>	<b>51%</b>

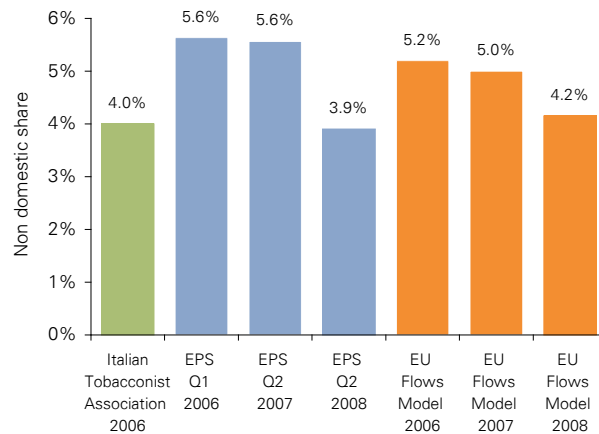
Sources: (1) KPMG EU Flows Model  
(2) Synovate ND(L) research 2006, 2007; AC Nielsen ND(L) research, 2008  
(3) Interviews with PMI Local Management

# Comparison of external sources for non-domestic estimates

EU Flows Model results for non-domestic incidence in 2008 is slightly higher than observed in the Empty Pack Survey

However, both sources do indicate a decline in non-domestic incidence in 2008

Non-domestic market volume estimates<sup>(1)(2)(3)</sup>



Sources: (1) KPMG EU Flows Model  
 (2) PMI EPS Q2 2006, Q2 2007 and Q2 2008  
 (3) Interview with Italian Tobacconist Association

The EU Flows Model non-domestic incidence estimate for Italy is higher than that suggested by PMI EPS results in 2008 to reflect analysis of border sales with Slovenia

- Slovenian inflows into Italy have been adjusted upwards by 0.1 billion cigarettes to reflect lower sales on the border with Slovenia in 2008 compared to 2007

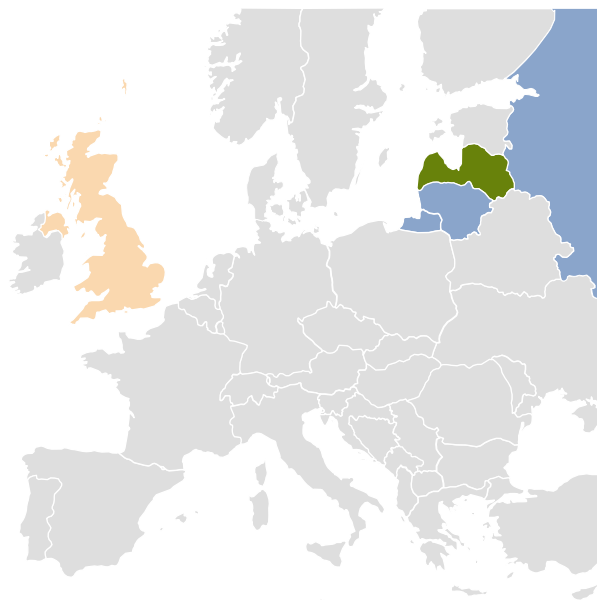
- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

Consumption declined by 12.9% in 2008, whilst non-domestic inflows to Latvia remained stable at 0.4 billion cigarettes

Russia remains the largest source of non-domestic product to Latvia

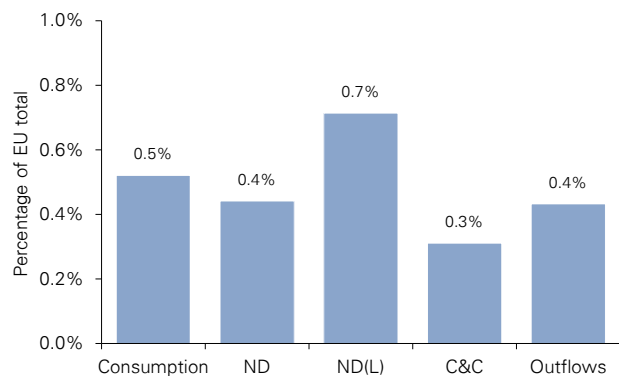
Outflows significantly declined in 2008 driven by lower flows to the UK and Ireland

Key source and destination markets<sup>(1)(a)</sup>

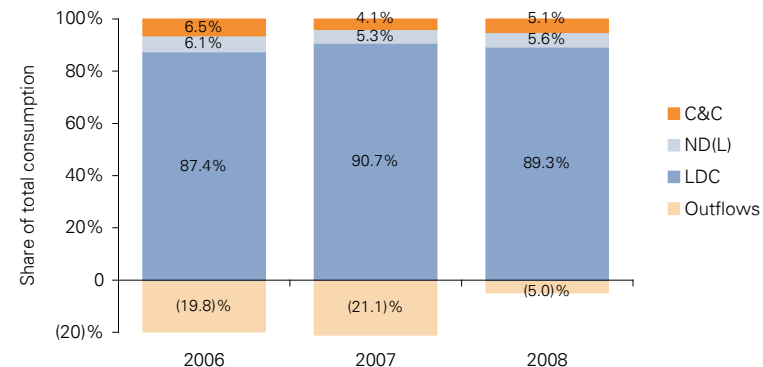


Key: ■ Latvia ■ Major source countries ■ Major destination country  
 Note: (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow  
 Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management  
 (2) AC Nielsen ND(L) research 2006, 2008

Key source and destination markets<sup>(1)(a)</sup>

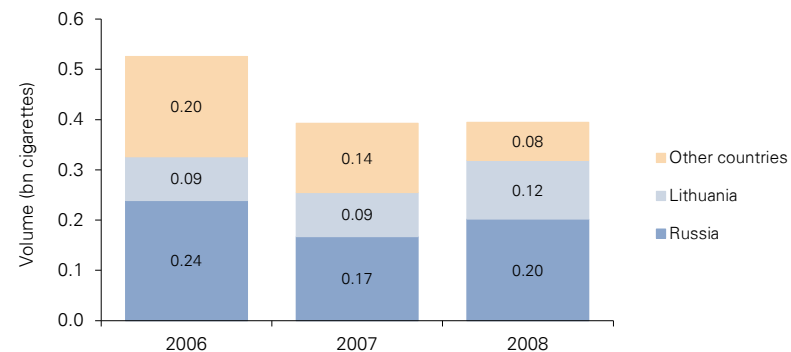


Total Latvian consumption 2006-2008<sup>(1)(2)(b)</sup>



Volume (bn cigarettes):	2006	2007	2008
	4.2	4.2	3.7

Total non-domestic inflows (ND(L) and C&C) by origin 2006-2008<sup>(1)(2)</sup>



Volume (bn cigarettes):	2006	2007	2008
	0.5	0.4	0.4

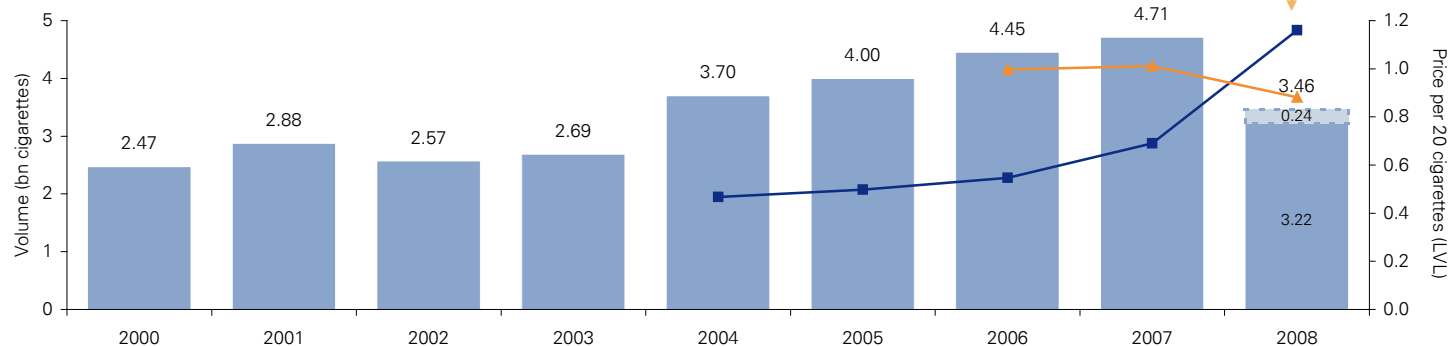
Note: (b) This report and the Project Star 2007 results use 4.7 billion cigarettes as estimated legal domestic sales (LDS) in Latvia in 2007. However, PMI internal estimates suggest that LDS in 2007 was 4.5 billion cigarettes. Use of the 4.5 billion cigarettes estimate for LDS in 2007 implies a total consumption of 4.0 billion cigarettes, which is in line with the implied consumption decline between 2006 and 2008



# Historic sales and pricing trends

**Legal domestic sales declined by 27% in 2008**

## Historic cigarette prices and legal domestic sales 2000-2008<sup>(1)(2)(a)</sup>



CAGR (%)	1999-2003	2003-2006	2006-2008	2007-2008
Legal domestic sales <sup>(b)</sup>	1.4%	2.8%	(11.8)%	(26.5)%
Average pack price	n/a	n/a	45.7%	68.1%
Consumption	n/a	n/a	(5.9)%	(12.9)%

**Note:** (a) For reasons of consistency across Member States, Project Star uses In Market Sales data in order to measure legal domestic sales as it reflects actual retail sales to consumers during a calendar year. Alternative sources of data may be measured at a different points in the supply chain (such as ex-warehouse or factory) and therefore be subject to inventory fluctuations which would otherwise distort year on year trends and comparability between countries  
 (b) Legal domestic sales CAGR calculated on sales adjusted for inventories in 2008  
 (c) Tax stamp calculation based on total stamps issues to warehouses and assuming average pack size of 20 cigarettes

**Sources:** (1) In Market Sales supplied by PMI  
 (2) Weighted average pack price supplied by PMI  
 (3) AC Nielsen Retail Audit (excludes tourist outlets and Hotels, Restaurants and Cafés)  
 (4) Interview with PMI Baltics management team  
 (5) Latvia State Revenue Service: Total tax stamps issued to tax warehouses  
 (6) Latvian Statistics Bureau, data accessed April 2009

## Legal domestic sales decreased by 26.5% in 2008 after adjusting for the impact of inventory building at the end of 2007

- Part of the decline in legal domestic sales in 2008 was driven by inventory building before the January 2008 excise price increase
- Legal domestic sales in 2008 were adjusted upwards in the EU Flows Model by 0.24 billion cigarettes to control for the impact of inventory building
  - adjusted volumes were calculated by factoring up the PMI estimated volume of higher inventories by the PMI 2007 market share<sup>(3)(4)</sup>
- The revised legal sales are comparable to tax stamp data, which indicated total market sales of 3.5 billion cigarettes<sup>(5)(c)</sup>

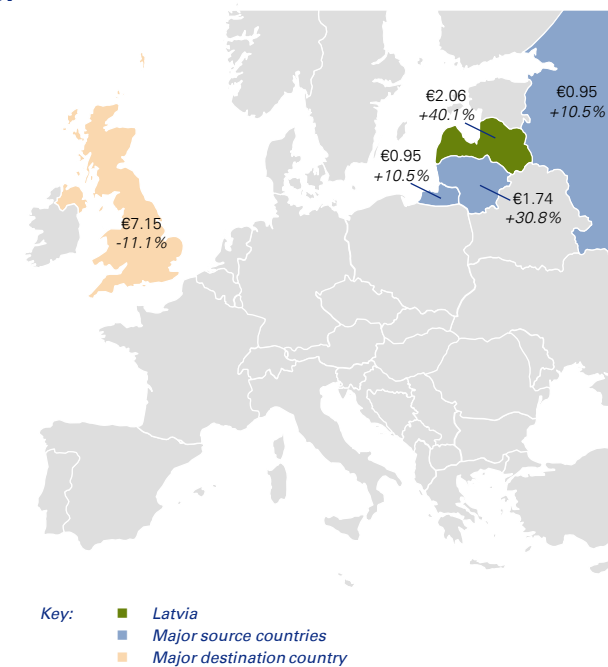
## Weighted average pack price significantly increased in 2008

- The increase in average pack price was 68.1% in 2008, driven by the January 2008 excise price increase
- The economic crisis has had a significant impact upon the Latvian economy in 2008, with GDP declining by 4.6% in 2008 compared to 2007, whilst consumer prices were 9.8% higher in January 2009 compared to January 2008<sup>(6)</sup>
- Anti-forestalling legislation was introduced in Latvia in 2008
- In December 2007 Latvia entered the Schengen zone

PMI market share in Latvia has remained stable in 2008

The price of Marlboro in Latvia increased by 40% in 2008 compared to 2007

Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



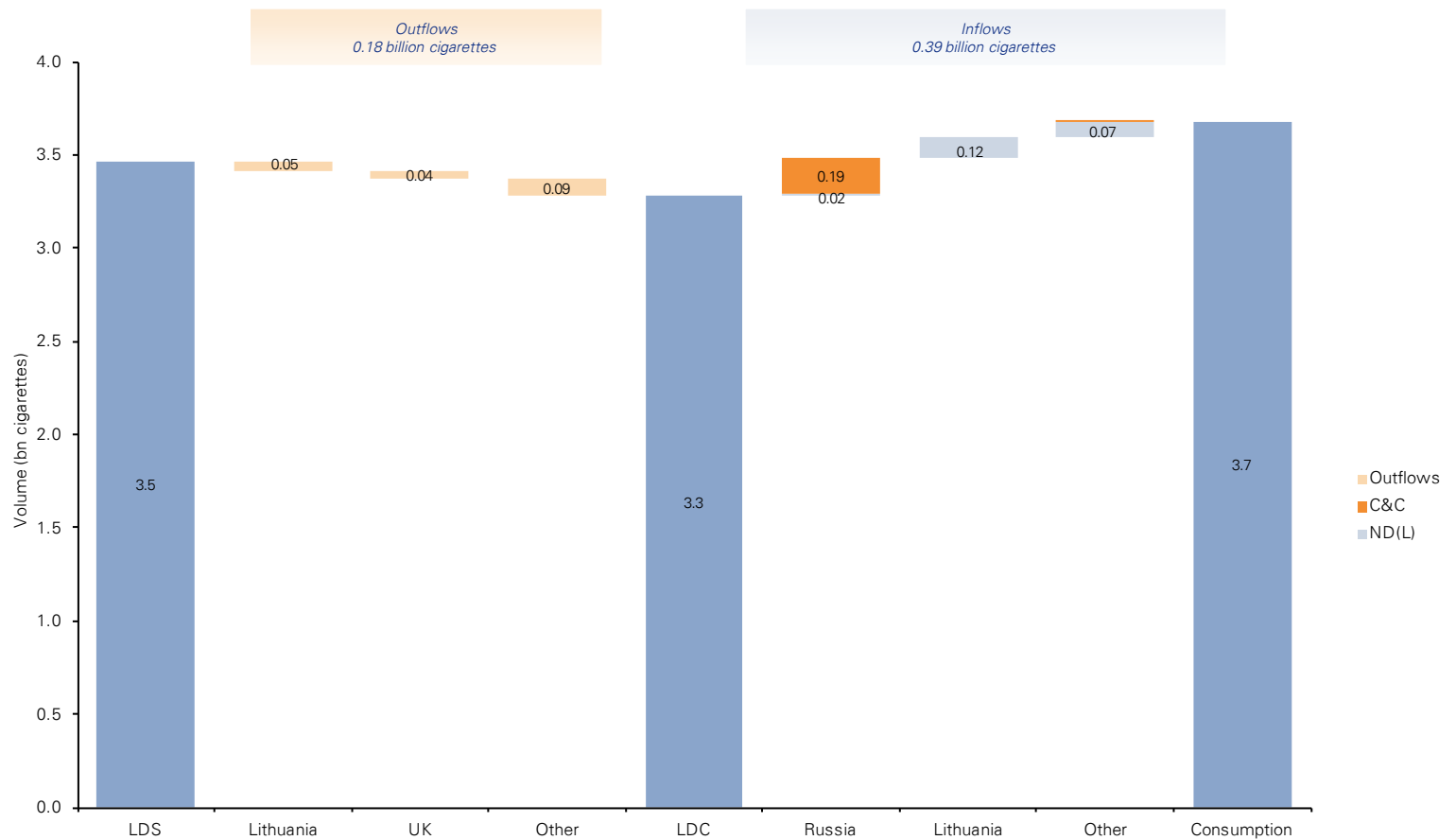
Note: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) Marlboro retail selling price supplied by PMI

# Outflows and inflows

Latvian consumption is estimated at 3.7 billion cigarettes versus legal sales of 3.5 billion cigarettes, with a net inflow of 0.2 billion cigarettes

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)(c)</sup>



Notes: (a) LDS – Legal Domestic Sales  
 (b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)  
 (c) IMS indicates legal domestic sales of 3.22 billion cigarettes in 2008. However, Project Star 2008 results uses legal domestic sales of 3.46 billion cigarettes which reflects an adjustment for higher inventories of 0.24 billion cigarettes

Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2008  
 (3) In Market Sales supplied by PMI  
 (4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

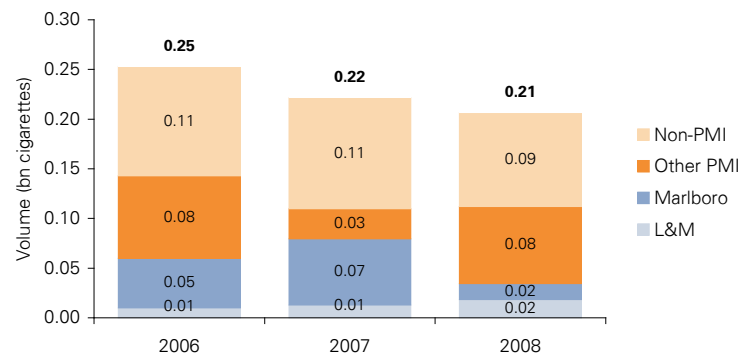
**Consumer research shows that non-domestic (legal) inflows declined to 0.21 billion cigarettes in 2008**

## Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)</sup>



<b>ND(L) share of consumption:</b>	<b>6%</b>	<b>5%</b>	<b>6%</b>
<b>ND(L) share of non-domestic:</b>	<b>48%</b>	<b>56%</b>	<b>52%</b>

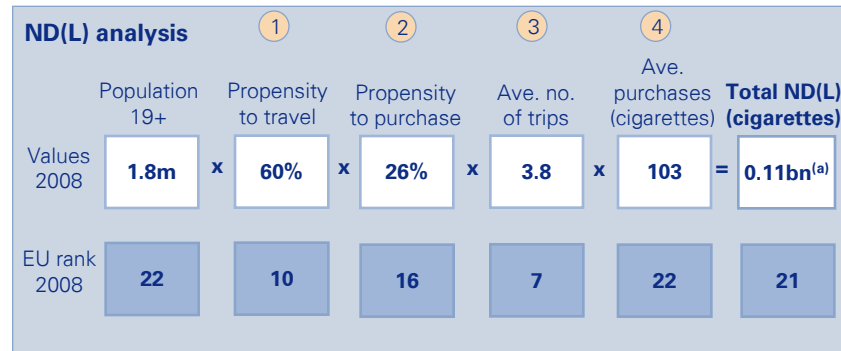
## Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)</sup>



<b>PMI share of ND(L):</b>	<b>56%</b>	<b>49%</b>	<b>54%</b>
----------------------------	------------	------------	------------

Note: (a) ND(L) analysis from AC Nielsen excludes adjustments to inflows associated with inbound tourism. Total ND(L) including adjustments for inbound tourism is 0.21 billion cigarettes

Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2006, 2008  
 (3) Interviews with PMI Local Management



### ND(L) analysis 2007-2008

	2007	2008
Propensity to travel and purchase cigarettes	15.5%	15.3%
Average annual cigarettes purchased	789	390

# Counterfeit and contraband breakdown

Russian origin products account for the majority of counterfeit and contraband consumption in Latvia

Counterfeit and contraband by origin  
2006-2008<sup>(1)(2)(3)</sup>



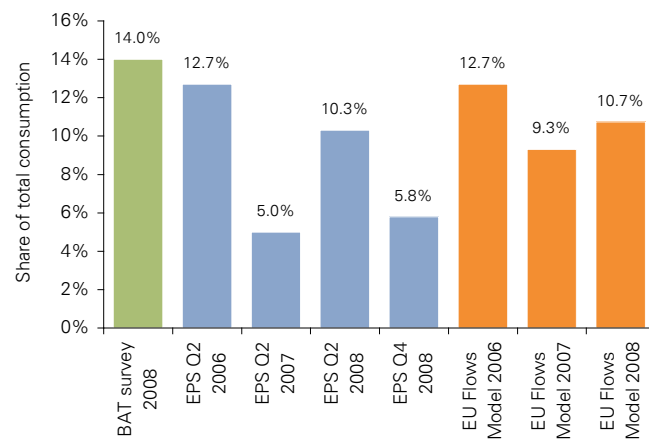
<b>C&amp;C share of consumption:</b>	<b>7%</b>	<b>4%</b>	<b>5%</b>
<b>C&amp;C share of non-domestic:</b>	<b>52%</b>	<b>44%</b>	<b>48%</b>

Sources: (1) KPMG EU Flows Model  
(2) AC Nielsen ND(L) research 2006, 2008  
(3) Interviews with PMI Local Management

# Non-domestic incidence

The EU Flows Model indicates an increase in non-domestic incidence in Latvia in 2008

Non-domestic market volume estimate<sup>(1)(2)(3)(4)</sup>



Source:

- (1) KPMG EU Flows Model
- (2) PMI EPS Q2 2006, Q2 2007 and Q2/Q4 2008
- (3) Pricing data supplied by PMI In Market Sales
- (4) Sales data provided by PMI Commission Agent
- (5) BAT press release "incidence of Duty-not-paid cigarettes in Latvia double since 2007"

## The KPMG EU Flows Model incorporates the results of both Empty Pack Surveys conducted in 2008

- An equal weighting was applied to the results of both Empty Pack Surveys to calculate non-domestic incidence
- EPS results indicated inflows from Lithuania had declined in 2008. However, analysis of sales and pricing data suggests that inflows from Lithuania may be understated in the EPS in 2008
  - inflows from Lithuania have been uplifted in line with the border sales trend from 2007 to 2008<sup>(3)(4)</sup>

## BAT estimates a higher non-domestic incidence than EU Flows Model results

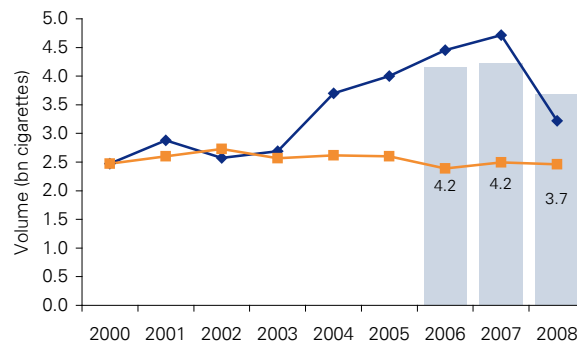
- Differences in non-domestic incidence will reflect timing and methodology
  - the BAT survey was based on pack swap methodology, and conducted between March and June 2008<sup>(5)</sup>

# Consumption modelling

Consumption modelling results suggest outflows from Latvia have become less important relative to inflows in 2008

This is consistent with the 2008 EU Flows Model results showing a significant decline in outflows to 0.2 billion cigarettes in 2008, compared to 0.9 billion cigarettes in 2007

## Consumption index modelling 2000-2008<sup>(1)(2)(3)</sup>



CAGR (%)	2000-2003	2003-2006	2006-2008	2007-2008
■ LDS	2.8%	18.3%	(11.8)%	(26.5)%
■ KPMG consumption index	1.3%	(2.4)%	1.5%	(1.4)%
■ KPMG consumption estimate	n/a	n/a	(5.9)%	(12.9)%

Note: (a) GCTS refers to the Global Consumer Tracking Survey to estimate smoking prevalence and average smoking volume by country

Sources: (1) KPMG Consumption Index model  
(2) In Market Sales supplied by PMI  
(3) KPMG EU Flows Model

## The gap between LDS and the KPMG consumption index for Latvia decreased between 2007 and 2008

- Consumption has been stable since 2000 while LDS increased until 2007, then significantly declined
- The LDS decline suggests that outflows from Latvia have become less important in 2008
  - this is consistent with 2008 EU Flows Model results showing a significant decline in outflows to 0.2 billion cigarettes in 2008, compared to 0.9 billion cigarettes in 2007

## Consumption index modelling is undertaken to identify discrepancies between the legal domestic sales trend and other consumption estimates and potentially provides an indication of changes in non-domestic inflows and outflows

- The KPMG consumption index is calculated using the incidence of smoking and the average daily consumption and the population of each market (from OEF)
  - these figures are then indexed to the earliest year for which we have data from the both GCTS<sup>(a)</sup> and LDS data available, 2000 for Latvia
- Please note that consumption modelling can only identify market trends and cannot be used to quantify total consumption
  - the gap between indexed consumption and LDS in the final year is therefore only a broad indication of the extent to which the market has changed over the analysed period
  - in many markets, some level of inflows or outflows are likely to be present in the first analysed year

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

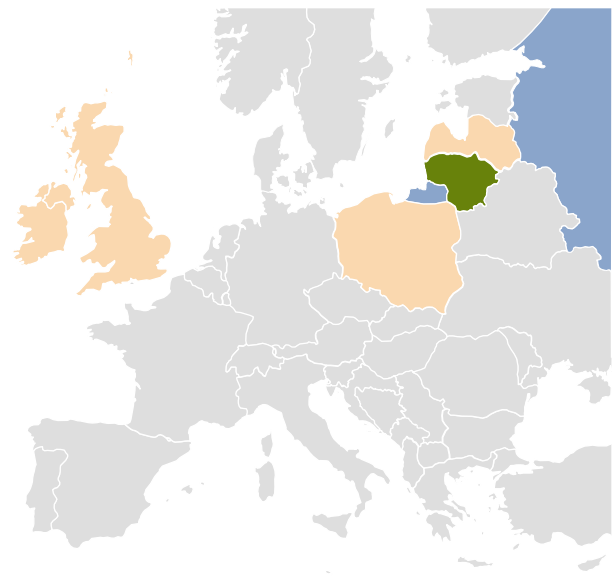


**Total consumption in Lithuania declined by 7.9% in 2008**

**Outflows from Lithuania exceeded non-domestic inflows by 0.1 billion cigarettes in 2008, whereas in 2007 inflows had exceeded outflows**

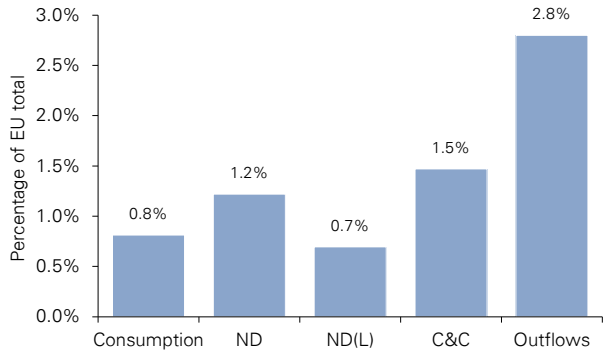
**Non-domestic inflows declined to 1.1 billion cigarettes in 2008 due largely to falling inflows from Russia**

**Key source and destination markets<sup>(1)(a)</sup>**

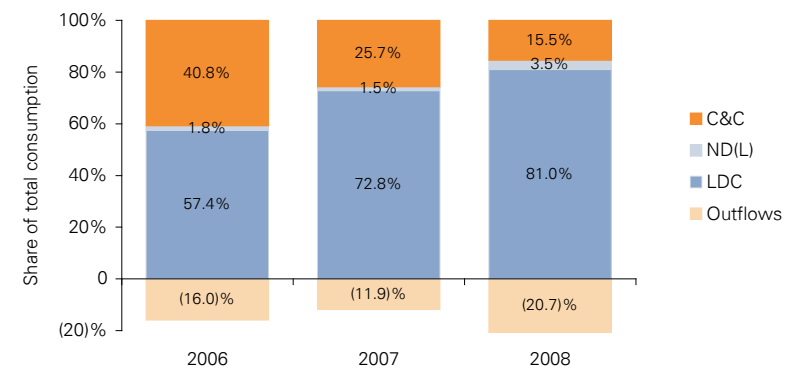


**Key:** ■ Lithuania ■ Major source country ■ Major destination countries  
**Note:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow  
 (b) ND(L) research has not been updated in 2008, but corroborating research has not indicated any significant changes to 2007 results  
**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
 (2) Synovate ND(L) research 2006, 2007

**Proportion of total EU levels<sup>(1)(2)</sup>**



**Total Lithuanian consumption 2006-2008<sup>(1)(2)</sup>**



Volume (bn cigarettes):	2006	2007	2008
	5.6	6.2	5.7

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2008<sup>(1)(2)</sup>**

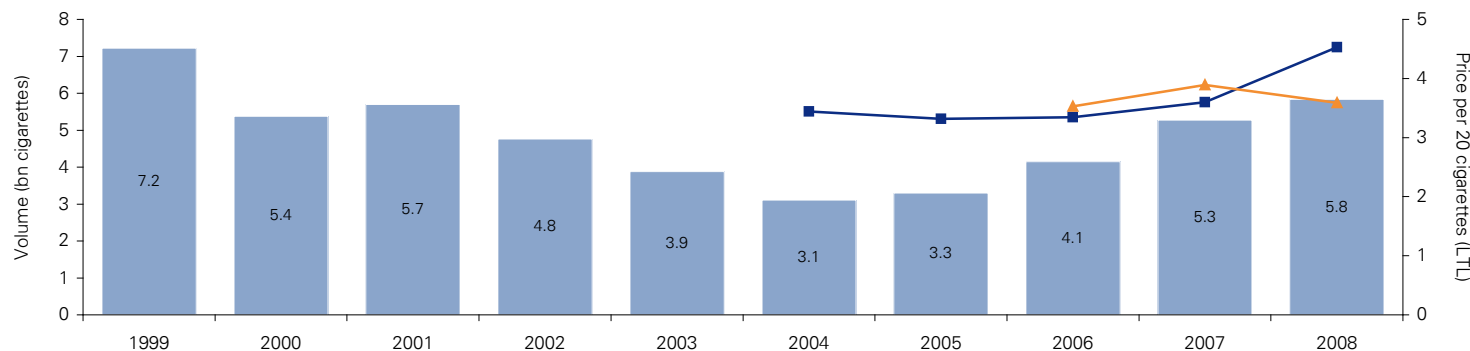


Volume (bn cigarettes):	2006	2007	2008
	2.4	1.7	1.1

# Historic sales and pricing trends

Legal domestic sales have been on an upward trend since 2004 despite rising prices, however they remain below 1999 levels

## Historic cigarette prices and legal domestic sales 1999-2008<sup>(1)(2)(a)</sup>



CAGR (%)	1999-2004	2004-2006	2006-2008	2007-2008
Legal domestic sales	(15.5)%	15.6%	18.7%	10.6%
Average pack price	n/a	(1.4)%	16.4%	25.8%
Consumption	n/a	n/a	0.8%	(7.9)%

Note: (a) For reasons of consistency across Member States, Project Star uses In Market Sales data in order to measure legal domestic sales as it reflects actual retail sales to consumers during a calendar year. Alternative sources of data may be measured at a different points in the supply chain (such as ex-warehouse or factory) and therefore be subject to inventory fluctuations which would otherwise distort year on year trends and comparability between countries

Sources: (1) In Market Sales supplied by PMI  
 (2) Weighted average pack price supplied by PMI  
 (3) "Smoking curbs: The global picture", BBC News, January 2008

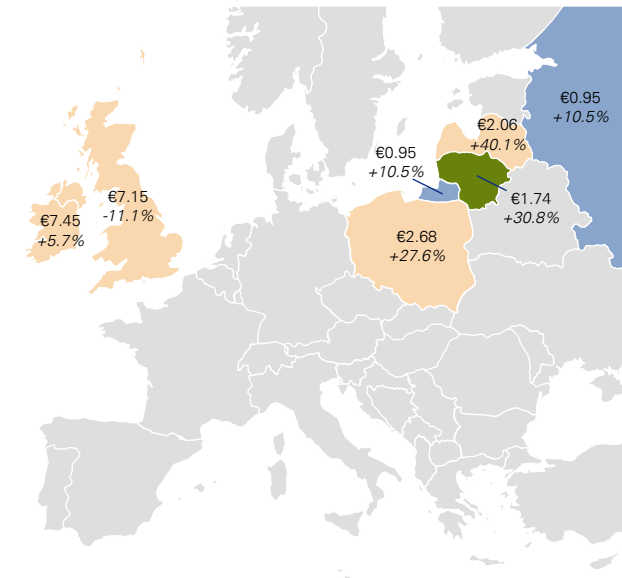
### Legal domestic sales increased by 10.6% in 2008 whilst average pack prices increased by 25.8%

- Excise taxes were raised in March 2007 and March 2008
- In January 2007 Lithuania introduced a smoking ban for bars and cafés, which was extended in January 2008 to include casinos and internet cafés<sup>(3)</sup>
- Anti-forestalling legislation was introduced in Lithuania in March 2008
- In December 2007 Lithuania joined the Schengen zone

### Government data for 2008 shows sales of 5.7 billion cigarettes and is therefore comparable to In Market Sales data provided by PMI of 5.8 billion cigarettes

- The difference in estimates is likely to be a result of trade inventory fluctuations as the Government data relates to tax stamps issued, whilst the In Market Sales data relates to sales when cigarettes have reached trade channels
- Sales data presented for 2008 continues to be based upon the same source as prior years

**Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>**



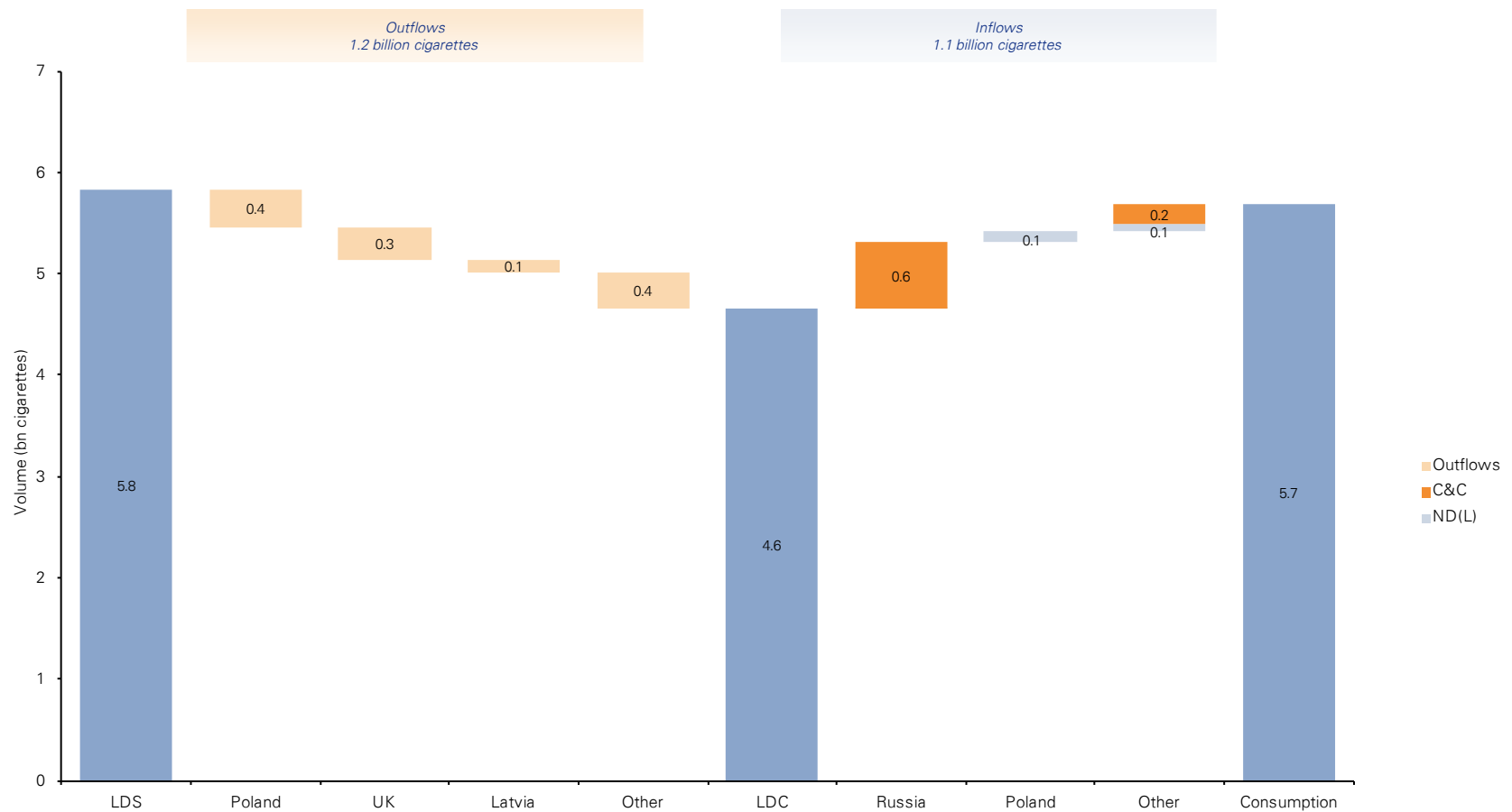
Key:   
■ Lithuania   
■ Major source country   
■ Major destination countries

Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007  
 Sources: (1) Marlboro retail selling price supplied by PMI

# Outflows and inflows

Lithuanian consumption is estimated at 5.7 billion cigarettes versus legal sales of 5.8 billion cigarettes, with a net outflow of 0.1 billion cigarettes

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>



Notes: (a) LDS – Legal Domestic Sales

(b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)

Sources: (1) KPMG EU Flows Model

(2) Synovate ND(L) research 2007

(3) In Market Sales supplied by PMI

(4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

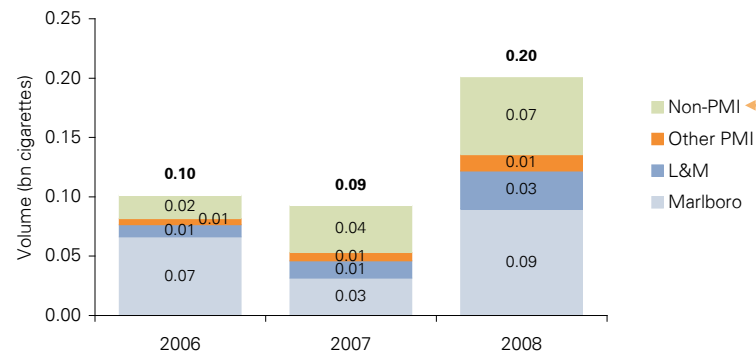
**Non-domestic (legal) inflows increased to 0.20 billion cigarettes in 2008 and accounted for 18% of non-domestic consumption**

**Share of non-domestic (legal) by origin**  
2006-2008<sup>(1)(2)(3)(a)(b)</sup>



<b>ND(L) share of consumption:</b>	<b>2%</b>	<b>1%</b>	<b>4%</b>
<b>ND(L) share of non-domestic:</b>	<b>4%</b>	<b>5%</b>	<b>18%</b>

**Non-domestic (legal) by brand**  
2006-2008<sup>(1)(2)(3)(a)(b)</sup>



<b>PMI share of ND(L):</b>	<b>81%</b>	<b>57%</b>	<b>67%</b>
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**Note:** (a) ND(L) inflows to Lithuania are higher in 2008 due to a change in treatment for inflows from Poland. In 2008, all inflows from Poland are assumed legal to reflect that cigarette prices in Poland are higher than Lithuania

**ND(L) analysis<sup>(b)</sup>**

	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)	Total ND(L) (cigarettes)
Values 2008	2.8m	44%	34%	2.0	111	0.09bn <sup>(b)</sup>
EU rank 2008	21	16	8	21	20	23

The top three non-PMI brands in 2008 are Kent, Winston and Saint George, accounting for 52% of total non-PMI non-domestic (legal) inflows in both 2007 and 2008

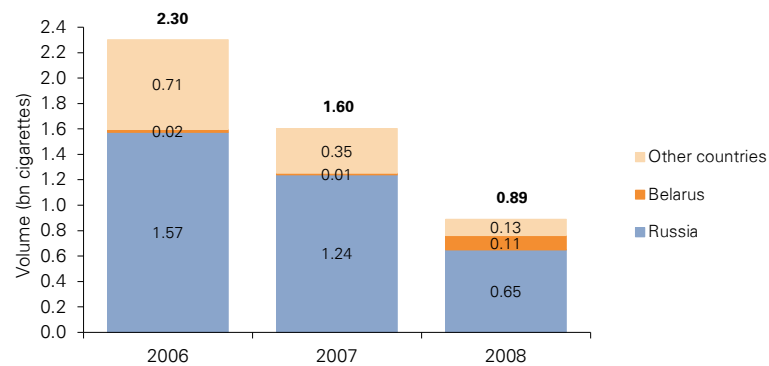
**Sources:** (1) KPMG EU Flows Model  
(2) Synovate ND(L) research 2006, 2007  
(3) Interviews with PMI Local Management

# Counterfeit and contraband breakdown

Counterfeit and contraband inflows decreased to 0.89 billion cigarettes in 2008

Russia has remained the main source of C&C inflows

Counterfeit and contraband by origin  
2006-2008<sup>(1)(2)(3)</sup>



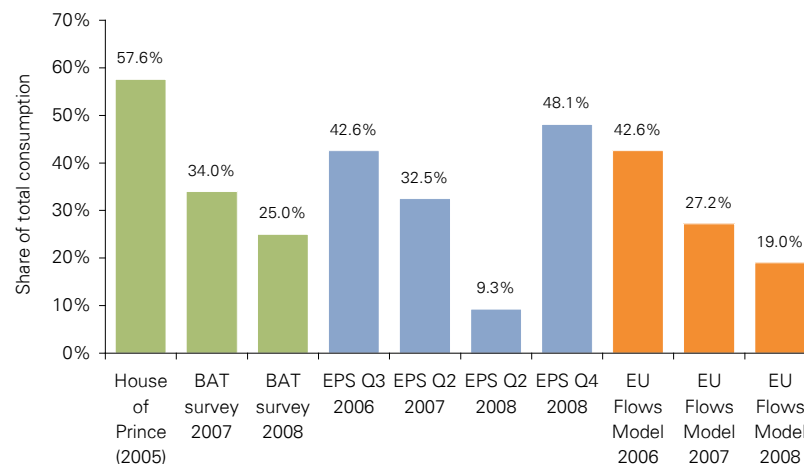
<b>C&amp;C share of consumption:</b>	<b>41%</b>	<b>26%</b>	<b>15%</b>
<b>C&amp;C share of non-domestic:</b>	<b>96%</b>	<b>95%</b>	<b>82%</b>

Sources: (1) KPMG EU Flows Model  
(2) Synovate ND(L) research 2006, 2007  
(3) Interviews with PMI Local Management

# Non-domestic incidence

The EU Flows Model uses a weighting of results from the two Empty Pack Surveys conducted in Lithuania in 2008

Non-domestic market volume estimate<sup>(1)(2)(3)(4)</sup>



Source:

- (1) KPMG EU Flows Model
- (2) House of Prince, quoted from "Appearance of Cheap cigarettes facilitates growth of tobacco market", ELTA, 30 March 2006
- (3) PMI EPS Q3 2006, Q2 2007 and Q2/Q4 2008
- (4) Results of BAT research interviews, data supplied by PMI 2007, 2008

**The 2008 non-domestic incidence in Lithuania of 19% is calculated by applying a weighting to the two Empty Pack Surveys conducted in 2008**

