KPMG

cutting through complexity™

# Project Star
# 2011 Results

19 June 2012

# Important notice

- This report on tobacco consumption in the EU (“Report") has been prepared by KPMG LLP in accordance with specific terms of reference (“terms of reference") agreed between Philip Morris International Management S.A. ("PMI") and KPMG LLP.
- This is a revised edition of the report presented to OLAF (Office Européen de Lutte Anti-Fraude – European Commission Anti-Fraud Office) and representatives of the EU-27 Member States on 19 June 2012. Information that is commercially sensitive has been removed from this edition.
- KPMG LLP has agreed that the Report may be disclosed to any party on the basis set out herein. KPMG LLP wishes all parties to be aware that KPMG LLP's work for PMI was performed to meet specific terms of reference agreed between PMI and KPMG LLP and that there were particular features determined for the purposes of the engagement.
- The Report should not therefore be regarded as suitable to be used or relied on by any other person or for any other purpose.
- The Report is issued to all parties on the basis that it is for information only. Should any party choose to rely on the Report they do so at their own risk. KPMG LLP will accordingly accept no responsibility or liability in respect of the Report to any party other than PMI.

# Basis of preparation

- This presentation of key findings ('Report') is given in accordance with our agreed written terms of engagement dated 22 September 2011 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.
- This is a revised version of the Report presented to OLAF and the Member States on 19 June 2012. The Report has been revised to remove commercially sensitive information.
- Our work has been ongoing since 1 November 2005. Our fieldwork for 2011 results is now complete.
- In preparing this Report, KPMG LLP 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.
- KPMG LLP has agreed that the Report may be disclosed to any party on the basis set out herein. KPMG LLP wishes all parties to be aware that KPMG LLP's work for PMI was performed to meet specific terms of reference agreed between PMI and KPMG LLP and that there were particular features determined for the purposes of the engagement.
- The Report should not therefore be regarded as suitable to be used or relied on by any other person or for any other purpose.
- The Report is issued to all parties on the basis that it is for information only. Should any party choose to rely on the Report they do so at their own risk. KPMG LLP will accordingly accept no responsibility or liability in respect of the Report to any party other than PMI.

# Glossary of terms

## Cigarette industry

| | |
|---|---|
| *Bootlegging* | 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 |
| *Cigarette* | Any factory-made product that contains tobacco and is intended to be burned or heated under ordinary conditions of use |
| *Contraband (CB)* | Genuine product that has been bought in a low-tax country and which exceeds legal border limits or acquired without taxes for export purposes to be illegally re-sold (for financial profit) in a higher priced market. There are generally two types of contraband: bootlegging and wholesale smuggling/organised crime |
| *Counterfeit (CF)* | 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 |
| *Duty Free* | 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 |
| *MPPC* | Most popular price category |
| *NMA / TMA* | National Manufactures Association / Tobacco Manufacturers Association |
| *OTP* | Other Tobacco Products (RYO/MYO, cigarillos, portions, rolls and cigars; excluding smokeless tobacco and water-pipe tobacco) |
| *RYO/MYO* | Roll-your-own/Make-your-own - loose tobacco for the purpose of hand rolling / loose tobacco for the purpose of tubing |
| *Smoking prevalence* | The percentage of smokers in the total adult population |
| *Smoking incidence* | The number of cigarettes consumed per day on average by the adult population |
| *Tobacco taxes* | The sum of all types of taxes levied on tobacco products. There are two basic methods of tobacco taxation: *Normal or specific taxes* are based on a set amount of tax per unit (e.g. cigarette); these taxes are differentiated according to the type of tobacco. *Ad valorem taxes* are assessed as a percentage mark up on a determined value, usually the retail selling price or a wholesale price and includes any value added tax |

## Project Star

| | |
|---|---|
| *CAGR* | Compound Annual Growth Rate |
| *C&C* | Counterfeit and Contraband |
| *Consumption* | 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 |
| *Consumption gap* | The difference between total consumption and legal domestic consumption |
| *Country of origin* | Country from which the packs collected are deemed to have originated. This is determined by either the tax stamp on the pack or in cases where tax stamp is not shown, on the health warning and packaging characteristics |
| *EU* | European Union |
| *EU Flows Model* | 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) |
| *Illicit Whites* | Brands that are mainly produced for the purpose of smuggling |
| *Inflows/Outflows* | Inflows of non-domestic product into a market/outflows of product from a market |
| *LDS* | Sales of genuine domestic product through legitimate, domestic channels based on In Market Sales (IMS) data |
| *LDC* | Legal Domestic Consumption is defined as legal domestic sales net of outflows |
| *ND* | Non-Domestic product – product that was not originally intended for the market in which it is consumed |
| *ND(L)* | Non-Domestic (Legal) – product that is brought into the market legally by consumers, such as during a cross-border trip |
| *Unspecified* | Unspecified market variant refers to cigarette packs which do not bear specific market labelling or Duty Free labelling |
| *OLAF* | Office Européen de Lutte Anti-Fraude (European Commission Anti-Fraud Office) |
| *PMI* | Philip Morris International |

# Glossary of terms

**PMI data sources**

| | |
|---|---|
| *EPS* | Empty Pack Survey |
| *GCTS* | Global Consumer Tracking Survey |
| *IMS* | In Market Sales (the primary source of legal domestic sales volumes) |
| *Retail Panel* | Sales measurement at a retail level |

**Market research**

| | |
|---|---|
| *CAPI* | Computer-aided personal interviewing |
| *CATI* | Computer-aided telephone interviewing |

**Measurements**

| | |
|---|---|
| *Bn* | Billion |
| *Mn* | Million |

# Contents

# Overview of Project Star

**The primary deliverable of Project Star is an assessment of the level of counterfeit and contraband cigarettes across the EU Member States.**