- The first EPS took place in Q2 2008, and the second in Q4 2008
- A weighting of 75% was applied to the Q2 EPS, and 25% to the Q4 EPS to reflect the worsening economic situation in Lithuania in Q4 2008 and its subsequent impact upon purchasing patterns of domestic consumers

**The trend of declining non-domestic consumption between 2007 and 2008 is corroborated by the decline in non-domestic incidence observed in the BAT survey**

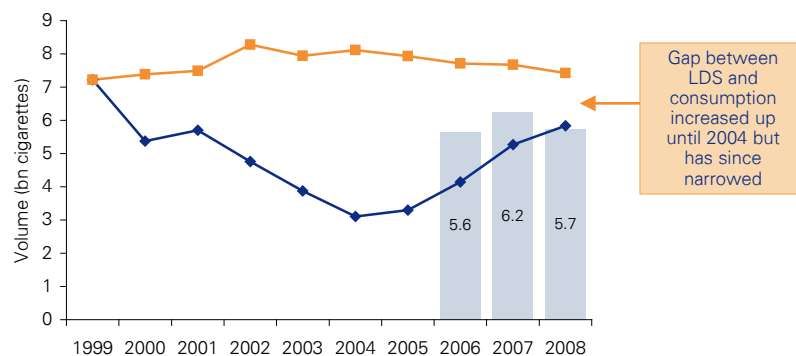
- The BAT survey was based on consumer interviews and is broadly comparable with the EU Flows Model results given timing and methodology differences

# Consumption modelling

Consumption modelling results suggest non-domestic consumption has been declining since 2004

2008 consumption modelling results show a continuation of this trend and therefore support EU Flows Model results

## Consumption index modelling 1999-2008<sup>(1)(2)(3)</sup>



CAGR (%)	1999-2004	2004-2008	1999-2008
■ LDS	(15.5)%	17.1%	(2.3)%
■ KPMG consumption index	2.7%	(2.2)%	0.3%
■ KPMG consumption estimate	n/a	n/a	n/a

Note: (a) GCTS refers to the Global Consumer Tracking Survey to estimate smoking prevalence and average smoking volume by country

Sources: (1) KPMG Consumption Index model  
(2) In Market Sales supplied by PMI  
(3) KPMG EU Flows Model

## The gap between LDS and the KPMG consumption index for Lithuania widened between 1999 and 2004, but has since narrowed

- Between 1999 and 2004, consumption increased while LDS decreased suggesting strong growth in non-domestic inflows during this period
- Between 2004 and 2008, consumption decreased while LDS increased. This suggests that non-domestic consumption has declined over the last three years
  - this is consistent with EU Flows Model results which show an 8 percentage point decline in non-domestic share of total consumption between 2007 and 2008

## Consumption index modelling is undertaken to identify discrepancies between the legal domestic sales trend and other consumption estimates and potentially provides an indication of changes in non-domestic inflows and outflows

- The KPMG consumption index is calculated using the incidence of smoking and the average daily consumption and the population of each market (from OEF)
  - these figures are then indexed to the earliest year for which we have data from the both GCTS<sup>(a)</sup> and LDS data available, 1999 for Lithuania
- Please note that consumption modelling can only identify market trends and cannot be used to quantify total consumption
  - the gap between indexed consumption and LDS in the final year is therefore only a broad indication of the extent to which the market has changed over the analysed period
  - in many markets, some level of inflows or outflows are likely to be present in the first analysed year



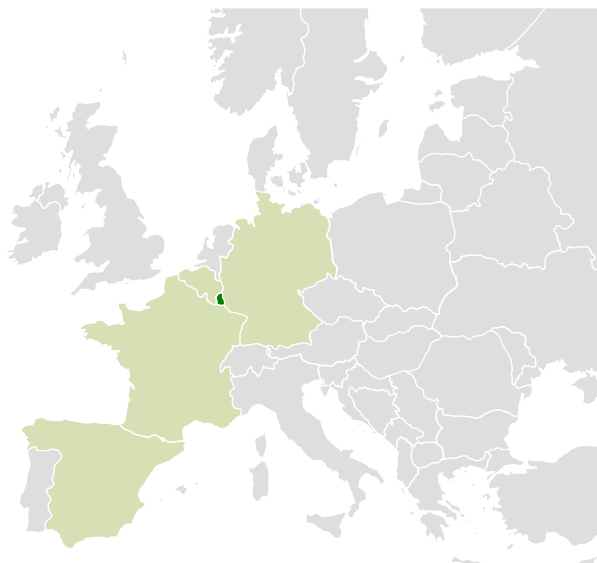
- Austria
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- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

Luxembourg has low inflows and high outflows reflecting its low prices relative to surrounding countries

Non-domestic inflows to Luxembourg were stable in 2008 at 0.11 billion cigarettes

Outflows from Luxembourg are equivalent to approximately four times domestic consumption

## Key source and destination markets<sup>(1)(a)(b)</sup>

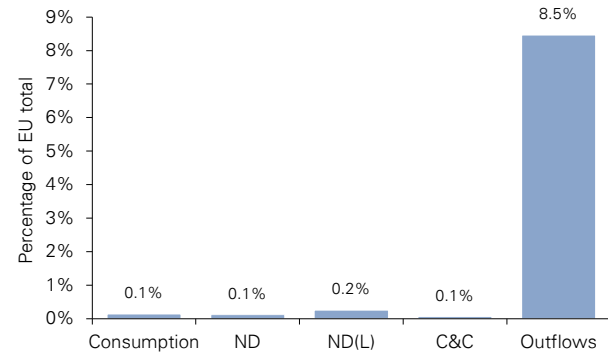


**Key:** ■ Luxembourg ■ Major destination countries

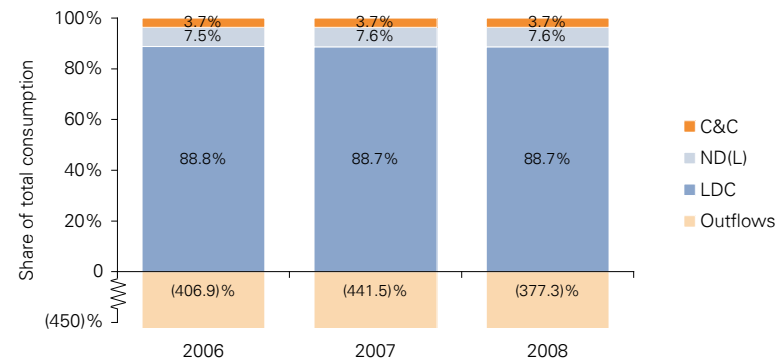
**Notes:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow  
 (b) ND(L) and EPS research has not been updated for 2007 and 2008 but corroborating research has not indicated any significant changes to 2006 results

**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
 (2) Synovate ND(L) research 2006

## Proportion of total EU levels<sup>(1)(2)</sup>



## Total Luxembourg consumption 2006-2008<sup>(1)(2)(b)</sup>



Volume (bn cigarettes):	2006	2007	2008
	1.0	1.0	1.0

## Total non-domestic inflows by origin (ND(L) and C&C) 2006-2008<sup>(1)(2)(b)</sup>

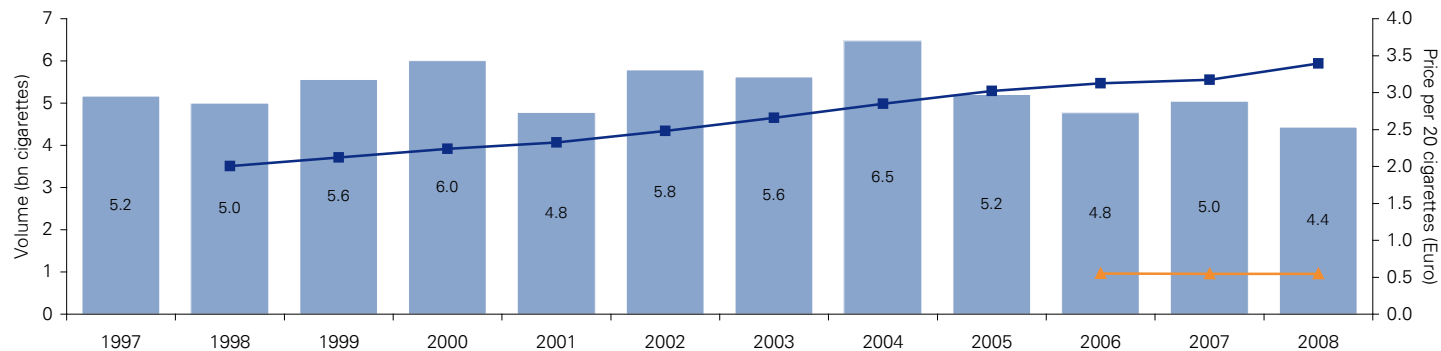


Volume (bn cigarettes):	2006	2007	2008
	0.11	0.11	0.11

# Historic sales and pricing trends

Changes to external demand drivers, such as price differential versus neighboring countries, have a significant impact on legal domestic sales in Luxembourg

## Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-1999	1999-2006	2006-2008	2007-2008
Legal domestic sales	3.8%	(1.1)%	(3.6)%	(12.1)%
Average pack price	n/a	6.1%	4.2%	6.9%
Consumption	n/a	n/a	1.9%	(0.1)%

Sources: (1) In Market Sales data supplied by PMI

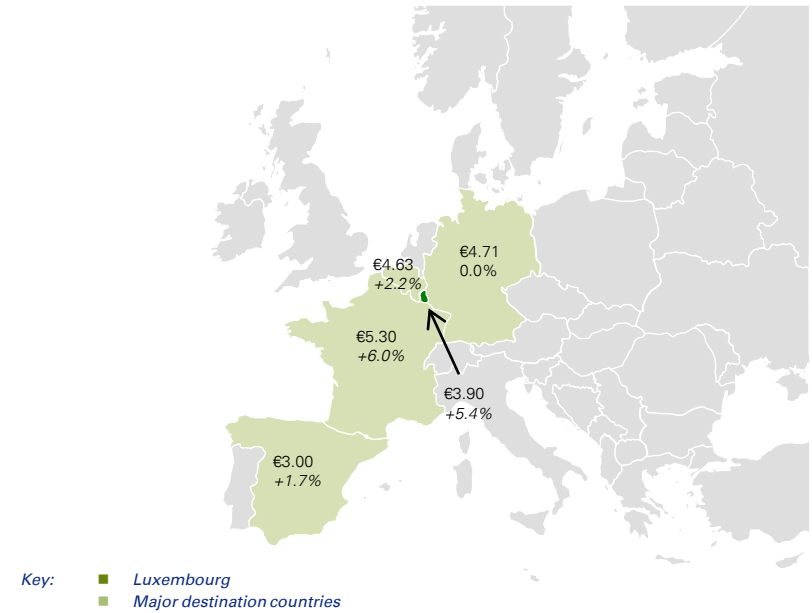
(2) Weighted average pack price supplied by PMI

### Legal domestic sales have declined by 3.6% from 2006 to 2008 as average pack price increased by 4.2% over the same period

- Anti-smoking legislation was introduced to Luxembourg in September 2006 which covered smoking in public places including restaurants and cafés
  - for restaurants separate smoking rooms are permitted if these account for less than 25% of the total area of the venue and cafés have a ban in place during dining hours,
  - a total ban is in place for schools, public buildings, buses and trains

Prices in Luxembourg are significantly lower than in neighbouring countries

**Marlboro 2008 price comparison in Euros and percentage change from 2007**<sup>(1)(a)(b)</sup>

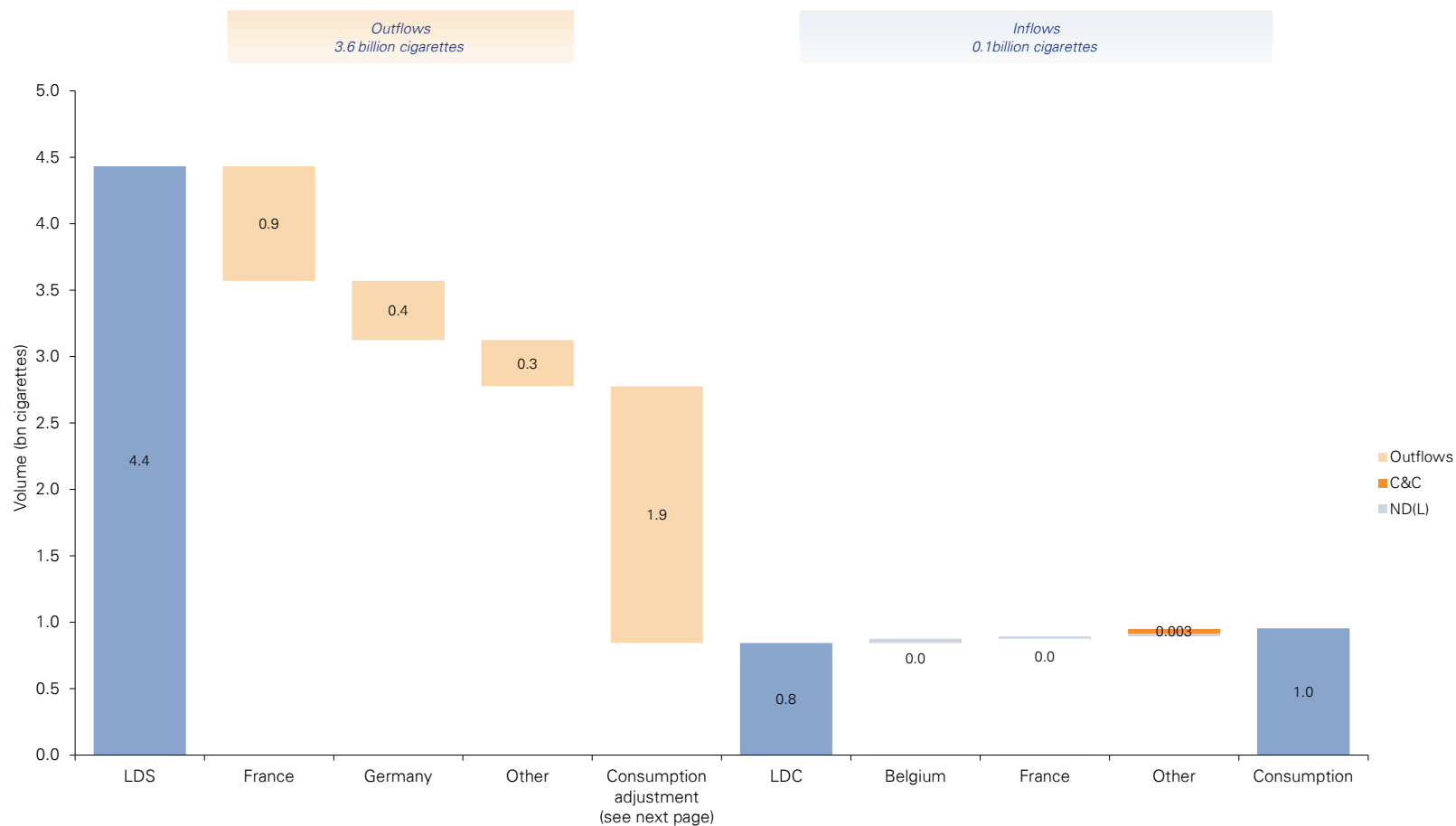


Notes: (a) Based on pack of 20 Marlboro King Size on 1<sup>st</sup> July 2006 and 2007  
(b) Marlboro prices increased in France by 30 cents in August 2007  
Sources: (1) Marlboro retail selling prices supplied by PMI

# Outflows and inflows

Luxembourg consumption is estimated at 1.0 billion cigarettes versus legal domestic sales of 4.4 billion cigarettes in 2008

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>



Notes: (a) LDS – Legal Domestic Sales

(b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)

Sources: (1) KPMG EU Flows Model

(2) Synovate ND(L) research 2006

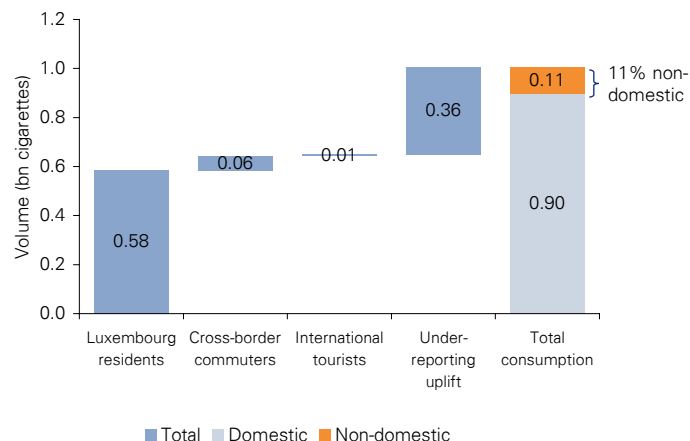
(3) Tax stamp data supplied by PMI Local Management

(4) Interviews with PMI Local Management

# Estimation of consumption

Our estimate of total consumption in Luxembourg uses the same methodology as in 2006 and 2007

## Consumption estimate 2006<sup>(1)(2)(3)(b)</sup>



## Consumption calculation 2006<sup>(b)</sup>

	Luxembourg	Belgium	Netherlands
<b>Population 18+ (million)<sup>(1)</sup></b>	0.4	8.6	13.2
<b>Smoking incidence<sup>(1)</sup></b>	29%	20%	19%
<b>Avg. daily consumption<sup>(1)</sup></b>	15.4	14.7	13.8
<b>Implied consumption (billion cigarettes)<sup>(a)(2)</sup></b>	0.7	8.7	12.0
<b>KPMG consumption (billion cigarettes)<sup>(3)</sup></b>	n/a	13.2	19.0
<b>Implied understatement</b>	36% ←	37%	35%
<b>Consumption estimate (billion cigarettes)</b>	1.01	n/a	n/a

## The scale of outflows from Luxembourg and the small size of the domestic market make an exact measurement of domestic consumption very challenging

- The estimation of outflows from Luxembourg requires the measurement of flows from Luxembourg into all other countries
  - these inflows are particularly difficult to measure as they are likely to be concentrated geographically within markets and are relatively small compared to the domestic markets of the destination countries
- As a result, this approach is likely to underestimate the volume of flows out of Luxembourg and hence overstate consumption

## We have used consumer survey data to adjust our estimate of consumption in 2006

- We have used consumer survey data to estimate domestic consumption by residents, commuters and visitors to Luxembourg
  - we estimated the extent of under-reporting in the survey data at 40% by performing the same calculation for Belgium and the Netherlands, and comparing the result to our own consumption estimates
- Applying an uplift for under-reporting implies total consumption of 1.01 billion cigarettes

## We have applied the results of the empty pack survey in Luxembourg to our revised consumption estimate

- The empty pack survey results for Luxembourg imply a non-domestic market share of 11%, equivalent to 110 million cigarettes
- There are no external estimates of the size of the non-domestic market in Luxembourg
  - however, this figure is substantially below that for Belgium and the Netherlands, which is consistent with its low price point relative to neighbouring countries and it being a low priority target for smugglers, who are likely to favour larger, higher priced markets

Notes: (a) Implied consumption for Luxembourg includes 0.07 billion cigarettes attributed to international commuters and tourists

(b) This analysis has not been updated for 2007 and 2008

Sources: (1) Attitudes of Europeans towards tobacco, Eurobarometer, 2006

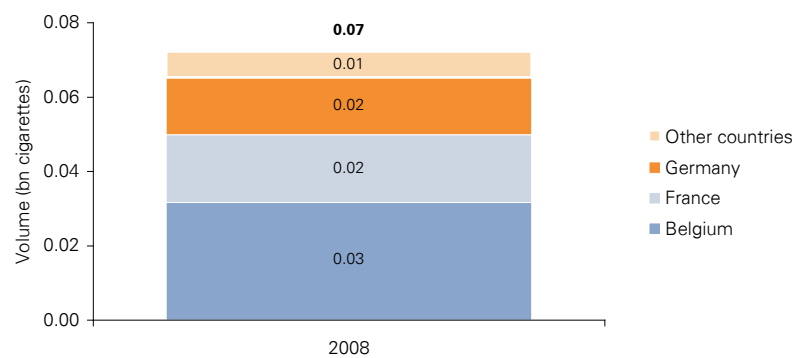
(2) <http://ec.europa.eu>

(3) KPMG EU Flows Model

# Non-domestic (legal) breakdown

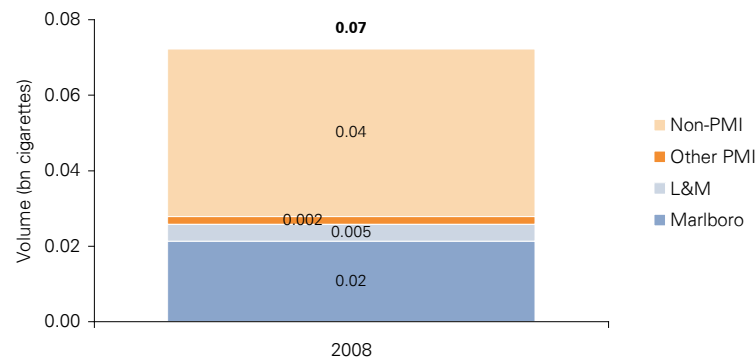
**Legal inflows account for around two thirds of non-domestic consumption in Luxembourg in 2008**

**Non-domestic (legal) by origin**  
2008<sup>(1)(2)(3)</sup>



<b>ND(L) share of consumption:</b>	<b>8%</b>
<b>ND(L) share of non-domestic:</b>	<b>67%</b>

**Non-domestic (legal) by brand**  
2008<sup>(1)(2)(3)</sup>



<b>PMI share of ND(L):</b>	<b>38%</b>
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*Note: ND(L) and EPS research was not updated in 2007 and 2008 but corroborating research has not indicated any significant changes to 2006 results*  
 Sources: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2006  
 (3) Interview with PMI Local Management

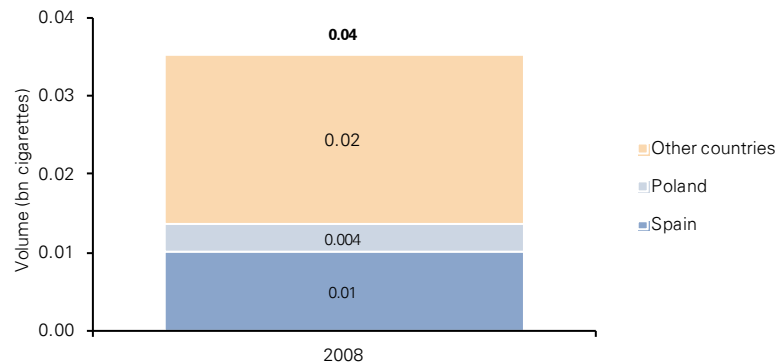
**ND(L) analysis**

	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)	Total ND(L) (cigarettes)
Values 2008	0.4m	88%	54%	2.0	208	0.07bn
EU rank 2008	26	1	2	20	8	25

# Counterfeit and contraband breakdown

C&C inflows account for a low percentage of total consumption in Luxembourg compared with other EU Member States

## Counterfeit and contraband by origin 2008<sup>(1)(2)(3)</sup>



<b>C&amp;C share of consumption:</b>	<b>4%</b>
<b>C&amp;C share of non-domestic:</b>	<b>33%</b>

Note: ND(L) and EPS research was not updated in 2007 and 2008 but corroborating research has not indicated any significant changes to 2006 results

Sources: (1) KPMG EU Flows Model

(2) Synovate ND(L) research 2006

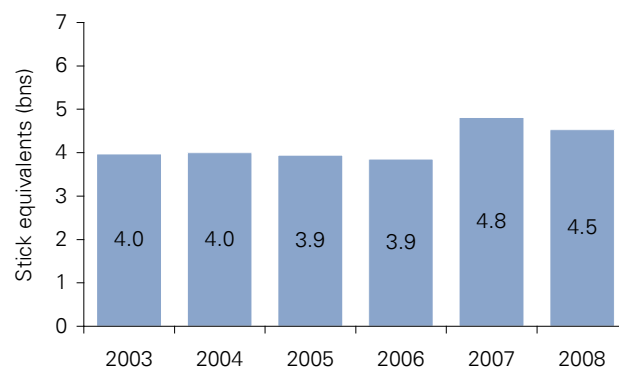
(3) Interviews with PMI Local Management



# OTP market size and growth

Legal domestic sales of fine cut tobacco accounted for 4.5 billion stick equivalents in 2008

**Fine cut tobacco sales in billion stick equivalents 2003-2008**<sup>(1)(a)(b)</sup>



**Manufactured cigarette sales (bn cigarettes)**

	5.6	6.5	5.2	4.8	5.0	4.4
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CAGR (%)	2003-2005	2005-2007	2007-2008
■ Fine cut tobacco	(0.4)%	(10.4)%	(5.8)%
Manufactured cigarettes	(3.8)%	(1.5)%	(12.1)%

Notes: (a) Smoking tobacco volumes have been calculated at one stick per 0.75 grams, while cigars and cigarillos have been calculated on a stick for stick basis

(b) Smokeless tobacco has been excluded from this analysis

Sources: (1) OTP volumes supplied by PM Benelux

(2) In Market Sales data supplied by PMI

## Fine cut tobacco sales decreased in 2008 compared to 2007 but remain above the 2003-2006 levels

- Fine cut tobacco sales declined by 5.8% in 2008 compared to 2007
- Smoking tobacco has had the highest volume growth among the major OTP categories since 2003 and now accounts for 99% of total OTP sales (excluding smokeless tobacco)

## Other tobacco product categories account for a large share of overall tobacco sales in Luxembourg

- Total cigarette sales are estimated at at 4.4 billion cigarettes<sup>(2)</sup> versus 4.5 billion cigarettes for fine cut tobacco in 2008
  - anecdotal evidence suggests that the majority of cigarettes and other tobacco products sold in Luxembourg are not consumed domestically
- 2008 sales estimates of pipe tobacco and other smokeless tobacco in Luxembourg are not currently available

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

**Total consumption in Malta declined by 2.4% in 2008 driven by higher outflows**

**Non-domestic inflows to Malta were stable in 2008 at 0.04 billion cigarettes**

**Key source and destination markets<sup>(1)(a)(b)</sup>**

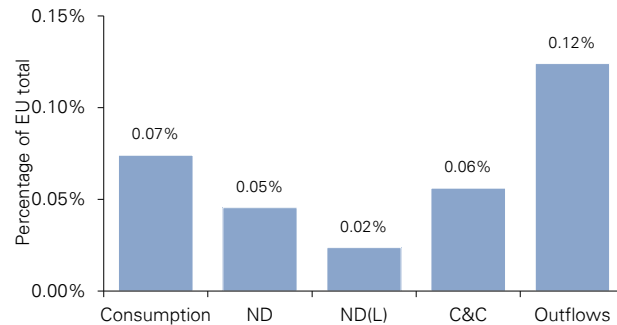


**Key:** ■ Malta ■ Major destination countries

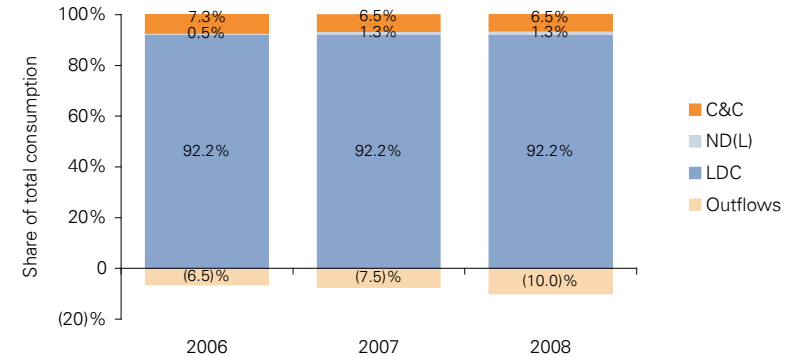
**Notes:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow  
(b) ND(L) and EPS research has not been updated in 2007 and 2008 but corroborating research has not indicated any significant changes to 2006 results

**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
(2) Synovate ND(L) research 2006

**Proportion of total EU levels<sup>(1)(2)</sup>**



**Total Maltese consumption 2006-2008<sup>(1)(2)(b)</sup>**



Volume (bn cigarettes):	2006	2007	2008
	0.542	0.536	0.523

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2008<sup>(1)(2)(b)</sup>**

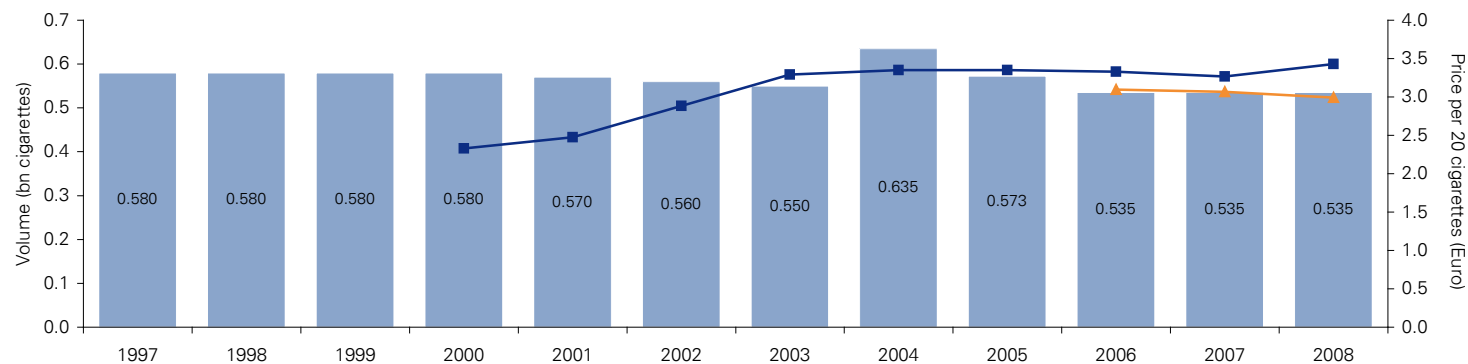


Volume (bn cigarettes):	2006	2007	2008
	0.042	0.042	0.041

# Historic sales and pricing trends

Cigarette sales were stable in 2008 but remain below 2004 levels at 535 million cigarettes

Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-2003	2003-2006	2006-2008	2007-2008
Legal domestic sales	(0.9)%	(0.9)%	0.0%	0.0%
Average pack price	n/a	0.4%	1.5%	5.0%
Consumption	n/a	n/a	(1.7)%	(2.4)%

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PMI Malta management

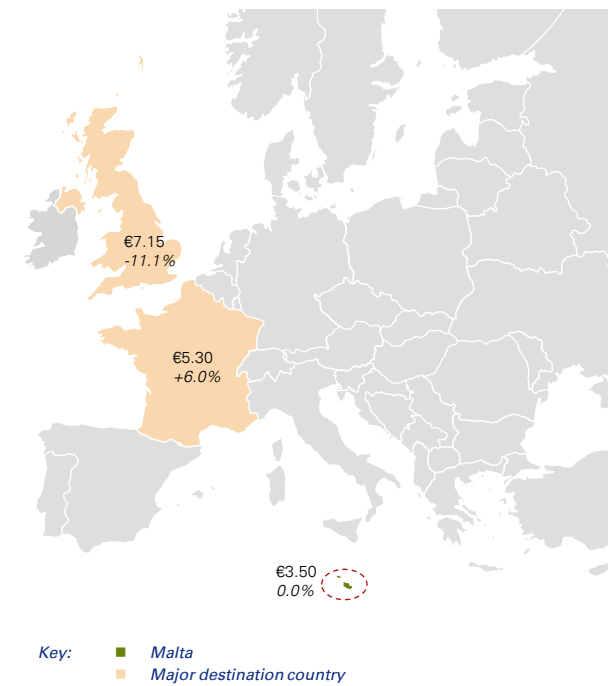
## Legal domestic sales were stable in 2008 whilst average prices increased by 5.0%

- In November 2008 taxation on cigarettes was changed by increasing the specific tax and reducing the ad valorem tax
- Smoking regulation that requires bars, restaurants and cafes to allocate designated smoking areas on their premises has been in place since 2005
- Malta began to use the Euro currency from January 1<sup>st</sup> 2008

PMI market share has increased in 2008

Malta has remained a significantly lower priced market compared to key destination markets of the UK and France

### Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



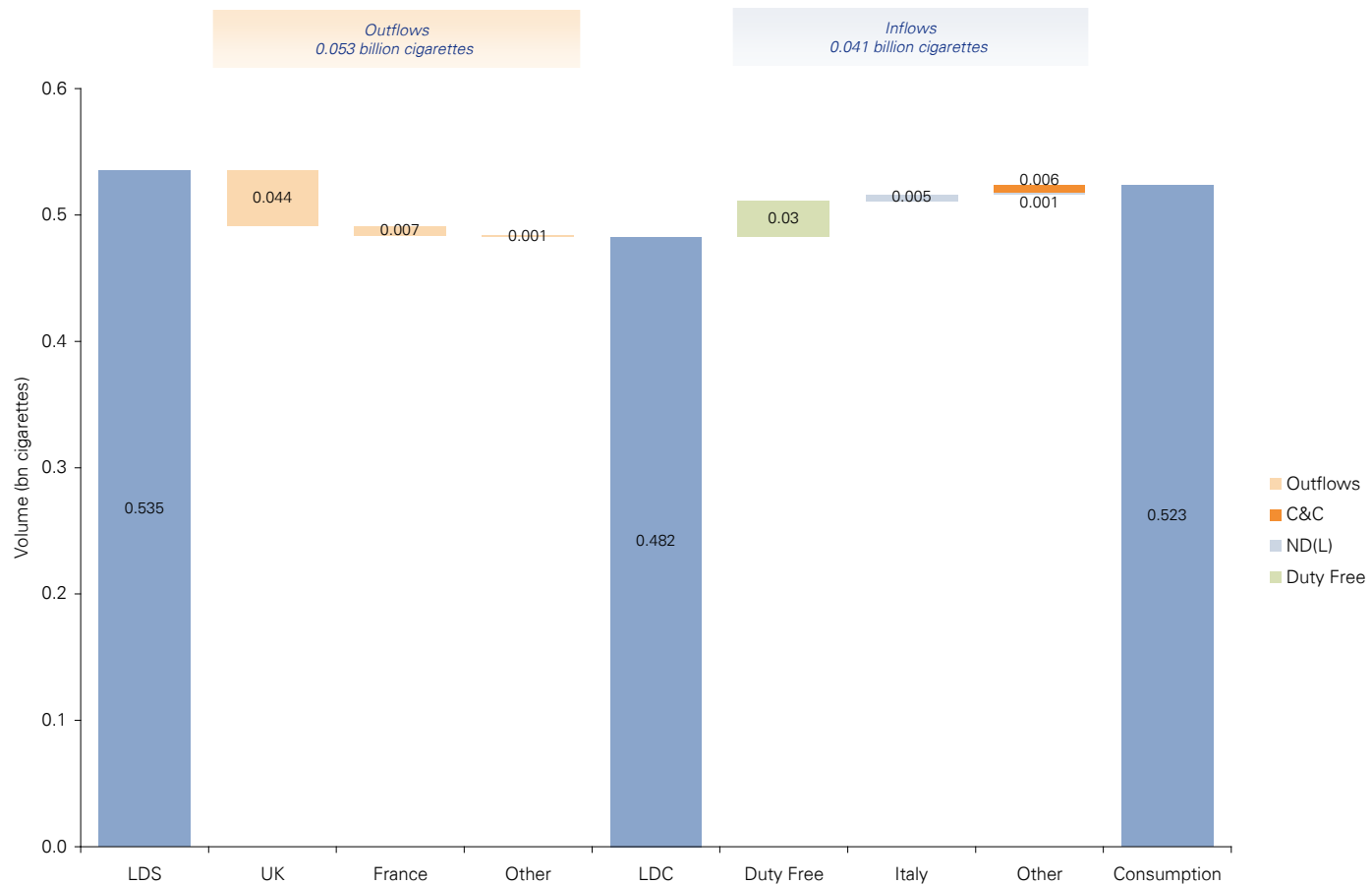
Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) Marlboro retail selling price supplied by PMI

# Outflows and inflows

Maltese consumption is estimated at 523 million cigarettes versus legal sales of 535 million cigarettes, with a net outflow of 12 million cigarettes

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>



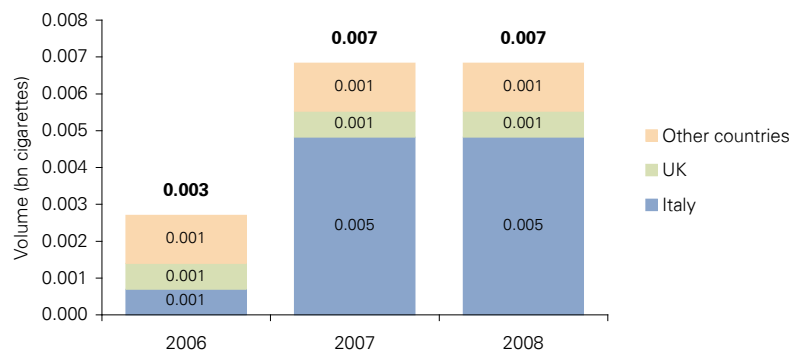
Notes: (a) LDS – Legal Domestic Sales  
 (b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)

Sources: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2006  
 (3) In Market Sales supplied by PMI  
 (4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

**In 2008 non-domestic (legal) inflows were stable at 7 million cigarettes**

**Non-domestic (legal) by origin 2006-2008**<sup>(1)(2)(3)(a)</sup>



<b>ND(L) share of consumption:</b>	<b>1%</b>	<b>1%</b>	<b>1%</b>
<b>ND(L) share of non-domestic:</b>	<b>7%</b>	<b>16%</b>	<b>17%</b>

**Non-domestic (legal) by brand 2006-2008**<sup>(1)(2)(3)(a)</sup>



<b>PMI share of ND(L):</b>	<b>20%</b>	<b>20%</b>	<b>20%</b>
----------------------------	------------	------------	------------

*Note:* (a) ND(L) inflows to Malta are higher in 2007 compared with 2006 due to a change in treatment for inflows from Italy. In 2007, all inflows from Italy are assumed to be legal to reflect the fact cigarettes prices in Italy are higher than Malta

*Sources:* (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2006  
 (3) Interviews with PMI Local Management

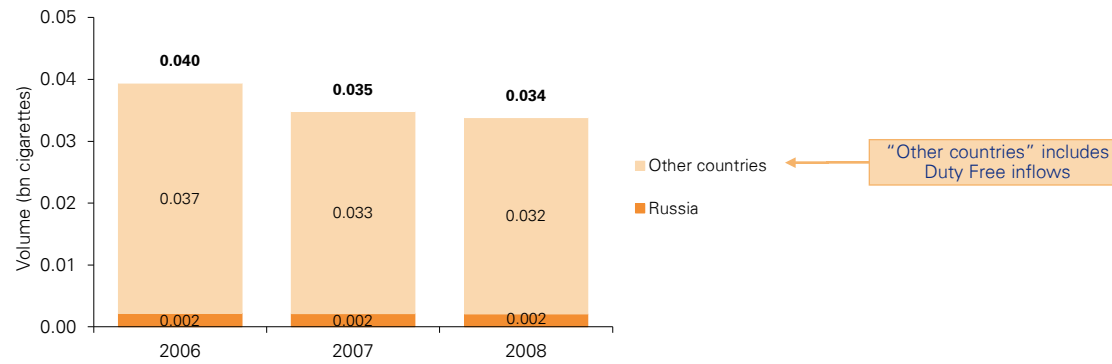
**ND(L) analysis**

	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)	<b>Total ND(L) (cigarettes)</b>
Values 2008	<b>0.3m</b>	<b>30%</b>	<b>8%</b>	<b>4.6</b>	<b>196</b>	<b>= 0.007bn</b>
EU rank 2008	<b>27</b>	<b>25</b>	<b>27</b>	<b>5</b>	<b>9</b>	<b>27</b>

# Counterfeit and contraband breakdown

**Counterfeit and contraband flows were 34 million cigarettes in 2008**

**Counterfeit and contraband by origin**  
2006-2008<sup>(1)(2)(3)</sup>



<b>C&amp;C share of consumption:</b>	<b>7%</b>	<b>7%</b>	<b>6%</b>
<b>C&amp;C share of non-domestic:</b>	<b>93%</b>	<b>84%</b>	<b>83%</b>

Sources: (1) KPMG EU Flows Model  
(2) Synovate ND(L) research 2006  
(3) Interviews with PMI Local Management

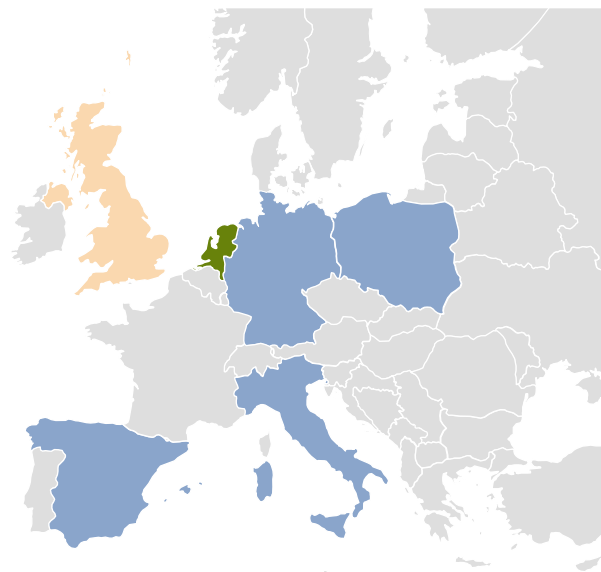


- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
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- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

Total consumption in the Netherlands has declined driven mainly by a significant decline in non-domestic inflows in 2008

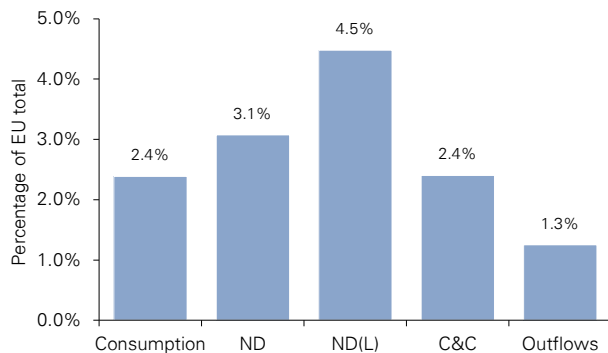
Both legal and illicit flows have declined

### Key source and destination markets<sup>(1)(a)</sup>

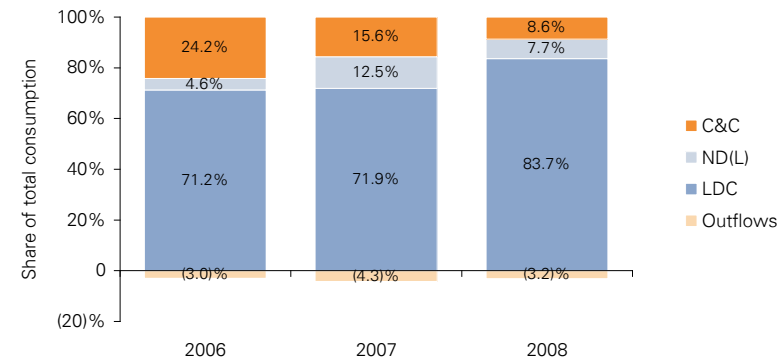


**Key:** ■ Netherlands ■ Major source countries ■ Major destination countries  
**Note:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow  
**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
 (2) Synovate ND(L) research 2006, 2007 and 2008

### Proportion of total EU levels<sup>(1)(2)</sup>

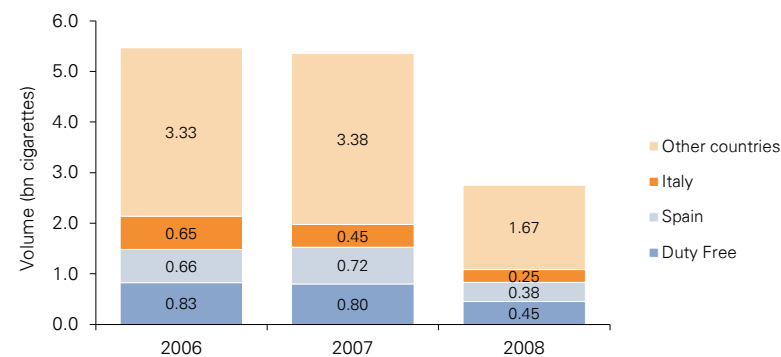


### Total Dutch consumption 2006-2008<sup>(1)(2)</sup>



Volume (bn cigarettes):	2006	2007	2008
	19.0	19.1	16.8

### Total non-domestic inflows by origin (ND(L) and C&C) 2006-2008<sup>(1)(2)</sup>

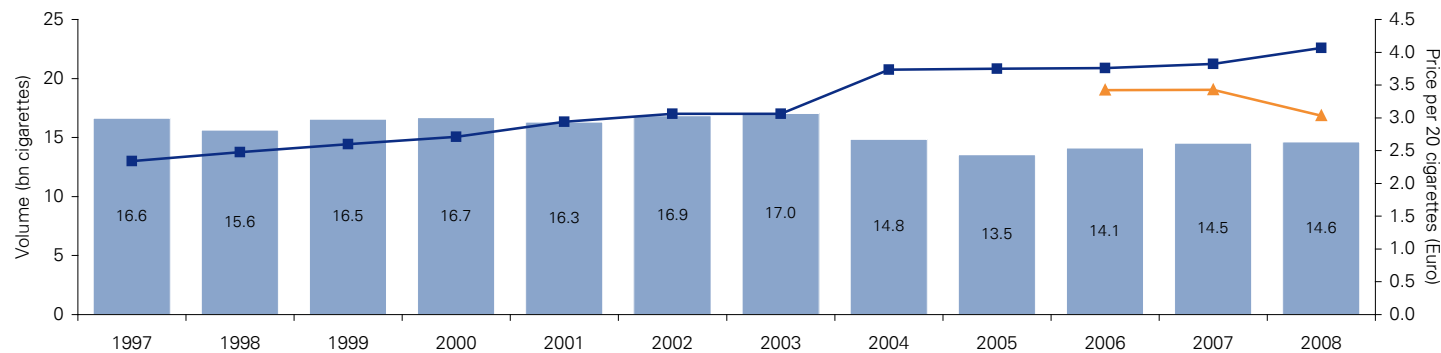


Volume (bn cigarettes):	2006	2007	2008
	5.5	5.4	2.8

# Historic sales and pricing trends

Legal domestic sales have grown gradually following significant declines in 2004 and 2005

## Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-1999	1999-2005	2005-2008	2007-2008
Legal domestic sales	0.1%	(3.3)%	2.6%	0.8%
Average pack price	5.0%	6.3%	2.8%	6.5%
Consumption <sup>(a)</sup>	n/a	n/a	(5.9)%	(11.6)%

Note: (a) Consumption CAGR is from 2006 to 2008

Sources: (1) Tax stamp data supplied by PMI is used for historic data; IMS data based on tax stamp and AC Nielsen is used for 2007 and 2008

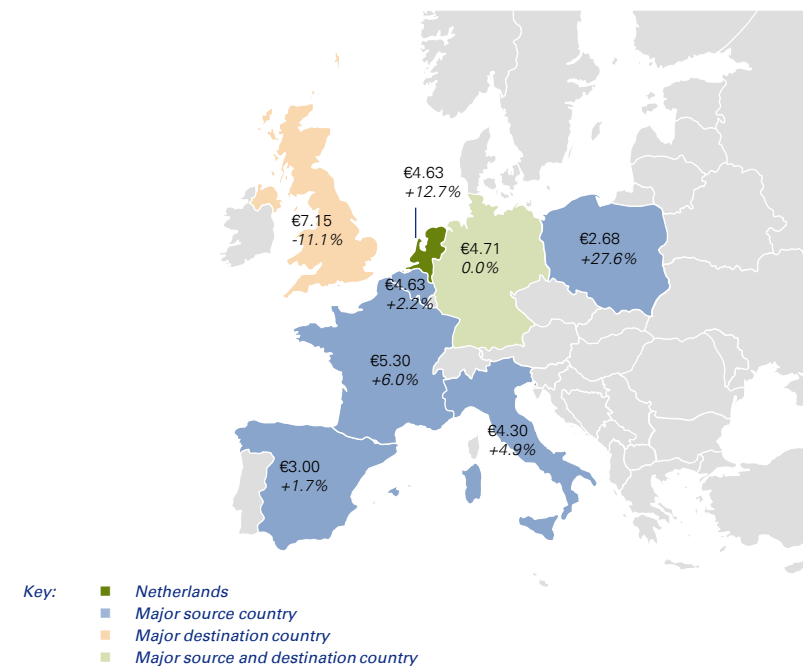
(2) Weighted average pack price supplied by PMI

### Legal domestic sales have increased by 0.8% in 2008 to 14.6 billion cigarettes in 2008 despite an increase in weighted average prices of 6.5%

- Prices were increased in January and July in 2008. However, Philip Morris Netherlands observed that price increases did not have an impact at the retail level until November 2008
  - the January 2008 price increase was manufacturer driven and the increase in July 2008 was driven by an excise tax increase
- A tobacco smoking ban was enforced in the Netherlands in July 2008
  - the ban prohibits smoking in restaurants, cafes, bars and nightclubs
  - a ban on smoking in other public buildings and public transport has been in place since January 2004

Price differentials have widened with Spain and Italy, which were both major source markets for the Netherlands in 2008

### Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



Notes: (a) Based on pack of 20 Marlboro King Size as at July 1<sup>st</sup> 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

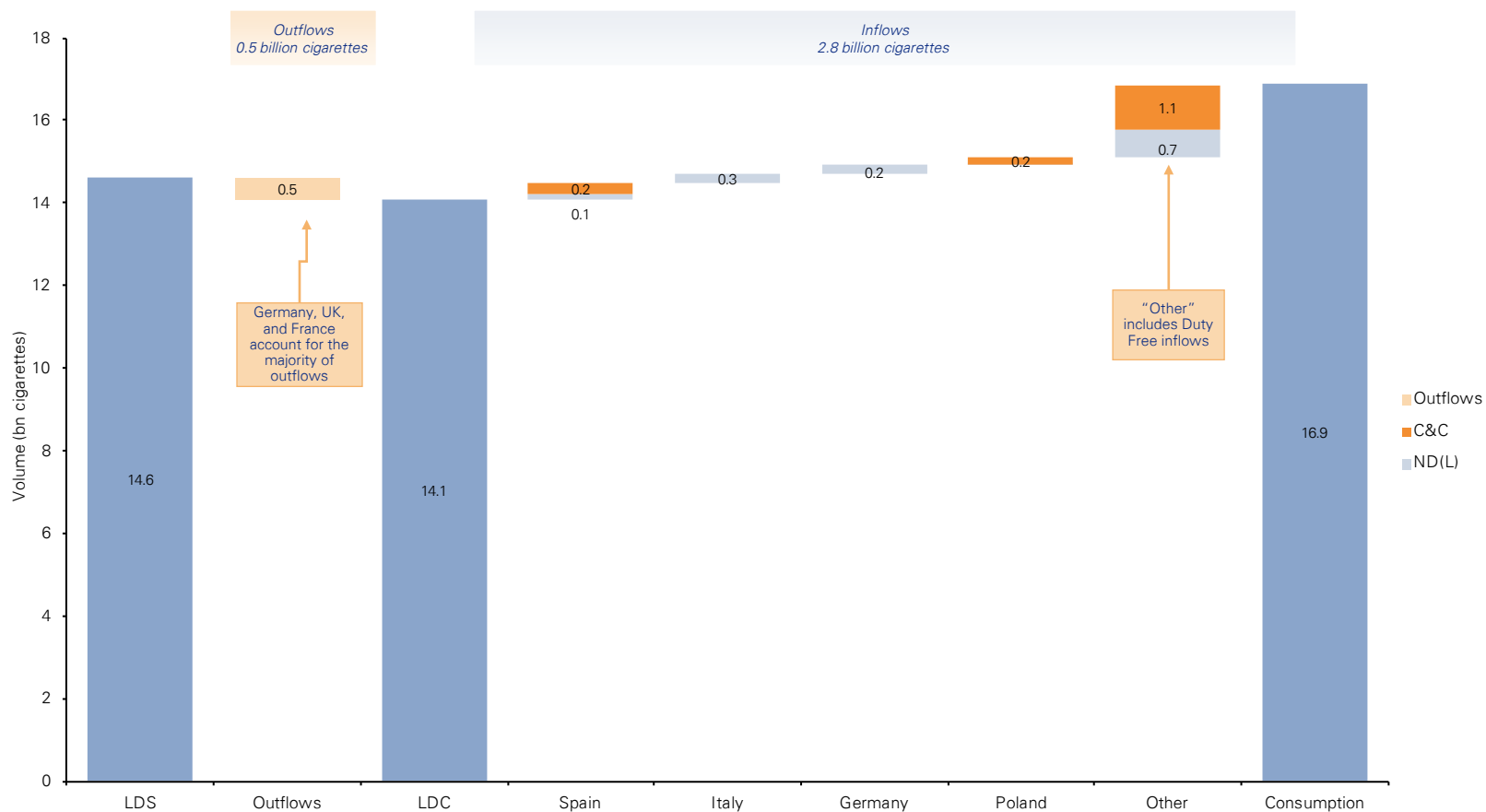
Sources: (1) KPMG EU Flows Model

(2) Marlboro retail selling price supplied by PMI based on PMI standard exchange rates as at June 2008 and June 2007

# Outflows and inflows

Consumption in the Netherlands is estimated at 16.8 billion cigarettes compared to legal domestic sales of 14.6 billion cigarettes, with a net inflow of 2.2 billion cigarettes

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>

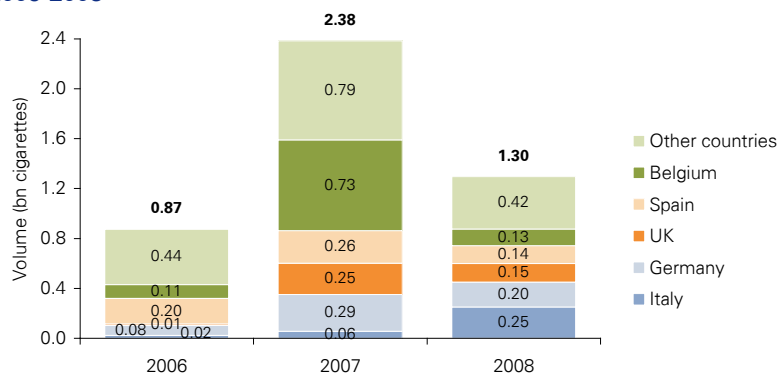


Notes: (a) LDS – Legal Domestic Sales  
 (b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)  
 Sources: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2008  
 (3) IMS data supplied by PMI  
 (4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

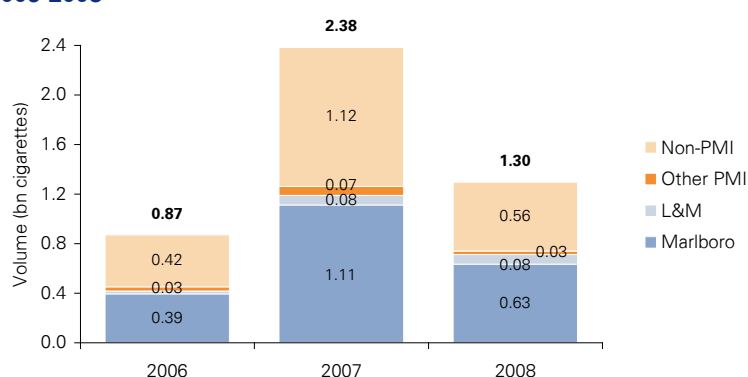
**Non-domestic (legal) inflows represented 8% of consumption in 2008 compared to 13% in 2007**

**Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)(a)</sup>**



<b>ND(L) share of consumption:</b>	<b>5%</b>	<b>13%</b>	<b>8%</b>
<b>ND(L) share of non-domestic:</b>	<b>16%</b>	<b>44%</b>	<b>47%</b>

**Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)(a)</sup>**



<b>PMI share of ND(L):</b>	<b>52%</b>	<b>53%</b>	<b>57%</b>
----------------------------	------------	------------	------------

Sources: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2006, 2007 and 2008  
 (3) Interviews with PMI Local Management

**ND(L) analysis**

	①	②	③	④		
	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)	
Values 2008	12.9m	73%	26%	2.3	145	
EU rank 2008	8	2	15	16	17	
	x				=	0.81bn <sup>(b)</sup>

**ND(L) analysis 2007-2008**

	2007	2008
Propensity to travel and purchase cigarettes	① x ② = 25.1%	19.1%
Average annual cigarettes purchased	③ x ④ = 517	327

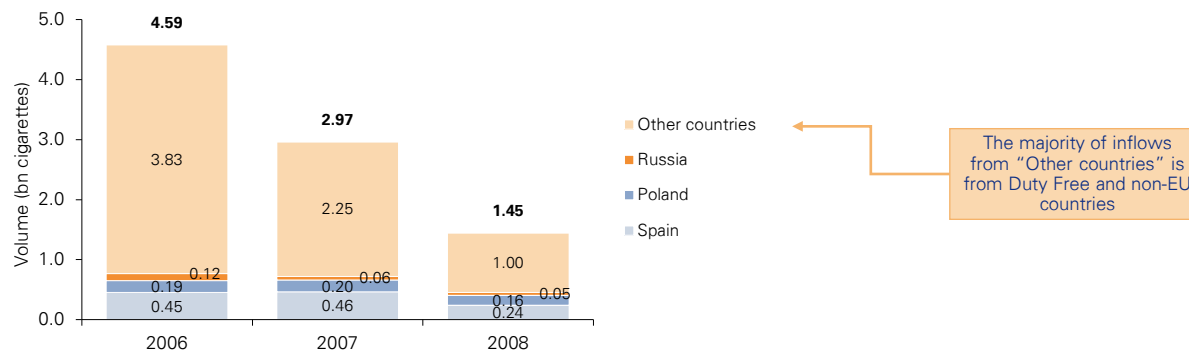
Pall Mall, Camel, Gauloises and Kent accounted for approximately 50% of Non-PMI brands in 2008

Notes: (a) ND(L) inflows in 2007 and 2008 are higher than those in 2006 partly as a result of changes in treatment of inbound tourism flows. In 2006, had the same methodology been applied, ND(L) including overseas inbound visitor flows would have been approximately 1.33 billion cigarettes  
 (b) ND(L) analysis from Synovate excludes adjustments for inbound tourism inflows. Total ND(L) including these inbound tourism inflows in 1.30 billion cigarettes

# Counterfeit and contraband breakdown

**Counterfeit and contraband volumes have shown a declining trend since 2006**

**Counterfeit and contraband by origin 2006-2008**<sup>(1)(2)(3)(a)</sup>



The majority of inflows from "Other countries" is from Duty Free and non-EU countries

<b>C&amp;C share of consumption:</b>	<b>24%</b>	<b>16%</b>	<b>9%</b>
<b>C&amp;C share of non-domestic:</b>	<b>84%</b>	<b>56%</b>	<b>53%</b>

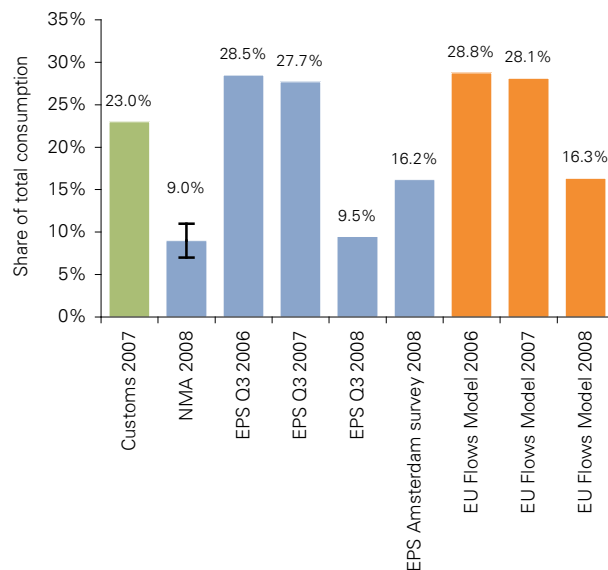
Note: (a) C&C inflows have decreased in 2007 and 2008 partly as a result of changes in treatment of inbound tourism flows. In 2006, had the same methodology been applied, C&C inflows would have been approximately 4.13 billion cigarettes

Sources: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2006, 2007 and 2008  
 (3) Interview with PMI Local Management

# Comparison of external sources for non-domestic estimates

Both the EU Flows Model and the Empty Pack Surveys conducted in 2008 show a substantial decline in non-domestic inflows compared to 2007

Non-domestic market volume estimates<sup>(1)(2)(3)(4)(a)(b)</sup>



Note: (a) Netherlands Customs 2005 estimate revised based on feedback following interview with relevant parties in April 2008

(b) EPS Amsterdam Survey 2008 relates to the a parallel empty pack survey conducted in 30 neighbourhoods in Amsterdam in December 2008

Sources: (1) KPMG EU Flows Model

(2) PMI EPS Q3 2006, Q3 2007, Q3 2008, Amsterdam 30 Neighbourhood Survey December 2008

(3) KPMG interview with Netherlands Customs

(4) Results of the Dutch NMA survey provided by PM Netherlands

## Empty Pack Surveys conducted during 2008 indicated a substantial decline in non-domestic incidence in the Netherlands

- The Q3 2008 EPS was conducted by a different agency compared to prior years. Although the sampling plan and methodology were consistent, there were differences in the selection of neighbourhoods and approach. Fieldwork inconsistency has limited the validity of the study
- Two additional Empty Pack Surveys in Amsterdam were conducted in December 2008 using the same agency that conducted the 2007 and 2006 surveys
  - one of the surveys was conducted across 30 neighbourhoods and resulted in a higher non-domestic incidence of 16.2% whilst the other was conducted in 10 neighbourhoods in Amsterdam and resulted in a non-domestic incidence of 13.2%
- For the purposes of Project Star, the results of the 30 neighbourhood Amsterdam survey have been used as the basis for the EU Flows Model. This is because the second survey provides a larger sample size and also provides consistency of agency, approach and methodology with prior years

## Results of the survey conducted by the Dutch Tobacco Manufacturers Association indicate a non-domestic consumption of 7-11% in 2008

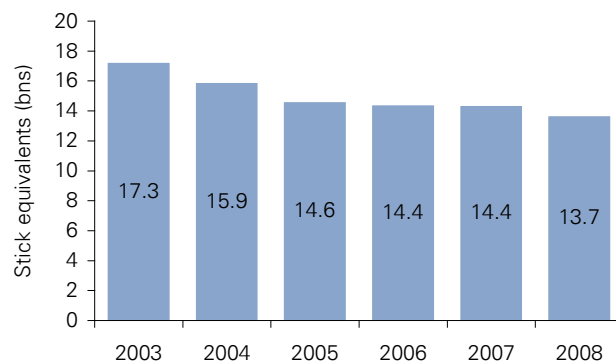
- The survey in 2008 was based on asking participants to complete a questionnaire and inviting them to send their empty packs to be analysed over a three week period
  - four waves were conducted in 2008 and on average 287 smokers participated in each wave



# OTP market size and growth

Sales of fine cut tobacco were 13.7 billion stick equivalents in 2008

**Fine cut tobacco sales in billion stick equivalents 2003-2008<sup>(1)(a)(b)</sup>**



**Manufactured cigarette sales (bn cigarettes)**

2003	2004	2005	2006	2007	2008
17.0	14.8	13.5	14.1	14.5	14.6

CAGR (%)	2003-2005	2005-2007	2007-2008
■ Fine cut tobacco	(7.9)%	(0.9)%	(4.7)%
Manufactured cigarettes	(10.8)%	4.2%	0.8%

Notes: (a) Smoking tobacco volumes have been calculated at one stick per 0.75 grams, while cigars and cigarillos have been calculated on a stick for stick basis

(b) Smokeless tobacco is excluded from this analysis

Source: (1) Fine cut tobacco volumes supplied by PMI

**Legal sales of fine cut tobacco have declined by 4.7% in 2008 to 13.7 billion stick equivalents compared to 2007**

- Legal sales of manufactured cigarettes increased by 0.8% over the same time period

**Smoking tobacco accounts for the majority of OTP volumes (excluding smokeless tobacco) in the Netherlands**

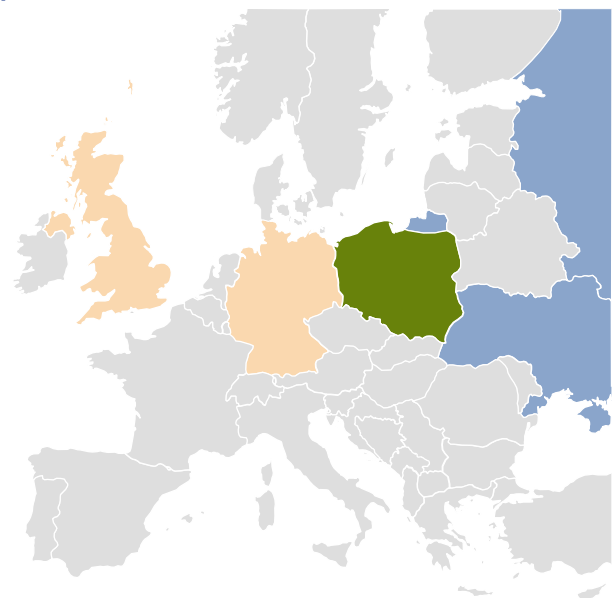
- Austria
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- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

**Total consumption in Poland declined by 8.5% in 2008, reflecting a fall of legal domestic sales**

**Inflows to Poland increased to 5.8 billion cigarettes in 2008, driven by higher flows from Ukraine**

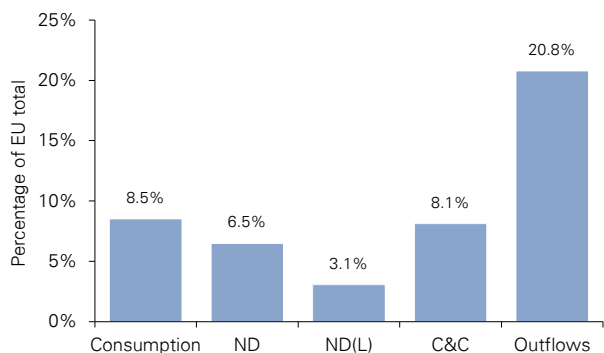
**Outflows from Poland represented 14.7% of total consumption in 2008**

**Key source and destination markets<sup>(1)(a)</sup>**

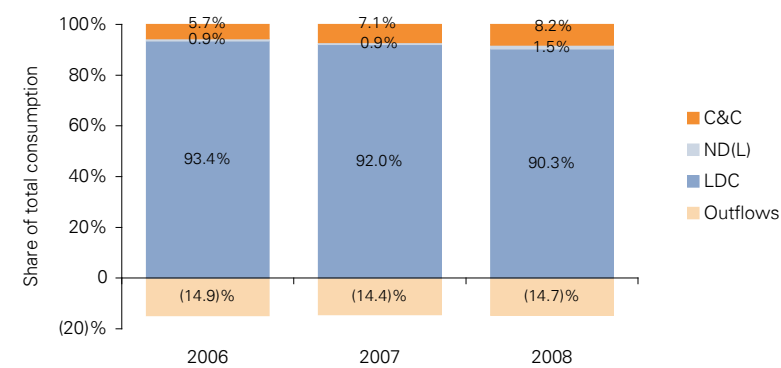


**Key:** ■ Poland ■ Major source countries ■ Major destination countries  
**Note:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow  
**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
 (2) AC Nielsen ND(L) research 2006, 2007 and 2008

**Proportion of total EU levels<sup>(1)(2)</sup>**

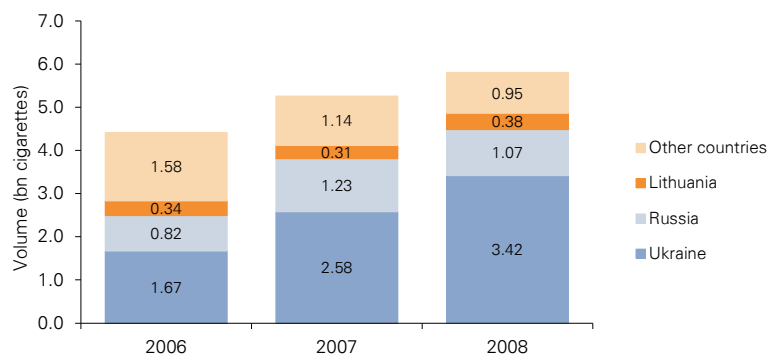


**Total Polish consumption 2006-2008<sup>(1)(2)</sup>**



Volume (bn cigarettes):	2006	2007	2008
	66.9	65.7	60.1

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2008<sup>(1)(2)</sup>**

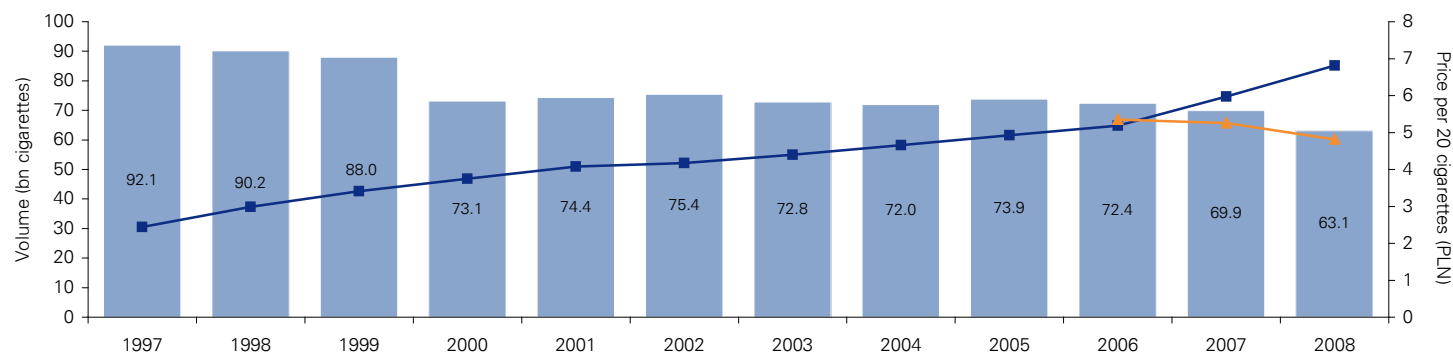


Volume (bn cigarettes):	2006	2007	2008
	4.4	5.3	5.8

# Historic sales and pricing trends

Legal domestic sales have declined from 2005 to 2008 whilst average prices have increased

## Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-2000	2000-2005	2005-2008	2007-2008
■ Legal domestic sales	(7.4)%	0.2%	(5.1)%	(9.7)%
■ Average pack price	15.5%	5.6%	11.4%	14.1%
▲ Consumption	n/a	n/a	(5.2)% <sup>(a)</sup>	(8.5)%

Note: (a) Consumption CAGR percentage calculated from 2006 to 2008

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PMI

(3) "Poland will enact fuel and tobacco excise hikes in January 2007", PAP Market Insider, 29th November 2006

(4) "New excise on cigarettes comes into force today", Polish News Bulletin, 14th January 2008

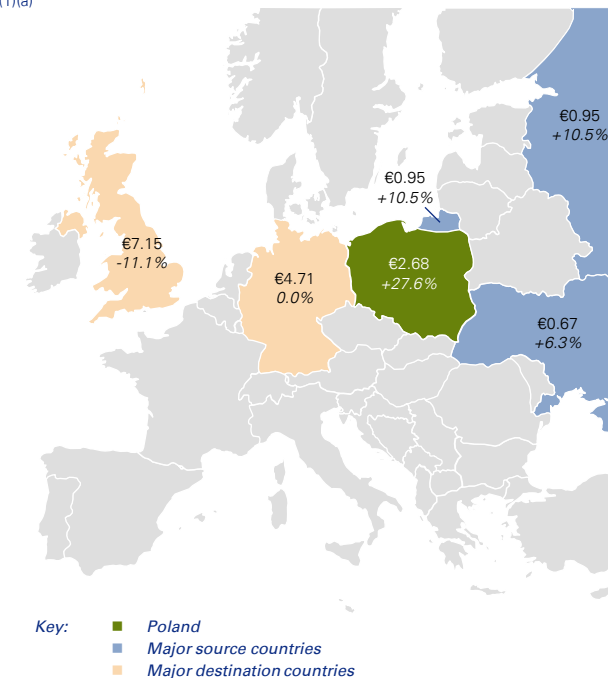
(5) OTP volumes supplied by PMI

### Legal domestic sales decreased by 9.7% in 2008 compared to 2007, whilst average pack price increased by 14.1%

- There have been a number of excise tax increases on cigarettes following Poland's entry into the EU in 2004
  - the excise tax increased by 13% from January 2007, and 15-17% from January 2008<sup>(3)(4)</sup>
- The decline in legal sales of manufactured cigarettes may have been driven by consumers trading down to lower cost other tobacco products
  - sales of smoking tobacco increased by approximately 3.6 billion cigarettes to a market size of 9.9 billion cigarettes in 2008<sup>(5)</sup>

The market share of each price category has remained stable in 2008 despite an increase in average pack price

### Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



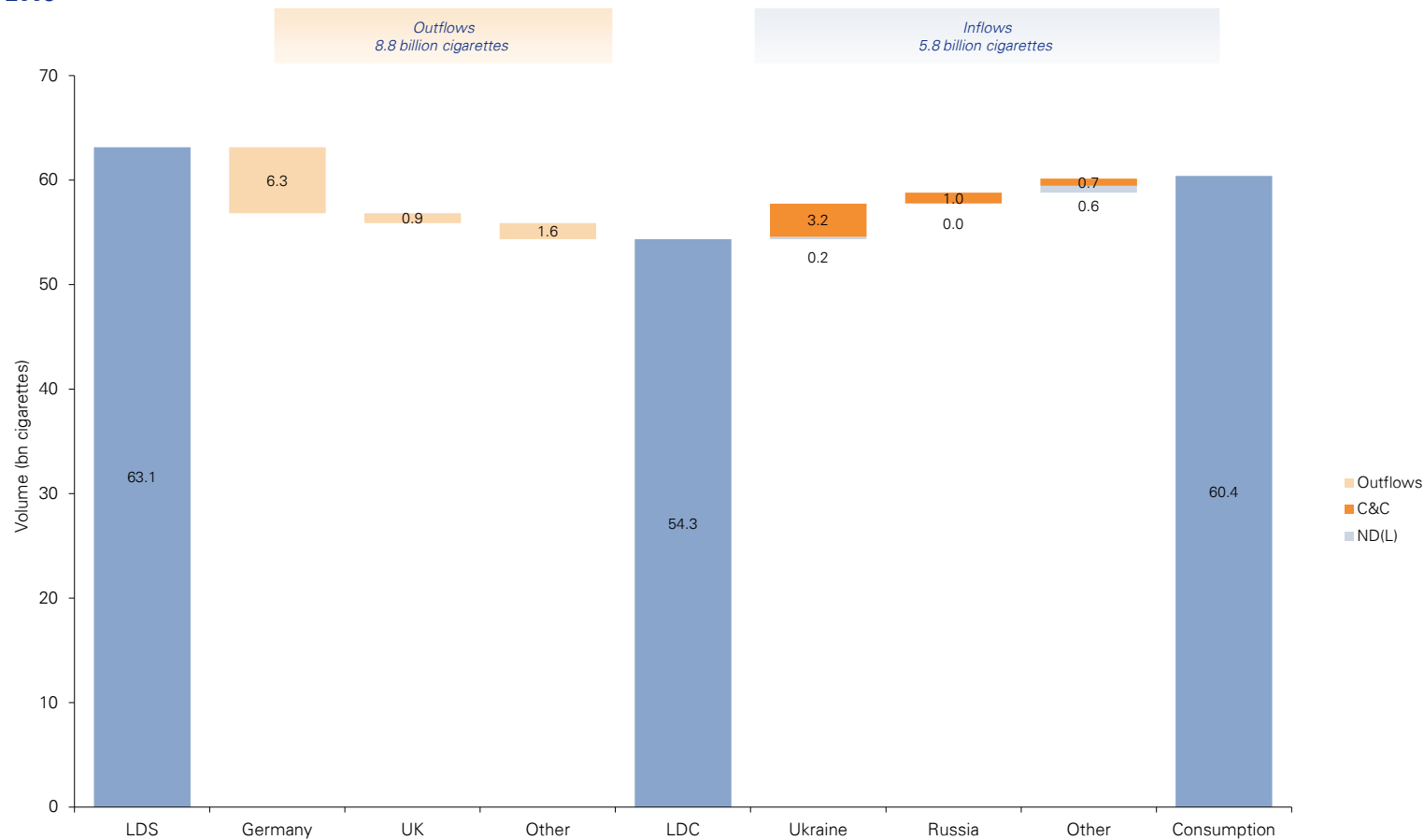
Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) Marlboro retail selling price supplied by PMI

# Outflows and inflows

**Polish consumption is estimated at 60.1 billion cigarettes versus legal sales of 63.1 billion cigarettes, with a net outflow of 3.0 billion cigarettes in 2008**

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>

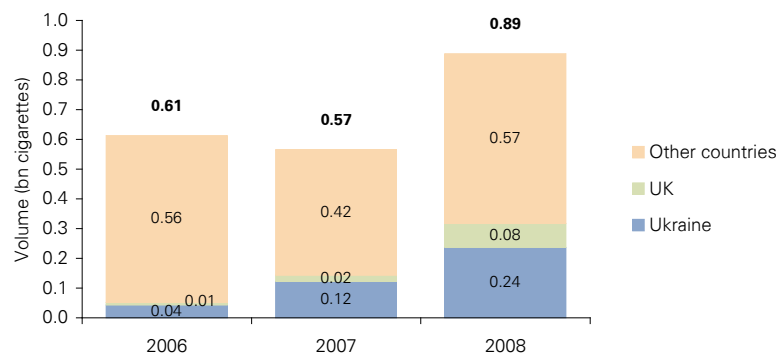


Notes: (a) LDS – Legal Domestic Sales  
 (b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)  
 Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2008  
 (3) In Market Sales supplied by PMI  
 (4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

**Legal inflows to Poland increased to 0.89 billion cigarettes in 2008**

**Non-domestic (legal) by origin 2006-2008**<sup>(1)(2)(3)</sup>



<b>ND(L) share of consumption:</b>	<b>1%</b>	<b>1%</b>	<b>1%</b>
<b>ND(L) share of non-domestic:</b>	<b>14%</b>	<b>11%</b>	<b>15%</b>

**Non-domestic (legal) by brand 2006-2008**<sup>(1)(2)(3)</sup>



<b>PMI share of ND(L):</b>	<b>43%</b>	<b>63%</b>	<b>50%</b>
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Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2006, 2007 and 2008  
 (3) Interviews with PMI Local Management

**ND(L) analysis**

	①	②	③	④	
	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)
Values 2008	30.6m	35%	18%	5.1	91
EU rank 2008	6	21	21	2	25
	x				=
					<b>0.89bn</b>
					<b>Total ND(L) (cigarettes)</b>

**ND(L) analysis 2007-2008**

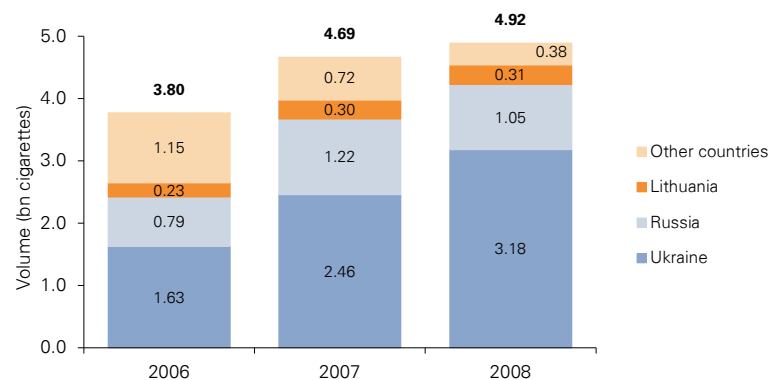
	2007	2008
Propensity to travel and purchase cigarettes	① x ②	3.6%
Average annual cigarettes purchased	③ x ④	468

Non-PMI brands includes small volumes of a number of brands including Camel, Classic and Monte Carlo

# Counterfeit and contraband breakdown

**Counterfeit and contraband consumption in Poland increased to 4.9 billion cigarettes in 2008 driven by higher inflows from Ukraine**

**Counterfeit and contraband by origin 2006-2008<sup>(1)(2)(3)</sup>**



<b>C&amp;C share of consumption:</b>	<b>6%</b>	<b>7%</b>	<b>8%</b>
<b>C&amp;C share of non-domestic:</b>	<b>86%</b>	<b>89%</b>	<b>85%</b>

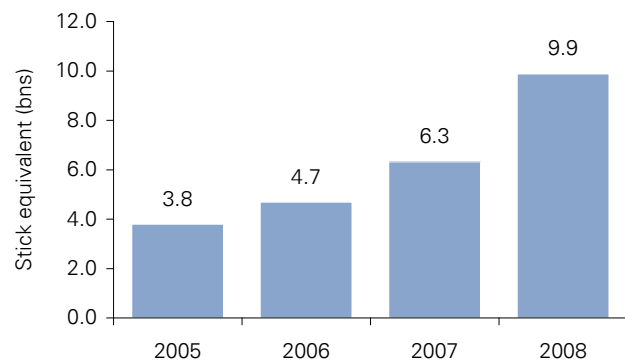
Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2006, 2007 and 2008  
 (3) Interviews with PMI Local Management



# OTP market size and growth

The market for other tobacco products increased by 56% in 2008

## Smoking tobacco sales in billion stick equivalents 2005-2008<sup>(1)(a)</sup>



Manufactured cigarette sales (bn cigarettes)	2005	2006	2007	2008
	73.9	72.4	69.9	63.1

CAGR (%)	2005-2008	2007-2008
Smoking tobacco	37.5%	56.3%
Manufactured cigarettes	(5.1)%	(9.7)%

Notes: (a) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams

Sources: (1) OTP volumes supplied by PMI

## Between 2005 and 2008, smoking tobacco sales increased at an average rate of 38% per year

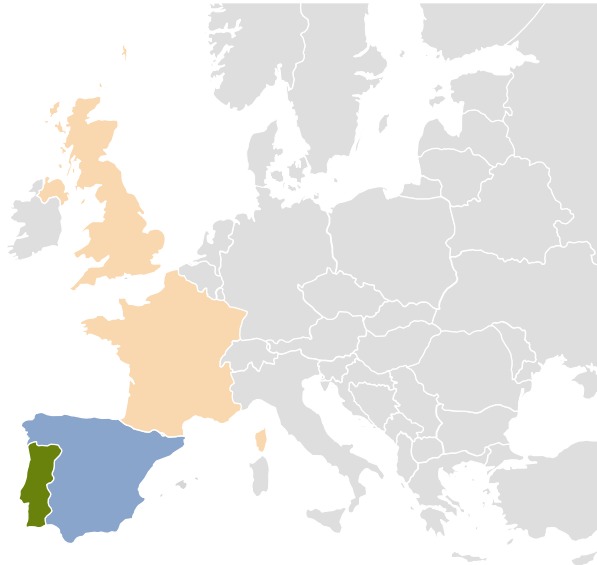
- The increase may have been driven by consumers trading down to lower cost OTP products, following several excise price increases on manufactured cigarettes
  - sales of manufactured cigarettes declined by 5% per year over the same time period
  - increasing sales of OTP products may also be attributable to cross border purchases by consumers entering Poland

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

**Total consumption in Portugal declined by 8.5% in 2008 driven by lower legal domestic sales**

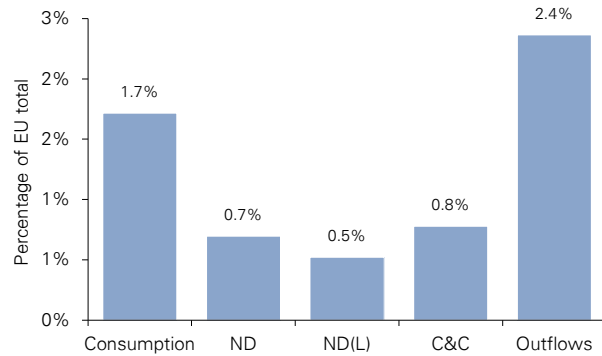
**Non-domestic inflows increased to 0.6 billion cigarettes in 2008 due largely to increasing inflows from Spain**

**Key source and destination markets<sup>(1)(a)</sup>**

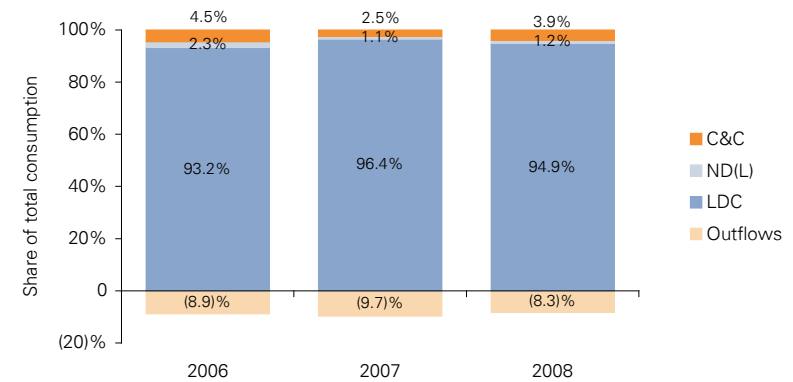


**Key:** ■ Portugal ■ Major source country ■ Major destination countries  
**Note:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow  
**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
 (2) AC Nielsen ND(L) research 2006; Synovate ND(L) research 2008