## 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

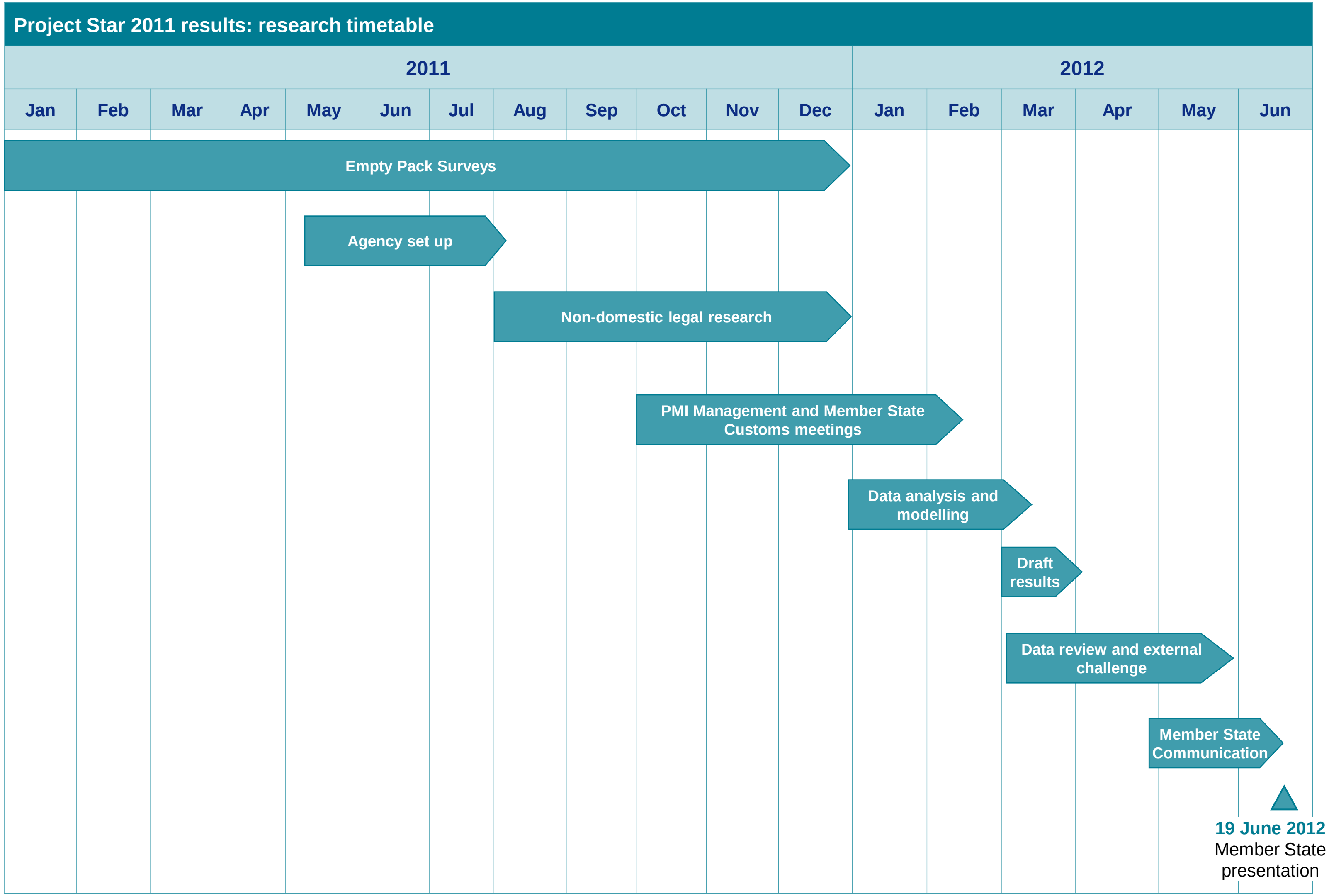
# Project timing

**Fieldwork work commenced in early 2011 and was completed in February 2012 when full year legal domestic sales data became available.**

**Data analysis and modelling was undertaken during the first quarter of 2012.**

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

**Full 2011 results have now been finalised and are contained in this report.**



# Contents

# Overview

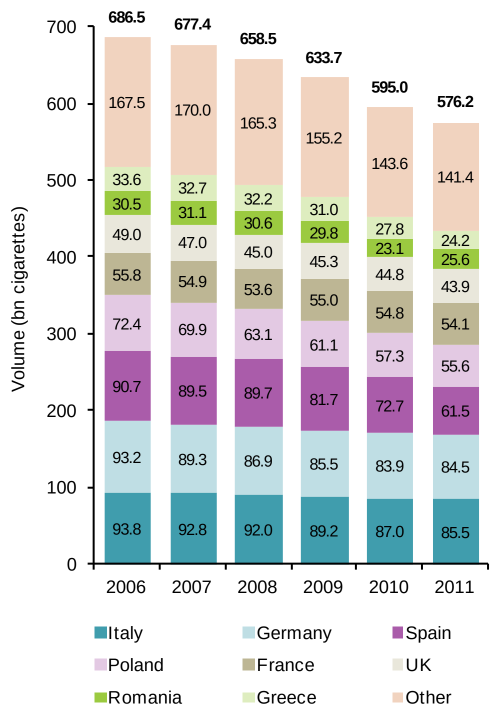
| | |
|---|---|
| **576 billion cigarettes were sold legally in the EU in 2011** | **The eight largest EU markets accounted for 75.5% of total cigarette sales in 2011**<br>■ Of these, Italy and Germany each accounted for more than 80 billion cigarettes of legal domestic sales in 2011 |
| **Prices have increased in the majority of EU markets in 2011, but notable price variances continue to exist between some EU member states** | **Despite widespread price increases in 2011, retail prices continue to vary widely across the EU**<br>■ Price increased in Euro terms in 25 of the 27 Member States in 2011, with increases of over 5% in 15 countries<br>■ Across the EU, the price of a pack of Marlboro ranges from €2.58 in Lithuania to €8.55 in Ireland, while prices in bordering non-EU countries such as Ukraine, Russia, Belarus and Serbia remain significantly below EU levels |
| **Cigarette sales have declined on a European level, partly driven by declining consumption** | **EU legal domestic sales continued to decline reaching 576 billion cigarettes in 2011; a fall of over 100 billion cigarettes since 2007**<br>■ EU cigarette sales declined by 3.2% in 2011, compared to a 6.1% decline in 2010<br>– This follows a longer term trend of declining sales; EU legal domestic sales declined at an annual rate of 4.4% between 2006 and 2011<br>■ The steepest declines in legal domestic sales during 2011 were observed in the Mediterranean region<br>– Five Mediterranean markets, Spain, Greece, Cyprus, Portugal and Malta experienced rapid sales declines of over 5%; Spain, Greece and Cyprus experienced declines of over 10%<br>■ Seven countries experienced growth in legal domestic sales in 2011<br>– However, of these seven countries, only Belgium and Sweden saw legal sales levels higher than 2009 levels |
| **Legal sales of Other Tobacco Products increased in 2011** | **Legal sales of Other Tobacco Products in the EU increased by 6.5% in 2011; the fourth consecutive year of sales growth**<br>■ The six largest markets for smoking tobacco sales in the EU, Germany, Netherlands, Belgium, France, Spain and the UK account for 75% of overall sales<br>**The Benelux markets had the greatest share of Other Tobacco Product sales as a proportion of overall legal domestic tobacco sales**<br>■ Smoking tobacco accounted for approximately half of total tobacco sold in Luxembourg, the Netherlands and Belgium in 2011 |

European cigarette market

# Legal domestic sales by country

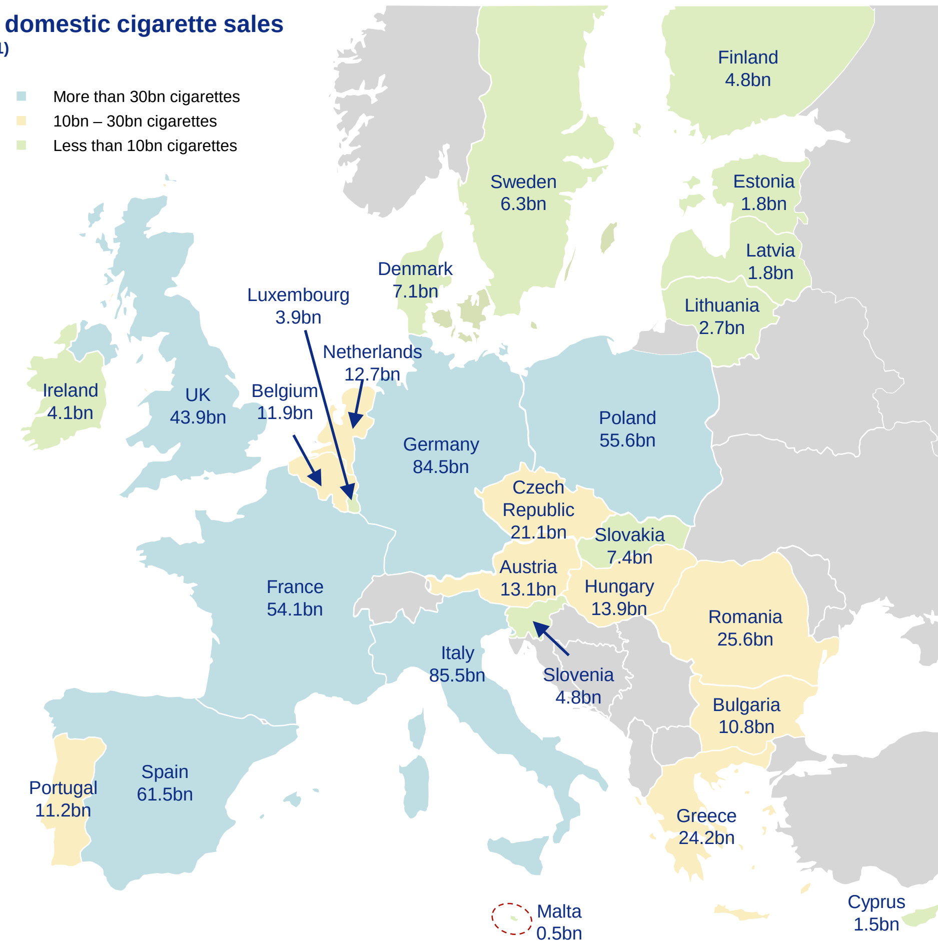
**The eight largest markets accounted for 75.5% of total EU legal cigarette sales in 2011.**