**Proportions of total EU levels<sup>(1)(2)</sup>**

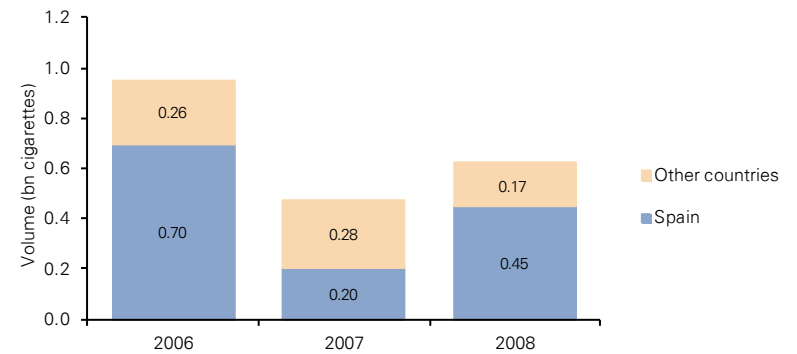


**Total Portuguese consumption 2006-2008<sup>(1)(2)</sup>**



Volume (bn cigarettes):	2006	2007	2008
	14.0	13.2	12.1

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2008<sup>(1)(2)</sup>**

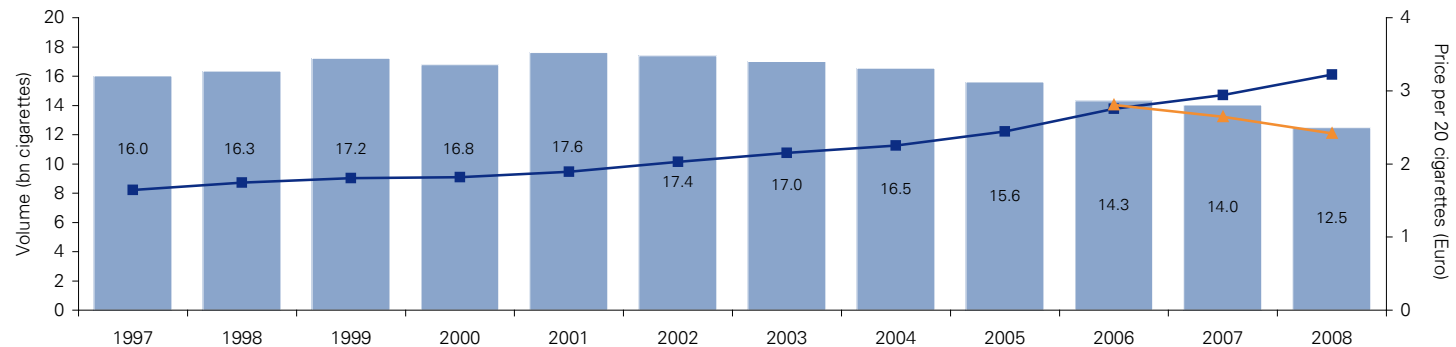


Volume (bn cigarettes):	2006	2007	2008
	1.0	0.5	0.6

# Historic sales and pricing trends

Legal cigarette sales have trended downwards since 2001, and decreased by 11.1% in 2008

## Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-2001	2001-2006	2006-2008	2007-2008
Legal domestic sales	2.4%	(4.1)%	(6.7)%	(11.1)%
Average pack price	3.6%	7.8%	8.2%	9.5%
Consumption	n/a	n/a	(7.2)%	(8.5)%

Sources: (1) In Market Sales supplied by PMI

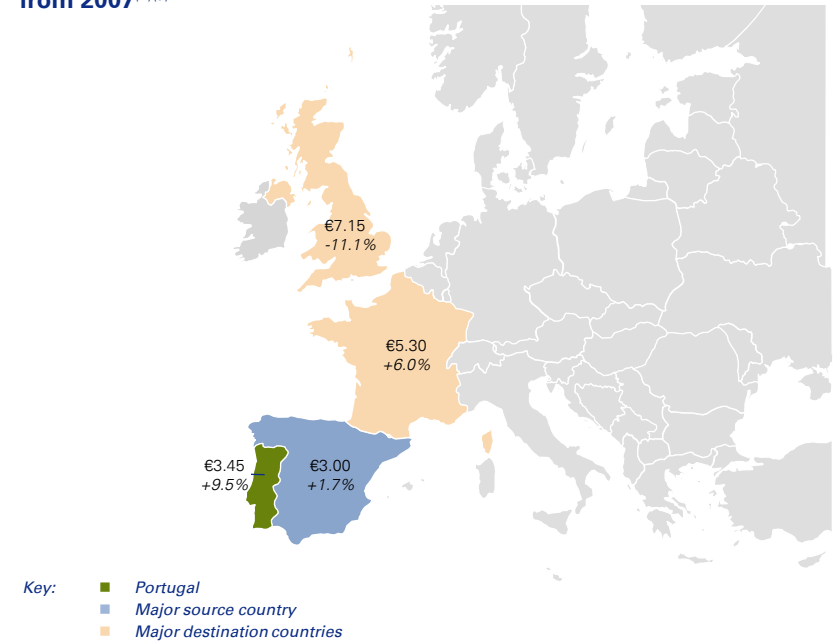
(2) Weighted average pack price supplied by PMI

### Legal domestic sales decreased by 11.1% in 2008, whilst average prices increased by 9.5%

- An excise tax increase was passed through in January 2008
- Anti-smoking legislation came into force on 1<sup>st</sup> January 2008
  - this legislation restricts smoking in public places
- Anti-forestalling legislation was introduced on 1<sup>st</sup> September 2007
  - the legislation sets a time limit for holding of cigarettes that carry old tax stickers

The price differential with Spain widened in 2008

Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



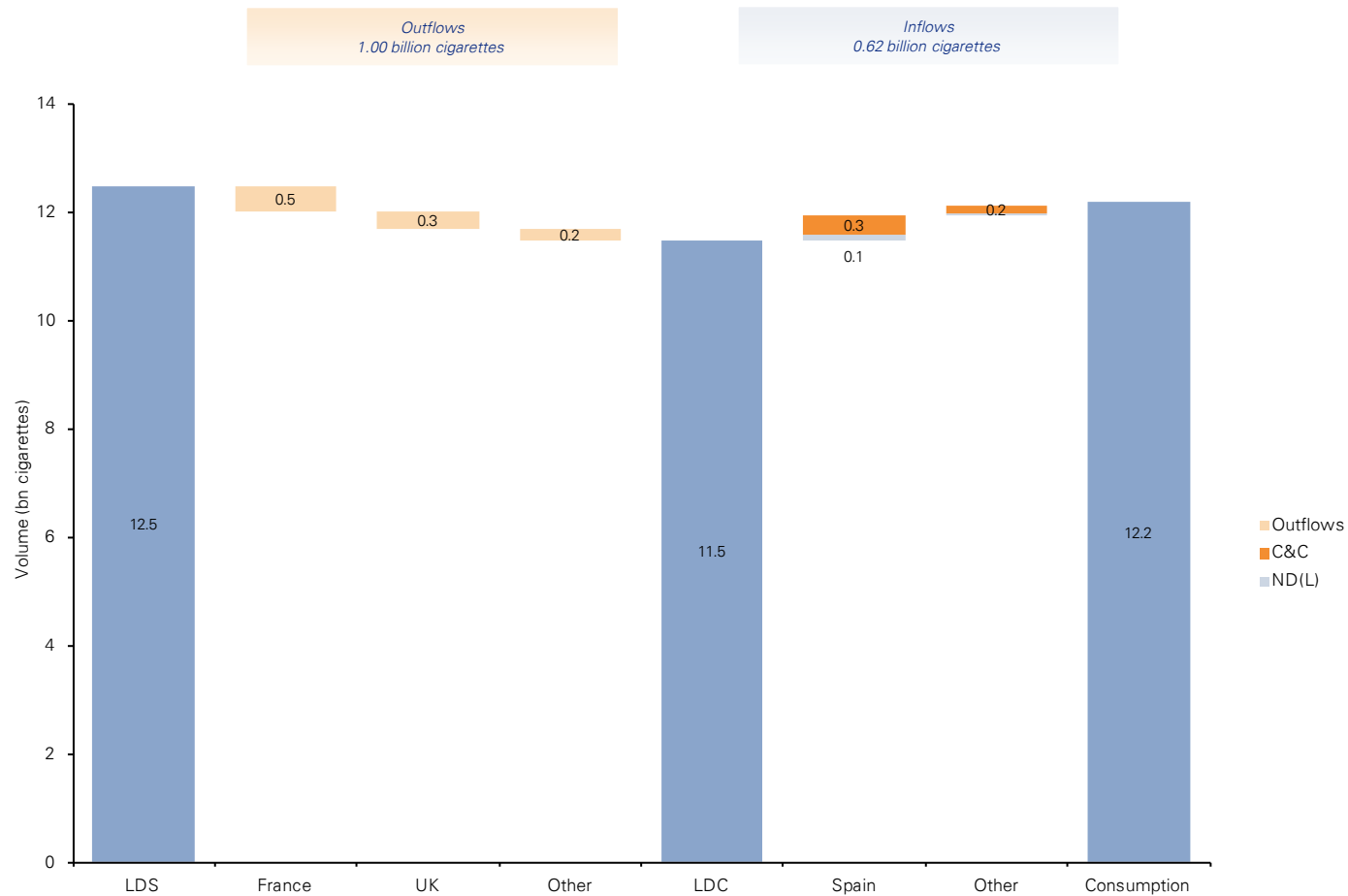
Note: (a) Based on pack of 20 Marlboro King Size as at July 1<sup>st</sup> 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) Marlboro retail selling price supplied by PMI

# Outflows and inflows

Portuguese consumption is estimated at 12.1 billion cigarettes versus legal sales of 12.5 billion cigarettes, with a net outflow of 0.4 billion cigarettes in 2008

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>



Notes: (a) LDS – Legal Domestic Sales  
 (b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)  
 Sources: (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2008  
 (3) In Market Sales supplied by PMI  
 (4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

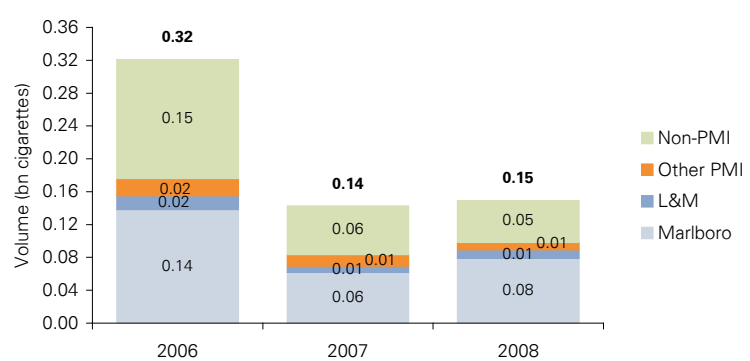
**Legal inflows to Portugal remained stable at 0.15 billion cigarettes in 2008, and accounted for 24% of non-domestic inflows**

**Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)</sup>**



<b>ND(L) share of consumption:</b>	<b>2%</b>	<b>1%</b>	<b>1%</b>
<b>ND(L) share of non-domestic:</b>	<b>34%</b>	<b>30%</b>	<b>24%</b>

**Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)</sup>**



<b>PMI share of ND(L):</b>	<b>55%</b>	<b>58%</b>	<b>65%</b>
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Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2006; Synovate ND(L) research 2008  
 (3) Interviews with PMI Local Management

**ND(L) analysis**

	①	②	③	④	
	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)
Values 2008	8.4m	17%	31%	2.5	142
	x	x	x	x	=
					<b>0.15bn</b>
EU rank 2008	10	27	11	14	18
					19

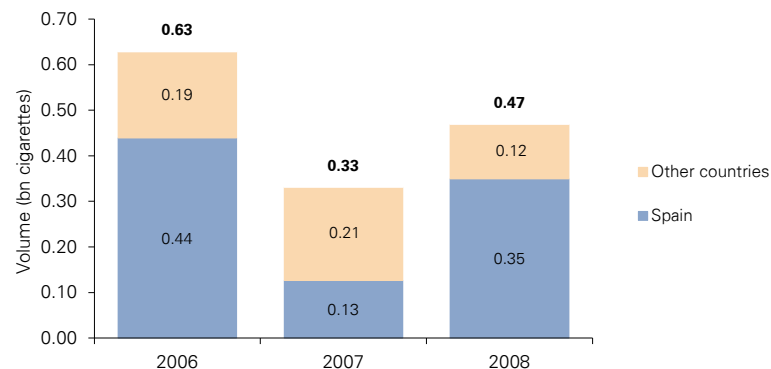
**ND(L) analysis 2007-2008**

	2007	2008
Propensity to travel and purchase cigarettes	① x ② = 7.3%	5.1%
Average annual cigarettes purchased	③ x ④ = 235	350

# Counterfeit and contraband breakdown

**Counterfeit and contraband flows increased to 0.47 billion cigarettes in 2008 driven mainly by inflows from Spain**

**Contraband and counterfeit by origin 2006-2008<sup>(1)(2)(3)</sup>**



<b>C&amp;C share of consumption:</b>	<b>4%</b>	<b>3%</b>	<b>4%</b>
<b>C&amp;C share of non-domestic:</b>	<b>66%</b>	<b>70%</b>	<b>76%</b>

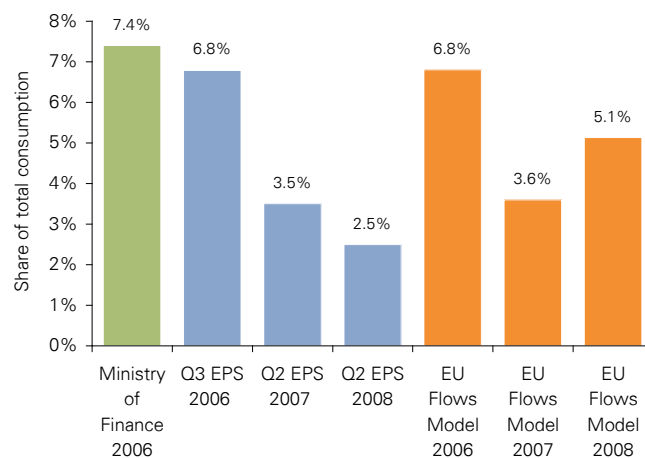
Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2006; Synovate ND(L) 2008  
 (3) Interviews with PMI Local Management



# Comparison of external sources for non-domestic estimates

EU Flows Model results for non-domestic incidence in 2008 are higher than those observed in the Empty Pack Survey

Non-domestic market volume estimates<sup>(1)(2)(3)</sup>



Sources: (1) KPMG EU Flows Model

(2) Interview with Ministry of Finance – Antifraud services, Information division Portugal

(3) PMI EPS Q3 2006, Q2 2007 and Q2 2008

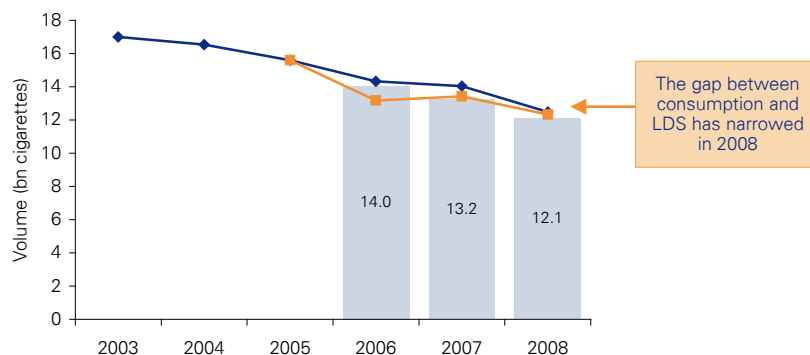
## The 2008 EU Flows Model estimate for non-domestic consumption is higher than the Empty Pack Survey results in 2008

- EPS results indicated a decline in Spanish inflows in 2008. However, analysis of Spanish border sales shows an increase in sales in the regions bordering Portugal therefore suggesting that the EPS results underestimate the inflows from Spain to Portugal
  - inflows from Spain have been adjusted upwards by 0.33 billion cigarettes in line with the level of increase in Spanish border sales

# Consumption modelling

Consumption modelling results suggest that inflows to Portugal have become increasingly important relative to outflows in 2008

## Consumption index modelling 2003-2008<sup>(1)(2)(3)(a)</sup>



CAGR (%)		2006-2008
■	LDS	(6.7)%
■	KPMG consumption index	(3.3)%
■	KPMG consumption estimate	(7.2)%

Note: (a) A change in consumption methodology occurred in 2005. Prior to 2005 information was collected via phone interviews on a monthly basis. Post 2005, the research supplier changed and interviews were conducted on a quarterly basis and via face-to-face interviews. Data prior to 2005 is believed to be less reliable and hence has not been used in the model  
(b) GCTS refers to the Global Consumer Tracking Survey to estimate smoking prevalence and average smoking volume by country

Sources: (1) KPMG Consumption Index model  
(2) In Market Sales supplied by PMI  
(3) KPMG EU Flows Model

## The gap between LDS and the KPMG consumption index for Portugal narrowed between 2006 and 2008

- This result suggests that outflows have decreased and inflows to Portugal have become increasingly important relative to outflows i.e. non-domestic consumption has increased
  - this is consistent with EU Flows Model results showing a decrease in net outflows from 0.8 billion cigarettes in 2007 to 0.4 billion cigarettes in 2008

## Consumption index modelling is undertaken to identify discrepancies between the legal domestic sales trend and other consumption estimates and potentially provides an indication of changes in non-domestic inflows and outflows

- The KPMG consumption index is calculated using the incidence of smoking and the average daily consumption and the population of each market (from OEF)
  - these figures are then indexed to the earliest year for which we have data from the both GCTS<sup>(b)</sup> and LDS data available, 2003 for Portugal
- Please note that consumption modelling can only identify market trends and cannot be used to quantify total consumption
  - the gap between indexed consumption and LDS in the final year is therefore only a broad indication of the extent to which the market has changed over the analysed period
  - in many markets, some level of inflows or outflows are likely to be present in the first analysed year

- Austria
- Belgium
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- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

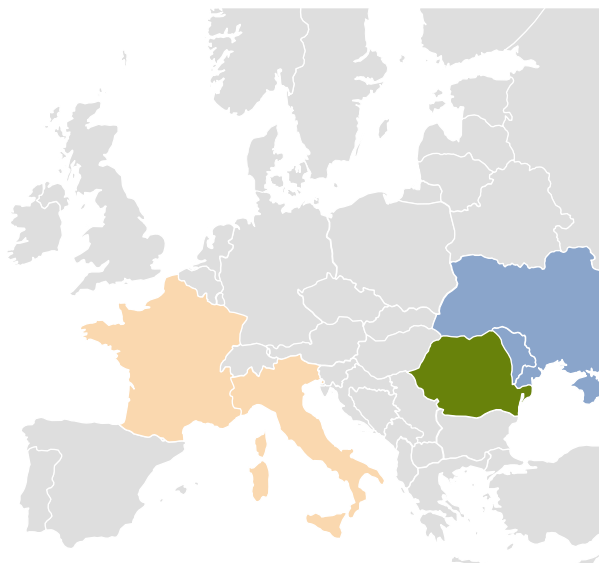
**Total consumption in Romania has increased in 2008 to 32.7 billion cigarettes**

**Non-domestic inflows to Romania increased in 2008 to 4.0 billion cigarettes with Moldova and Ukraine representing the two main sources of inflows**

**Products from these countries appear to have replaced flows of Duty Free variant packs**

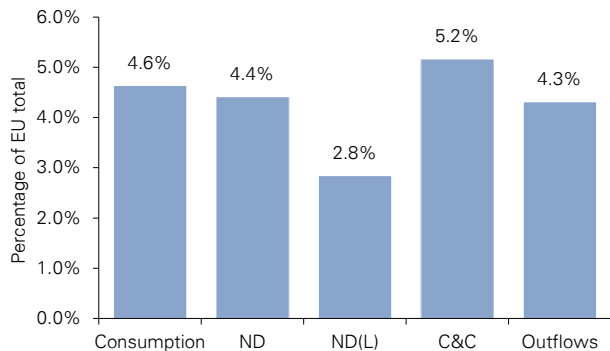
**France and Italy remain the main destination countries for Romanian outflows**

**Key source and destination markets<sup>(1)(a)</sup>**

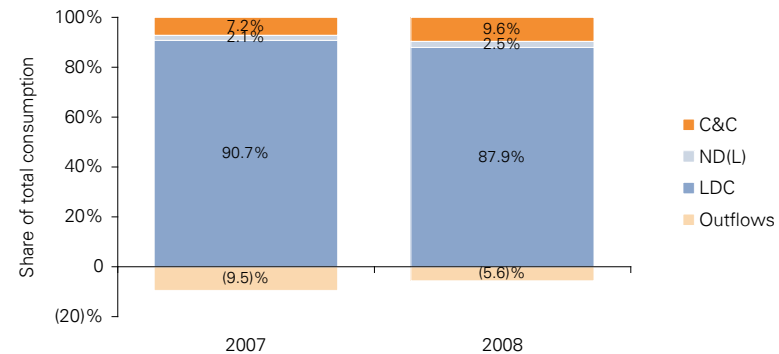


**Key:** ■ Romania ■ Major source countries ■ Major destination countries  
**Note:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow  
**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
 (2) AC Nielsen ND(L) research 2007, 2008

**Proportion of total EU levels<sup>(1)(2)</sup>**

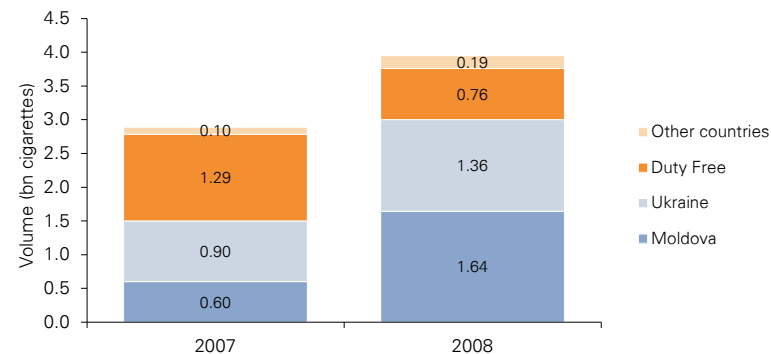


**Total Romanian consumption 2007-2008<sup>(1)(2)</sup>**



<b>Volume (bn cigarettes):</b>	<b>31.1</b>	<b>32.7</b>
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**Total non-domestic inflows (ND(L) and C&C) by origin 2007-2008<sup>(1)(2)</sup>**

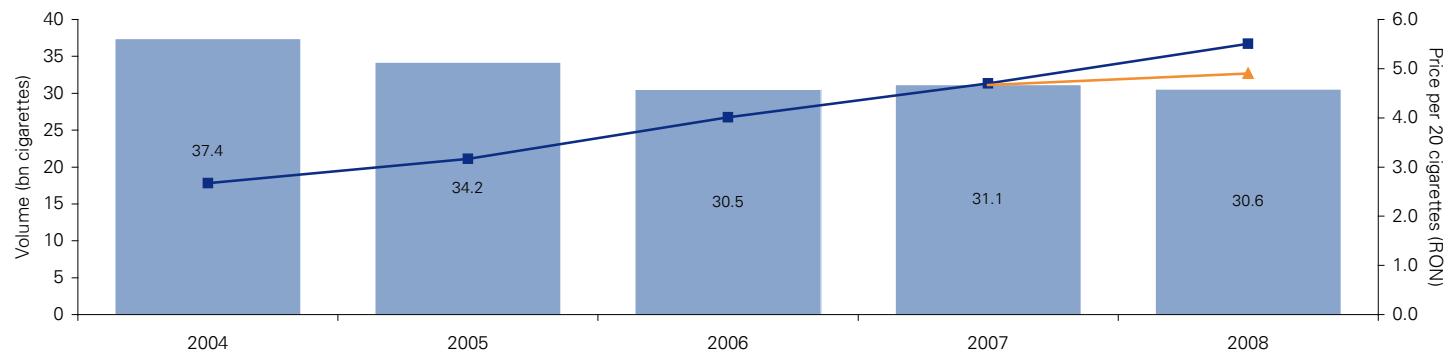


<b>Volume (bn cigarettes):</b>	<b>2.9</b>	<b>4.0</b>
--------------------------------	------------	------------

# Historic sales and pricing trends

Legal domestic sales declined by 1.8% in 2008 to 30.6 billion cigarettes

## Historic cigarette prices and legal domestic sales 2004-2008<sup>(1)(2)</sup>



CAGR (%)	2004-2007	2007-2008
Legal domestic sales	(5.9)%	(1.8)%
Average pack price	20.7%	17.1%
Consumption	n/a	5.1%

Sources: (1) In Market Sales supplied by PMI

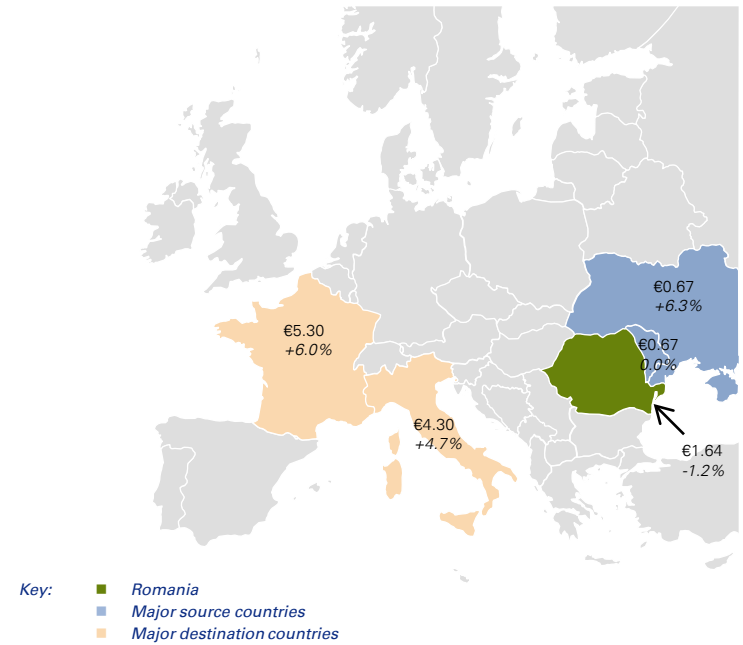
(2) Average retail selling price supplied by PMI Local Management

### Legal domestic sales declined by 1.8% in 2008 following an increase in average pack price of 17.1% in 2008 compared to 2007

- Romania is raising taxes into line with EU excise tax regulations
  - prices increased at an annual average of 19.8% between 2004 and 2008
  - In 2008, prices were increased in January, March, July, October and December
  - Romania expects to meet minimum EU excise tax regulations by July 2010
- Recent anti-smoking legislation in Romania includes a smoking ban in public places, a ban on sales to people under 18 years of age and the introduction of graphical health warnings

Price differentials between Romania and key source and destination markets remained significant in 2008

**Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>**



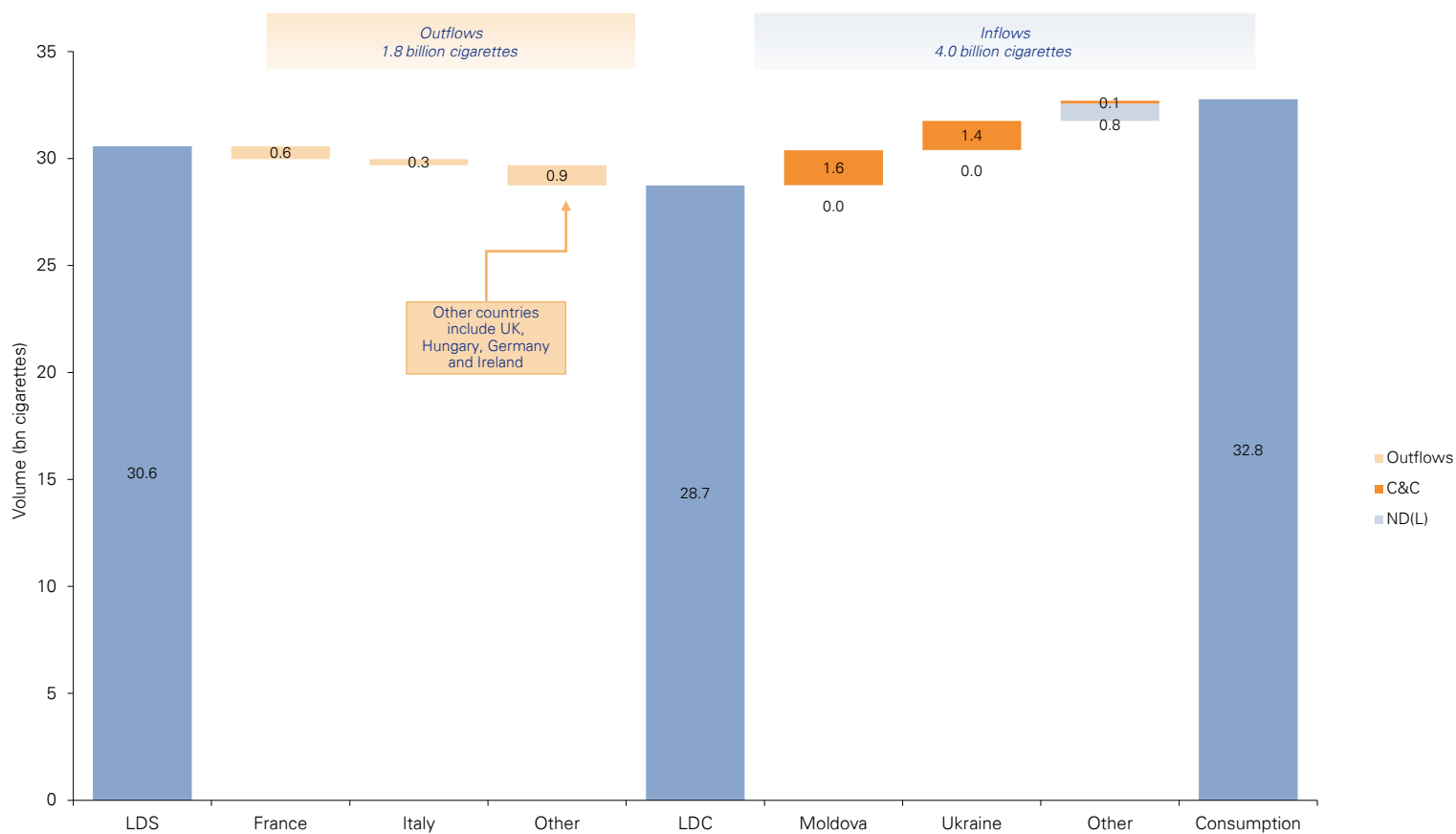
Notes: (a) Based on pack of 20 Marlboro King Size as at July 1<sup>st</sup> 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007.

Sources: (1) KPMG EU Flows Model  
 (2) Marlboro retail selling price supplied by PMI based on PMI standard exchange rates as at June 2008 and June 2007

# Outflows and inflows

Romanian consumption is estimated at 32.7 billion cigarettes compared to legal domestic sales of 30.6 billion cigarettes, with a net inflow of 2.1 billion cigarettes

**Consumption breakdown 2008**<sup>(1)(2)(3)(4)(a)(b)</sup>

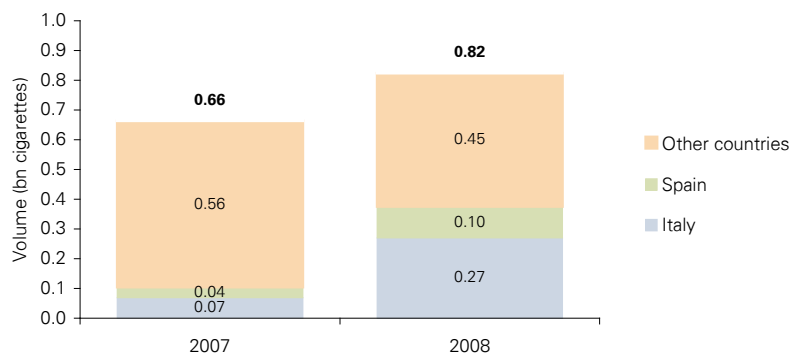


Notes: (a) LDS – Legal Domestic Sales  
 (b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)  
 Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2008  
 (3) In Market Sales supplied by PMI  
 (4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

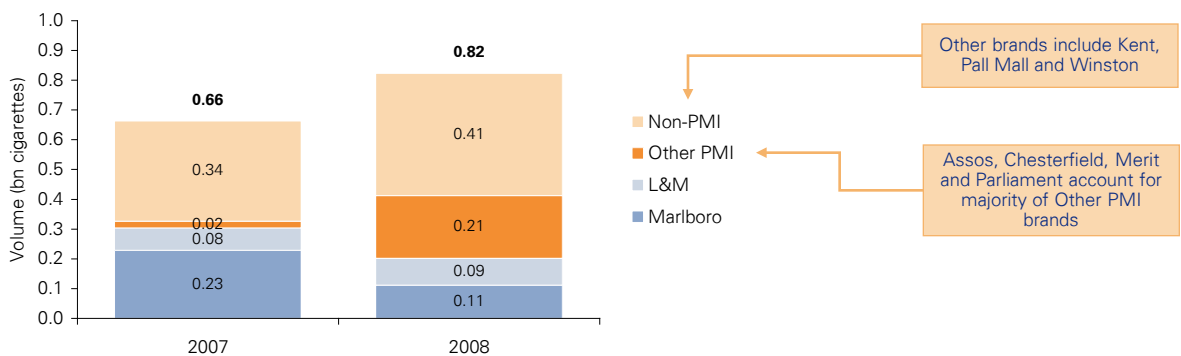
**Non-domestic (legal) inflows represent 3% of consumption in 2008 compared to 2% in 2007**

**Non-domestic (legal) by origin 2007-2008<sup>(1)(2)(3)</sup>**



<b>ND(L) share of consumption:</b>	<b>2%</b>	<b>3%</b>
<b>ND(L) share of non-domestic:</b>	<b>23%</b>	<b>21%</b>

**Non-domestic (legal) by brand 2007-2008<sup>(1)(2)(3)</sup>**



<b>PMI share of ND(L):</b>	<b>49%</b>	<b>50%</b>
----------------------------	------------	------------

Source: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2007 and 2008  
 (3) Interviews with PMI Local Management

**ND(L) analysis**

	①	②	③	④		
	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)	
Values 2008	17.6m	35%	29%	5.1	90	
EU rank 2008	7	20	13	3	26	
	x				=	<b>0.82bn</b>
					<b>Total ND(L) (cigarettes)</b>	

**ND(L) analysis 2007-2008**

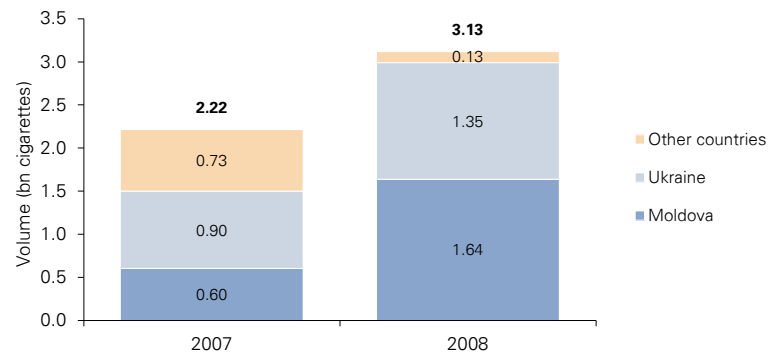
	2007	2008
Propensity to travel and purchase cigarettes	9.0%	10.1%
Average annual cigarettes purchased	418	461



# Counterfeit and contraband breakdown

Moldovan and Ukrainian origin products accounted for the majority of counterfeit and contraband consumption in Romania in 2008

Counterfeit and contraband by origin  
2007-2008<sup>(1)(2)(3)</sup>



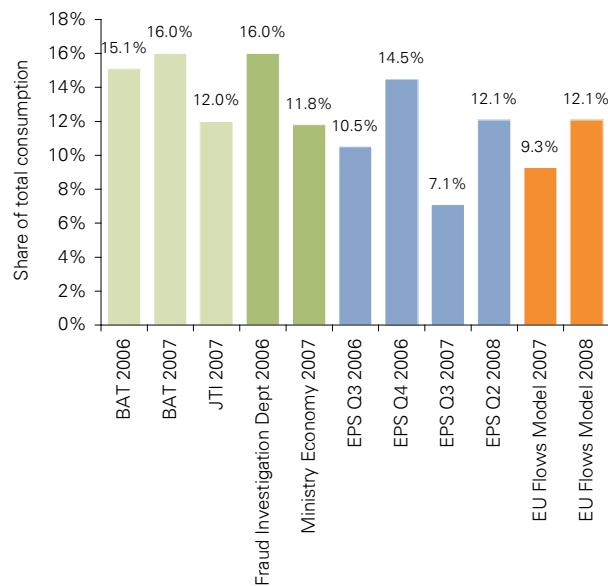
<b>C&amp;C share of consumption:</b>	<b>7%</b>	<b>10%</b>
<b>C&amp;C share of non-domestic:</b>	<b>77%</b>	<b>79%</b>

Sources: (1) KPMG EU Flows Model  
(2) AC Nielsen ND(L) research, 2007 and 2008  
(3) Interviews with PMI Local Management

# Comparison of external sources for non-domestic estimates

**EU Flows model estimates for non-domestic incidence for 2008 are comparable to other external estimates**

Non-domestic market volume estimates<sup>(1)(2)(3)(4)(5)(6)(7)</sup>



Sources: (1) KPMG EU Flows Model  
 (2) Rompress, 30<sup>th</sup> January 2007  
 (3) Rompress, 7<sup>th</sup> February 2007  
 (4) Rompress, 27<sup>th</sup> June 2007  
 (5) PMI EPS Q3 2006, Q4 2006, Q3 2007, Q2 2008  
 (6) Nine O'Clock, 28<sup>th</sup> June 2008  
 (7) Interview with Custom Control  
 (8) BAT website

## EU Flows Model results are in the range of other estimates for non-domestic consumption

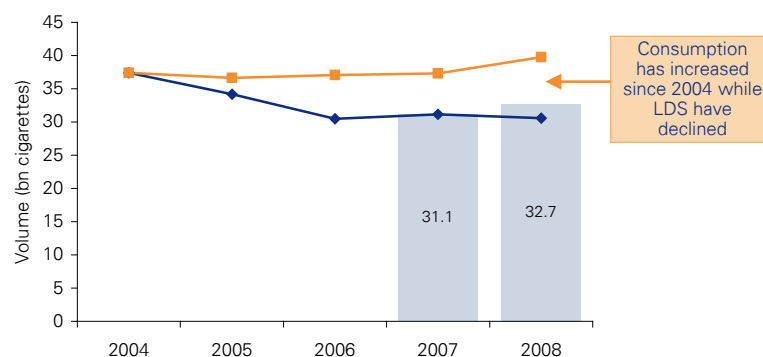
- The differences in estimates are believed to be driven by differences in methodologies
  - JTI estimates are believed to be based on Ministry of Economy and Finance data
  - BAT estimates are believed to be based on consumer research and analysing packs collected from consumers<sup>(8)</sup>

# Consumption modelling

Consumption modelling results suggest that non-domestic consumption has increased in Romania since 2004

This trend is in line with Project Star results from 2007 to 2008

## Consumption index modelling 2004-2008<sup>(1)(2)(3)</sup>



CAGR (%)	2004-2008
■ LDS	(4.9)%
■ KPMG consumption index	1.6%
■ KPMG consumption estimate	n/a

Note: (a) GCTS refers to the Global Consumer Tracking Survey to estimate smoking prevalence and average smoking volume by country

Sources: (1) KPMG Consumption Index model

(2) In Market Sales supplied by PMI

(3) KPMG EU Flows Model

## The gap between LDS and the KPMG consumption index for Romania increased between 2004 and 2008

- Consumption in Romania increased between 2004 and 2008 while LDS declined
- This result suggests that inflows have become increasingly important relative to outflows from Romania i.e. non-domestic consumption has increased and/or outflows have decreased
- This is consistent with the EU Flows model trend between 2007 and 2008

## Consumption index modelling is undertaken to identify discrepancies between the legal domestic sales trend and other consumption estimates and potentially provides an indication of changes in non-domestic inflows and outflows

- The KPMG consumption index is calculated using the incidence of smoking and the average daily consumption and the population of each market (from OEF)
  - these figures are then indexed to the earliest year for which we have data from the both GCTS<sup>(a)</sup> and LDS data available, 2004 for Romania
- Please note that consumption modelling can only identify market trends and cannot be used to quantify total consumption
  - the gap between indexed consumption and LDS in the final year is therefore only a broad indication of the extent to which the market has changed over the analysed period
  - in many markets, some level of inflows or outflows are likely to be present in the first analysed year

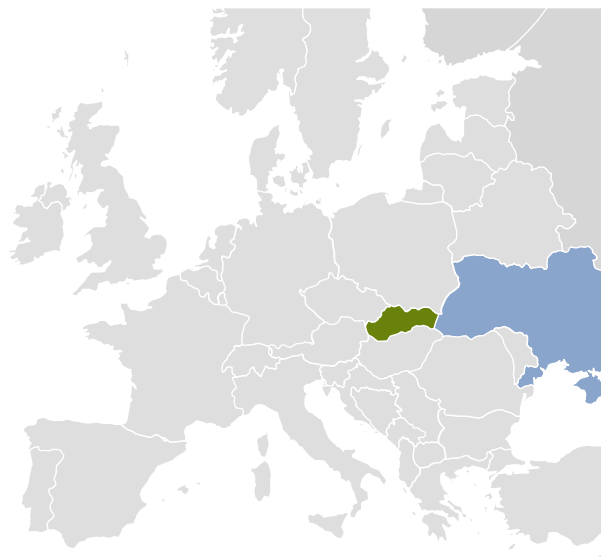
- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

Consumption in Slovakia continued to increase in 2008, which was partially driven by higher non-domestic inflows from Ukraine

Non-domestic inflows to Slovakia exceeded outflows by 0.3 billion cigarettes in 2008, whereas in 2007 outflows had exceeded inflows

Legal domestic sales increased by 0.3 billion cigarettes in 2008, whilst outflows remained stable at 0.4 billion cigarettes

Key source market<sup>(1)(a)(b)</sup>

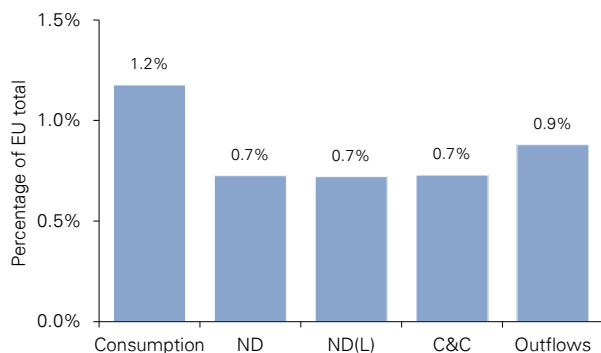


Key: ■ Slovakia ■ Major source country

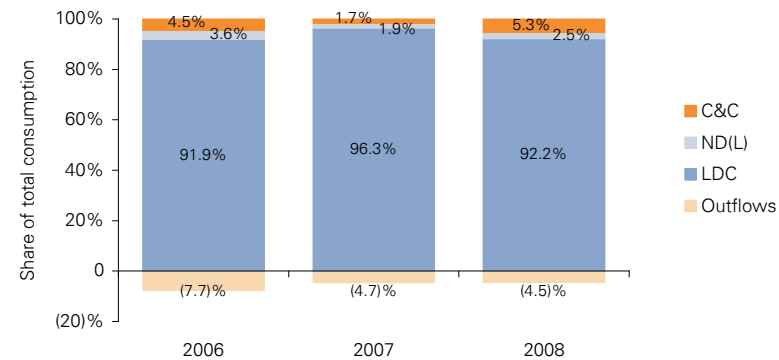
Note: (a) Map shows flows over 1% of consumption  
(b) ND(L) research has not been updated in 2008, but corroborating research has not indicated any significant changes to 2007 results

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management  
(2) AC Nielsen ND(L) research 2006, 2007

Proportion of total EU levels<sup>(1)(2)</sup>



Total consumption in Slovakia  
2006-2008<sup>(1)(2)</sup>



Volume (bn cigarettes):	7.0	7.7	8.3
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Total non-domestic inflows (ND(L) and C&C) by origin  
2006-2008<sup>(1)(2)</sup>

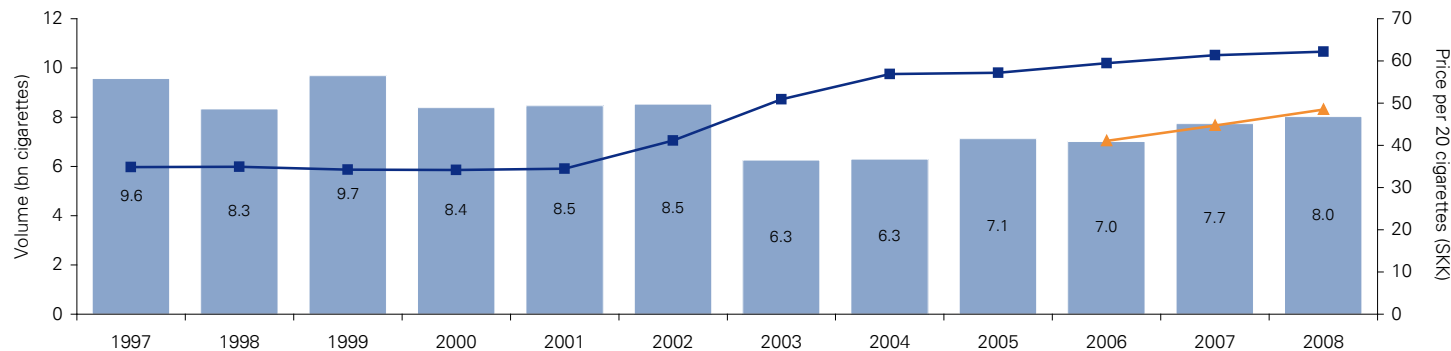


Volume (bn cigarettes):	0.6	0.3	0.6
-------------------------	-----	-----	-----

# Historic sales and pricing trends

Legal cigarette sales in Slovakia reached 8.0 billion cigarettes in 2008, but remain significantly below pre-2002 levels

## Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-2002	2002-2003	2003-2008	2007-2008
Legal domestic sales	(2.3)%	(26.6)%	5.1%	3.8%
Average pack price	3.4%	23.8%	4.1%	1.3%
Consumption	n/a	n/a	n/a	8.4%

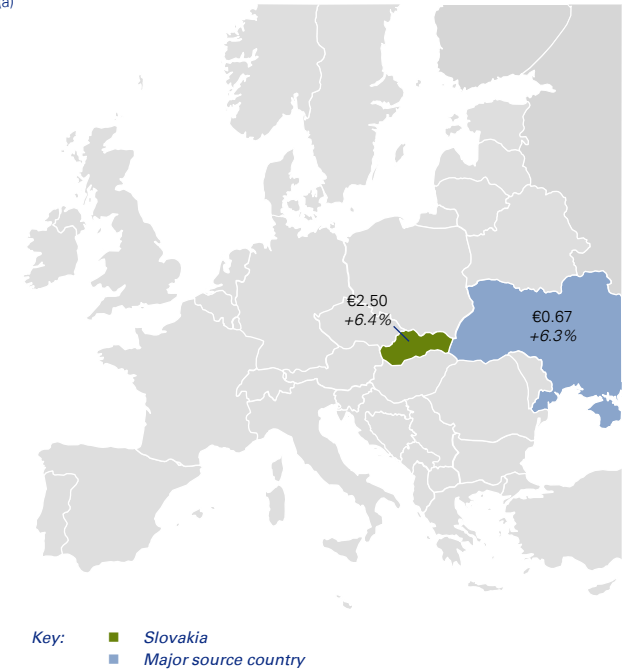
Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PMI

(3) 'Slovak smokers dodge 26% tax as cheap cigarettes flood market', Bloomberg news, February 2008

### Legal cigarette sales in Slovakia increased by 3.8% in 2008

- The average pack price for manufactured cigarettes in Slovakia increased by 1.3% in 2008
  - excise tax on cigarettes was raised by 26% in January 2008<sup>(3)</sup>
- LDS growth in 2008 has been partially driven by the increasing popularity of lower priced brands
  - the super low price segment (brands sold for less than 67.5SKK) accounted for 56% of sales in 2008, compared to 50% in 2007
- Slovakia joined the Schengen Zone in December 2007

**Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>**

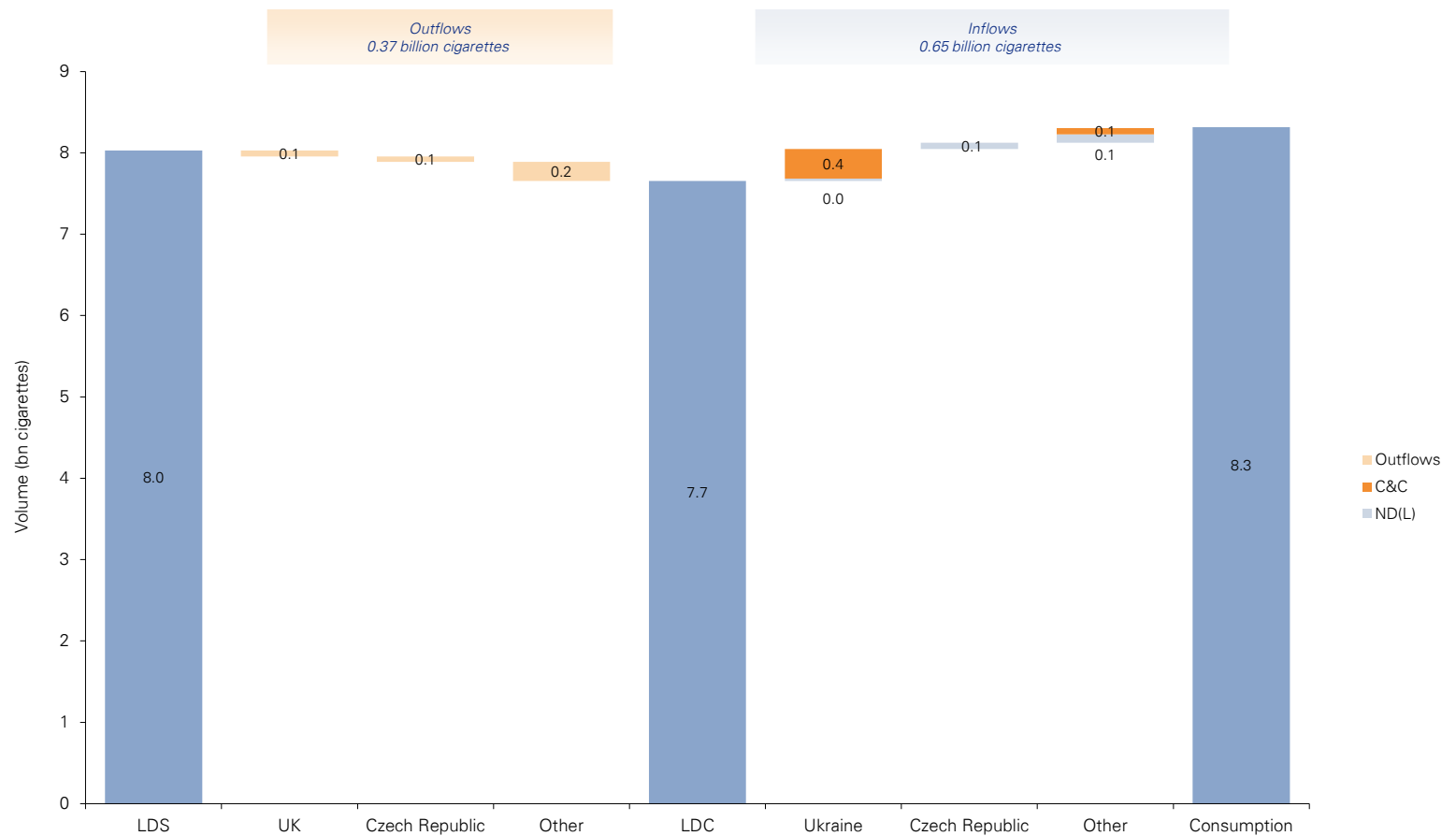
Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) Marlboro retail selling price supplied by PMI

# Outflows and inflows

Consumption in Slovakia is estimated at 8.3 billion cigarettes versus legal sales of 8.0 billion cigarettes, with a net inflow of 0.3 billion cigarettes

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>



Notes: (a) LDS – Legal Domestic Sales

(b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)

Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research 2007

(3) In Market Sales supplied by PMI

(4) Interviews with PMI Local Management



# Non-domestic (legal) breakdown

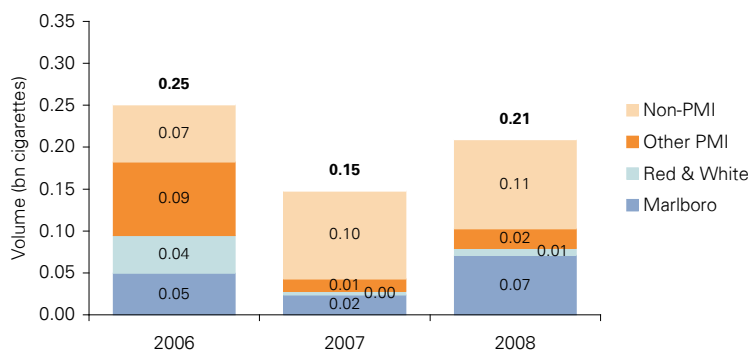
**Non-domestic (legal) consumption in Slovakia was 0.21 billion cigarettes in 2008**

## Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)(a)</sup>



<b>ND(L) share of consumption:</b>	<b>4%</b>	<b>2%</b>	<b>3%</b>
<b>ND(L) share of non-domestic:</b>	<b>44%</b>	<b>52%</b>	<b>32%</b>

## Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)(a)</sup>



<b>PMI share of ND(L):</b>	<b>72%</b>	<b>29%</b>	<b>49%</b>
----------------------------	------------	------------	------------

**Note:** (a) Non-domestic (legal) research has not been updated in 2008. With the exception of flows from Ukraine and Russia, ND(L) inflows to Slovakia in 2008 are estimated to have changed in proportion to changes in total non-domestic inflows

## ND(L) analysis

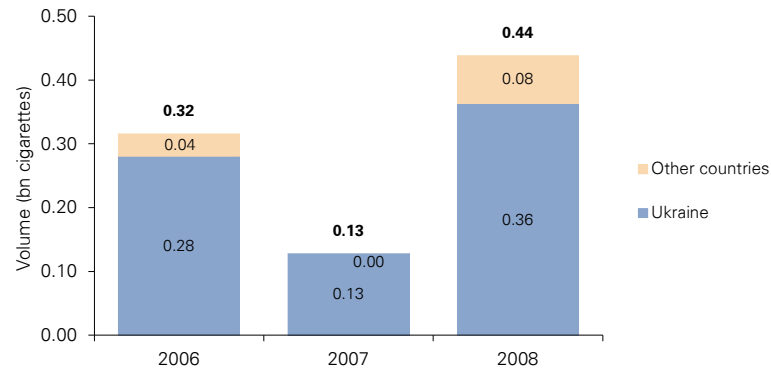
	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)	Total ND(L) (cigarettes)
Values 2008	4.2m	53%	12%	7.6	105	= 0.21bn <sup>(a)</sup>
EU rank 2008	17	12	24	1	21	17

**Sources:** (1) KPMG EU Flows Model  
(2) AC Nielsen ND(L) research 2006, 2007  
(3) Interviews with Local PMI Management

# Counterfeit and contraband breakdown

Counterfeit and contraband inflows to Slovakia increased to 0.44 billion cigarettes in 2008, driven by increasing inflows from Ukraine

Counterfeit and contraband by origin  
2006-2008<sup>(1)(2)(3)</sup>



<b>C&amp;C share of consumption:</b>	<b>5%</b>	<b>2%</b>	<b>5%</b>
<b>C&amp;C share of non-domestic:</b>	<b>56%</b>	<b>48%</b>	<b>68%</b>

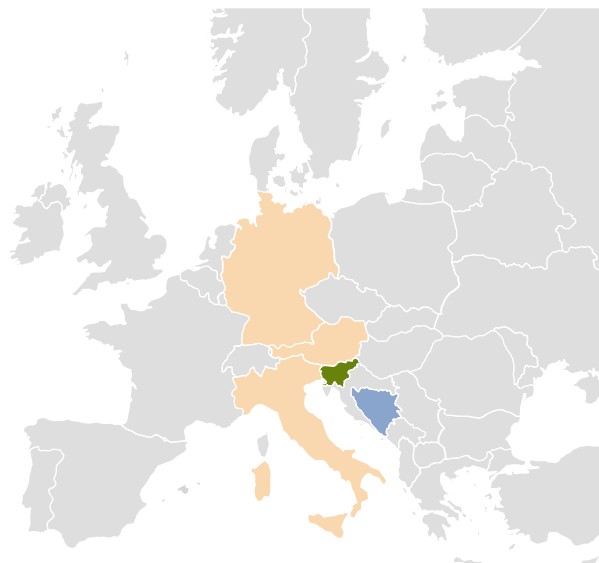
Sources: (1) KPMG EU Flows Model  
(2) AC Nielsen ND(L) research 2006, 2007  
(3) Interviews with Local PMI Management

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

Consumption increased by 12.0% in 2008 driven primarily by a growth in non-domestic inflows from Bosnia and Herzegovina

Outflows from Slovenia increased to 24% of total consumption in 2008

Key source and destination markets<sup>(1)(a)</sup>

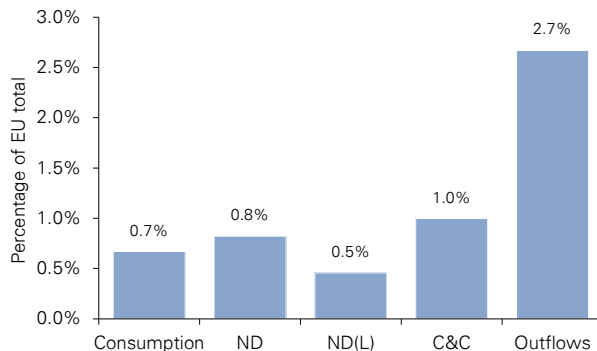


Key: ■ Slovenia ■ Major source country ■ Major destination countries

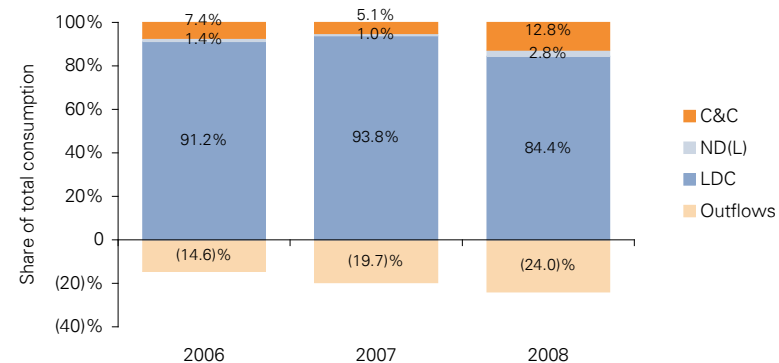
Notes: (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management  
(2) AC Nielsen ND(L) research 2006, 2008

Proportion of total EU levels<sup>(1)(2)</sup>

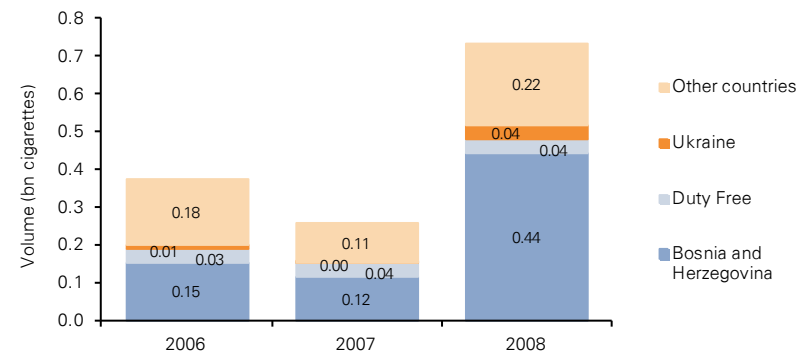


Total Slovenian consumption 2006-2008<sup>(1)(2)(b)</sup>



Volume (bn cigarettes):	2006	2007	2008
	4.27	4.21	4.72

Total non-domestic inflows (ND(L) and C&C) 2006-2008<sup>(1)(2)(b)</sup>

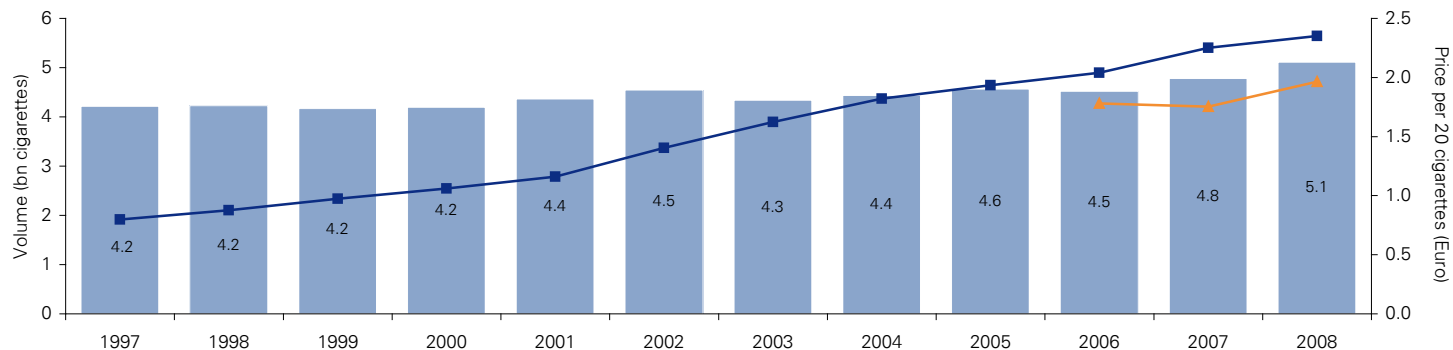


Volume (bn cigarettes):	2006	2007	2008
	0.38	0.26	0.74

# Historic sales and pricing trends

Legal domestic sales increased by 7% to 5.1 billion cigarettes in 2008

## Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-2000	2000-2003	2003-2008	2007-2008
Legal domestic sales	(0.1)%	1.1%	2.5%	7.0%
Average pack price	9.9%	15.3%	7.7%	4.4%
Consumption	n/a	n/a	5.1% <sup>(a)</sup>	12.0%

Note: (a) Consumption CAGR calculated from 2006 to 2008

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PMI

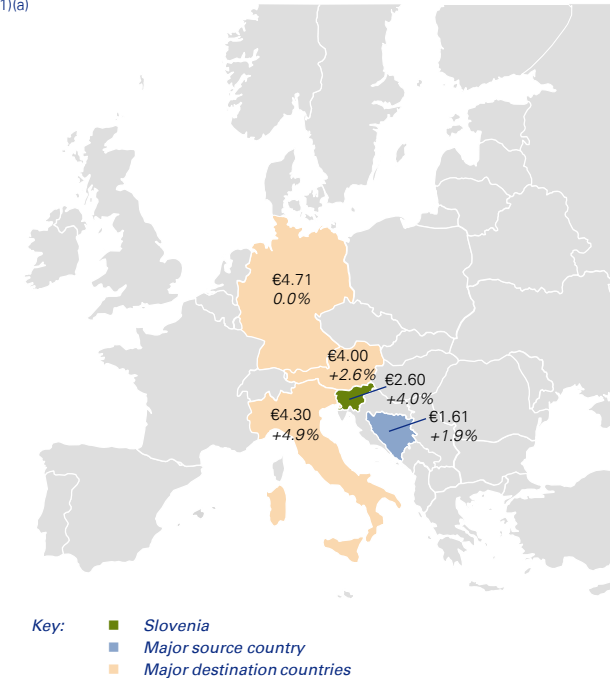
(3) 'Natural migration changes of population', Statistical Office of the Republic of Slovenia, accessed April 2009

### Legal domestic sales increased by 7.0% from 2007 to 2008, whilst average weighted prices increased by 4.4% in the same period

- Migration to Slovenia increased by 50% to approximately 43,800 people in 2008 compared to 2007<sup>(3)</sup>
- In December 2007, Slovenia joined the Schengen zone

The price differential between Slovenia and key source and destination markets has remained high

Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

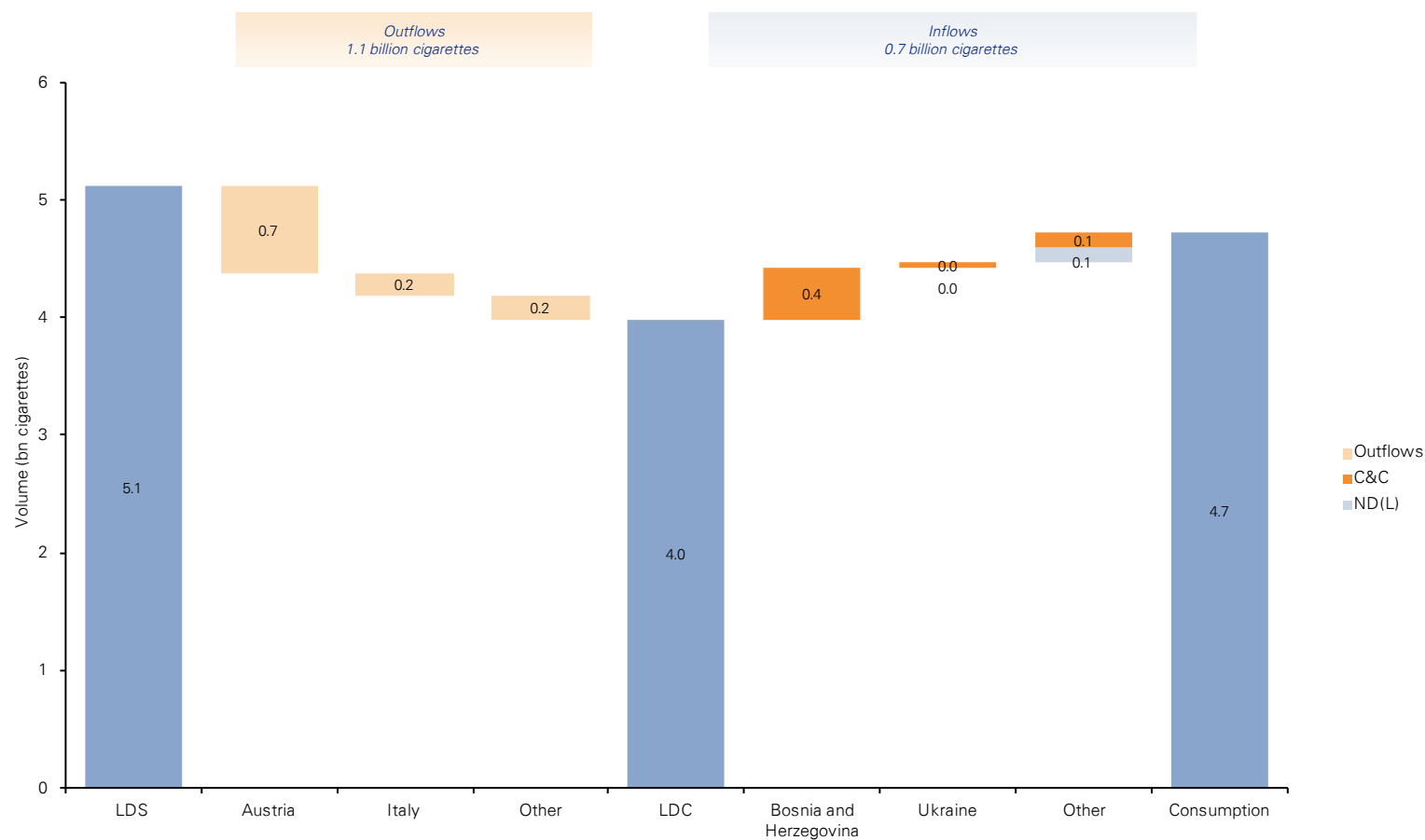
Sources: (1) Marlboro retail selling price supplied by PMI

# Outflows and inflows

Slovenian consumption is estimated at 4.7 billion cigarettes versus legal sales of 5.1 billion cigarettes, with a net outflow of 0.4 billion cigarettes

## Consumption breakdown

2008<sup>(1)(2)(3)(4)(a)(b)</sup>



Notes: (a) LDS – Legal Domestic Sales

(b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)

Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research 2008

(3) In Market Sales supplied by PMI

(4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

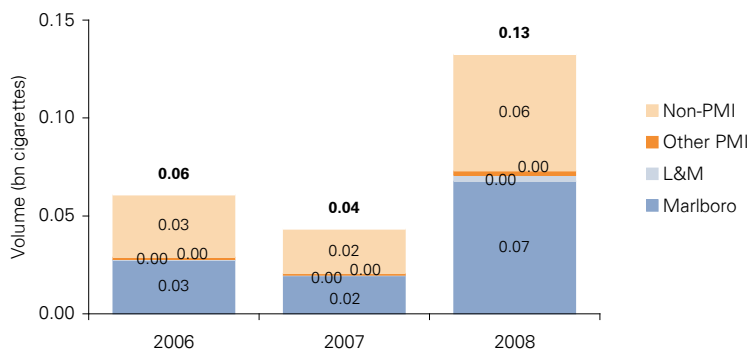
Non-domestic (legal) consumption was 0.1 billion cigarettes in 2008

## Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)</sup>



<b>ND(L) share of consumption:</b>	<b>1%</b>	<b>1%</b>	<b>3%</b>
<b>ND(L) share of non-domestic:</b>	<b>16%</b>	<b>17%</b>	<b>18%</b>

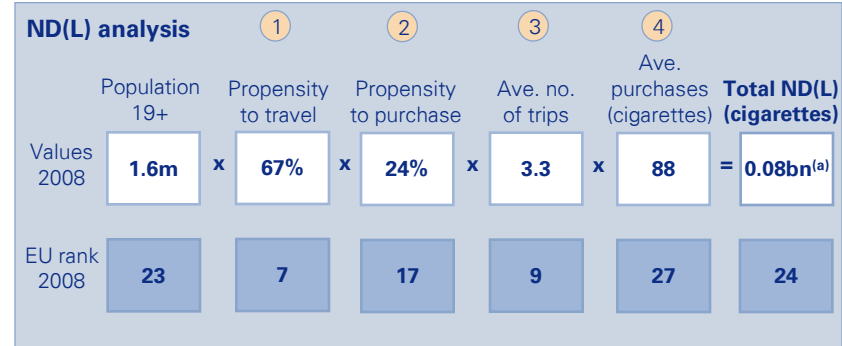
## Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)</sup>



<b>PMI share of ND(L):</b>	<b>48%</b>	<b>48%</b>	<b>55%</b>
----------------------------	------------	------------	------------

Note: (a) ND(L) analysis from AC Nielsen excludes adjustments to inflows associated with inbound tourism. Total ND(L) including adjustments for inbound tourism is 0.13 billion cigarettes

Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2006, 2008  
 (3) Interviews with PMI Local Management



### ND(L) analysis 2007-2008

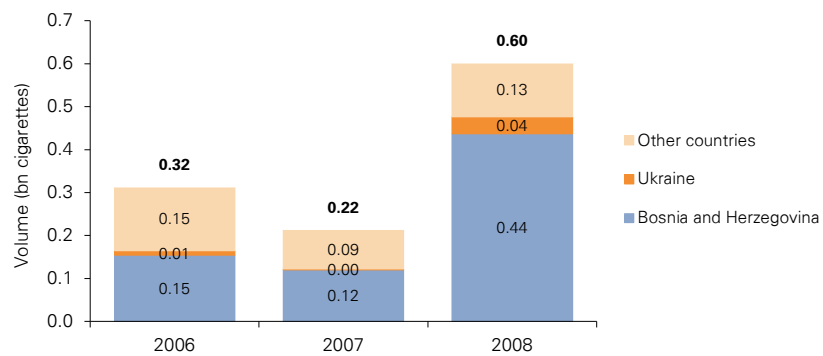
	2007	2008
Propensity to travel and purchase cigarettes	15.3%	16.1%
Average annual cigarettes purchased	173	287



# Counterfeit and contraband breakdown

Counterfeit and contraband consumption increased to 0.6 billion cigarettes in 2008

Counterfeit and contraband by origin  
2006-2008<sup>(1)(2)(3)</sup>



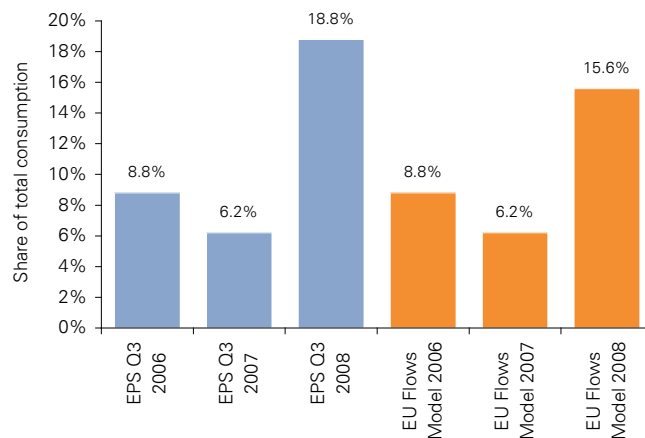
<b>C&amp;C share of consumption:</b>	<b>7%</b>	<b>5%</b>	<b>13%</b>
<b>C&amp;C share of non-domestic:</b>	<b>84%</b>	<b>83%</b>	<b>82%</b>

Sources: (1) KPMG EU Flows Model  
(2) AC Nielsen ND(L) research 2006, 2008  
(3) Interviews with PMI Local Management

# Comparison of sources for non-domestic estimates

In 2008, the EU Flows Model shows an increase in non-domestic incidence from previous years

Non-domestic market volume estimate<sup>(1)(2)(3)(4)</sup>



Source: (1) KPMG EU Flows Model  
 (2) PMI EPS Q3 2006, Q3 2007 and Q3 2008  
 (3) In Market Sales supplied by PMI  
 (4) AC Nielsen Retail Audit

## The KPMG EU Flows Model 2008 shows a lower non-domestic incidence than the Empty Pack Survey following adjustments to the results

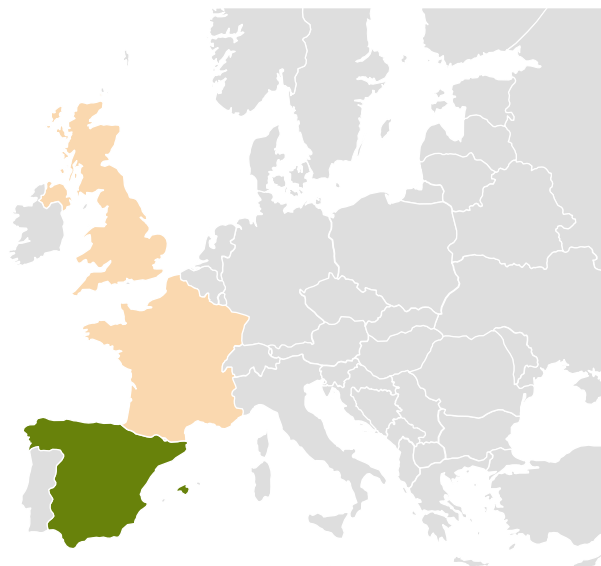
- EPS results indicated a significant increase in inflows of the Boss brand from Bosnia and Herzegovina which was not corroborated by a corresponding decline in legal sales
  - it has been assumed that domestic consumption of the Boss brand remained constant, therefore inflows from Bosnia and Herzegovina have been adjusted downwards to reflect this
- Croatian inflows have been adjusted downwards as a result of the EPS timing which may overweight Croatian packs purchased during the tourist season

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

Consumption has remained stable in 2008 at 83.7 billion cigarettes

Spain remains a key outflow market with 12% of Spanish consumption flowing out to other European countries in 2008

Key source and destination markets<sup>(1)(a)</sup>

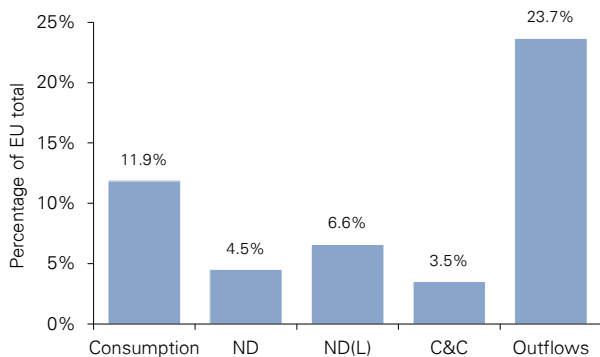


Key: ■ Spain ■ Major destination countries

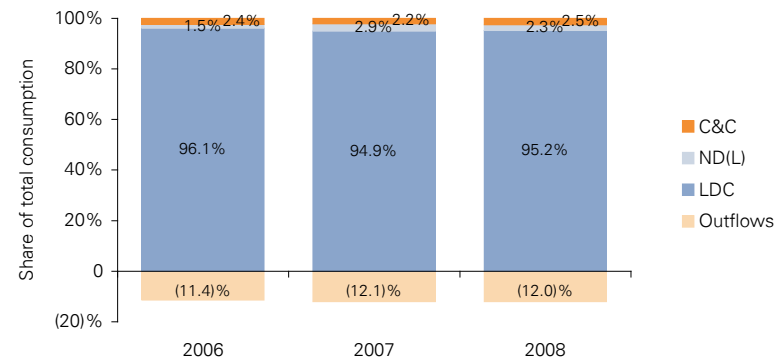
Note: (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management  
(2) Synovate ND(L) research 2006, 2007 and 2008

Proportions of total EU levels<sup>(1)(2)</sup>

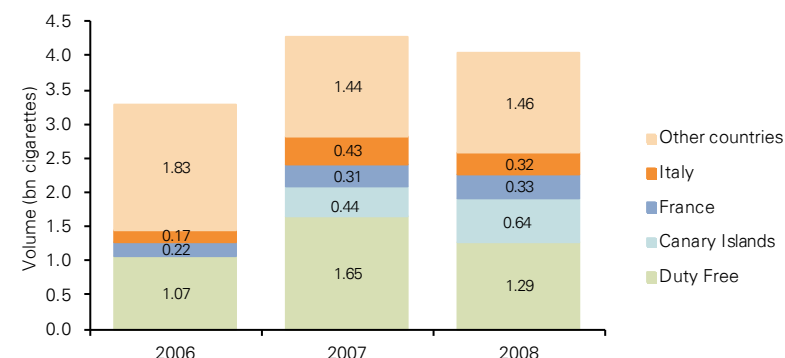


Total Spanish consumption 2006-2008<sup>(1)(2)(b)</sup>



Volume (bn cigarettes):	2006	2007	2008
	84.4	83.7	83.7

Total non-domestic inflows (ND(L) and C&C) 2006-2008<sup>(1)(2)(b)</sup>



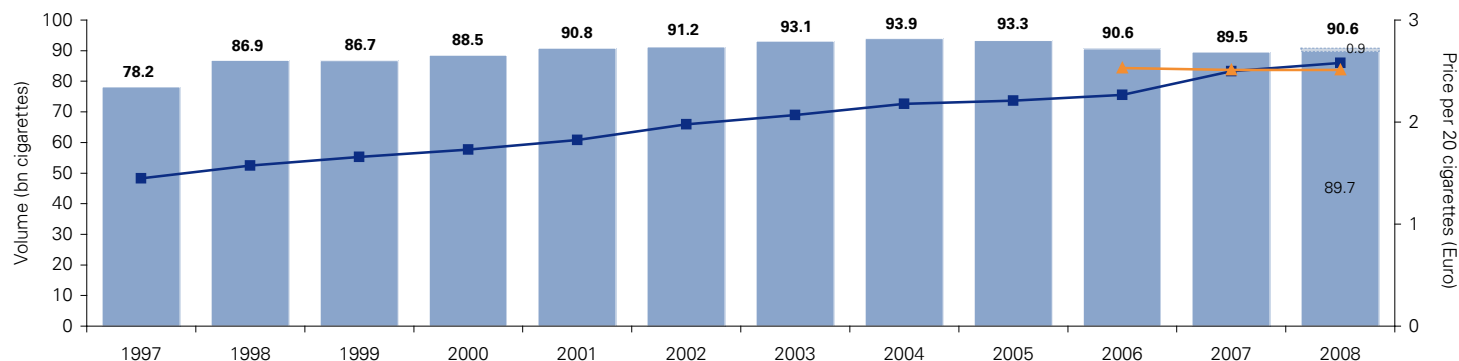
Volume (bn cigarettes):	2006	2007	2008
	3.3	4.3	4.0

Note: (b) In the 2006 Project Star results, Canary Islands variant cigarettes were classified as Spanish legal domestic. In 2007 and 2008, Canary Islands variant cigarettes have been classified as non-domestic legal

# Historic sales and pricing trends

Legal domestic sales have declined from 2004 to 2008 whilst average prices have increased

## Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)(a)</sup>



CAGR (%)	1997-2000	2000-2004	2004-2008	2007-2008
Legal domestic sales	4.2%	1.5%	(1.1)% <sup>(a)</sup>	0.3% <sup>(a)</sup>
Average pack price	6.2%	5.9%	4.3%	3.2%
Consumption	n/a	n/a	(0.4)% <sup>(b)</sup>	0.1%

Notes: (a) IMS indicates legal domestic sales of 90.6 billion cigarettes in 2008. However, Project Star 2008 results uses legal domestic sales of 89.7 billion cigarettes which reflects an adjustment of 0.9 billion cigarettes to account for additional inventories held in 2008

(b) Consumption CAGR is from 2006 to 2008

(c) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PMI

(3) PMI Spain estimate based on legal domestic sales information

(4) In 2007, OTP volumes are supplied by PMI. 2008 volumes are estimates provided by PMI Spain

### In Market Sales suggest that legal domestic sales have declined at an annual rate of 1.1% since 2004 whilst average prices increased by 4.3%

- A smoking ban was introduced in January 2006, covering all workplaces and bars and restaurants larger than 100m<sup>2</sup>
- Legal domestic sales of smoking tobacco increased at an annual rate of 16% since 2004 to represent 5.5 billion cigarettes in 2008<sup>(4)(c)</sup>

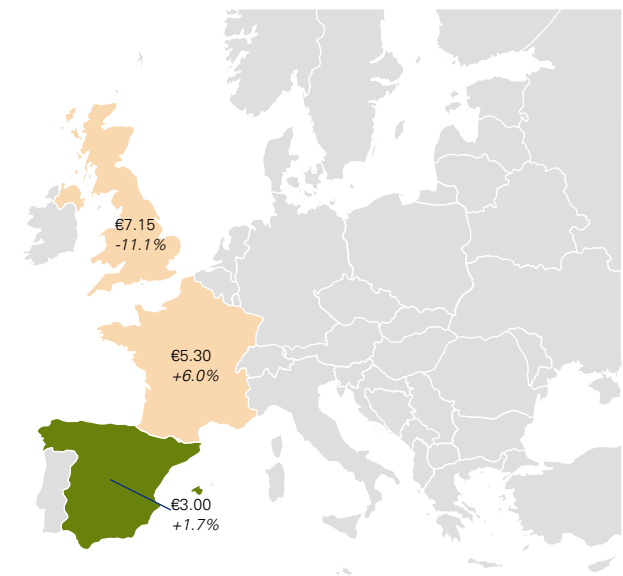
### Monthly analysis of In Market Sales (IMS) suggests additional inventories held of 0.9 billion cigarettes in December 2008<sup>(3)(a)</sup>

- IMS sales were higher in December 2008 as a result of inventory build up in advance of the price increases implemented in January 2009
- EU Flows Model results in 2008 reflect the adjusted legal domestic sales volume of 89.7 billion cigarettes

PMI market share has remained stable from 2006 to 2008

A significant price difference remains between Spain and France and the UK, which continue to be key destination markets

### Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



Key: ■ Spain  
■ Major destination countries

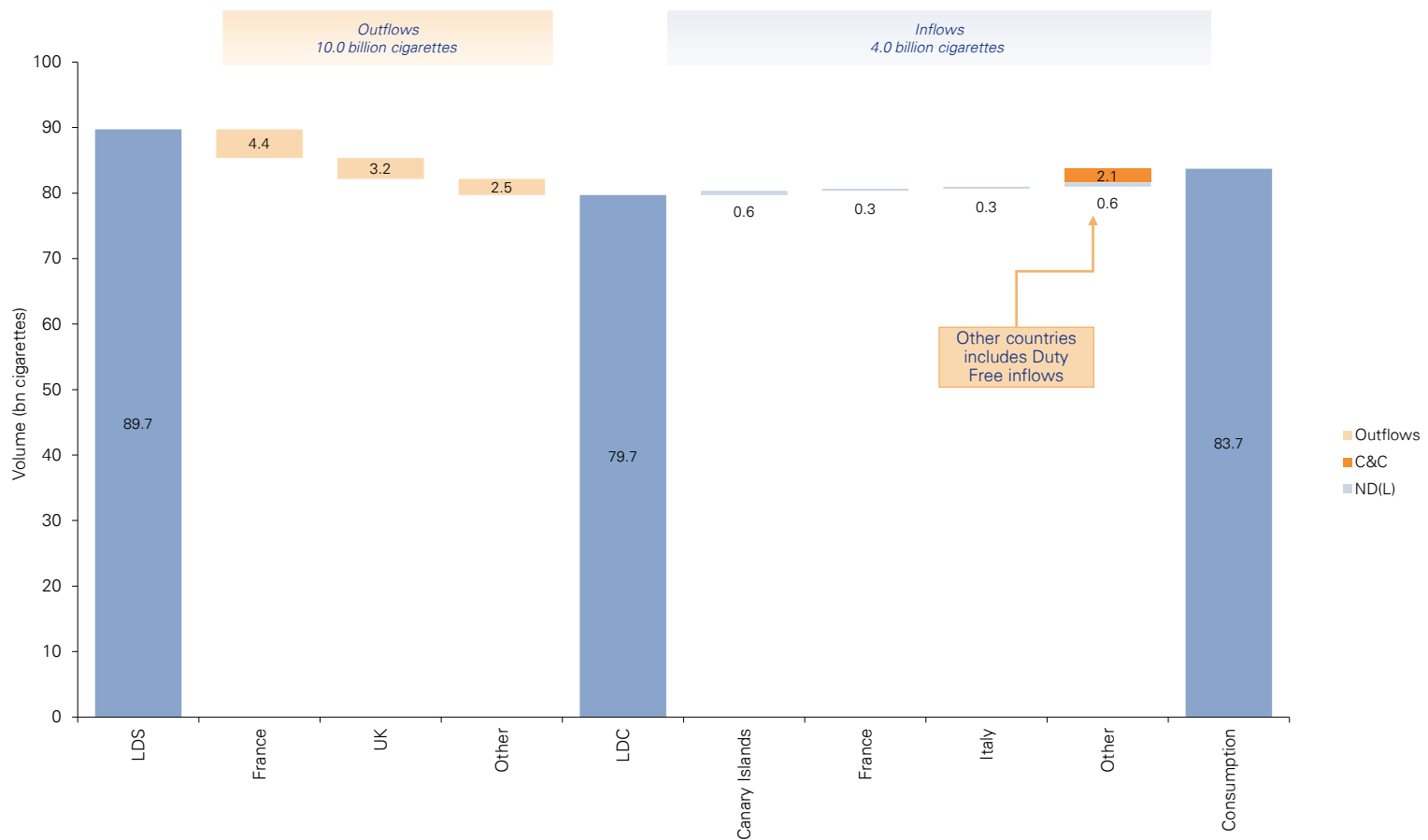
Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

Sources: (1) Marlboro retail selling price supplied by PMI

# Outflows and inflows

Spanish consumption is estimated at 83.7 billion cigarettes compared to legal domestic sales of 89.7 billion cigarettes, with a net outflow of 6.0 billion cigarettes

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)(c)</sup>



Notes: (a) LDS – Legal Domestic Sales

(b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)

(c) IMS indicates legal domestic sales of 90.6 billion cigarettes in 2008. However, Project Star 2008 results uses legal domestic sales of 89.7 billion cigarettes which reflects an adjustment of 0.9 billion cigarettes to account for additional inventories held in 2008