### EU legal domestic cigarette sales 2006-2011[1]




### Legal domestic cigarette sales 2011[1]

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



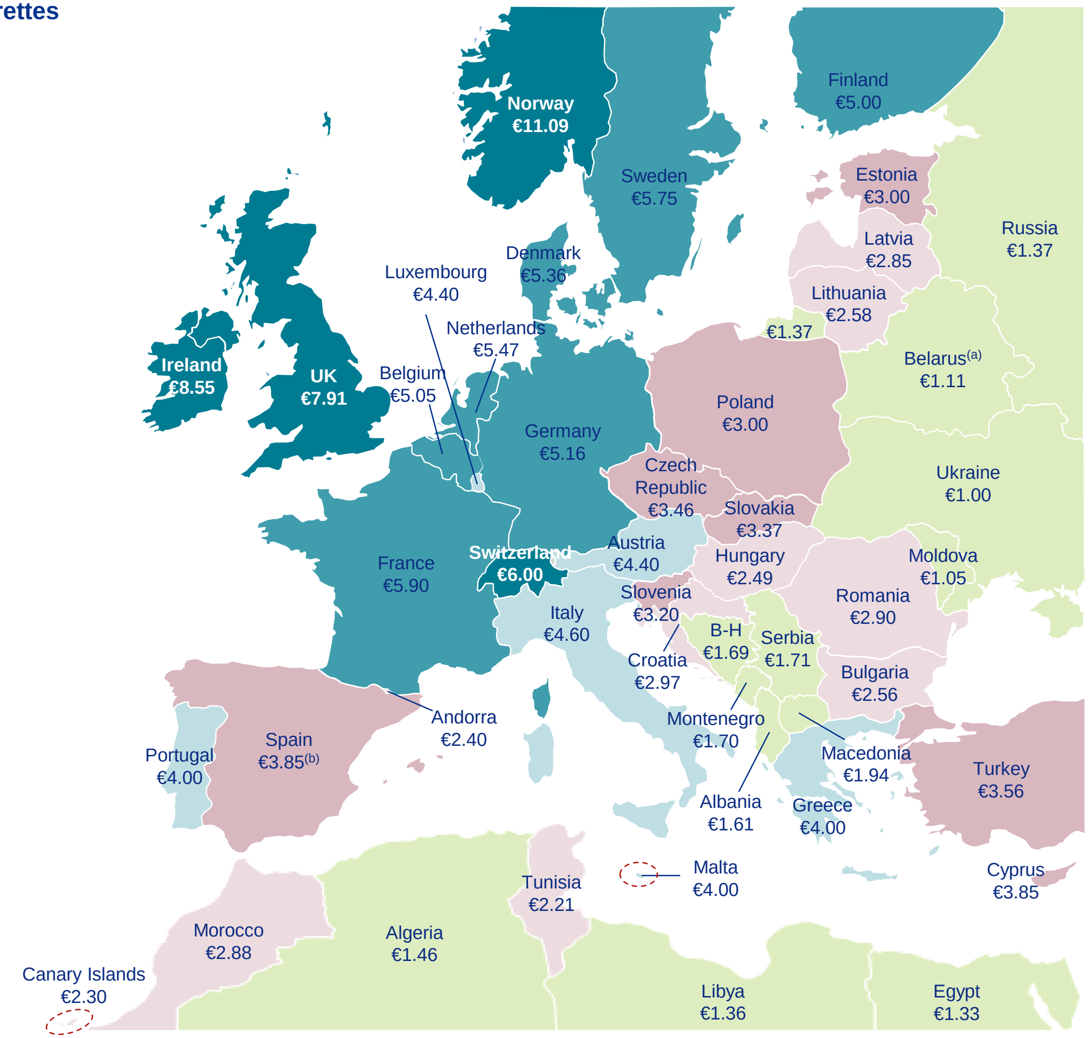

Source: (1) In Market Sales provided by PMI management

European cigarette market

# Price comparison - Marlboro

**Across the EU, the price of a pack of Marlboro ranges from €2.58 in Lithuania to €8.55 in Ireland, while prices in bordering non-EU countries such as Ukraine, Russia, Belarus and Serbia remain significantly below EU levels.**

**Map denotes Marlboro price per 20 cigarettes 1 July 2011[(1)]**




Key:

- €6.00 or more
- €5.00 to €5.99
- €4.00 to €4.99
- €3.00 to €3.99
- €2.00 to €2.99
- Less than €2.00

Note (a) Based upon the price of a pack of 20 Kent cigarettes, a comparable premium brand, as Marlboro is not sold in Belarus

(b) A number of price changes took place in Spain between April and October in 2011, the average Marlboro price for the year per IMS data is €4.15

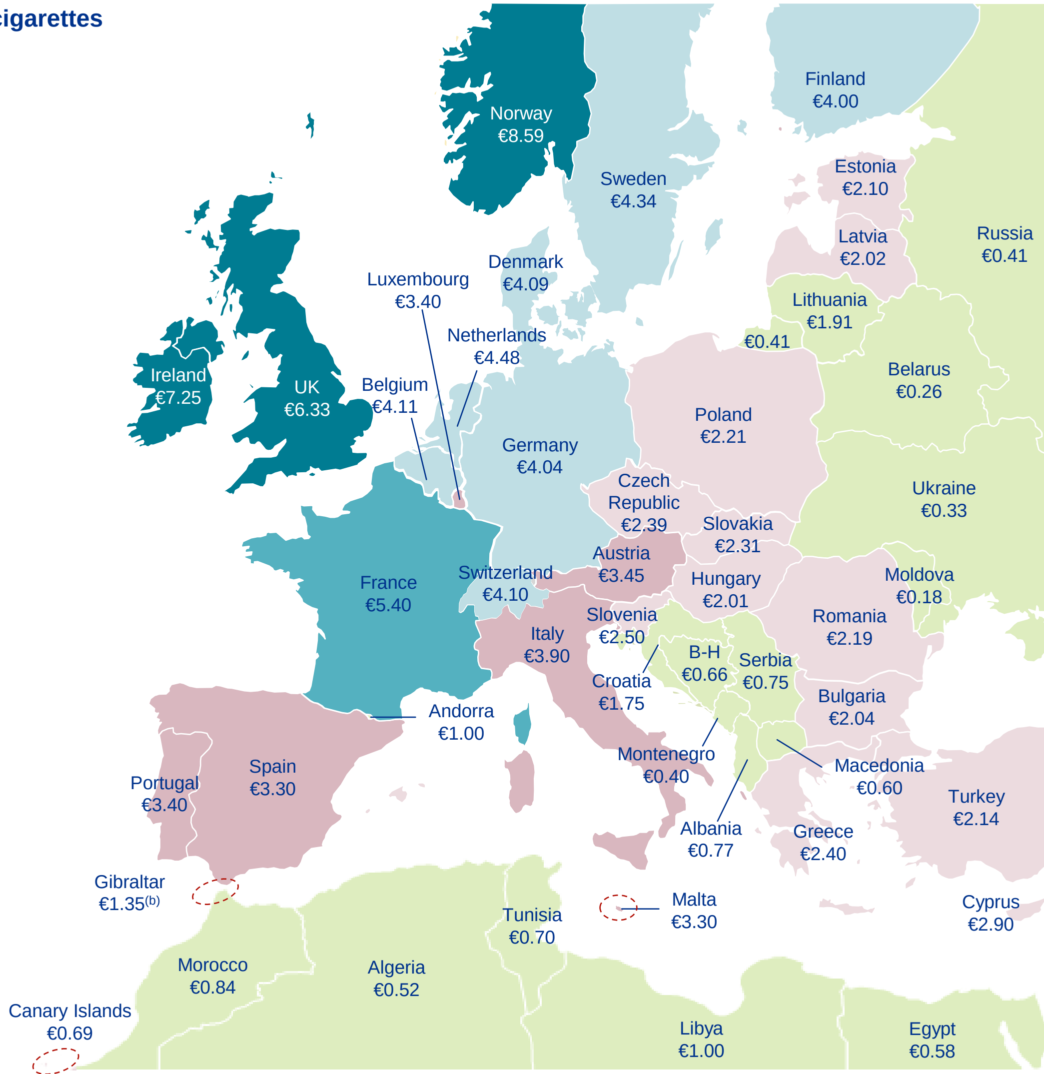
Source: (1) PMI Management and EU Tax Tables