Sources: (1) KPMG EU Flows Model

(2) Synovate ND(L) research 2008

(3) In Market Sales supplied by PMI

(4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

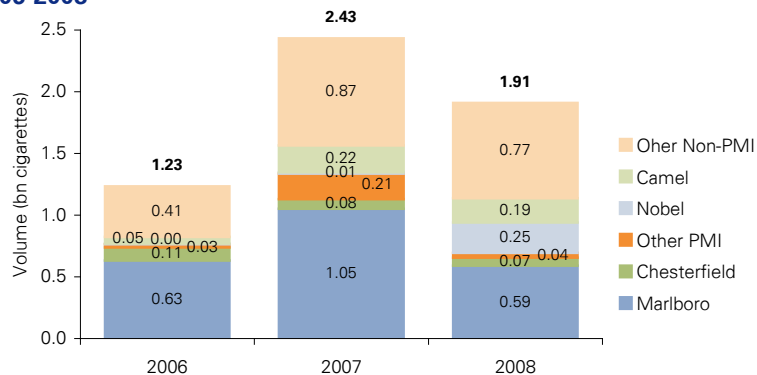
**Non-domestic (legal) inflows to Spain have declined to 1.91 billion cigarettes in 2008**

**Non-domestic (legal) by origin 2006-2008**<sup>(1)(2)(3)(a)(b)</sup>



<b>ND(L) share of consumption:</b>	<b>1%</b>	<b>3%</b>	<b>2%</b>
<b>ND(L) share of non-domestic:</b>	<b>37%</b>	<b>57%</b>	<b>47%</b>

**Non-domestic (legal) by brand 2006-2008**<sup>(1)(2)(3)</sup>



<b>PMI share of ND(L):</b>	<b>62%</b>	<b>55%</b>	<b>36%</b>
----------------------------	------------	------------	------------

**Notes:** (a) In 2006 Project Star results, Canary Islands and Andorra variant cigarettes were classified as Spanish legal domestic. In 2007 and 2008, Canary Islands and Andorra variant cigarette cigarettes have been classified as non-domestic (legal)  
 (b) ND(L) analysis from Synovate excludes adjustments to inflows from Canary Islands and Andorra and inbound tourism flows. Total ND(L) including these adjustments is 1.91 billion cigarettes

**ND(L) analysis<sup>(a)(b)</sup>**

	1	2	3	4	
	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)
Values 2008	33.1m	22%	18%	1.4	132
	x	x	x	x	=
					<b>0.24bn</b>
EU rank 2008	5	26	22	26	19
					14

**ND(L) analysis 2007-2008**

	2007	2008
Propensity to travel and purchase cigarettes	6.3%	4.0%
Average annual cigarettes purchased	303	181

**Sources:** (1) KPMG EU Flows Model  
 (2) Synovate ND(L) research 2006, 2007 and 2008  
 (3) Interview with PMI Local Management



# Counterfeit and contraband breakdown

Counterfeit and contraband inflows to Spain increased slightly to represent 3% of consumption in 2008

Counterfeit and contraband by origin  
2006-2008<sup>(1)(2)(3)</sup>

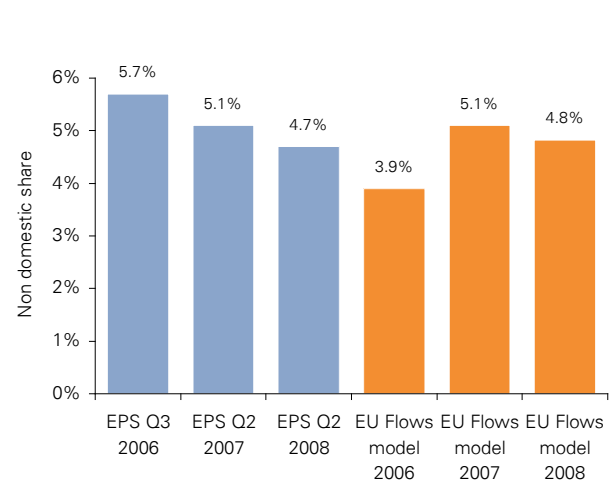


<b>C&amp;C share of consumption:</b>	<b>2%</b>	<b>2%</b>	<b>3%</b>
<b>C&amp;C share of non-domestic:</b>	<b>63%</b>	<b>43%</b>	<b>53%</b>

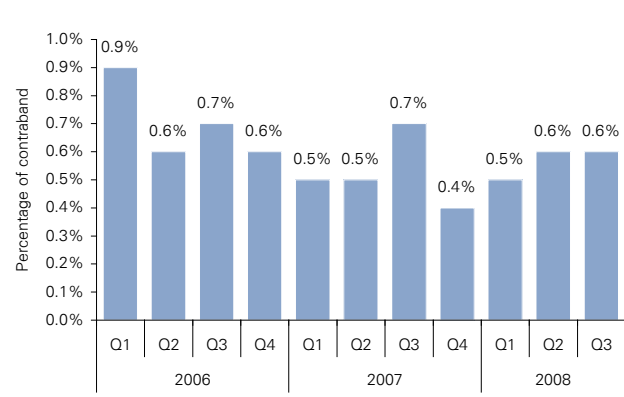
Sources: (1) KPMG EU Flows Model  
(2) Synovate ND(L) research 2006, 2007 and 2008  
(3) Interviews with PMI Local Management

**EU Flows Model results suggest that non-domestic incidence has declined in 2008**

**Non-domestic market volume estimates<sup>(1)(2)</sup>**



**ASM Grupo Spain contraband estimates 2006-2008<sup>(3)</sup>**



Sources: (1) KPMG EU Flows Model  
 (2) PMI EPS Q3 2006, Q2 2007 and Q2 2008  
 (3) "Control Coincidental del Consumo de Tabacco", ASM Grupo, 2008

**EU Flows Model suggest that non-domestic incidence in Spain declined to represent 4.8% of consumption in 2008**

- The decline in non-domestic incidence is consistent with PMI EPS results which also show a decline from 2007 to 2008

**The apparent increase in non-domestic share when comparing EU Flows Model results for 2006 and 2007 reflects changes in the treatment of the Canary Islands and Andorra variant packs found in Spain**

- In the 2006 Project Star results, Canary Islands and Andorra variant cigarettes were classified as Spanish legal domestic. In 2007 and 2008, Canary Islands and Andorra variant cigarettes have instead been classified as non-domestic legal

**In 2008, the ASM Grupo estimate for contraband was 0.6%, which compares to a Project Star estimate in 2008 for C&C of 2.5% of consumption**

- ASM Grupo are a Spanish market research company who provide estimates of non-domestic incidence to the Guardia Civil on a quarterly basis
- Both KPMG estimates and the results from the ASM Grupo survey support the view that Spain has one of the lowest rates of C&C consumption in the EU

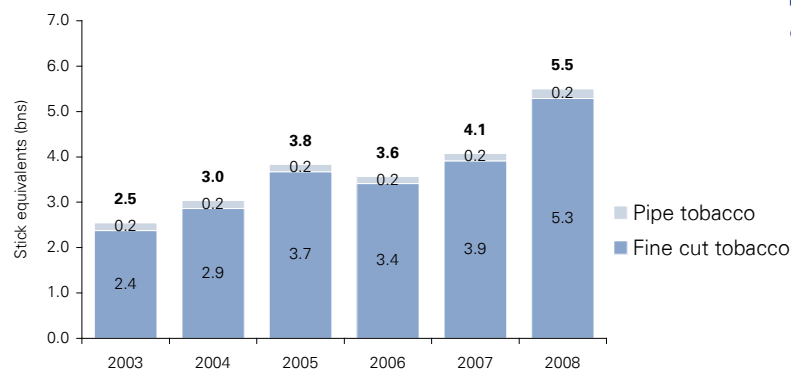
**Differences between the ASM Grupo and Project Star estimates for contraband are likely to be driven by survey methodology**

- In 2008 the ASM Grupo estimate was based upon a quarterly survey of 13,000 people regarding their smoking habits
  - contraband incidence is determined based on the results of the pack swap that occurs on completion of the questionnaire

# OTP market size and growth

Sales of fine cut tobacco increased by 35% in 2008 to 5.3 billion stick equivalents

## OTP sales in billion stick equivalents 2003 to 2008<sup>(1)(a)(b)(c)</sup>



Manufactured cigarette sales (bn cigarettes) <sup>(d)</sup>	2003	2004	2005	2006	2007	2008
	93.1	93.9	93.3	90.6	89.5	89.7

CAGR (%)	2003-2005	2005-2007	2007-2008	2004-2008
■ Pipe tobacco	(2.4)%	0.2%	32.2%	5.2%
■ Fine cut tobacco	24.4%	3.2%	35.1%	16.6%
<b>Total Smoking tobacco</b>	<b>22.8%</b>	<b>3.1%</b>	<b>34.9%</b>	<b>16.0%</b>
<b>Manufactured cigarettes</b>	<b>0.1%</b>	<b>(2.0)%</b>	<b>0.3%</b>	<b>(1.1)%</b>

Notes: (a) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams  
 (b) Cigars and cigarillos has been excluded from this analysis  
 (c) In 2008 fine cut tobacco is represented by 'roll your own' tobacco only whereas in 2003-2007 fine cut tobacco is represented by 'roll your own' and 'make your own' tobacco. Roll your own tobacco does however account for 98% of total fine cut in 2007  
 (d) IMS indicates legal domestic sales of 90.6 billion cigarettes in 2008. However, Project Star 2008 results uses legal domestic sales of 89.7 billion cigarettes which reflects an adjustment of 0.9 billion cigarettes to account for additional inventories held in 2008

Sources: (1) Until 2007, OTP volumes are supplied by PMI. 2008 volumes are estimates provided by PMI Spain

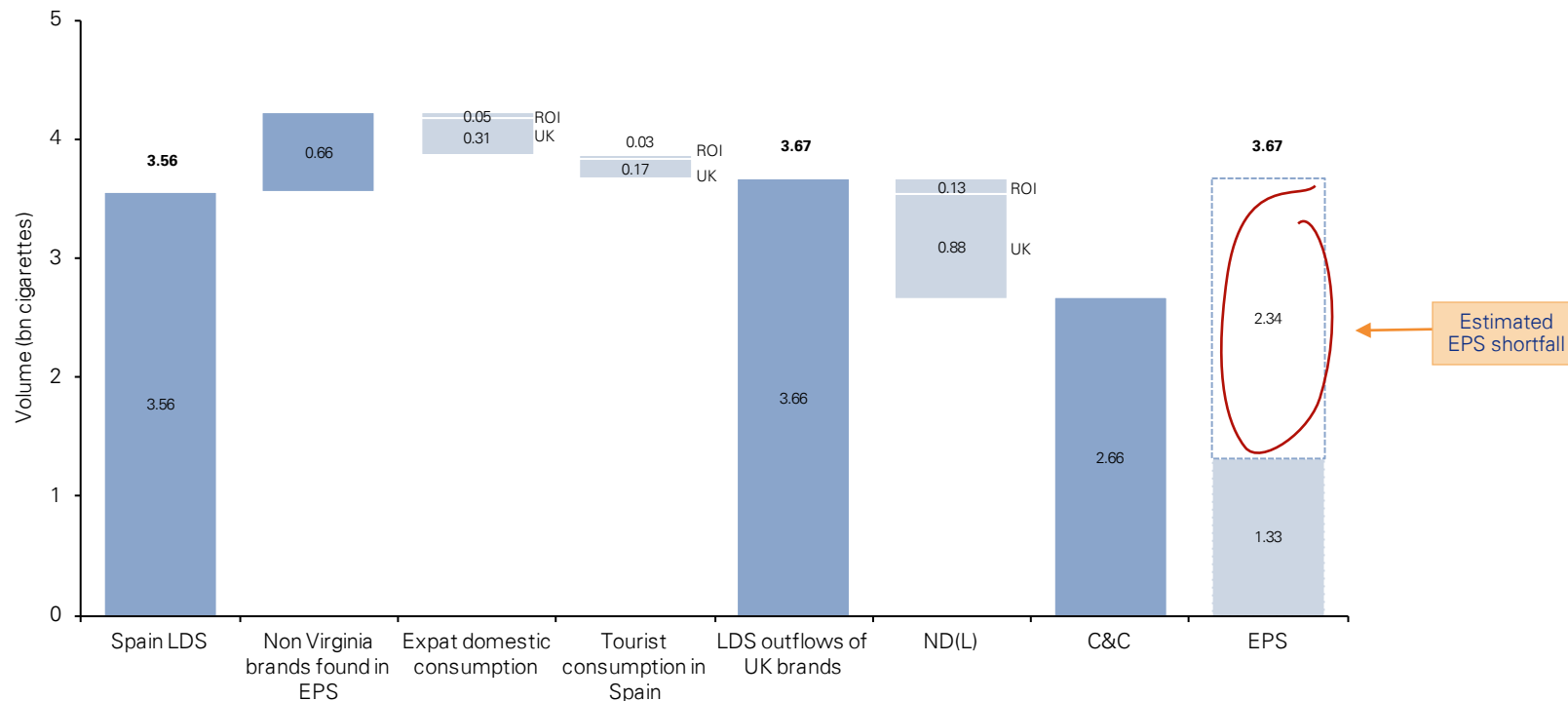
## Sales of fine cut tobacco increased by 35% from 2007 to 2008 whilst sales of manufactured cigarettes have remained stable over the same period

- Sales of fine cut tobacco increased to 5.3 billion stick equivalents in 2008 compared to 2.9 billion stick equivalents in 2004
  - by contrast sales of manufactured cigarettes declined to 89.7 billion cigarettes in 2008 from 93.9 billion cigarettes in 2004

# Country outflow refinements: Spain to UK and Republic of Ireland

Adjustments have been made to flows out of Spain to the UK and Republic of Ireland

Cigarette flows from Spain to UK and Republic of Ireland <sup>(1)(2)(3)(4)(a)</sup>



## Adjustments have been made to outflows from Spain to UK and Republic of Ireland (ROI)

- Multiple alternative sources suggest that outflows from Spain to the UK and Republic of Ireland are understated by empty pack survey results
- The EPS shortfall was estimated at 2.3 billion cigarettes in 2008, compared to an estimate of 2.6 and 3.1 billion cigarettes in 2007 and 2006 respectively
- Outflows to the UK and Ireland were therefore adjusted upwards by 2.0 billion cigarettes and 0.3 billion cigarettes respectively to reflect for sales of British brands in Spain of 3.6 billion cigarettes and non-domestic incidence of other brands found in the UK and Irish EPS of 0.7 billion cigarettes, net of:
  - estimated consumption by permanent UK and Irish expatriate residents in Spain
  - tourist consumption whilst in Spain

Note: (a) Expatriate numbers for the UK (322,780) based on estimates from Eurostat

Sources: (1) Spain In Market Sales, PMI management Spain

(2) UK and Ireland EPS

(3) GCTS Spain and UK

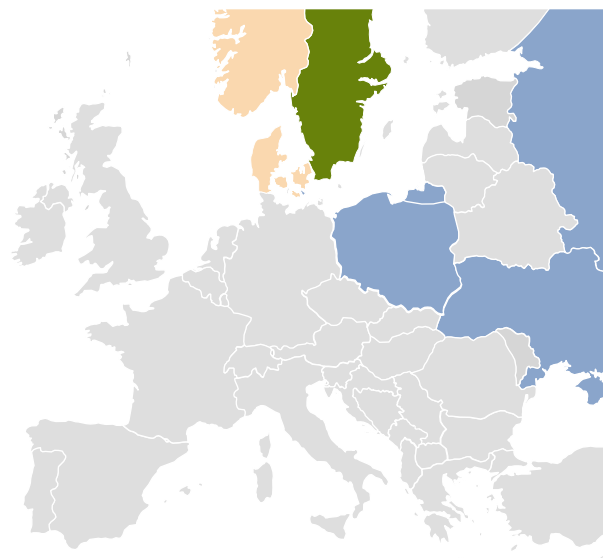
(4) Eurostat

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

**Total consumption in Sweden declined by 4.8% in 2008 driven by lower legal sales and decline in non-domestic inflows**

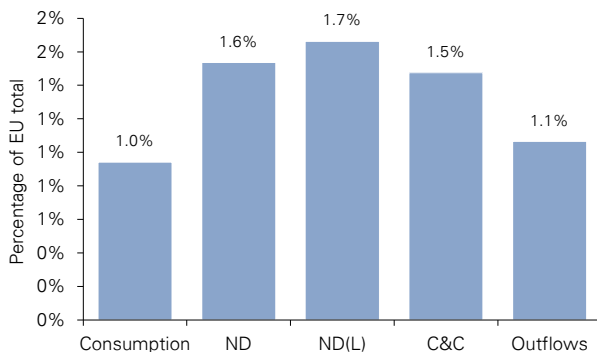
**Non-domestic inflows declined to 1.4 billion cigarettes in 2008**

**Key source and destination markets<sup>(1)(a)</sup>**

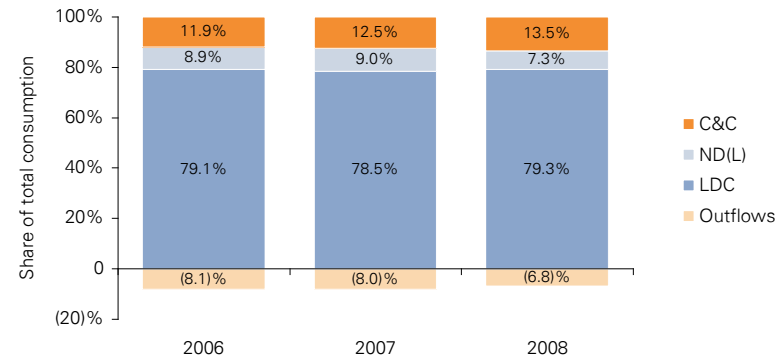


**Key:** ■ Sweden ■ Major source countries ■ Major destination countries  
**Note:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow  
**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
 (2) AC Nielsen ND(L) research 2006, 2007 and 2008

**Proportion of total EU levels<sup>(1)(2)</sup>**

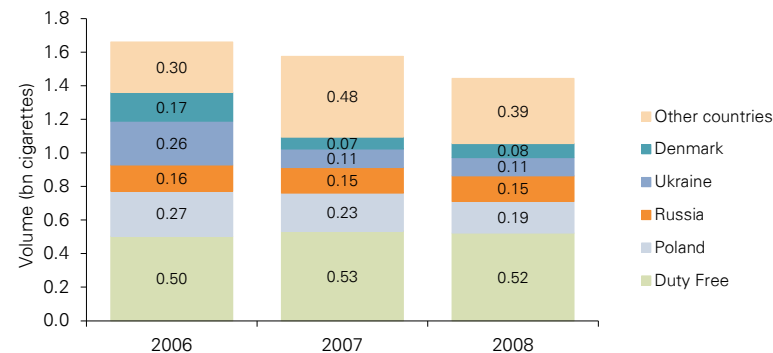


**Total Swedish consumption by origin 2006-2008<sup>(1)(2)</sup>**



Volume (bn cigarettes):	8.0	7.3	7.0
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**Total non-domestic inflows (ND(L) & C&C) 2006-2008<sup>(1)(2)</sup>**

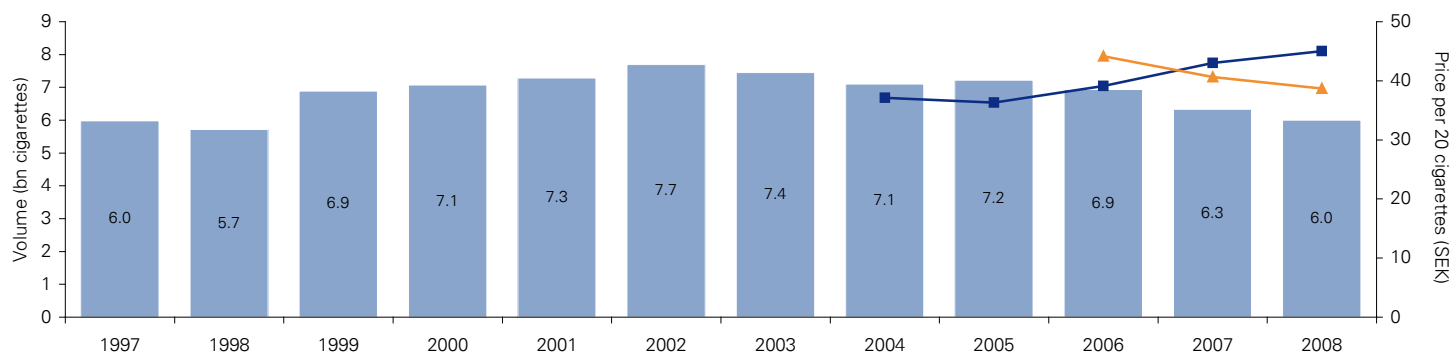


Volume (bn cigarettes):	1.7	1.6	1.4
-------------------------	-----	-----	-----

# Historic sales and pricing trends

Legal domestic cigarette sales have been trending downwards since 2002

Historic cigarette prices and legal domestic sales  
1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-2002	2002-2006	2006-2008	2007-2008
Legal domestic sales	5.2%	(2.6)%	(7.0)%	(5.2)%
Average pack price	n/a	2.7% <sup>(a)</sup>	7.3%	4.6%
Consumption	n/a	n/a	(6.4)%	(4.8)%

Notes: (a) Average pack price CAGR percentage is calculated from 2004 to 2006  
(b) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams

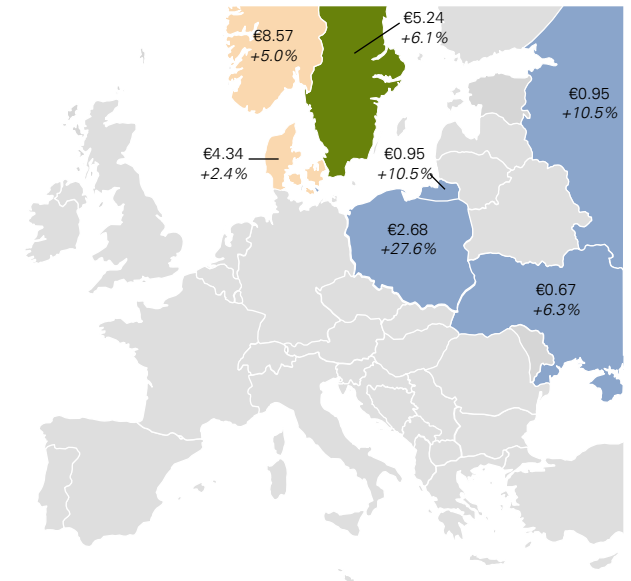
Sources: (1) In Market Sales supplied by PMI  
(2) Weighted average pack price supplied by PMI  
(3) In 2007, OTP volumes supplied by PMI. 2008 volumes are estimates provided by PMI

## Legal domestic sales declined by 5.2% in 2008 whilst average pack prices increased by 4.6%

- There was an excise price increase of SEK1.50 in January 2008 and some manufacturers added an additional SEK1.50 to this excise price increase
- Legal domestic sales of fine cut tobacco declined by 61.8% in 2008 to represent 0.3 billion sticks equivalents<sup>(3)(b)</sup>
  - there was a 60% excise price increase on fine cut tobacco in 2008 and this has meant that the price gap between fine cut and manufactured cigarettes has narrowed

There has been a down-trading trend in 2008

### Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



Key:

- Sweden
- Major source countries
- Major destination countries

Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

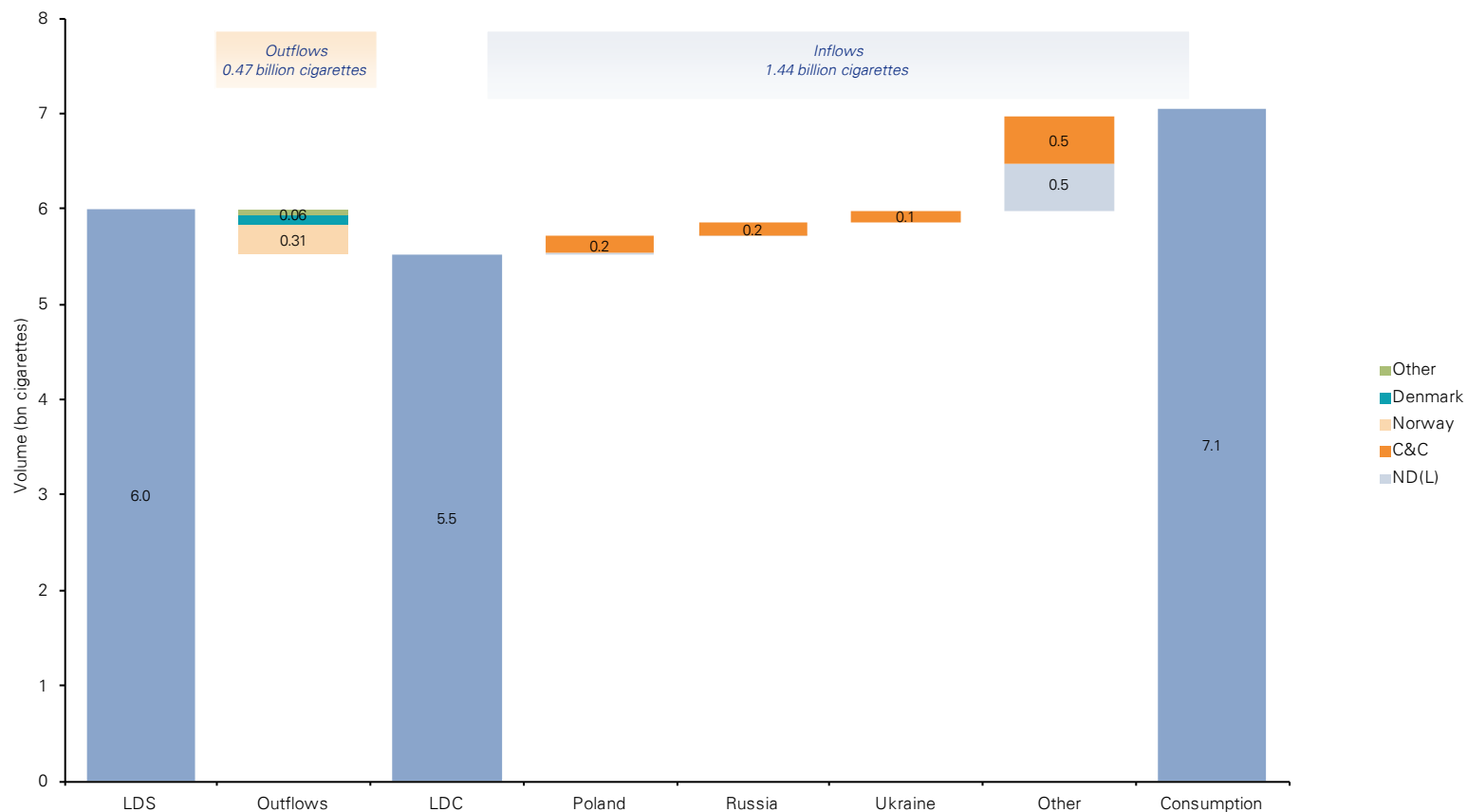
Sources: (1) Marlboro retail selling price supplied by PMI



# Outflows and inflows

Swedish consumption is estimated at 7.0 billion cigarettes compared to legal sales of 6.0 billion cigarettes, with a net inflow of 1.0 billion cigarettes in 2008

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)(c)</sup>



Notes: (a) LDS – Legal Domestic Sales

(b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)

(c) The outflow to Norway is calculated by assuming that the increase in LDC in Norway in 2008 is matched by an equal fall in inflows into Norway. The percentage fall in total inflows into Norway from 2007 to 2008 is then applied to the 2007 Swedish outflow to Norway volume to estimate the comparable 2008 flow

Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research 2008

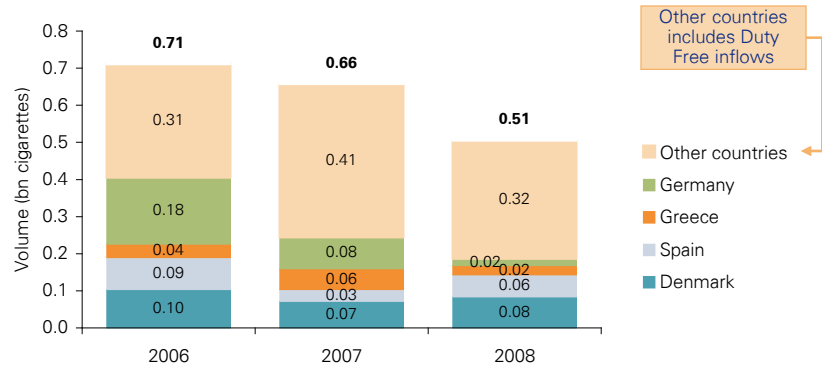
(3) In Market Sales supplied by PMI

(4) Interviews with PMI local management

# Non-domestic (legal) breakdown

**Non-domestic legal inflows decreased in 2008 and accounted for 7% of total consumption**

**Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)</sup>**



<b>ND(L) share of consumption:</b>	<b>9%</b>	<b>9%</b>	<b>7%</b>
<b>ND(L) share of non-domestic:</b>	<b>43%</b>	<b>42%</b>	<b>35%</b>

**Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)</sup>**



<b>PMI share of ND(L):</b>	<b>48%</b>	<b>44%</b>	<b>47%</b>
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**ND(L) analysis<sup>(a)</sup>**

	1	2	3	4	Total ND(L) (cigarettes)	
Values 2008	Population 19+ <b>7.1m</b>	Propensity to travel <b>69%</b>	Propensity to purchase <b>23%</b>	Ave. no. of trips <b>2.8</b>	Ave. purchases (cigarettes) <b>153</b>	<b>= 0.49bn</b>
EU rank 2008	<b>14</b>	<b>3</b>	<b>18</b>	<b>11</b>	<b>15</b>	<b>11</b>

**ND(L) analysis 2007-2008**

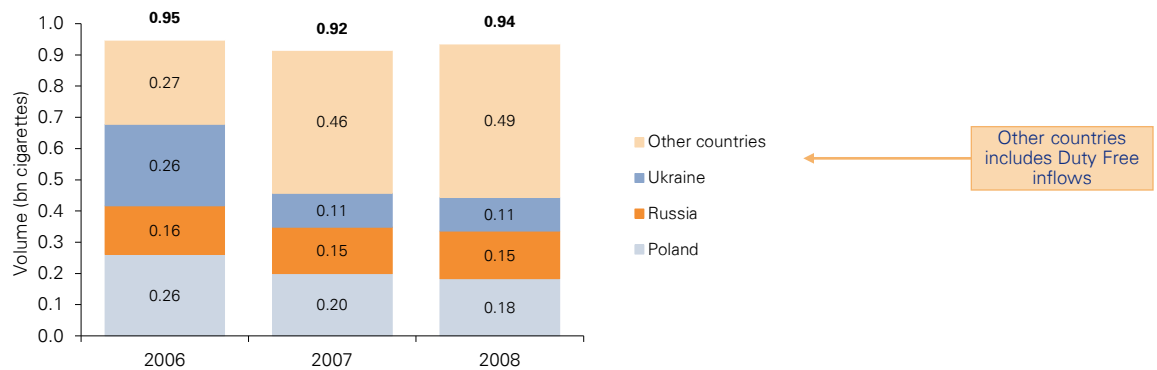
	2007	2008
Propensity to travel and purchase cigarettes	15.2%	16.2%
Average annual cigarettes purchased	614	427

*Notes:* (a) ND(L) analysis from AC Nielsen excludes adjustments for inbound tourism inflows. Total ND(L) including these inbound tourism inflows is 0.51 billion cigarettes  
*Sources:* (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2006, 2007 and 2008  
 (3) Interviews with PMI local management

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows remained stable in 2008 accounting for 13% of total consumption**

**Counterfeit and contraband by origin 2006-2008<sup>(1)(2)(3)</sup>**



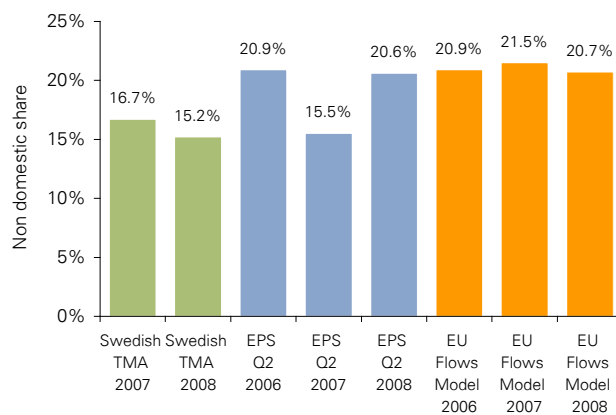
<b>C&amp;C share of consumption:</b>	<b>12%</b>	<b>13%</b>	<b>13%</b>
<b>C&amp;C share of non-domestic:</b>	<b>57%</b>	<b>58%</b>	<b>65%</b>

Sources: (1) KPMG EU Flows Model  
 (2) AC Nielsen ND(L) research 2006, 2007 and 2008  
 (3) Interviews with PMI Local Management

# Comparison of external sources for non-domestic estimates

**KPMG's estimate of non-domestic consumption is higher than that provided by the Swedish Tobacco Manufacturer Association**

Non-domestic market volume estimates<sup>(1)(2)(3)(a)</sup>



Note: (a) The Swedish Manufacturers Tobacco Association study was conducted in April 2008 whereas PMI EPS was conducted primarily in June 2008. Seasonality difference should therefore be considered when making comparisons of the two surveys

Sources: (1) KPMG EU Flows Model

(2) PMI EPS research Q2 2006, Q2 2007 and Q2 2008

(3) The non-duty paid market for cigarettes in Sweden'. AB Handelns Utredningsinstitut, 2008

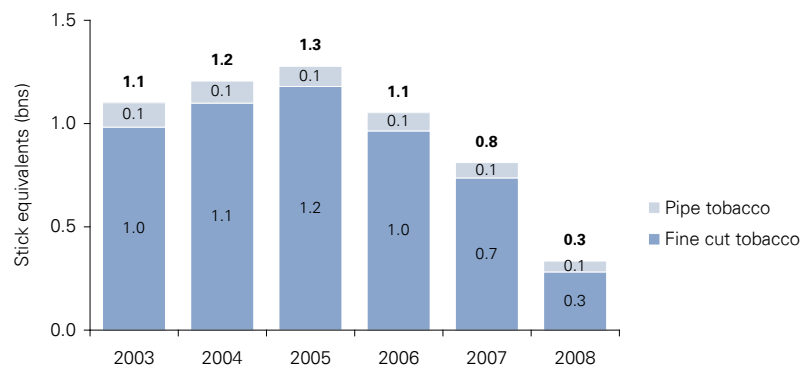
**The Swedish Tobacco Manufacturers Association (TMA) use a different methodology to Project Star that may understate non-domestic share of consumption**

- Counterfeit products with Swedish warning texts and non-recognised foreign brands are not taken into account in the Swedish TMA study<sup>(a)</sup>
- Both the Swedish TMA and the EU Flows Model do however indicate a decline in non-domestic incidence in 2008

# OTP market size and growth

Legal domestic sales of fine cut tobacco declined by 61.8% in 2008 to 0.3 billion stick equivalents in 2008

OTP sales in billion stick equivalents 2003-2008<sup>(1)(a)(b)</sup>



Manufactured cigarette sales (bn cigarettes)	2003	2004	2005	2006	2007	2008
	7.4	7.1	7.2	6.9	6.3	6.0

CAGR (%)	2003-2005	2005-2007	2007-2008
■ Pipe tobacco	(8.8)%	(12.9)%	(29.0)%
■ Fine cut tobacco	9.6%	(21.0)%	(61.8)%
<b>Total Smoking tobacco</b>	<b>7.8%</b>	<b>(20.3)%</b>	<b>(58.8)%</b>
<b>Manufactured cigarettes</b>	<b>(1.6)%</b>	<b>(6.4)%</b>	<b>(5.2)%</b>

Notes: (a) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams

(b) Cigars/cigarillos and smokeless tobacco has been excluded from this analysis

Source: (1) Until 2007, OTP volumes supplied by PMI. 2008 volumes are estimates provided by PMI

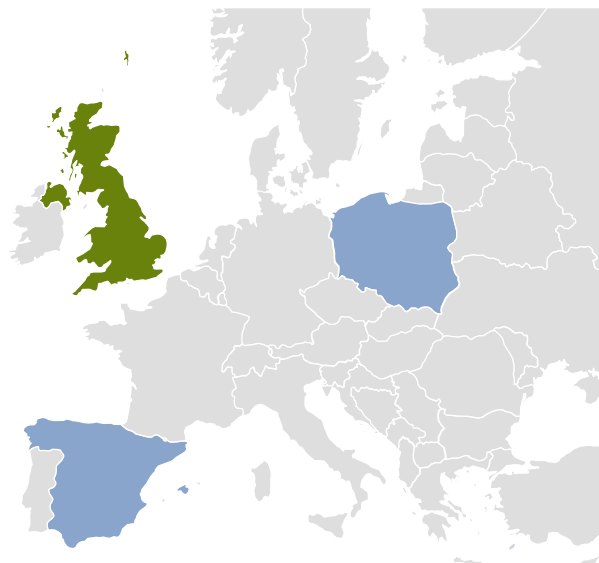
Legal domestic sales of fine cut tobacco have declined at a faster rate than manufactured cigarettes since 2005, with the rate of decline accelerating in 2008

- Fine cut tobacco sales have declined at an average of 21.0% per year between 2005 and 2007, whereas manufactured cigarettes declined at an average of 6.4% a year over the same time period
- However in 2008, the rate of decline of fine cut tobacco accelerated to 61.8% compared to a 5.2% fall in legal domestic sales of manufactured cigarettes

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

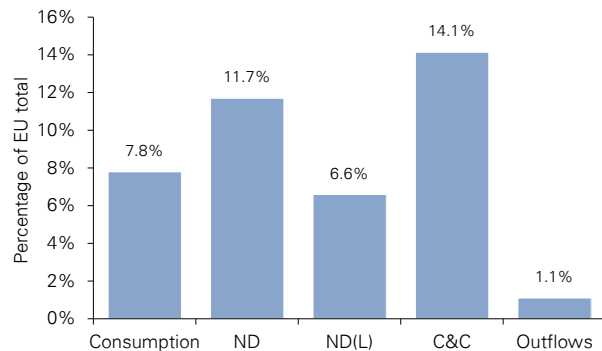
Consumption has declined from 59.7 billion cigarettes in 2006 to 55.0 billion cigarettes in 2008 driven by both lower legal domestic sales and a decline in non-domestic inflows

## Key source and destination markets<sup>(1)(a)(b)</sup>

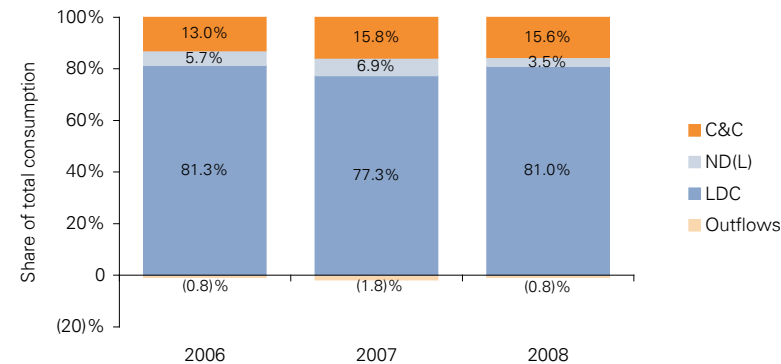


**Key:** ■ UK ■ Major source countries  
**Note:** (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow  
 (b) ND(L) research was not updated in 2007, but corroborating research did not indicate any significant changes to 2006 results  
**Sources:** (1) KPMG EU Flows Model and interviews with PMI Local Management  
 (2) AC Nielsen ND(L) research 2006, 2008

## Proportion of total EU levels<sup>(1)(2)</sup>

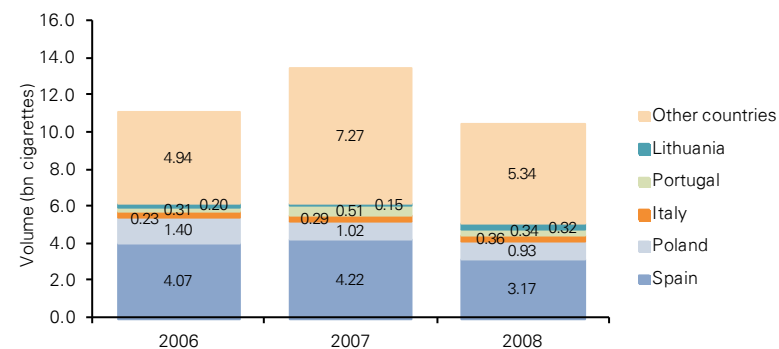


## Total UK consumption 2006-2008<sup>(1)(2)(b)</sup>



Volume (bn cigarettes):	2006	2007	2008
	59.7	59.4	55.0

## Total non-domestic inflows (ND(L) and C&C) 2006-2008<sup>(1)(2)(b)</sup>



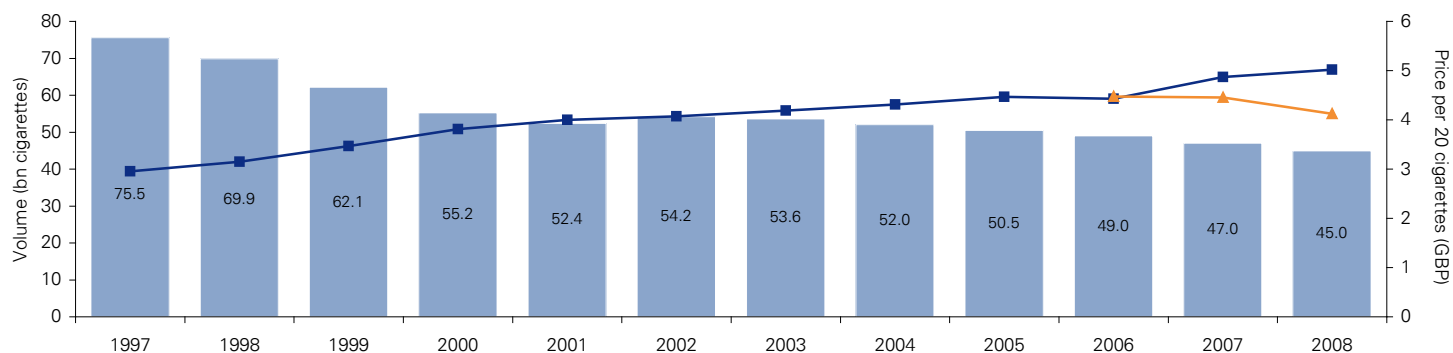
Volume (bn cigarettes):	2006	2007	2008
	11.1	13.5	10.5

Other countries include Duty Free inflows

# Historic sales and pricing trends

Legal domestic cigarette sales have been trending downwards since 2002 as prices have risen

## Historic cigarette prices and legal domestic sales 1997-2008<sup>(1)(2)</sup>



CAGR (%)	1997-2001	2001-2006	2006-2008	2007-2008
Legal domestic sales	(8.8)%	(1.3)%	(4.2)%	(4.3)%
Average pack price	7.9%	2.1%	6.4%	3.1%
Consumption	n/a	n/a	(4.0)%	(7.5)%

Notes (a) Smoking tobacco volumes have been calculated at 1 stick per 0.75 grams

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PMI

(3) OTP volumes provided by PMI UK

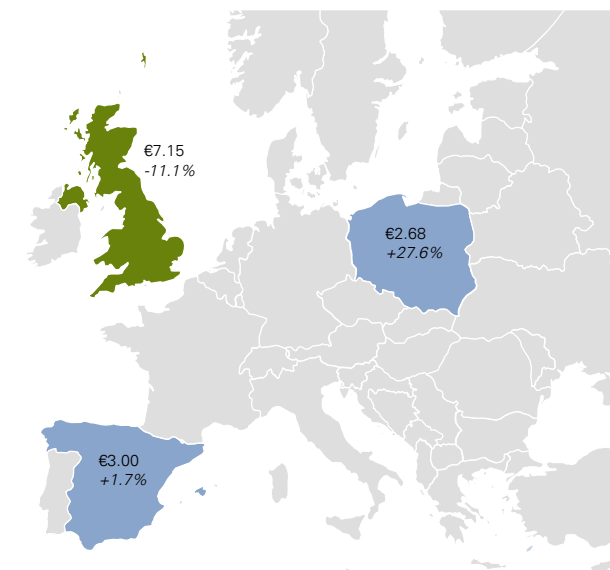
### Legal domestic sales declined by 4.3% in 2008 whilst average pack prices increased by 3.1%

- 2008 was the first full year in which anti-smoking legislation in England, Wales and Northern Ireland was enforced
  - smoking bans in public buildings were introduced on the 2nd April 2007 in Wales, the 30th April 2007 in Northern Ireland and the 1st July 2007 in England. Scotland introduced a similar ban on the 26th March 2006
- Average pack prices increased by 3.1% in 2008 compared to 2007
  - price increases were implemented in January and March 2008
- Legal domestic sales of fine cut tobacco increased by 10.8% in 2008 to represent 5.4 billion stick equivalents<sup>(3)(a)</sup>



Despite the weakening of the British Pound against the Euro, a significant price differential between the UK and key source markets remains

### Marlboro 2008 price comparison in Euros and percentage change from 2007<sup>(1)(a)</sup>



Key: ■ UK  
■ Major source countries

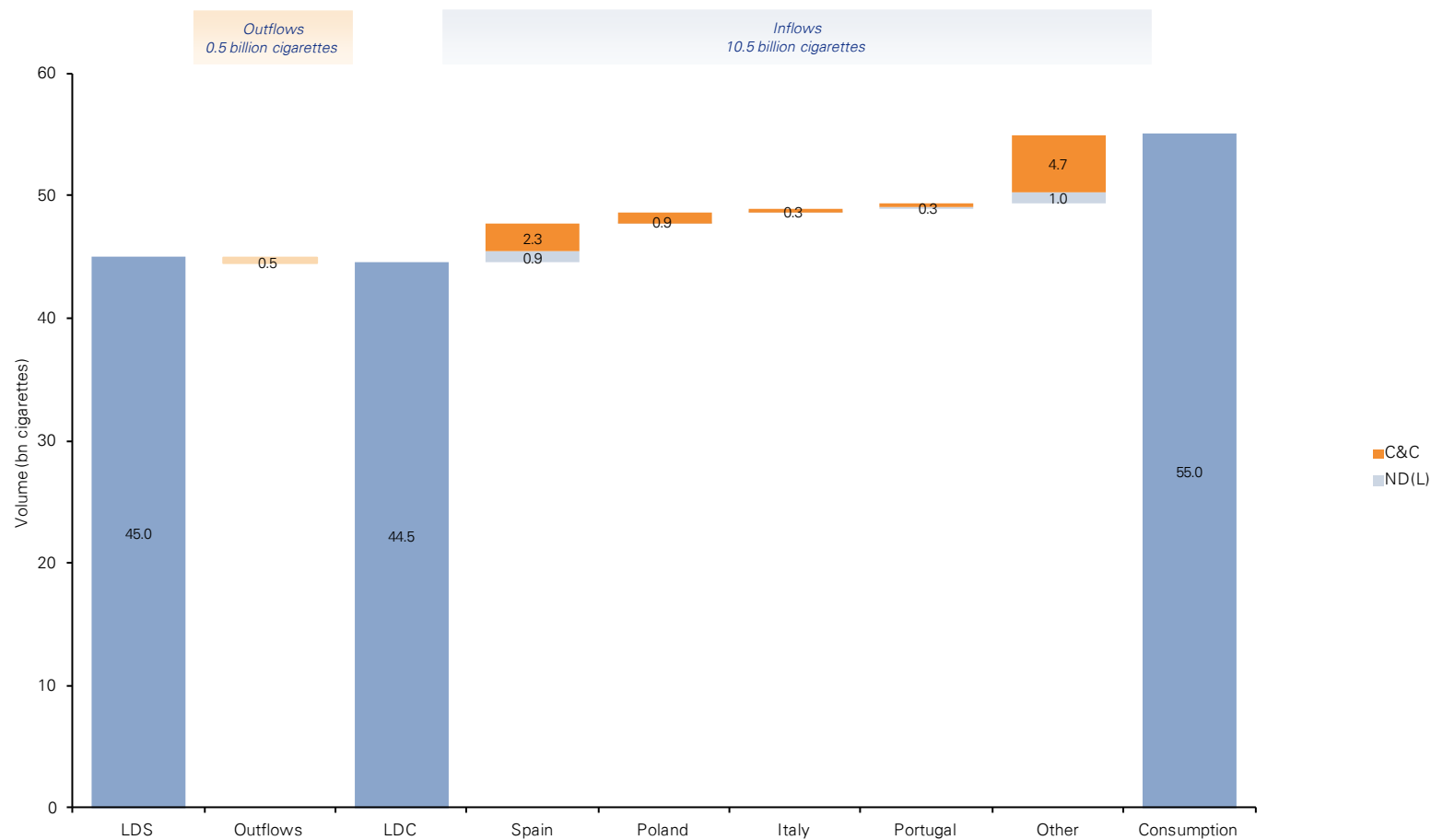
Sources: (1) Marlboro retail selling price supplied by PMI

Notes: (a) Based on pack of 20 Marlboro King Size as at July 1st 2007 and 2008. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2008 and June 2007

# Outflows and inflows

UK consumption is estimated at 55.0 billion cigarettes in 2008 compared to legal domestic sales of 45.0 billion cigarettes, with a net inflow of 10.0 billion cigarettes

## Consumption breakdown 2008<sup>(1)(2)(3)(4)(a)(b)</sup>



Notes: (a) LDS – Legal Domestic Sales

(b) LDC – Legal Domestic Consumption (i.e. legal in-market sales that are also consumed in the same market)

Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research 2008

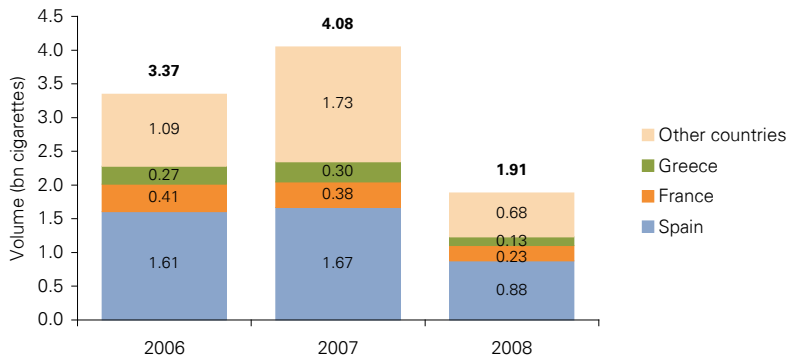
(3) In Market Sales supplied by PMI

(4) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

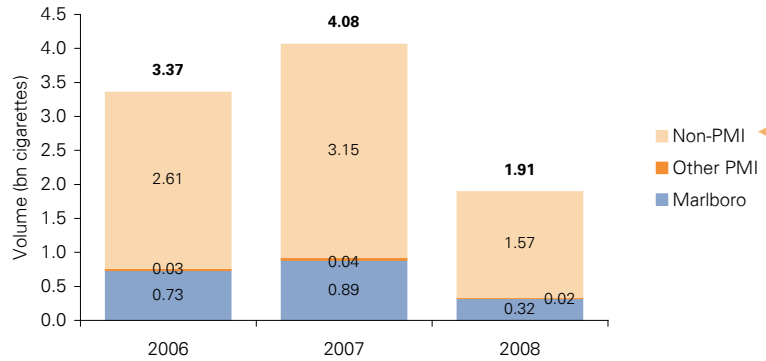
**Non-domestic (legal) inflows to the UK have decreased from 2006 to 2008 and accounted for 18% of non-domestic consumption in 2008**

**Non-domestic (legal) by origin 2006-2008<sup>(1)(2)(3)</sup>**



<b>ND(L) share of consumption:</b>	<b>6%</b>	<b>7%</b>	<b>3%</b>
<b>ND(L) share of non-domestic:</b>	<b>30%</b>	<b>30%</b>	<b>18%</b>

**Non-domestic (legal) by brand 2006-2008<sup>(1)(2)(3)</sup>**



<b>PMI share of ND(L):</b>	<b>23%</b>	<b>23%</b>	<b>17%</b>
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*Note: ND(L) research was not updated in 2007, but was assumed to have increased in proportion with the increase in non-domestic incidence i.e. ND(L) share of non-domestic was assumed to equal 30% in both 2006 and 2007*

*Sources: (1) KPMG EU Flows Model  
(2) AC Nielsen ND(L) research 2006, 2008  
(3) Interviews with PMI Local Management*

**ND(L) analysis**

	①	②	③	④	
	Population 19+	Propensity to travel	Propensity to purchase	Ave. no. of trips	Ave. purchases (cigarettes)
Values 2008	47.4m	51%	11%	2.1	332
	x	x	x	x	=
					<b>1.91bn</b>
EU rank 2008	4	13	25	18	5
					4

**ND(L) analysis 2007-2008**

	2007	2008
Propensity to travel and purchase cigarettes	① x ② = 8.1%	① x ② = 5.7%
Average annual cigarettes purchased	③ x ④ = 1070	③ x ④ = 711

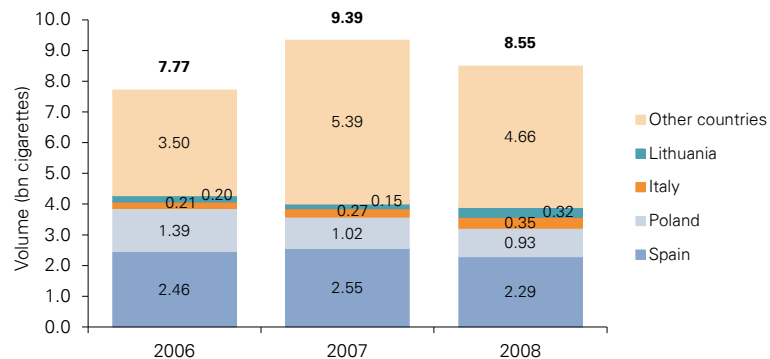
The fall in non-domestic (legal) volumes from other countries is driven by lower inflows from a number of countries including Netherlands, Portugal, and Germany

The top three non-PMI brands in 2008 are Superkings, Lambert & Butler, and Benson & Hedges accounting for 45% of total non-PMI non-domestic (legal) inflows, compared to 41% in 2007

# Counterfeit and contraband breakdown

Counterfeit and contraband inflows accounted for 82% of total non-domestic consumption in 2008

Counterfeit and contraband by origin  
2006-2008<sup>(1)(2)(3)</sup>



<b>C&amp;C share of consumption:</b>	<b>13%</b>	<b>16%</b>	<b>16%</b>
<b>C&amp;C share of non-domestic:</b>	<b>70%</b>	<b>70%</b>	<b>82%</b>

*Note:* ND(L) research was not updated in 2007, but was assumed to have increased in proportion with the increase in non-domestic incidence i.e. ND(L) share of non-domestic was assumed to equal 30% in both 2006 and 2007. Therefore C&C share of non-domestic was assumed to equal 70% in both 2006 and 2007

Sources: (1) KPMG EU Flows Model

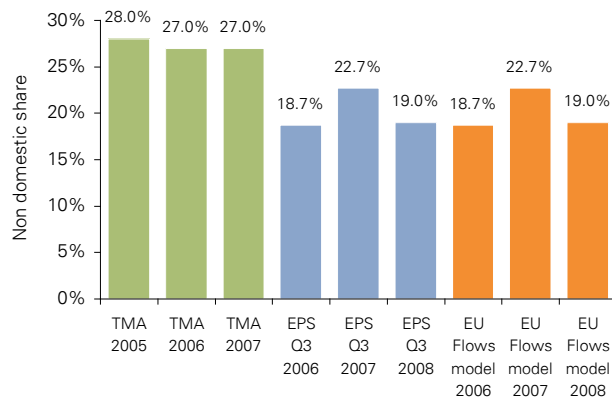
(2) AC Nielsen, ND(L) research 2006, 2008

(3) Interviews with PMI Local Management

# Comparison of external sources for non-domestic estimates

Both the EU Flows Model and PMI EPS results suggest non-domestic incidence has returned to a similar level as estimated in 2006

Non-domestic market volume estimates<sup>(1)(2)(3)</sup>



Notes (a) The TMA 2008 estimates for non-domestic incidence are not available  
 Sources: (1) Estimates of non-UK Duty paid cigarette consumption, Tobacco Manufacturer's association, 2005-2007  
 (2) KPMG EU Flows Model  
 (3) PMI EPS Q3 2006, Q3 2007 and Q3 2008  
 (4) Discussion with TMA

## The EU Flows Model estimate for non-domestic share is in line with PMI EPS results at 19%

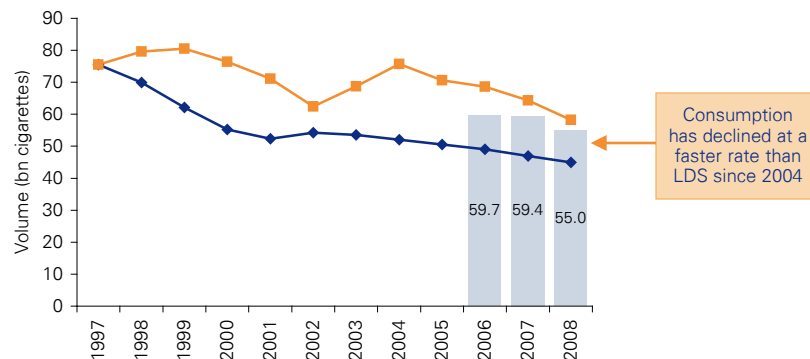
- EU Flows Model results suggest that non-domestic incidence has fallen in 2008, returning to a similar level estimated by the EPS and the EU Flows Model in 2006

## In previous years, the Trade Manufactures Association (TMA) has estimated a much higher level of non-domestic incidence compared to the EU Flows Model<sup>(a)</sup>

- The TMA use a different methodology than that applied by the EU Flows Model
  - the TMA estimate is of non-UK duty paid cigarette consumption. The methodology is based on consumption and prevalence levels and EPS samples. The EPS is carried out in various locations including sports events<sup>(4)</sup>

Consumption modelling results suggest that non-domestic consumption has declined in recent years

## Consumption index modelling 1997-2008<sup>(1)(2)(3)</sup>



CAGR (%)	1997-2001	2001-2004	2004-2008
■ LDS	(8.8)%	(0.2)%	(3.6)%
■ KPMG consumption index	(1.5)%	2.1%	(6.3)%
■ KPMG consumption estimate	n/a	n/a	(4.0)% <sup>(a)</sup>

Notes: (a) Consumption CAGR is calculated from 2006 to 2008  
 (b) GCTS refers to the Global Consumer Tracking Survey to estimate smoking prevalence and average smoking volume by country

Sources: (1) KPMG Consumption Index model  
 (2) In Market Sales supplied by PMI  
 (3) KPMG EU Flows Model

## The gap between LDS and the KPMG consumption index for the UK decreased between 2004 and 2008

- Consumption in the UK has declined at a faster rate than legal sales since 2004
- This result suggests that non-domestic consumption has declined
  - this is consistent with the EU Flows Model results showing a decrease in net inflows from 12.4 billion cigarettes in 2007 to 10.0 billion cigarettes in 2008

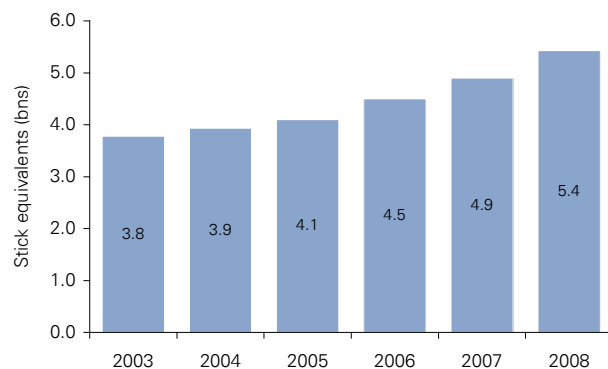
## Consumption index modelling is undertaken to identify discrepancies between the legal domestic sales trend and other consumption estimates and potentially provides an indication of changes in non-domestic inflows and outflows

- The KPMG consumption index is calculated using the incidence of smoking and the average daily consumption and the population of each market (from OEF)
  - these figures are then indexed to the earliest year for which we have data from the both GCTS<sup>(b)</sup> and LDS data available, 1997 for the UK
- Please note that consumption modelling can only identify market trends and cannot be used to quantify total consumption
  - the gap between indexed consumption and LDS in the final year is therefore only a broad indication of the extent to which the market has changed over the analysed period
  - in many markets, some level of inflows or outflows are likely to be present in the first analysed year

# OTP market size and growth

Legal domestic sales of fine cut tobacco increased to 5.4 billion stick equivalents in 2008

Fine cut tobacco sales in billion stick equivalents, 2003 to 2008<sup>(1)(a)(b)</sup>



Manufactured cigarette sales (bn cigarettes)	2003	2004	2005	2006	2007	2008
	53.6	52.0	50.5	49.0	47.0	45.0

CAGR (%)	2003-2005	2005-2007	2007-2008
■ Fine cut tobacco	4.2%	9.3%	10.8%
Manufactured cigarettes	(2.9)%	(3.5)%	(4.3)%

Notes: (a) Fine cut tobacco volumes have been calculated at 1 stick per 0.75 grams  
(b) Pipe tobacco, cigars, cigarillos and smokeless tobacco has been excluded from this analysis

Sources: (1) Until 2006 fine cut volumes supplied by PMI. 2008 volumes are estimates provided by PMI UK

(2) UK Tobacco Manufacturers Association

(3) PMI UK

Legal domestic sales of fine cut tobacco increased by 10.8% in 2008 whilst sales of manufactured cigarettes declined by 4.3% over the same period

- Legal domestic sales of fine cut tobacco account for approximately 10% share of tobacco sales in the UK in 2008<sup>(b)</sup>
  - the UK Tobacco Manufacturers Association understand that non-domestic Other Tobacco Products (OTP) account for a large proportion of overall OTP consumption<sup>(2)</sup>
  - PMI management have observed an increase of roll your own tobacco from Spain in 2008<sup>(3)</sup>

- Project overview and timing
- EU cigarette market
- 2008 Project Star results
- Appendices
  - country results
  - methodology
  - overview
  - limitations of results
  - summary of country flow refinements
  - sources
  - scope of work



We have developed a methodology for quantifying C&C incidence across the 27 EU markets

**The methodology has been tested extensively and refined to ensure that it can deliver the most robust and defensible results possible**

- Our approach comprises four steps: initial information assessment, preliminary methodology design, pilot and refinement, and then implementation
- Our approach integrates multiple sources and custom-built analytical tools

The methodology is based primarily on objective evidence from legal domestic sales and Empty Pack Survey results

**The EU Flows Model is a dynamic, iterative model that is principally based on legal domestic sales and Empty Pack Survey results**

- Legal domestic sales are the starting point of the methodology, from which outflows of legal sales to other countries are then subtracted to determine legal domestic consumption
- Empty Pack Survey results provide the most credible indication of the incidence of non-domestic and PMI counterfeit packs by country of origin

Consumption index modelling and regression modelling provide further corroboration of the extent of non-domestic consumption

**Analysis of long-term GCTS consumption results provides a further source with which to triangulate our consumption gap estimates**

- Consumption index modelling based on GCTS data provides a useful indicator of market trends and helps to corroborate the scale of non-domestic consumption. GCTS data cannot be used to quantify total consumption due to exclusions of particular age cohorts and under-reporting of consumption, but is helpful in tracking broad developments over time
- Analysis of external data sources and a focused interview programme also delivered good supporting evidence with which to corroborate results

Primary market research was used to quantify legal non-domestic cigarette purchases

**The key objective of the market research programme was to quantify genuine, legal non-domestic tobacco purchases in each market**

- ND(L) data for 2008 Project Star results is based upon over 12,800 full interviews and over 136,000 gross respondents. This research was updated in 21 Member States during 2008
- Primary research was critical to deliver robust results as no other sources of sufficient detail and accuracy are available for legal cross border shopping

**In addition to the research programme, ND(L) data is adjusted to reflect inbound visitor inflows from higher cost markets**

There are some specific limitations to the results that our methodology delivers

**Given the innate complexity of measuring C&C, some limitations to accurate quantification are to be expected**

- There are broadly two types of limitations, scope exclusions and source limitations, which are covered in more detail in this section
  - scope exclusions include areas which cannot or have not been accounted for in our approach, such as geographic, brand (non-PMI counterfeit), category exclusions (OTP) and legal domestic product flows out of the EU
  - source limitations cover potential errors inherent with any data sources such as sampling criteria, coverage issues and seasonality factors

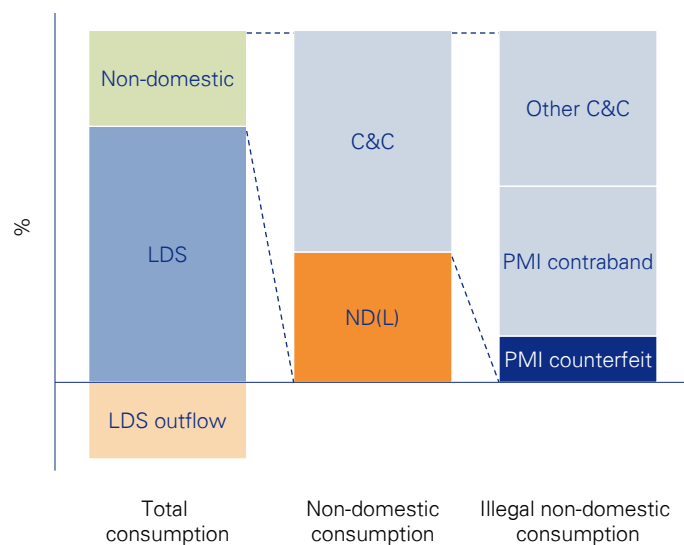
In order to maximise the accuracy of results some minor refinements were necessary at a country level

**Triangulation of results from alternative sources identified a few markets where country-to-country flows required minor adjustment**

- In nearly all instances, overall country results and flows from the EU Flows Model appear reasonable
- However, in a limited number of instances, specific adjustments were made to country-to-country flows on the basis of sound supporting evidence

We have used a top-down approach to estimate PMI counterfeit and contraband volumes starting from total consumption

### Overview of Project Star methodology and key terms



Our methodology is based on a dynamic, iterative model driven primarily from actual legal domestic sales and empty pack survey results

- **Legal domestic sales** are the key starting point for our methodology and are derived in most instances from shipment data
  - legal domestic sales are defined as sales of genuine domestic product through legitimate, domestic channels based on In Market Sales (IMS) data
- **Outflows** are defined as purchases of domestic product which are taken out of the country of purchase and consumed elsewhere
  - EPS provides a consistent source across all 27 markets of non-domestic packs by country of origin from which we estimate total product outflow from a market to the other 26 countries
  - we have not quantified outflows to non-EU markets
  - however, given the high prices of cigarettes in Europe relative to the rest of the world, LDS outflows to the rest of the world are not expected to be material
- **Legal domestic consumption (LDC)** is defined as legal domestic sales net of outflows
- **Non-domestic** product is defined as product that was not originally intended for the market in which it is consumed
- **ND(L)** is defined as product that is brought into the market legally by consumers, such as during a cross-border trip
  - legal cross-border shopping: buying duty paid tobacco product in a neighbouring country for buyer's own consumption in amounts allowable under customs regulations
  - legal tourist shopping: buying tobacco products in a non-neighbouring country for buyers own consumption in amounts allowable under customs regulations
  - legal Duty Free sales: buying tax free products in amounts that are allowed under travellers' allowances
- **Contraband** is defined as genuine product that has been bought in a low-tax country or without taxes for export purposes and illegally re-sold (for financial profit) in a higher priced market. There are generally two types of contraband:
  - **bootlegging**: the purchase of tobacco products in one country for consumption or resale in another country without paying the applicable taxes or duties
  - **large scale smuggling/organised crime**: occurs when tobacco products are sold without payment of taxes or duties, even in their country of origin
  - for the purpose of this investigation, we are not able to quantify accurately the split between smaller scale bootlegging and large scale smuggling. Consequently our contraband incidence may be larger than some external observations anticipate
- **Counterfeit product** is defined as cigarettes that are illegally manufactured and sold by a party other than the original trademark owner. For the purposes of this analysis, data relating to Counterfeit is not included within the definition of Contraband. Illicit flows of Philip Morris brands are split into their separate Counterfeit and Contraband components. Illicit volumes of other manufacturer brands are reported as combined Counterfeit and Contraband flows

# Corroboration of results

**We have sought to triangulate our findings against alternative sources wherever available**

## Methodology steps and key information sources

Calculation step	1.	2.	3.	4.	5.	6.
	Measure legal domestic sales in all markets	Adjust legal domestic sales for product outflows	Add total non-domestic consumption to adjusted legal domestic sales to derive estimated total consumption	Deduct legal non-domestic purchases from total non-domestic volume to arrive at illicit purchase volume	Deduct PMI counterfeit volumes from total illicit purchase volume	Deduct PMI contraband volume from remaining illicit volume to arrive at non-PMI C&C
Primary source	Directly measured from shipment data or equivalent	Directly measured from 'on the ground' empty packs by country of origin in 27 country flow model	Legal domestic consumption plus EU Flows Model	ND(L) market research programme	Measured from Empty Pack Survey results	Directly calculated by the KPMG methodology
Corroboratory source	<ul style="list-style-type: none"> <li>• Tax stamp receipts</li> <li>• Federal statistics</li> </ul>	<ul style="list-style-type: none"> <li>• PMI management estimates</li> <li>• Border sales surveys</li> </ul>	<ul style="list-style-type: none"> <li>• Consumption index modelling</li> </ul>	<ul style="list-style-type: none"> <li>• PMI Duty Free market estimates</li> <li>• External research</li> <li>• Expert interview programme</li> </ul>	<ul style="list-style-type: none"> <li>• Expert interview programme</li> <li>• Seizure data</li> </ul>	<ul style="list-style-type: none"> <li>• Expert interview programme</li> <li>• Seizure data</li> </ul>



**Preliminary results are subject to testing and review with local PMI management in each of the 27 EU markets**

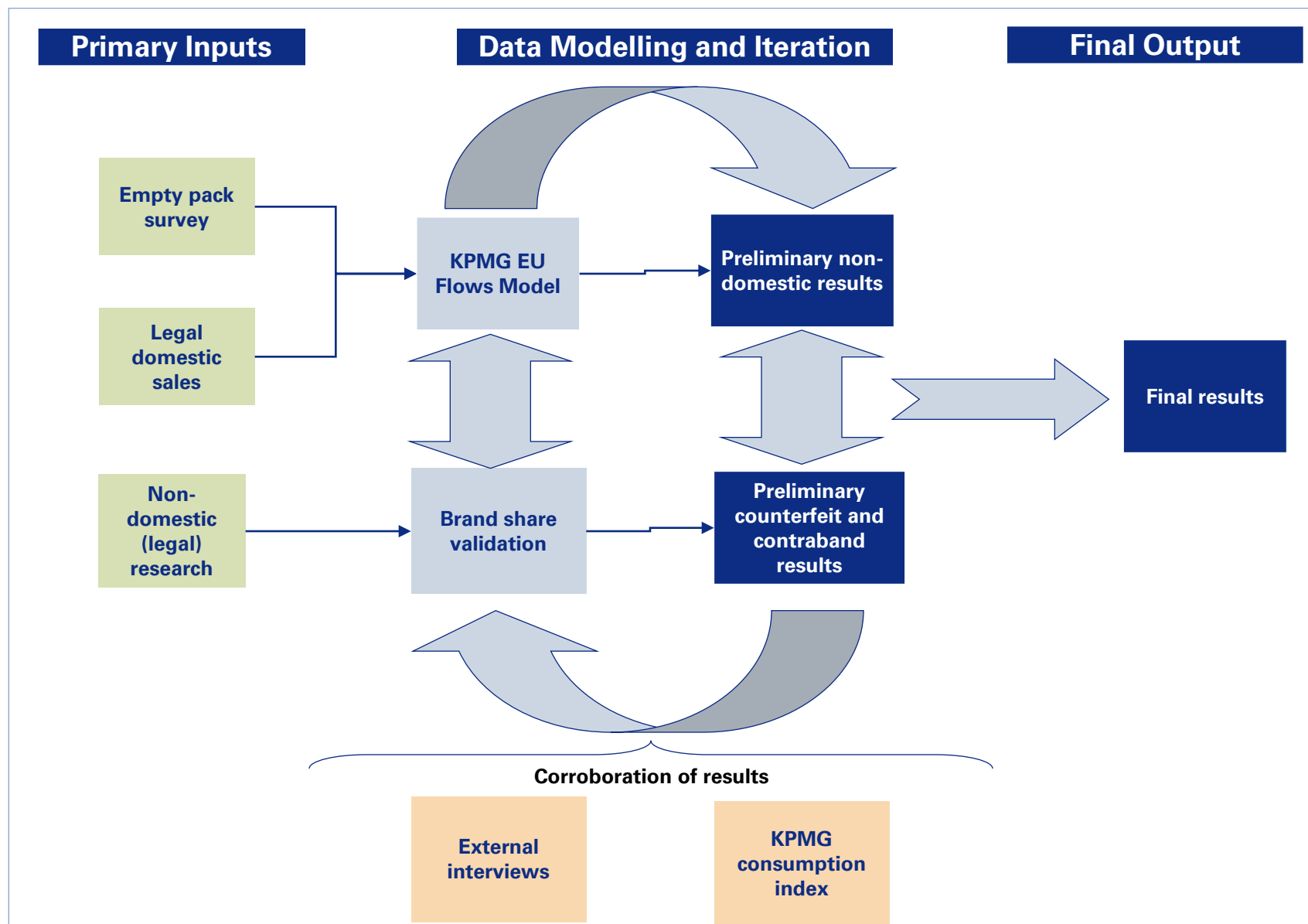
# Primary information sources and tools

Our approach integrates multiple sources with custom-built analytical tools

The results have then been through extensive iteration and testing to finalise

Model refinements are informed by gap analysis, external public research and interviews with both cigarette manufacturers/distributors and independent market experts

Further corroboration is provided by the KPMG consumption index analysis



# Primary information sources and tools – Empty Pack Surveys (1 of 3)

Empty Pack Surveys provide a highly objective and robust view of the population samples and, notwithstanding some scope constraints, represents the most credible indication of the incidence of non-domestic and counterfeit packs

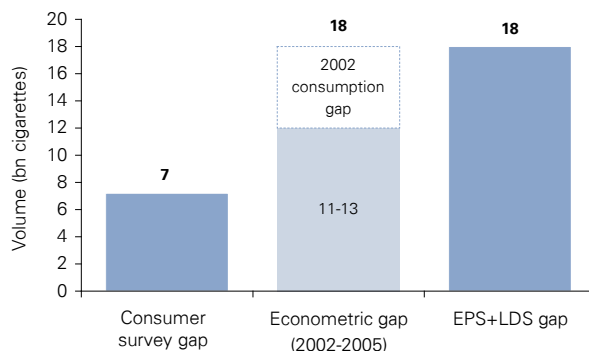
<p><b>Overview</b></p>	<p><b>Empty Pack Surveys are a system of collecting discarded empty cigarette packs, the results of which are used to estimate the share of non-domestic and counterfeit packs in each of the markets</b></p> <ul style="list-style-type: none"> <li>• Results are based on a large sample of packs collected in various cities throughout the countries, although the 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>• Evidence is based on collected packs: no discrepancies or scope for respondent confusion</li> <li>• Data reflects actual overall non-domestic share and provides good snapshot of brands consumed</li> </ul>
<p><b>Process</b></p>	<p><b>Empty Pack Surveys measure shares of total consumption and avoids potential errors associated with estimating volumes</b></p> <ul style="list-style-type: none"> <li>• Once packs are collected, they are sorted by manufacturer and the number of packs with domestic versus non-domestic tax stamps are 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 define the source market</li> </ul> </li> <li>• In markets where collection is handled centrally, 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. Results of these analyses are not released to competitors</li> <li>• Empty Pack Surveys can also be used to extrapolate overall consumption in the market by projecting LDS (net of outflows) using the percentage of non-domestic cigarettes in the market as found through Empty Pack Surveys</li> </ul>
<p><b>Coverage</b></p>	<p><b>Empty Pack Surveys are designed to be fit for purpose and the coverage per market is tailored by the size of the market, the likelihood of high non-domestic incidence and PMI's share of the legal market</b></p> <ul style="list-style-type: none"> <li>• Large surveys (10,000 packs collected; all cities with over 100,000 inhabitants covered / at least 20 cities): France, Germany, Italy, Poland, Spain, UK</li> <li>• Medium surveys (5,000 packs collected, all cities with over 100,000 inhabitants or top 10 cities by population): Belgium, Czech Republic, Finland, Greece, Ireland, Lithuania, Netherlands, Portugal, Romania, Slovakia, Sweden <ul style="list-style-type: none"> <li>– note that in Austria the Empty Pack Survey is carried out by the Tobacco Manufacturers Association based on a sample over 20,000 packs. In Hungary, the Empty Pack Survey is carried out by the GfK Hungária Market Research Institute and is based on a sample of nearly 20,000 packs</li> </ul> </li> <li>• Small surveys (1,000 – 2,000 packs collected, top 4 – 5 cities covered): Bulgaria, Cyprus, Denmark, Estonia, Latvia, Luxembourg, Malta, Slovenia</li> </ul> <p><b>In 2008, Empty Pack Surveys were conducted in 25 of the 27 EU Member States</b></p> <ul style="list-style-type: none"> <li>• Data from 2006 results was used for Luxembourg and Malta</li> </ul>

# Primary information sources and tools – Empty Pack Surveys (2 of 3)

During the pilot phase, the advantages of using Empty Pack Survey results to monitor non-domestic consumption became clear

The case of Germany provides a good example of the benefits of this approach

German consumption gap estimates by source



Sources: (1) GfK consumption survey 2006  
 (2) Legal Domestic Sales – PMI In Market Sales, In Market Sales 2006 01; KPMG analysis  
 (3) German EPS market study 2005

### Implied EPS + LDS German consumption gap calculation

	Domestic	+	Non-domestic (consumption gap)	=	EPS implied consumption
% of packs collected	82.7%		17.3%		100%
cigarettes (bn) based on net LDS	85.6		17.9		103.5

### We believe that Empty Pack Survey provides the most reliable indicator of non-domestic consumption

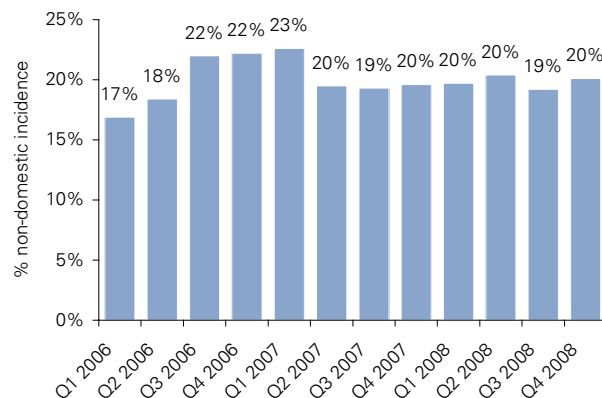
- The standalone consumption survey does not deliver a credible consumption result without a significant uplift for under-reporting (in the order of a further 15-20%)
  - estimates of consumption gap (i.e. the difference between legal sales and actual consumption) of 7 billion cigarettes for Germany from consumer research results alone was too low given external estimates of ND(L), C&C and results from border studies
- Econometric analysis provides corroboration of a significant growth in the consumption gap over the last few years
  - however, while this analysis can support the quantification of a gap, it would be dangerous to use it as the primary source
- Given consumption limitations, we believe that Empty Pack Surveys provide the most credible indicator of the incidence of non-domestic and illicit packs. Benefits of Empty Pack Surveys include;
  - less potential for non-sampling error (e.g. results are not distorted by behavioural error such as systematic under-reporting of consumption)
  - evidence based on physical collected packs so there are no discrepancies or potential for respondent confusion
  - reflects actual consumption and provides good snapshot of brands consumed
- Therefore, we have used the Empty Pack Survey results to derive a consumption gap for our analysis, and have focused on this estimate rather than those obtained from consumer research
  - Empty Pack Survey results for 2006 show that non-domestic purchases represented 17% of overall German consumption. As a result, the total consumption in 2006 is estimated at 103.5bn cigarettes, with a consumption gap of approximately 18bn cigarettes

# Primary information sources and tools – Empty Pack Surveys (3 of 3)

Empty Pack Surveys can provide a method for monitoring trends in individual markets

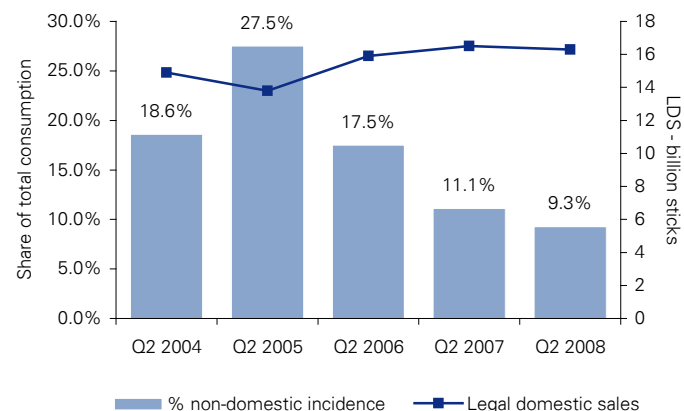
In countries where historical EPS data is available, there is a strong correlation between results and observed market trends in domestic sales and legal non-domestic flows

## Germany historical empty pack survey results



Source: "Yellow Bag" survey, an empty pack survey undertaken by the German Cigarette Industry Association (VDC), 2006 to 2007 and by TFT in 2008. Full PMI results were available along with total non-domestic market size

## Hungary historical Empty Pack Survey results



Source: GfK Empty Pack Surveys, 2004 to 2008

## The low level of variance in German results highlights the validity of using Empty Pack Surveys to monitor trends in cigarette consumption

- Empty Pack Surveys based on the Yellow Bag approach are conducted in Germany on an ongoing basis using the country's network of recycling centres
- Packs are collected monthly, with the results released on a quarterly basis
- The emergence and strength of the trend for increased non-domestic consumption has been apparent in each survey at both national and regional levels

## There is a strong correlation between changes in the German results and other sources including legal domestic sales, PMI shipment data and the observations of government bodies with respect to cross border flows

- Underlying trends in terms of country of origin and brand of cigarette are consistent with expectations and corroborated by external sources

## Empty Pack Surveys conducted in Hungary have identified and quantified the rise and subsequent fall in non-domestic incidence since 2004

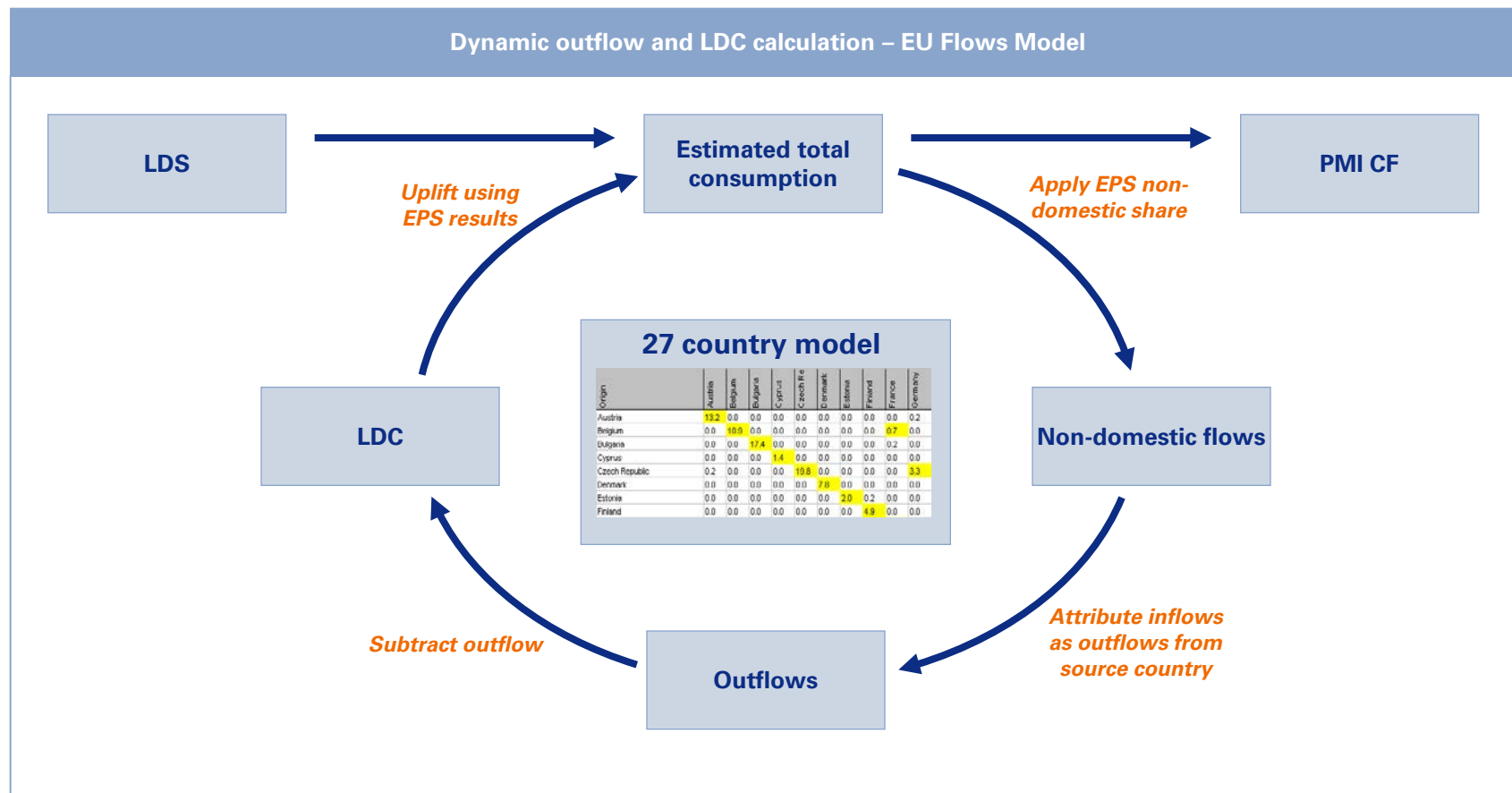
- The increase in non-domestic incidence to 2005 corresponded with an increase in excise taxes of 93.5% between 2002 and 2004
  - the impact of this tax change was a price increase of 63%
- In 2006, increased domestic sales and stricter border controls corresponded to a significant decline in non-domestic incidence
  - new enforcement measures implemented by Hungarian Customs included tightened border controls, vehicle confiscation powers, additional sniffer dogs and increasing the administrative burden of importing cigarettes from Romania