# Price comparison – cheapest brand

**Differentials between the lowest price legally sold brands highlight the differences between countries.**

**Furthermore, the differential in the lowest price legally sold brands is often more significant between EU and bordering non-EU countries such as Ukraine, Russia, Belarus and Moldova.**

**Map denotes cheapest pack price per 20 cigarettes 1 July 2011[(1)(a)]**




Key:
- €6.00 or more
- €5.00 to €5.99
- €4.00 to €4.99
- €3.00 to €3.99
- €2.00 to €2.99
- Less than €2.00

Note: (a) Based on the cheapest pack of 20 cigarettes sold in each country on 1st July 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2011

(b) Latest available price data for Gibraltar is from July 2010.

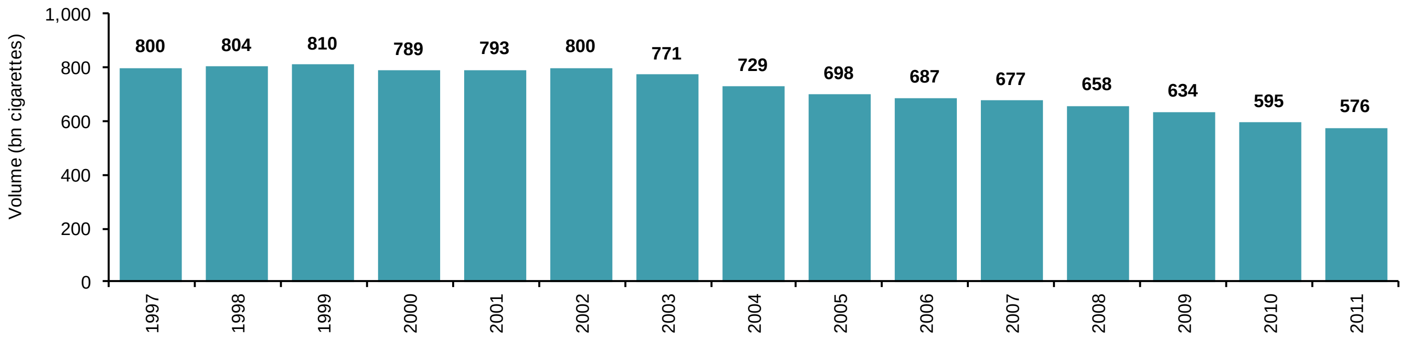
Source: (1) PMI Management and EU Tax Tables

# Contents

# Legal sales trends

**Total EU legal domestic sales declined by 3.2% in 2011, compared with a 6.1% fall the previous year.**

## Historic legal domestic cigarette sales for EU-27 1997-2011[(1)(a)]




| | 1997-2006 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 | 2010-2011 |
|---|---|---|---|---|---|---|
| CAGR (%) | -1.7% | -1.3% | -2.8% | -3.8% | -6.1% | -3.2% |

Note: (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 and therefore 2005 data has been used for 1999-2005

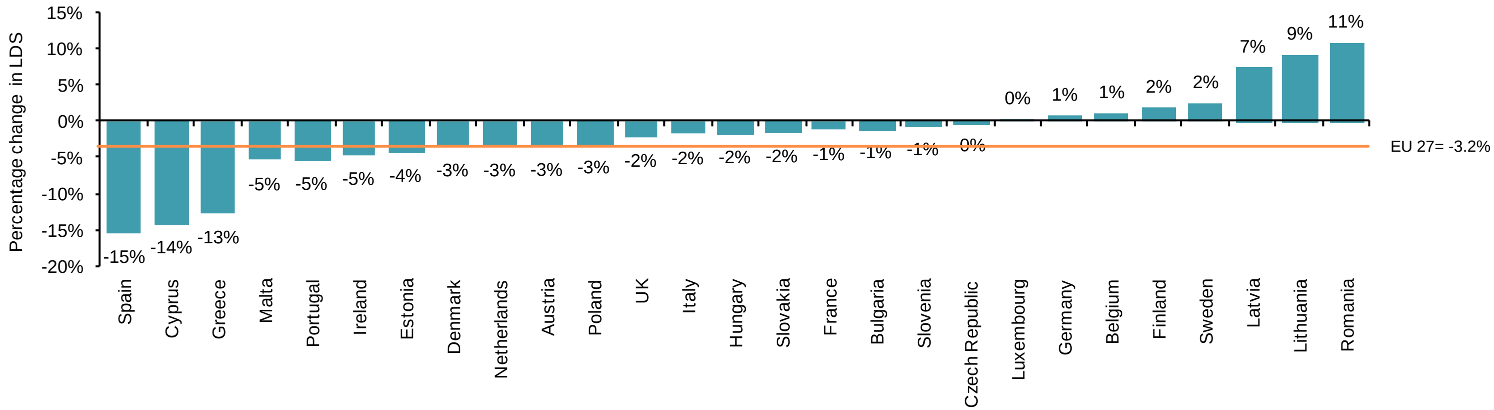
Source: (1) In Market Sales provided by PMI management

# Legal sales, price and tax trends

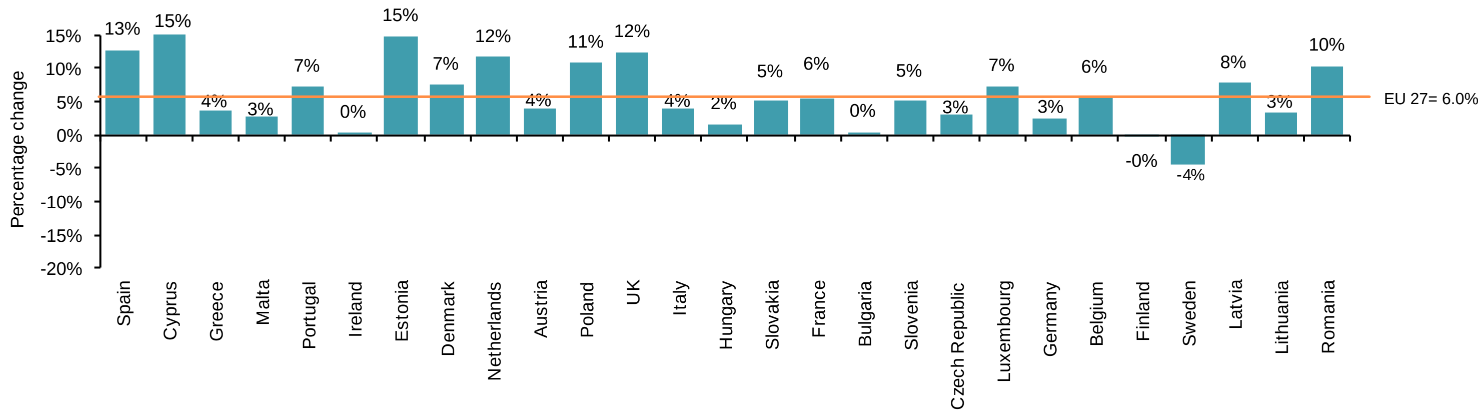
**In 2011, the steepest falls in legal domestic sales were observed in the Mediterranean region.**