## EPS results from Q2 2007 and Q2 2008 show a continued decline in non-domestic incidence

- This reduction is in line with the understanding of Hungarian Customs. Changes in border controls may have contributed to lower non-domestic flows in the past two years
  - for example, in 2008 individuals bringing in more than 40 cigarettes to Hungary were required to complete a declaration for the cigarettes imported
- The fall in non-domestic consumption from 2006 to 2008 is also corroborated by trends in legal domestic sales and PMI shipment data

# Primary information sources and tools – EU Flows Model

We have built a dynamic, iterative model based primarily on objective evidence from legal domestic sales and empty pack survey results



**The EU Flows Model is a dynamic, iterative model that is principally based on legal domestic sales and empty pack survey results**

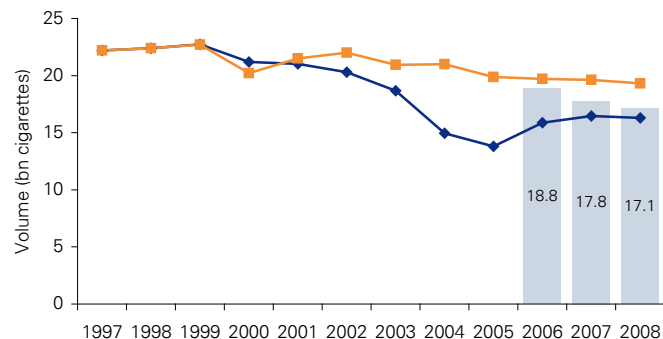
- Legal domestic sales are the starting point of the model from which outflows of legal sales to other countries are then subtracted to determine legal domestic consumption in a market
- EPS results provide a measurement of the share of non-domestic packs by country of origin in all markets
  - EPS results provide a consistent source across all 27 markets of non-domestic packs by country of origin from which we can calculate total product outflow from each market to the other 26 markets
- We have then iterated the model to refine estimates for legal domestic consumption



# Primary information sources and tools - consumption modelling

Historic GCTS consumption index analysis was added to the methodology to provide a further means of corroborating changes in consumption and net outflows

Example of historic GCTS consumption index modelling for Hungary 1997-2008<sup>(1)(2)(3)</sup>



CAGR (%)	1997-2003	2003-2005	2005-2007	2007-2008
■ LDS	(2.8)%	(14.1)%	9.3%	(1.0)%
■ KPMG consumption index	(1.0)%	(2.6)%	(0.6)%	(1.7)%
■ KPMG consumption estimate	n/a	n/a	n/a	(3.7)%

Sources: (1) KPMG Consumption Index model  
 (2) In Market Sales supplied by PMI  
 (3) KPMG EU Flows Model

## Historic GCTS data can provide a helpful indicator of market trends to corroborate the extent of non-domestic consumption in a market

- The rate of change in the GCTS smoking prevalence and average smoking volume figures provide a useful indication of observed changes in smoking habits. However, GCTS data cannot be used to quantify total consumption in a market due to exclusions of particular age cohorts and the problem of under-reporting of consumption
- The KPMG consumption index is calculated using the incidence of smoking and the average daily consumption (both from GCTS) and the population of each market (from OEF)
  - these figures are then indexed to the earliest year for which both GCTS and LDS data are available, in most cases 1997
- If LDS trends differ from those shown by the consumption index, it implies that the relationships between inflows, outflows and domestic consumption have changed over the analysed period

## Please note that consumption modelling can only identify market trends and cannot be used to quantify total consumption

- Comparing consumption and sales trends helps to understand market direction and its likely inflow/outflow status. However, it will not identify any consumption gap that is present at the start of the period
  - the gap between indexed consumption and LDS in the final year is therefore only a broad indication of the extent to which the market has changed over the analysed period
  - in many markets, some level of inflows or outflows are likely to be present in the first analysed year
- Any changes in GCTS (methodology, supplier, sample size and selection, etc.) will also have an impact on the conclusions generated

## Primary information sources and tools – non-domestic (legal) analysis (1 of 2)

**Primary market research was conducted to quantify legal purchases of non-domestic cigarettes by a Member State's inhabitants**

**During 2008, research was updated in 21 key markets**

### Approach

- Our approach was to measure the number and volume of tobacco purchase occasions from a complete, nationally representative sample of males and females, aged 19 years and over who have travelled abroad in the past 12 months
  - these results were then weighted and projected by age and gender to a national level to estimate the volume of legal non-domestic cigarettes brought back into each market by travellers returning from overseas
  - during 2008 research was updated in 21 markets

### Sample

- The sample was drawn from the most complete, nationally representative database available and was representative of both urban and rural areas, age and gender
  - a fully random sample approach was used to ensure results were as 'certifiable' as possible and could be projected to the total target population
- A target of 7,000 gross contacts (i.e. agreed to be interviewed and aged 19 years and over) or 500 net contacts (i.e. travelled abroad and purchased tobacco products in the past year) was set
  - these targets were considered sufficient to derive accurate volume estimates once projected to the national population and set based on past experience from the research agencies and findings from the pilot process
  - the target was achieved in all markets except Romania
- For France and Germany the number of net contacts was increased to 1,000 in 2008 to improve accuracy of volume estimates

### Data collection

- Computer Aided Telephone Interviewing (CATI) was the data collection method in each market except for Latvia which used pen and paper data collection
- The interview script was consistent across all markets, translated into local language and back translated into English for quality control purposes

### Validation tools

- Numerous validation tools were built into the script to enhance the accuracy of responses, for example
  - respondents were asked to recall all trips abroad in the past year and purchase volumes and brands for each trip
  - for each trip, the purpose of visit was also recorded to ensure final results appear logical and within a reasonable range

### Results capping

- To ensure that we were recording legal personal purchases only, results were capped at an individual respondent level
  - total annual purchases were limited to a maximum of 1,000 packs per person as this was considered the absolute upper level for a heavy smoker who makes all of their purchases abroad
  - purchases from non-EU destinations were limited to a maximum of 10 packs per trip in line with Duty Free purchase restrictions
  - purchases were also capped for intra-EU purchases where limits are enforced

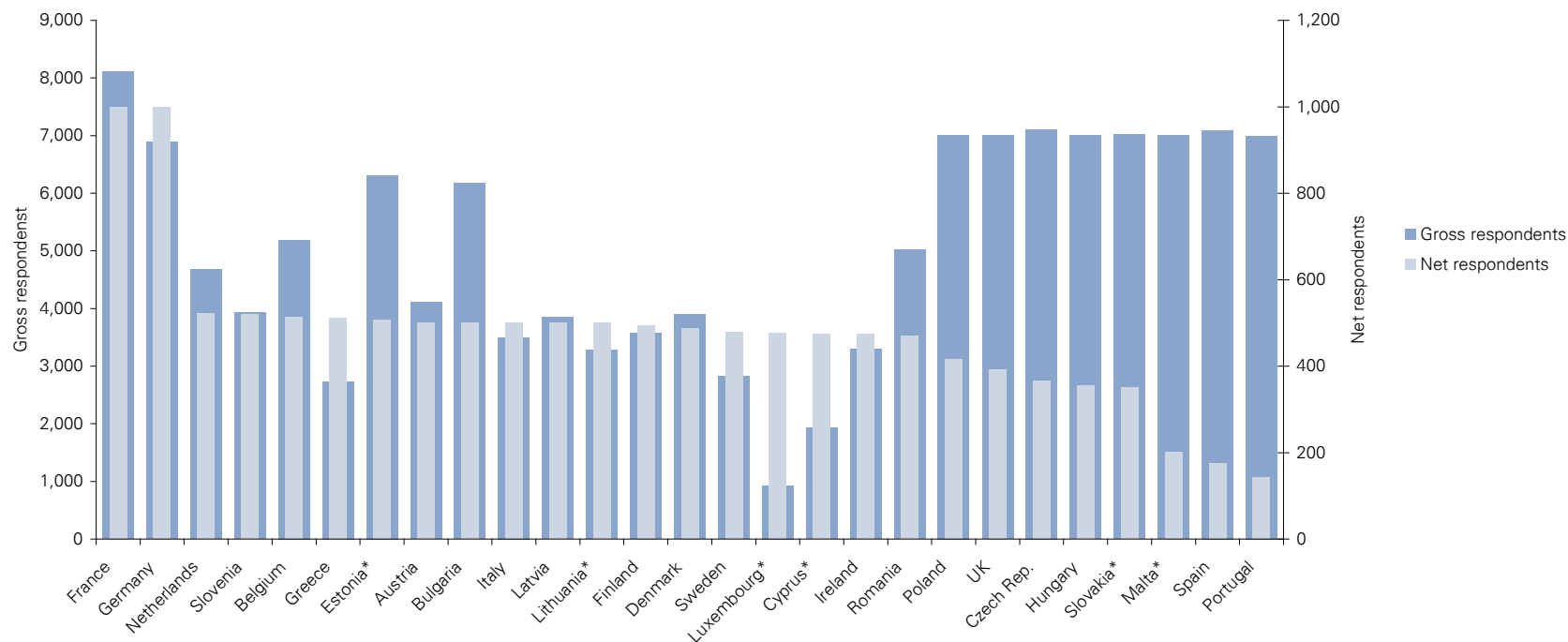
# Primary information sources and tools – non-domestic (legal) analysis (2 of 2)

The project has involved an extensive primary research programme

ND(L) for Project Star results in 2008 is based upon over 12,800 full interviews and over 136,000 gross respondents carried out during the second halves of 2006, 2007 and 2008

ND(L) data is also adjusted to reflect inbound visitor inflows

Gross versus net respondents by country, 2008



Note: \* indicates research not updated in 2008

## The key objective of the market research programme is to quantify genuine, legal non-domestic tobacco purchases in each market

- The 2008 market research programme incorporated an extensive interview programme across the 21 markets, using recognised market research specialists AC Nielsen and Synovate
  - research for the remaining 6 Member States was conducted during 2006 or 2007 by either AC Nielsen or Synovate
- ND(L) data for countries where research was not carried out during 2008 was updated in line with overall non-domestic trends for each country
  - in some examples further adjustments were made on the basis of additional corroborating data
- In the EU 27 countries, ND(L) results are based on a total of 136,440 contacted respondents and 12,824 successful interviews with adults (age 19+) who had travelled abroad and purchased tobacco products in the preceding twelve months.

## In addition to the research programme, ND(L) data is adjusted to reflect inbound visitor inflows

- Non-domestic product found in Empty Pack Surveys from high cost inbound tourist /visitor countries is likely to represent an incidental inflow and is therefore categorised as legal
  - flows attributable to inbound tourism and visitors can not be identified in the market research programme
  - adjustments to reflect inbound tourism/visitors total 3.3 billion cigarettes in 2008

# Primary information sources and tools – brand share validation

A combination of two brand share calculation methodologies, combined with IMS / ND(L) analysis and applied with market understanding and judgment in case of substantial variances, ensures the most robust brand-level results

Methodology comparison		
	Methodology one	Methodology two
<b>Description</b>	Brand share of total non-domestic x Total consumption gap	Non-domestic share of brand x Domestic sales by brand
<b>Key assumption</b>	<ul style="list-style-type: none"> <li>Brand share of non-domestic in the EPS is representative of the national picture               <ul style="list-style-type: none"> <li>any overstatement of domestic share of premium brands in EPS is not reflected in their non-domestic shares</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Non-domestic share of a brand in the EPS is representative of the national picture               <ul style="list-style-type: none"> <li>any overstatement of premium brands' domestic and non-domestic share is proportional</li> </ul> </li> </ul>
<b>Strengths</b>	<ul style="list-style-type: none"> <li>Brand totals tally to overall total of non-domestic</li> <li>Can track flows by brand and country</li> <li>Can calculate non-domestic volumes where no legal sales are present</li> </ul>	<ul style="list-style-type: none"> <li>More robust for brands which are overweight in the EPS samples at a non-domestic brand share level</li> </ul>
<b>Limitations</b>	<ul style="list-style-type: none"> <li>Some potential to overstate premium brands due to concentration on cities in EPS</li> <li>Small IMS share / large EPS share discrepancies</li> </ul>	<ul style="list-style-type: none"> <li>Totals by brand will not necessarily match total overall               <ul style="list-style-type: none"> <li>most effective as an estimate of share of non-domestic for major brands</li> </ul> </li> <li>Small IMS share / high EPS non-domestic level discrepancies</li> </ul>

## Two parallel methodologies for calculating non-domestic brand share were used to ensure that the most reliable and realistic results were achieved

- While results at an overall market level were all highly robust and credible, smaller sample sizes at a brand level have the potential to introduce distortions at this lower level
- In order to maximise the accuracy of brand results, a dual methodology was used to estimate non-domestic brand-level results in each markets
- The results from both approaches were then compared to both IMS and ND(L) brand results for corroboration
- In almost all markets and for the vast majority of brands the results for the two approaches were highly consistent
- In a few markets there were some brand-level discrepancies. In these markets, adjustments were made based on the weight of evidence from both approaches and the IMS and ND(L) findings to determine the most credible non-domestic brand share

## Brand share methodology two was used in a limited number of instances to ensure that the results were both as reliable and realistic as possible

- Methodology one is the most universally applicable and was therefore used where both approaches were consistent. Where an adjustment from methodology one was required, a combination of both approaches or methodology two was applied as appropriate
- For Marlboro inflows in a few countries, a combination of both approaches or methodology two was used as it appears to give more reliable and robust results
  - methodology two was used for Marlboro in France, Ireland and UK
  - a combination of both approaches was used for Marlboro in Denmark and Spain

# Primary information sources and tools – external public research and expert interviews

Analysis of external data sources has provided significant cross-validation of our research results

Although the interview programme delivered good circumstantial supporting evidence for our findings, interviews were not effective in delivering consistent and accurate estimates for the quantum of contraband and counterfeit

## External public research

- We have undertaken extensive research into external data sources in each of the 27 EU markets
- Research covered a wide variety of data sources, including:
  - third party information available within PMI
  - press articles
  - retail trade and tobacco industry associations
  - universities and other academic institutions
  - ministries of health and social affairs
  - customs departments
  - other government and policy-making institutions
  - market research publications
  - industry related journals and publications
  - federal statistics
- We have reviewed, collated and used the information available to cross-check and test our research results
  - we tested the reasonableness of our research results against a range of quantitative estimates obtained on the size and scale of C&C in each market

## Expert interviews

- In addition, we have undertaken structured interviews with industry specialists to canvas their opinions on C&C in each of the 27 EU markets where possible
- Our contacts were identified from multiple sources, including:
  - PMI recommendations
  - OLAF recommendations
  - KPMG external search
  - other interviewee recommendations
- We have interviewed specialists across a broad spectrum of areas and backgrounds, including:
  - governmental and policy-making organisations
  - academic research institutes
  - trade and industry associations
  - PMI management, both centrally and at a country level
- We devised a structured interview process for each interview category which underwent multiple iterations to ensure consistency and accuracy of both questioning and capturing results

## Conclusions

- Analysis of external research has been highly effective in:
  - improving our understanding of local market dynamics, trends and the nature of C&C in each country
  - facilitating our judgement on the potential limitations of our findings
- However, external data is not sufficiently detailed on its own to obtain a credible estimate of the size and scale of C&C as:
  - basis for estimates is often unknown and may not be objective
  - data sources and estimates across countries lack consistency
  - data is often sparse and patchy
- External expert interview programme has provided good soft corroboration of trends and issues
  - however, it has been less effective in delivering quantitative results

- Project overview and timing
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# Overview

**We have designed a methodology that is as robust and inclusive as we believe could practicably have been delivered**

**However, given the innate complexity of C&C, our methodology does have limitations**

## Scope limitations

- There are specific scope exclusions which cannot be or have not been accounted for in our approach:
  - geographic exclusions
  - brand exclusions – non-PMI counterfeit
  - category exclusions – OTP
  - LDS product flows out of the EU

## Source limitations

- Limitations are, of necessity, present with any primary information sources
- This primarily affects EPS, LDS and ND(L) sources
- For example, limitations can arise from
  - sampling criteria
  - coverage issues
  - timing/seasonality factors
  - specific regional or demographic exclusions

**Our methodology has certain specific scope limitations**

Limitation	Detail	Impact	Adjustment
<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), shipment 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</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</li> </ul>	Not adjusted for
<b>Non-PMI counterfeit</b>	<ul style="list-style-type: none"> <li>Empty pack survey results do not identify non-PMI brand counterfeit packs                             <ul style="list-style-type: none"> <li>only the manufacturer / trademark owner can confirm whether their brand pack is genuine</li> </ul> </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 are identified                             <ul style="list-style-type: none"> <li>this may lead to minimal understatements of C&amp;C volumes for non-PMI brands</li> </ul> </li> <li>Moreover, we cannot distinguish between non-PMI brand counterfeit (non-domestic variants) and contraband product, although this will not impact the overall volume of C&amp;C</li> </ul>	Not adjusted for
<b>OTP</b>	<ul style="list-style-type: none"> <li>Empty Pack Surveys collect cigarette packs only                             <ul style="list-style-type: none"> <li>non-domestic consumption for OTP cannot be measured via empty pack survey results</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Anecdotal evidence suggests that there do exist some non-domestic flows of OTP within the EU. However, based on extensive interviews, seizure data and analysis of other available information, the scale of non-domestic OTP consumption is believed to be limited when compared to manufactured cigarettes</li> <li>Although precise C&amp;C volumes for OTP are not available we have used domestic legal sales of OTP, seizure data and in market interviews to identify trends consistent with growth in C&amp;C inflows                             <ul style="list-style-type: none"> <li>these trends are identified in the relevant country section where appropriate</li> </ul> </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 EU, with the exception of Sweden (see country-specific refinements)</li> </ul>	<ul style="list-style-type: none"> <li>Net outflows besides Sweden are believed to be minimal, supported by anecdotal evidence from non-EU EPS surveys (including Switzerland and Turkey)</li> <li>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</li> <li>Potential minimal overstatement of EU consumption</li> </ul>	Partially adjusted for



## Source limitations (1 of 2)

Although there are limitations to any source, we are comfortable that we have used the most appropriate sources available

Source	Limitations
<b>Empty Pack Surveys</b>	<ul style="list-style-type: none"> <li>● In some geographies, the results may not be absolutely representative of total consumption because of the sample size, or, more likely, practical limitations to collection locations                             <ul style="list-style-type: none"> <li>– depending on the source of packs collected, either homes and workplaces or public spaces (in Germany) are not covered</li> <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> </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</li> <li>● Empty Pack Surveys are only conducted at set periods and results may be influenced by seasonal factors such as tourist inflow                             <ul style="list-style-type: none"> <li>– in some instances the timing of an EPS has changed between 2007 and 2008. 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                             <ul style="list-style-type: none"> <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</li> <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> <li>● However, EPS represents the most consistent source of non-domestic share across markets. We believe, especially at a total market level, that these results are credible and robust. Brand trends and analysis of country flows from EPS results further supports this conclusion</li> <li>● When allied to other methods of corroboration, such as consumption index modelling, we believe the results are fully fit for purpose</li> </ul>
<b>Legal domestic sales</b>	<ul style="list-style-type: none"> <li>● Shipment data is the most reliable source for legal domestic sales in a market. However, in some markets it is not available. In the absence of shipment data, we have used either AC Nielsen Retail Audit data or tax stamp data as available                             <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 PMI management to be the most representative of smoker consumption during the calendar year</li> </ul> </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, PMI local management have calculated the 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 of full year 2008 sales in each market</li> </ul>

## Source limitations (2 of 2)

Although there are limitations to any source, we are comfortable that we have used the most appropriate sources available

Source	Limitation
ND(L)	<ul style="list-style-type: none"> <li>As with any CATI-based market research approach, our samples may potentially exclude certain demographic segments, in particular, those without a permanent home, registered address or telephone line</li> <li>The nature of the market research programme requires that people can recall, with a high degree of accuracy, trip and purchase volumes undertaken over the past year. However, pilot and roll-out results give us confidence that this is not a significant issue for respondents</li> <li>Respondents are asked to recall purchase volumes in packs and we assume 20 cigarettes per pack for our pack to cigarette conversion</li> <li>To ensure that we record legal imports only, we have capped total individual purchases and applied a cap to imports from certain source countries where import restrictions apply</li> <li>Due to the nature of the survey, market research does not capture non-domestic (legal) product arising from inbound tourism. However, these flows are likely to be limited in nature and, in many cases, can be adjusted within the ND(L) methodology through the use of corroborating sources</li> <li>It is not possible to reliably distinguish between Duty Free and Duty Paid variant in the ND(L) research due to the consumer confusion when buying cigarettes abroad, particularly in airports when travelling intra-EU. We have however attempted to estimate legal Duty Free purchases by using ND(L) inflows from non-EU markets as an approximation. This approach assumes that EU nationals purchase Duty Free variants when they travel to non-EU markets and buy cigarettes as measured by the ND(L) research                         <ul style="list-style-type: none"> <li>this assumption is predicated on the fact that Duty Free variants are typically available at a lower prices than legal tax-paid cigarettes in non-EU destination countries</li> </ul> </li> </ul>

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## Country results refinements (1 of 5)

We have made specific modifications where required to refine our results at a country level

Country	Rationale	Description	Impact
<b>Belgium</b>	<ul style="list-style-type: none"> <li>Implied inflows of the Belga brand from Luxembourg and Spain appear to be overstated               <ul style="list-style-type: none"> <li>inflow volumes exceed legal sales of Belga in Luxembourg and Spain</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Belga flows from Luxembourg and Spain have been reduced to reflect actual sales in these countries</li> </ul>	<ul style="list-style-type: none"> <li>Inflows from Luxembourg and total non-domestic inflows reduced by 0.7 billion cigarettes</li> <li>Inflows from Spain and total non-domestic inflows reduced by 0.2 billion cigarettes</li> </ul>
<b>Denmark</b>	<ul style="list-style-type: none"> <li>Implied Swedish flows appear to be overstated in the 2008 EPS results</li> </ul>	<ul style="list-style-type: none"> <li>EPS results suggests Swedish inflows doubled to 0.2 billion cigarettes in 2008, which is not supported by analysis of brands, relative prices between Sweden and Denmark, traveller and migrant data</li> <li>Swedish inflows assumed to have remained stable from 2007 to 2008 at 0.1 billion cigarettes based on relative prices, traveller data and analysis of migration patterns</li> </ul>	<ul style="list-style-type: none"> <li>Swedish inflows and total non-domestic inflows reduced by 0.1 billion cigarettes</li> </ul>
<b>Finland</b>	<ul style="list-style-type: none"> <li>Implied EPS inflows from Russia appear to be understated given relative pricing and cross border travel statistics for 2008</li> </ul>	<ul style="list-style-type: none"> <li>Cross border travel statistics for 2008 do not indicate a decline in travel to and from Russia</li> <li>The fall in Russian inflows was driven by lower incidence of L&amp;M</li> <li>Russian inflows uplifted by 0.6 billion cigarettes to 0.9 billion cigarettes in line with Project Star 2007 estimate</li> </ul>	<ul style="list-style-type: none"> <li>Russian inflows and total non-domestic inflows increased by 0.6 billion</li> </ul>

## Country results refinements (2 of 5)

We have made specific modifications where required to refine our results at a country level

Country	Rationale	Description	Impact
<b>France inflows</b>	<ul style="list-style-type: none"> <li>Non-domestic volumes of Spanish and Duty Free variant inflows appear to be overstated in 2008 EPS results <ul style="list-style-type: none"> <li>the increase in Spanish inflows was predominantly driven by high Spanish non-domestic incidence in Pau (57.0%) and Perpignan (56.9%) compared to other regions in the South West of France (18.9%)</li> <li>the increase in Duty Free inflows was not supported by trends in traveller data or ND(L) research</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Spanish inflows reduced by 0.7bn cigarettes <ul style="list-style-type: none"> <li>this adjustment reduces Spanish non-domestic levels in Pau and Perpignan to reflect Spanish non-domestic level in South West France</li> </ul> </li> <li>Duty Free inflows reduced by 1.6 billion cigarettes <ul style="list-style-type: none"> <li>as an increase in Duty Free volumes was not supported by analysis of travel data or ND(L) research. Duty Free volumes were reduced to maintain a stable total consumption trend in 2008</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Total non-domestic inflows reduced by 2.3 billion cigarettes comprising a reduction of 0.7 billion cigarettes in Spanish inflows and 1.6 billion in Duty Free inflows</li> </ul>
<b>France brand share</b>	<ul style="list-style-type: none"> <li>Non-domestic Marlboro brand share appears to be overstated</li> </ul>	<ul style="list-style-type: none"> <li>Brand share methodology two has been used which is more in line with ND(L) results and domestic brand share</li> </ul>	<ul style="list-style-type: none"> <li>Methodology two brand share applied to total non-domestic volume for Marlboro</li> <li>Adjustments made to "Other non-PMI" to compensate for changes to Marlboro volumes</li> </ul>
<b>Germany</b>	<ul style="list-style-type: none"> <li>Implied trend of inflows from Poland appear to be overstated in the 2008 Yellow Bag results <ul style="list-style-type: none"> <li>analysis of sales in the Polish and German border regions shows a decline in 2008, which does not support an increase in Polish inflows</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>A reduction in Polish flows by 0.5 billion cigarettes in 2008 was made based on border sales trends <ul style="list-style-type: none"> <li>the rate of decline in PMI sales from 2007-2008 in Poznan (Polish-German border region) was 3.3 percentage points higher than the national sales decline (excluding Poznan)</li> <li>based on the assumption that the greater decline in the border region was driven by lower outflows to Germany, Polish inflows have been adjusted downwards</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Polish inflows and total non-domestic inflows reduced by 0.5 billion cigarettes</li> </ul>

## Country results refinements (3 of 5)

We have made specific modifications where required to refine our results at a country level

Country	Rationale	Description	Impact
<b>Ireland inflows</b>	<ul style="list-style-type: none"> <li>Spanish legal sales of UK/Irish brands suggest there is a shortfall in outflows to Ireland as measured by the Irish EPS</li> </ul>	<ul style="list-style-type: none"> <li>See Spain for detail</li> <li>Inflows from Spain uplifted by 0.3 billion cigarettes</li> </ul>	<ul style="list-style-type: none"> <li>Non-domestic Duty Free reallocated to Spanish non-domestic</li> <li>Total non-domestic level unchanged</li> </ul>
<b>Ireland brand share</b>	<ul style="list-style-type: none"> <li>Non-domestic Marlboro brand share appears to be overstated</li> </ul>	<ul style="list-style-type: none"> <li>Brand share methodology two has been used which is more in line with ND(L) results and domestic brand share</li> </ul>	<ul style="list-style-type: none"> <li>Methodology two brand share applied to total non-domestic volume for Marlboro</li> <li>Adjustments made to "Other non-PMI" to compensate for changes to Marlboro volumes</li> </ul>
<b>Italy</b>	<ul style="list-style-type: none"> <li>Implied inflows from Slovenia in the 2008 EPS results appear to be understated given relative pricing, increased import allowances and border sale analysis</li> </ul>	<ul style="list-style-type: none"> <li>Slovenian inflows uplifted by 0.1 billion cigarettes to 0.2 billion cigarettes to reflect the observed border sales trend               <ul style="list-style-type: none"> <li>analysis of sales trends of the main Italian wholesaler in the Italian and Slovenian border region indicates a 33% decline in sales volumes from 2007 to 2008. It has been assumed that the decline in sales on the Italian side of border has been replaced by inflows from Slovenia</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Inflows from Slovenia and total non-domestic inflows increased by 0.1 billion cigarettes</li> </ul>
<b>Latvia</b>	<ul style="list-style-type: none"> <li>Implied inflows from Lithuania in the 2008 EPS results appear to be understated given relative pricing and border sale analysis</li> </ul>	<ul style="list-style-type: none"> <li>Lithuanian inflows uplifted by 0.11 billion cigarettes to 0.12 billion cigarettes to reflect the observed sales trend in Lithuania on the Latvian border region</li> </ul>	<ul style="list-style-type: none"> <li>Inflows from Lithuania and total non-domestic inflows increased by 0.11 billion cigarettes</li> </ul>

## Country results refinements (4 of 5)

We have made specific modifications where required to refine our results at a country level

Country	Rationale	Description	Impact
<b>Luxembourg</b>	<ul style="list-style-type: none"> <li>Outflows of legal domestic sales are not accurately captured in destination market EPS resulting in unrealistic implied consumption trend</li> </ul>	<ul style="list-style-type: none"> <li>Decrease in legal sales in Luxembourg in 2007 reflects lower outflows rather than a decline in domestic consumption</li> <li>Net outflow (modelled to outside of the EU) decreased from 2.2 billion cigarettes in 2007 to 1.9 billion in 2008</li> </ul>	<ul style="list-style-type: none"> <li>Net reduction in outflows</li> </ul>
<b>Portugal</b>	<ul style="list-style-type: none"> <li>Implied inflows from Spain in the 2008 EPS results appear to be understated given relative pricing and border sales analysis</li> </ul>	<ul style="list-style-type: none"> <li>Spanish inflows uplifted by 0.3 billion cigarettes to 0.5 billion cigarettes to reflect the observed legal sales trend in Spain in the Portuguese border regions</li> </ul>	<ul style="list-style-type: none"> <li>Spanish inflows and total non-domestic inflows uplifted by 0.3 billion cigarettes</li> </ul>
<b>Slovenia</b>	<ul style="list-style-type: none"> <li>2008 EPS results indicated a significant increase in inflows of the Boss brand from Bosnia and Herzegovina which was not corroborated by a corresponding decline in legal sales</li> <li>Implied inflows from Croatia in the 2008 EPS results appear to be overstated given the relative pricing differential and timing of the EPS at the end of the tourist season</li> </ul>	<ul style="list-style-type: none"> <li>Inflows of the Boss brand from Bosnia and Herzegovina adjusted downwards by 0.1 billion cigarettes <ul style="list-style-type: none"> <li>this adjustment reflects the decline of legal domestic sales of the Boss brand in Slovenia</li> </ul> </li> <li>Croatian inflows adjusted downwards to reflect Croatia remaining a relatively more expensive market in 2008 <ul style="list-style-type: none"> <li>inflows reduced by 0.1 billion cigarettes to be in line with 2007 results</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Total non-domestic inflows reduced by 0.2 billion cigarettes</li> </ul>

## Country results refinements (5 of 5)

We have made specific modifications where required to refine our results at a country level

Country	Rationale	Description	Impact
<b>Spain</b>	<ul style="list-style-type: none"> <li>Analysis of Spanish legal sales of UK/Irish brands suggests there is a shortfall in outflows to the UK and Ireland as measured by the UK and Irish EPS</li> <li>Non-domestic volumes of Spanish inflows appear to be understated in Portuguese 2008 EPS results given relative pricing and border sale analysis</li> <li>Non-domestic volumes of Spanish inflows appear to be overstated in French 2008 EPS results</li> </ul>	<ul style="list-style-type: none"> <li>Outflows to the UK and Ireland increased to reflect sales of UK/Irish brands in Spain and non-domestic incidence of other brands found in the EPS net of estimated consumption by UK and Irish nationals resident in Spain and tourist consumption whilst in Spain</li> <li>Outflows to France reduced, see France for detail</li> <li>Outflows to Portugal increased, see Portugal for detail</li> </ul>	<ul style="list-style-type: none"> <li>Spanish outflows increased resulting in a net reduction in consumption and therefore total C&amp;C volume</li> </ul>
<b>UK brand share</b>	<ul style="list-style-type: none"> <li>Non-domestic Marlboro brand share appears to be overstated</li> </ul>	<ul style="list-style-type: none"> <li>Brand share methodology two has been used which is more in line with ND(L) results and domestic brand share</li> </ul>	<ul style="list-style-type: none"> <li>Methodology two brand share applied to total non-domestic volume for Marlboro</li> <li>Adjustments made to key Virginia brands to compensate for changes to Marlboro volumes</li> </ul>
<b>UK inflows</b>	<ul style="list-style-type: none"> <li>Spanish legal sales of UK/Irish brands suggest there is a shortfall in outflows to the UK as measured by the UK EPS</li> <li>Implied EPS inflows from Cyprus appear to be understated given 2008 tourism statistics</li> </ul>	<ul style="list-style-type: none"> <li>For Spanish flows, see Spain for detail <ul style="list-style-type: none"> <li>inflows from Spain uplifted by 2.0 billion cigarettes</li> </ul> </li> <li>Inflows from Cyprus increased by 0.1 billion cigarettes to reflect the 2007-2008 trend in UK tourists arriving in Cyprus</li> <li>Non-domestic Duty Free reallocated to Spanish and Cyprus non-domestic</li> </ul>	<ul style="list-style-type: none"> <li>Non-domestic Duty Free volumes reallocated to Spanish non-domestic</li> <li>Total non-domestic level unchanged</li> </ul>



# Adjustments to non-domestic (legal) research (1 of 2)

A limited number of adjustments to ND(L) results have been made on the basis of corroborating evidence

The net impact of these adjustments in a 1.4 billion cigarettes reallocation from C&C to ND(L)

Non-domestic (legal) results validation process	
Nature of adjustment	Impact
<p><b>Corroboration with total non-domestic volumes</b></p> <ul style="list-style-type: none"> <li>Some discrepancies may exist between the ND(L) data and total non-domestic volumes which leads to a negative C&amp;C level</li> </ul>	<ul style="list-style-type: none"> <li>Netherlands to Germany flow: reallocation of 0.9 billion cigarettes from ND(L) to C&amp;C           <ul style="list-style-type: none"> <li>ND(L) research overstated flows from Netherlands. Volumes capped at total non-domestic inflows from the Netherlands, resulting in a reduction of total ND(L) volumes to 9.4 billion cigarettes compared with an original total of 10.3 billion</li> </ul> </li> </ul>
<p><b>Review of key indicators for specific flows</b></p> <ul style="list-style-type: none"> <li>Results for a small number of flows into various destination countries suggested over/under reporting of pack purchases given the price differentials between the source and destination markets</li> </ul>	<ul style="list-style-type: none"> <li>Poland: reallocation of 0.7 billion cigarettes from ND(L) to C&amp;C           <ul style="list-style-type: none"> <li>ND(L) research overstated flows from more expensive EU countries. ND(L) volumes from these more expensive countries capped at ten packs per trip from those countries based on observed purchasing behaviour on other key shopping routes with similar price differentials between markets</li> </ul> </li> <li>Romania: reallocation of 1.7 billion cigarettes from ND(L) to C&amp;C           <ul style="list-style-type: none"> <li>ND(L) research overstated flows from more expensive EU countries. ND(L) volumes from these more expensive countries capped at ten packs per trip from those countries based on observed purchasing behaviour on other key shopping routes with similar price differentials between markets</li> </ul> </li> <li>Russia to Finland flow: 0.2 billion cigarette reallocation from C&amp;C to ND(L)           <ul style="list-style-type: none"> <li>average packs purchased by smokers very low at one pack per trip given significant price savings available (€3.45 per pack of Marlboro)</li> <li>average packs per trip increased to ten in line with import allowance</li> </ul> </li> </ul>
<p><b>Cross referencing with tourist and border crossing data</b></p> <ul style="list-style-type: none"> <li>Number of trips made is a key driver of ND(L) volumes, particularly where there is a large differential between cigarette pricing and stringent import restrictions between neighbouring countries</li> </ul>	<ul style="list-style-type: none"> <li>Poland to Germany flow: 1.5 billion cigarette reallocation from C&amp;C to ND(L)           <ul style="list-style-type: none"> <li>visitor numbers reported during research programme understated versus actual data</li> <li>flow volume recalculated based on actual visitor numbers and average packs per trip data from survey</li> </ul> </li> <li>Czech Republic to German flow: 2.1 billion cigarette reallocation from C&amp;C to ND(L)           <ul style="list-style-type: none"> <li>visitor numbers reported during research programme understated versus actual data</li> <li>flow volume recalculated based on actual visitor numbers and average packs per trip data from survey</li> </ul> </li> <li>Spain to UK flow: 0.3 billion cigarette reallocation from C&amp;C to ND(L)           <ul style="list-style-type: none"> <li>visitor numbers reported during research programme understated versus actual data</li> <li>flow volume recalculated based on actual visitor numbers and average packs per trip data from survey</li> </ul> </li> </ul>

## Adjustments to non-domestic (legal) research (2 of 2)

A limited number of adjustments to ND(L) results have been made on the basis of corroborating evidence

The net impact of these adjustments in a 1.4 billion cigarettes reallocation from C&C to ND(L)

Non-domestic (legal) results validation process	
Nature of adjustment	Impact
<p><b>Cross referencing with tourist and border crossing data</b></p> <ul style="list-style-type: none"> <li>Number of trips made is a key driver of ND(L) volumes, particularly where there is a large differential between cigarette pricing and stringent import restrictions between neighbouring countries</li> </ul>	<ul style="list-style-type: none"> <li>Slovenia to Austria flow: 0.4 billion cigarette reallocation from C&amp;C to ND(L)           <ul style="list-style-type: none"> <li>visitor numbers reported during research programme understated versus actual data and local market observations of legal inflows</li> <li>flow volume recalculated based on the assumption that C&amp;C volumes from Slovenia remained stable in 2008</li> </ul> </li> <li>Hungary to Austria flow: 0.3 billion cigarette reallocation from C&amp;C to ND(L)           <ul style="list-style-type: none"> <li>visitor numbers reported during research programme understated versus actual data and local market observations of legal inflows</li> <li>flow volume recalculated based on the assumption that C&amp;C volumes from Hungary remained stable in 2008</li> </ul> </li> </ul>

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## External data sources (1 of 2)

**Our assessment incorporates analysis from several sources**

### Other sources

- "Association of Producers and Traders of Tobacco estimates as quoted in "Share of Contraband Cigarettes on Bulgarian Market Is 15%", Bulgaria News Agency, Nov 2008
- Attitudes of Europeans towards tobacco, Eurobarometer, 2006
- Austrian Chamber of Commerce Empty Pack Survey, 2006-2008
- BAT press release "incidence of Duty-not-paid cigarettes in Latvia double since 2007" (Lithuania)
- "BGN 150 million lost from illegal cigarette trade, PARI Daily, 6th June 2007 (Bulgaria)
- "Bulgaria losses BGN 180 M from illegal cigarettes", Trud Daily, 24th September 2007
- Cigarette import information, Hungarian Customs and Finance Guard website, accessed April 2009
- "Cigarette sales seen down 3.0 – 5.0 pct on smoking ban in Germany", German News Digest, 11th April 2008
- "Control Coincidental del Consumo de Tabacco", ASM Grupo, 2008 (Spain)
- Dutch Tobacco Manufacturers Association Empty Pack Survey 2008 provided by PM Netherlands
- Estimates of Member State population, Oxford Economic Forecasting, retrieved April 2009
- European Commission website, <http://ec.europa.eu>
- Expatriate information from the Eurostat website, <http://ec.europa.eu/eurostat>
- Gallaher EPS in Austria, 2006
- House of Prince, quoted from "Appearance of Cheap cigarettes facilitates growth of tobacco market", ELTA, 30 March 2006 (Lithuania)
- "Hungary black economy clampdown yields results", Reuters News, 10th July 2007

### Other sources

- "Illicit Cigarette Market", Empty Pack Surveys carried out by GFK for Hungarian Tobacco Manufacturers' Association, 2005, 2006, 2007 and 2008
- Imperial Tobacco Limited Event Collection EPS, 2005-2008 (Ireland)
- Latvia State Revenue Service: Total tax stamps issued to tax warehouses
- Latvian Statistics Bureau, data accessed April 2009
- National Manufacturers Association survey results 2006 and 2007/2008 (Belgium)
- "Natural migration changes of population", Statistical Office of the Republic of Slovenia, accessed April 2009
- "New excise on cigarettes comes into force today", Polish News Bulletin, 14th January 2008
- Nine O'Clock, 28th June 2008 (Romania)
- "Origine des paquets de cigarettes et de tabac a rouler fumes en France Etude EPSY, September 2008
- "Poland will enact fuel and tobacco excise hikes in January 2007", PAP Market Insider, 29th November 2006
- Results of BAT research interviews, data supplied by PMI 2007, 2008 (Lithuania)
- Rompress, 27th June 2007 (Romania)
- Rompress, 30th January 2007 (Romania)
- Rompress, 7th February 2007 (Romania)
- Sales data provided by PMI Commission Agent (Latvia)
- Seizure data supplied by PMI Management based on notifications received from local law enforcement agencies as of 4th March 2009
- "Slovak smokers dodge 26% tax as cheap cigarettes flood market", Bloomberg news, February 2008
- "Smoking curbs: The global picture", BBC News, January 2008 (Lithuania)

## External data sources (2 of 2)

**Our assessment incorporates analysis from several sources**

### Other sources

- Smoking restriction information from the European Public Health Alliance website, <http://epha.org>
- "Status over Graensehandel", Ministry of Finance, June 2007 (Denmark)
- "The non-duty paid market for cigarettes in Sweden". AB Handelns Utredningsinstitut, 2008
- Tourism data from the Eurostat website, <http://ec.europa.eu/eurostat>
- TourMIS for cross border travel data, [www.tourmis.info](http://www.tourmis.info)
- "Un paquet de blondes sur cinq selon BAT/EPsy", Revue de Tabacs, March 2007 (France)
- UK Tobacco Manufacturers Association
- World Cigarette Production and Consumption Report – 2005 Edition, Tobacco Merchant Association, 3rd January 2006 (Bulgaria)
- "Yellow Bag" survey, an empty pack survey undertaken by the German Cigarette Industry Association (VDC), 2006-2007 and by TFT in 2008.

- Project overview and timing
- EU cigarette market
- 2008 Project Star results
- Appendices
  - country results
  - methodology
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  - sources
  - scope of work

## Scope of work

1. Through this study we will update individual research reports covering the estimated size and composition of the total cigarette market (including counterfeit and contraband products), as detailed below, for each of the 25 EU Member States covered in the first phase of Project Star; i.e. the 25 Member States as at September 2005.
2. In addition we will cover the cigarette market in the two new Member States of Romania and Bulgaria from year two.
3. The findings from the 27 Member States will be used to produce an overall view of the total EU market. We will also comment on counterfeit and contraband cross border flows on a pan-European basis.
4. Information from several independent sources will be combined assisting representativeness and reliability. These sources will include:
  - Tobacco industry research and statistics
    - Sales statistics, consumer surveys and empty pack surveys provided by PMI and/or Tobacco Manufacturers' Associations.
    - In year three, empty pack surveys will be conducted in the following countries; Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, UK.
  - Existing public studies and statistics
    - Research and data published by government agencies (including Ministries of Finance), health bodies, customs authorities, market researchers and academics
  - Independent research
    - New research designed to calibrate and augment existing data.
    - For year three, surveys to analyse the flows of non-domestic (legal) sales will be undertaken in the following countries; Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Netherlands, Poland, Romania, Slovenia, Spain, Sweden, UK
  - Third party research will be directed by KPMG, but will be contracted directly by PMI. Where agreed, data gained through this research will be passed directly to KPMG, and will not be released to PMI, for example data regarding the prevalence of smoking among the juvenile segment of the population
  - Expert opinions and expert panel data
    - Structured interview programmes designed to capture and quantify the opinions of relevant expert groups including, among others, customs and law enforcement officials
5. Interviews and data from external sources will be obtained on a best efforts basis. We will work with PMI to identify and contact key customs and Manufacturer's Associations members. We will require access to identified PMI personnel throughout this project and our ability to deliver this scope depends on this access being made available
6. We will design and develop a multi-year multi-country database EU flows model. This shift from a spreadsheet-based tool to a database approach will have significant benefits in: comparability of year-on-year results; ease of adding in new countries or incorporating other market developments; and speed of analysis given the large volumes of data involved.
7. We will communicate our final findings to OLAF and the Member States as set out in Appendix 3. Provision for more extensive communication of findings to OLAF or the Member States is not covered by this engagement letter.
8. PMI will be responsible for the development and maintenance of country dashboards for each of the Member States.