**Price increases of over 5% were observed in 15 Member States in 2011.**

## Percentage change in legal domestic cigarette sales for EU-27 2010-2011[1]




## Weighted average price change in local currency 2010-2011[2](a)




Note: (a) The weighted average price in a market can be impacted by changes to the mix of brands and their relative market shares from one year to the another

Sources: (1) In Market Sales provided by PMI

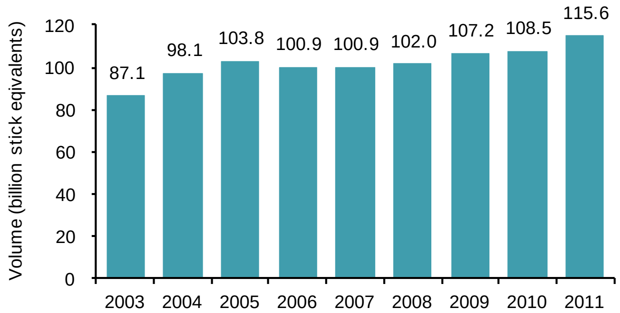
(2) PMI Management and EU Tax Tables

# Contents

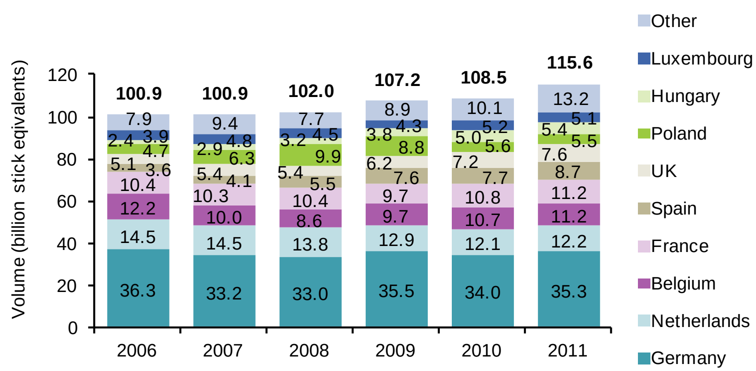
# EU Other Tobacco Product market size

**For the 18 largest Other Tobacco Product markets in the EU, smoking tobacco sales were estimated at 115.6 billion cigarette equivalents in 2011, an increase of 6.5% compared to 2010.**

## EU legal domestic sales of smoking tobacco 2003-2011[(1)(a)(b)(c)]




## EU leading markets for smoking tobacco by volume, 2006-2011[(1)(a)(b)(c)]




## Sales of smoking tobacco have continued to increase in 2011

- Smoking tobacco sales increased by 6.5% in 2011, whilst manufactured cigarette sales across the EU-27 Member States declined by 3.2% during the same period.
- OTP sales volume data for Bulgaria, Cyprus, Estonia, Latvia, Lithuania, Malta, Romania, Slovakia and Slovenia was not available from 2009 to 2011:
  - OTP share of total tobacco sales in these countries was less than 5% in 2008, the last year for which reliable data is available.

## The six largest markets for smoking tobacco sales in the EU account for 75% of overall sales

- The Mediterranean countries of Portugal, Italy and Greece all experienced significant increases in OTP sales each with increases greater than 20%:
  - Additionally, OTP sales in Spain increased by 12.9% (1 billion stick equivalents) in 2011;
  - Portugal, Italy, Greece and Spain all experienced declines in legal sales of manufactured cigarettes in excess of 5% in 2011.

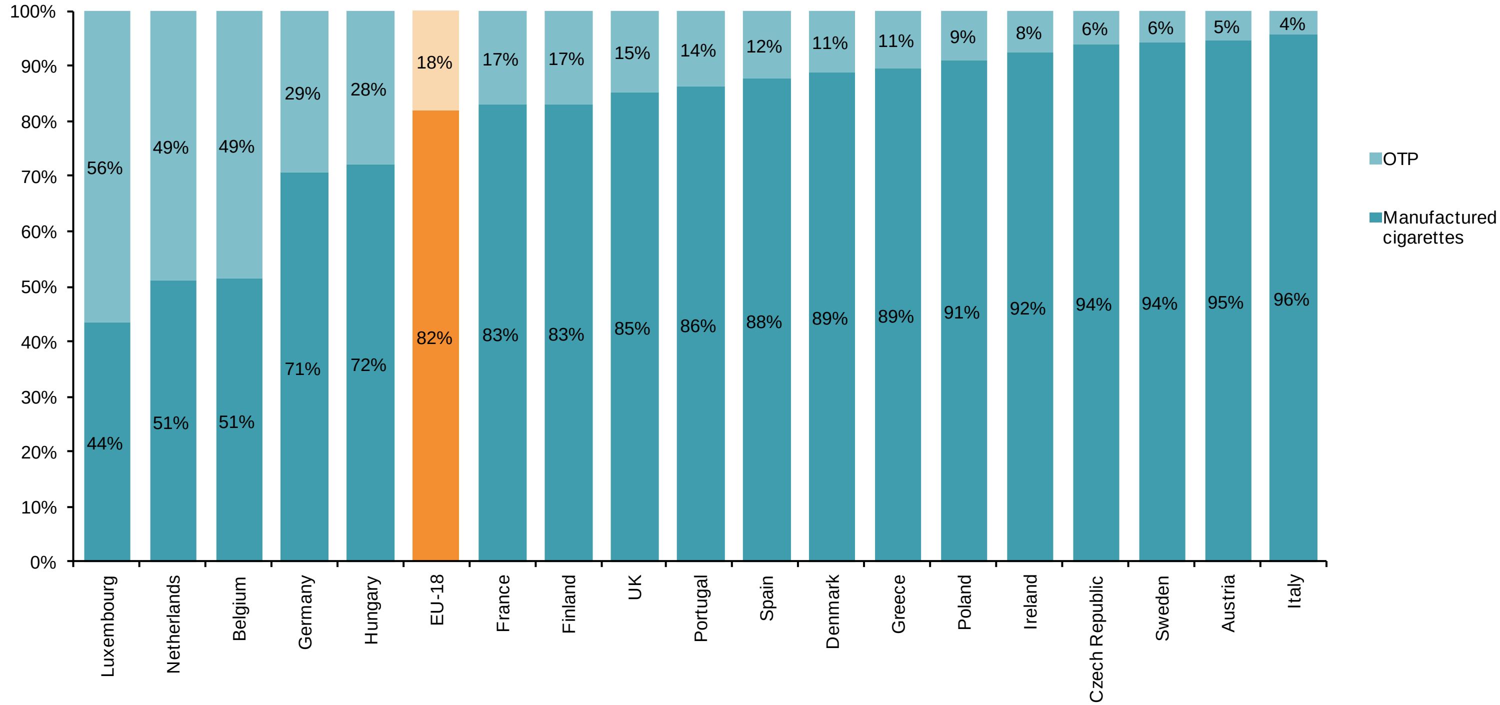
Notes:
(a) Smoking tobacco calculated based on 0.75 grams per cigarette for all countries except Poland and Belgium where significant amounts of volume tobacco were identified by local management. In these countries a proportion of the smoking tobacco is calculated based on 0.55 grams per cigarette in Poland for the years 2010 and 2011, and 0.50 grams per cigarette in Belgium for years 2009 to 2011.
(b) Smoking tobacco includes pipe and 'roll your own' (RYO) and 'make your own' (MYO) fine cut variants
(c) Data for historic years may differ from volumes reported in 2010 Star results due to updated estimates available since May 2011

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

# Comparison of Other Tobacco Products with manufactured cigarette sales

**Of the 18 largest Other Tobacco Product markets in the EU, the Benelux markets had the greatest share of Other Tobacco Product sales as a proportion of the overall legal domestic tobacco sales.**

**EU tobacco sales by category 2011[(1)(a)(b)(c)]**




Notes: (a) Smoking tobacco calculated based on 0.75 grams per cigarette for all countries except Poland and Belgium where significant amounts of volume tobacco were identified by local management. In these countries a proportion of the smoking tobacco is calculated based on 0.55 grams per cigarette in Poland for the years 2010 and 2011, and 0.50 grams per cigarette in Belgium for years 2009 to 2011.

(b) Smoking tobacco includes pipe tobacco and 'roll your own' (RYO), 'make your own' (MYO) fine cut variants

(c) EU-18 is the aggregate of the 18 largest Other Tobacco Product markets in the EU

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

**Smoking tobacco accounts for approximately half of total tobacco sold in Luxembourg, Belgium and the Netherlands**

- Other countries where smoking tobacco accounts for over 10% of total tobacco sales are Germany, Hungary, France, Finland, UK, Portugal, Spain, Denmark and Greece.
- A robust source of smoking tobacco legal sales data was not available for Bulgaria, Cyprus, Estonia, Latvia, Lithuania, Malta, Romania, Slovakia and Slovenia. However, legal sales of smoking tobacco accounted for less than 5% of total tobacco sales in these countries in 2008.

# Contents

# Consumption overview: summary

| | |
|---|---|
| **Total cigarette consumption reflects both legal domestic consumption and the consumption of non-domestic product from legal and illicit sources** | **Legal domestic consumption declined by 3.7% to 540 billion cigarettes in 2011**<br>■ Total cigarette consumption in the EU declined by 3.1% in 2011 to 629 billion cigarettes<br>– Legal domestic consumption accounted for 85.9% of consumption in 2011<br>■ Differences between changes in legal domestic sales and legal domestic consumption reflect net inflows from non-EU countries;<br>– Legal domestic sales of cigarettes in the EU declined by 3.2% to 576 billion cigarettes over the same period. |
| **The volume of non-domestic flows reached 88.5 billion cigarettes in 2011 for the 27 Member States** | **Non-domestic cigarettes accounted for 14.1% of EU consumption in 2011, an increase from 13.5% in 2010**<br>■ Total non-domestic flows to the EU in 2011 surpassed the volume of legal domestic sales in Italy, which is the largest single market in the EU |
| **In 2011, counterfeit and contraband cigarettes accounted for over 10% of EU consumption for the first time** | **Total counterfeit and contraband accounted for 10.4% of total consumption in 2011, up from 9.9% in 2010**<br>■ Counterfeit and contraband volumes accounted for 65.3 billion cigarettes in 2011<br>■ The Baltic states, Bulgaria and Ireland had the highest C&C share of cigarette consumption in 2011, with levels exceeding 16% respectively |

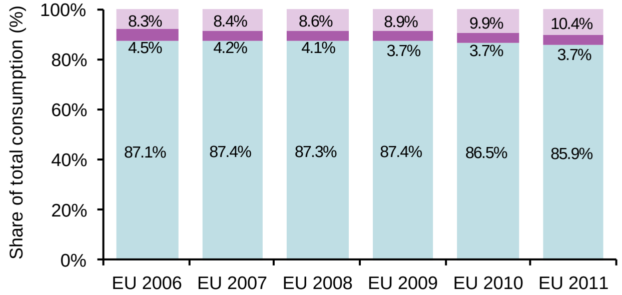
# EU Consumption by type

**Counterfeit and contraband increased to 10.4% of cigarette consumption in 2011, equivalent to 65 billion cigarettes.**

**ND(L) share of consumption remained broadly stable at 3.7% in 2011.**

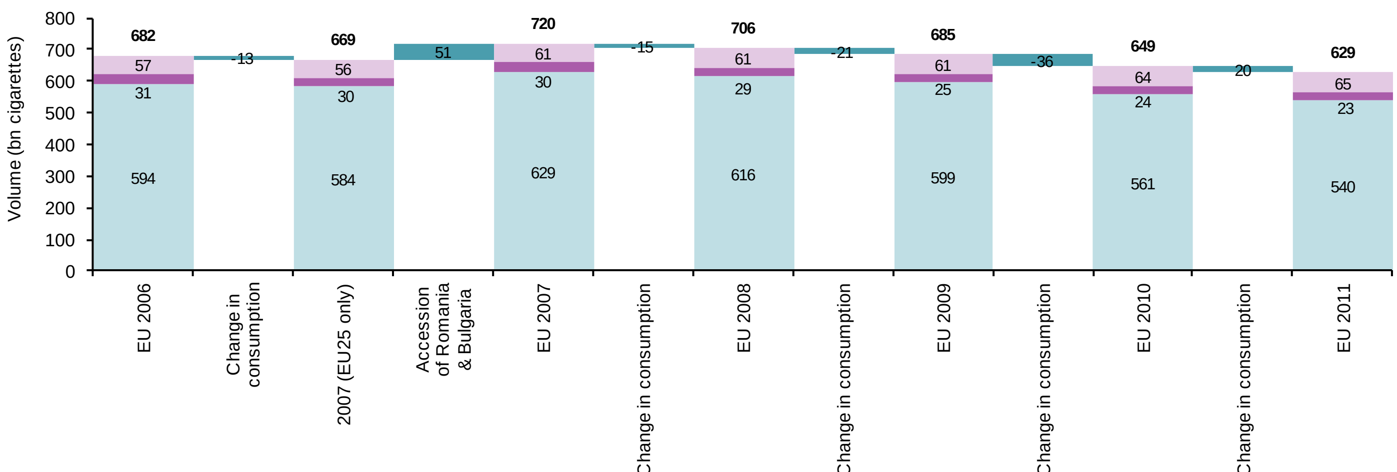
**The annual rate of decline in total consumption slowed in 2011 to 3.1%.**

### EU consumption by type 2006-2011(1)




| % change | 2006-2007 (a) | 2007-2008 | 2008-2009 | 2009-2010 | 2010-2011 |
|---|---|---|---|---|---|
| C&C | -1.1% | -0.1% | 1.0% | 5.0% | 1.7% |
| Non-domestic (legal) | -4.7% | -4.6% | -13.6% | -5.3% | -1.9% |
| Legal domestic consumption | -1.8% | -2.1% | -2.8% | -6.3% | -3.7% |
| **Total consumption** | **-1.9%** | **-2.0%** | **-2.9%** | **-5.3%** | **-3.1%** |

### EU consumption by type 2006-2011(1)



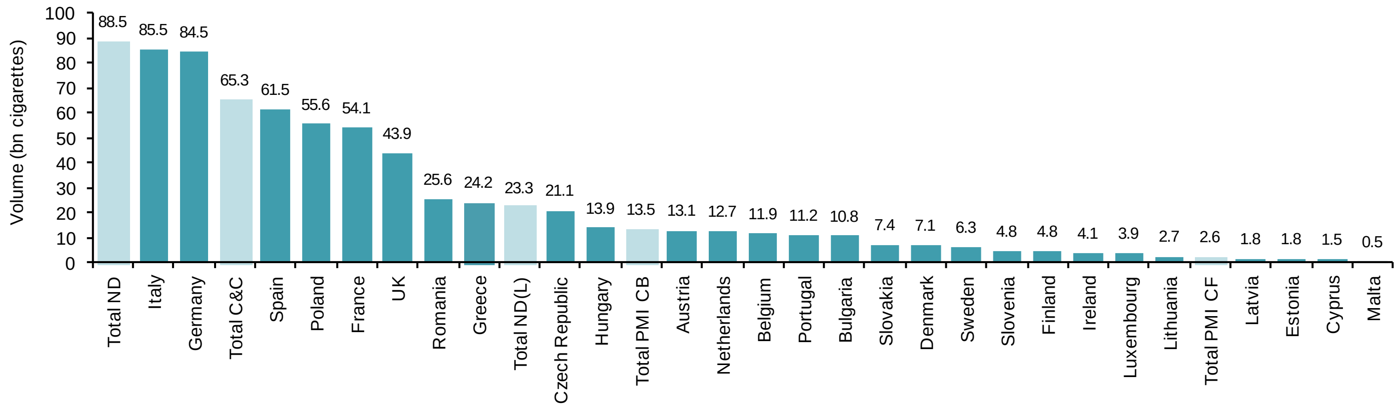

Note: (a) Percentage change 2006-2007 is for EU-25 only

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

# Legal sales trends versus EU non-domestic trends

**Total non-domestic flows to the EU of 88.5 billion cigarettes in 2011 surpassed the volume of legal domestic sales in Italy, which is the largest single market in the EU.**

**Legal domestic sales by country versus total EU non-domestic cigarette volumes 2011(1)**

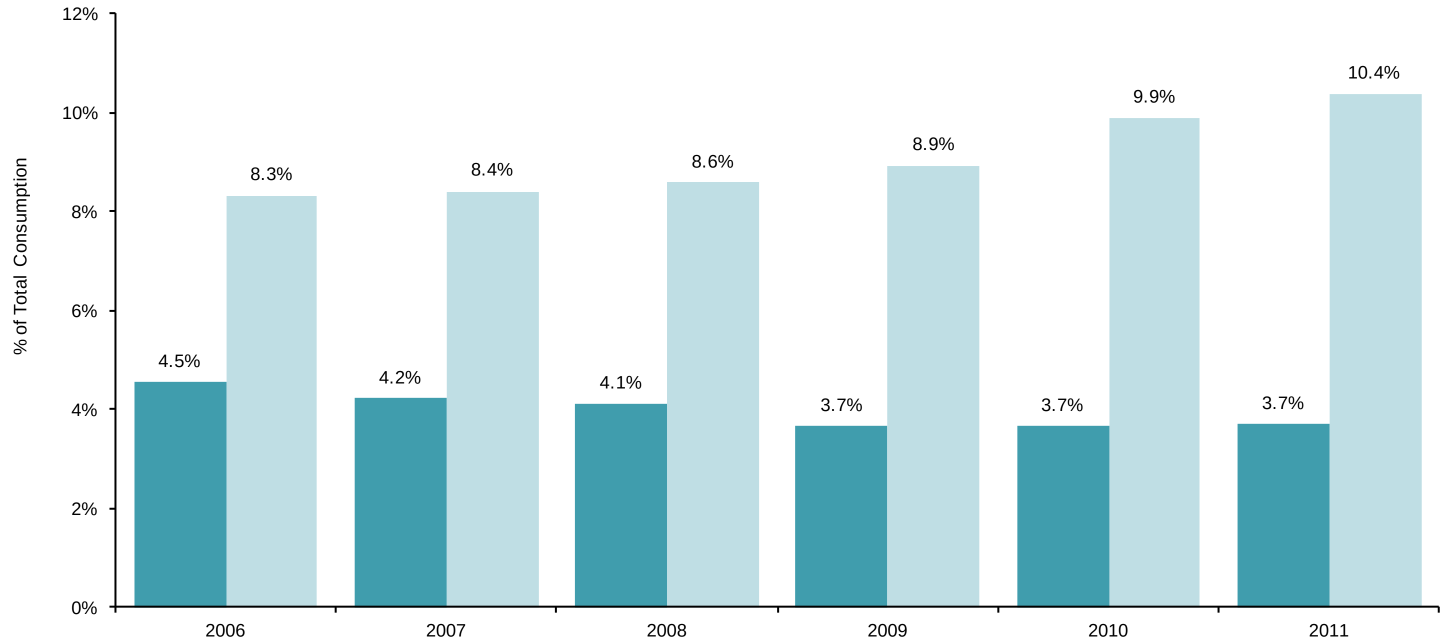



Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

# ND(L) and C&C share of total consumption

**The share of consumption accounted for by counterfeit and contraband increased for the fifth year to 10.4% in 2011.**

**ND(L) and C&C share of total consumption 2006 – 2011(1)**




| | | | | | | |
|---|---|---|---|---|---|---|
| **ND(L) volume (bn cigarettes)** | 31.0 | 30.3 | 29.0 | 25.0 | 23.7 | 23.3 |
| **C&C volume (bn cigarettes)** | 56.8 | 60.6 | 60.5 | 61.1 | 64.2 | 65.3 |

Key: C&C ND(L)

Source: (1) EU Flows Model 2006 - 2011

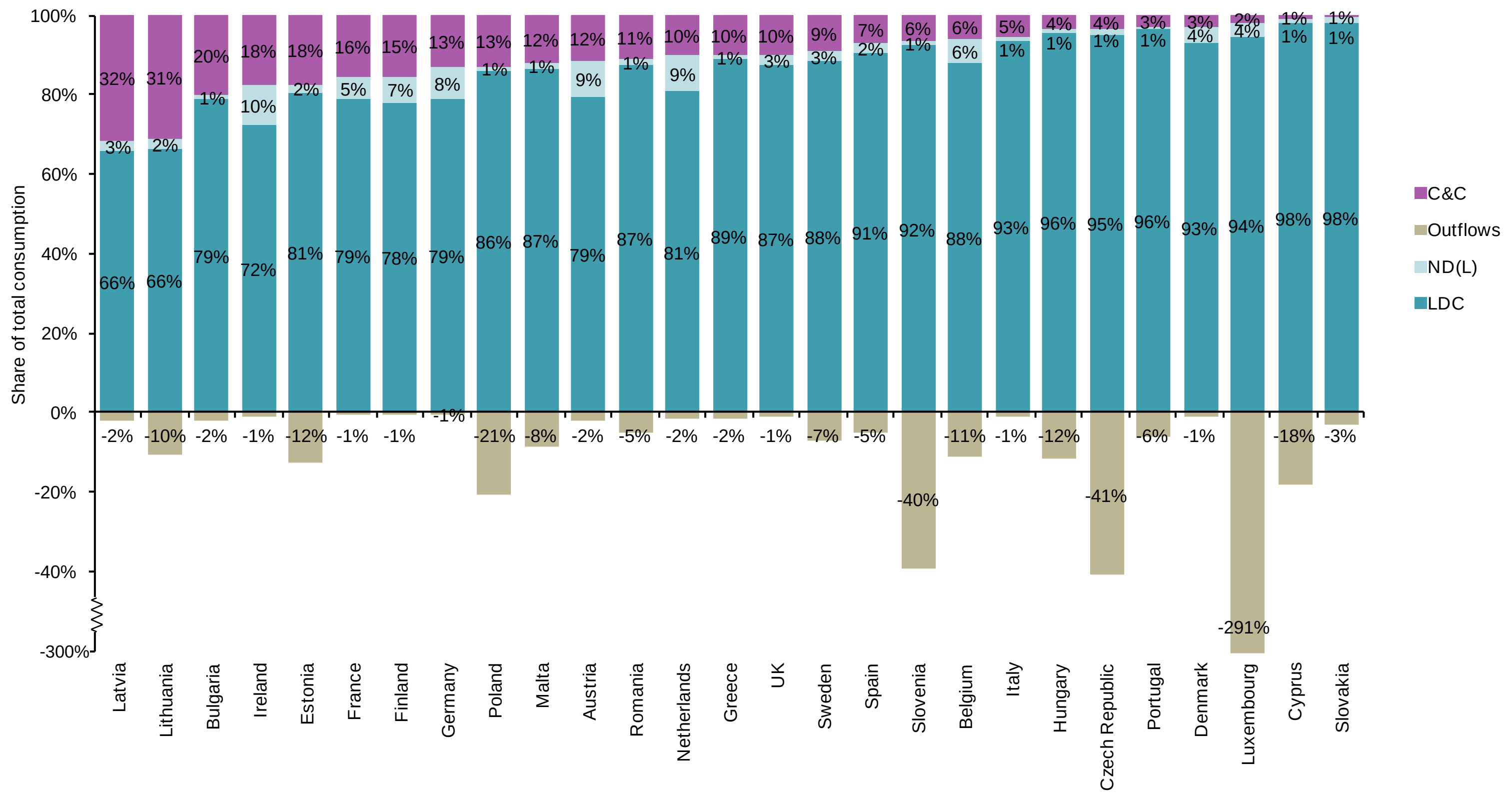
# Project Star results 2011

# Total cigarette consumption by type

**The Baltic states, Bulgaria, Ireland and France had the highest C&C share of cigarette consumption in 2011.**

## Total cigarette consumption by type 2011[(1)]

| Volume (bn) | 3 | 4 | 13 | 6 | 2 | 68 | 6 | 106 | 52 | 1 | 16 | 28 | 15 | 27 | 50 | 7 | 64 | 4 | 12 | 90 | 13 | 16 | 11 | 8 | 1 | 1 | 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|




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

# Contents

# Non-domestic (legal) overview

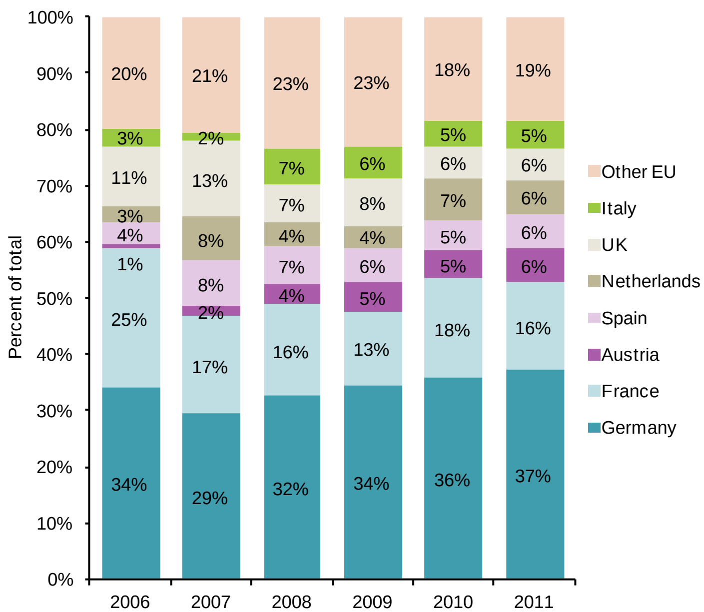
| | |
|---|---|
| **Non-domestic (legal) volumes accounted for 23.3 billion cigarettes and 3.7% of total consumption in 2011, down from 23.7 billion cigarettes in 2010** | **Declining non-domestic (legal) volumes in France, the Netherlands and Portugal were partially offset by increases in Austria, Germany and Spain in 2011**<br>▪ France, the Netherlands and Portugal accounted for 5.1 billion cigarettes of EU non-domestic (legal) volumes in 2011, down from 6.1 billion cigarettes in 2010<br>▪ Austria, Germany and Spain accounted for 11.5 billion cigarettes of EU non-domestic (legal) volumes in 2011, up from 10.9 billion cigarettes the previous year |
| **Non-domestic (legal) inflows as a proportion of total consumption are typically higher in western Member States** | **Germany and France accounted for approximately 53% of EU ND(L) consumption in 2011**<br>▪ Austria, Spain, the Netherlands, the UK and Italy were the only other Member States that accounted for over 5% of the EU total ND(L)<br>**Ireland and the Netherlands had the highest non-domestic (legal) share of consumption in 2011 at 9.9% and 9.1%, respectively**<br>▪ Austria, Germany, Finland, Belgium and France were the only other Member States where ND(L) share of consumption accounted for more than 5% in 2011 |
| **Flows from EU source countries account for the majority of non-domestic (legal) consumption** | **Non-domestic (legal) flows between the EU-27 Member States accounted for 76.3% of total ND(L) inflows in 2011, compared to 75.2% in 2010**<br>▪ Spain was the largest single source of non-domestic (legal) inflows, representing 10.4% of total EU ND(L) flows in 2011 |
| **Overall PMI share of non-domestic (legal) flows remained broadly stable in 2011** | **Non-domestic (legal) volumes of PMI brands remained broadly stable at 37.1% of the EU total in 2011**<br>▪ Marlboro share of total non-domestic (legal) increased to 26.5% in 2011, up from 24.7% in the previous year<br>▪ L&M share of total non-domestic (legal) was 4.5% in 2011 |

# Non-domestic (legal) inflows by destination country

**Non-domestic (legal) flows to the EU-27 Member States declined to 23.3 billion in 2011, compared to 23.7 billion cigarettes the previous year.**

**Germany and France remained the largest destination markets for non-domestic (legal) cigarettes in 2011.**

**Non-domestic (legal) inflows by destination 2006-2011(1)**




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption** | 4.5% | 4.2% | 4.1% | 3.7% | 3.7% | 3.7% |
| **ND(L) share of non-domestic** | 35.3% | 33.4% | 32.4% | 29.1% | 27.0% | 26.3% |

**Non-domestic (legal) volume by destination(1)(a)**

| Destination | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Germany | 10.6 | 8.9 | 9.4 | 8.6 | 8.4 | 8.6 |
| France | 7.7 | 5.3 | 4.7 | 3.3 | 4.2 | 3.6 |
| Austria | 0.2 | 0.6 | 1.0 | 1.3 | 1.2 | 1.4 |
| Spain | 1.2 | 2.4 | 1.9 | 1.6 | 1.3 | 1.4 |
| Netherlands | 0.9 | 2.4 | 1.3 | 1.0 | 1.8 | 1.4 |
| UK | 3.4 | 4.1 | 1.9 | 2.1 | 1.3 | 1.3 |
| Italy | 1.0 | 0.5 | 1.9 | 1.5 | 1.1 | 1.1 |
| Belgium | 0.9 | 0.8 | 1.0 | 0.7 | 0.7 | 0.8 |
| Ireland | 1.0 | 0.8 | 0.5 | 0.6 | 0.6 | 0.6 |
| Poland | 0.6 | 0.6 | 0.9 | 0.9 | 0.5 | 0.5 |
| Finland | 0.7 | 0.4 | 0.4 | 0.6 | 0.4 | 0.4 |
| Romania | n/a | 0.7 | 0.8 | 0.4 | 0.4 | 0.4 |
| Greece | 0.3 | 0.5 | 0.6 | 0.6 | 0.3 | 0.3 |
| Denmark | 0.4 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 |
| Czech Republic | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| Sweden | 0.7 | 0.7 | 0.5 | 0.2 | 0.2 | 0.2 |
| Bulgaria | n/a | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 |
| Slovakia | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 |
| Lithuania | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 |
| Hungary | 0.1 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 |
| Latvia | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 |
| Portugal | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 |
| Slovenia | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 |
| Luxembourg | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 |
| Estonia | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 |
| Cyprus | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 |
| Malta | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| **Total** | **31.0** | **30.3** | **29.0** | **25.0** | **23.7** | **23.3** |

Note (a) Volumes in billion cigarettes
Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

Project Star results 2011

# Major ND(L) flows

**Germany and France are the main destination markets for major non-domestic (legal) flows by volume.**

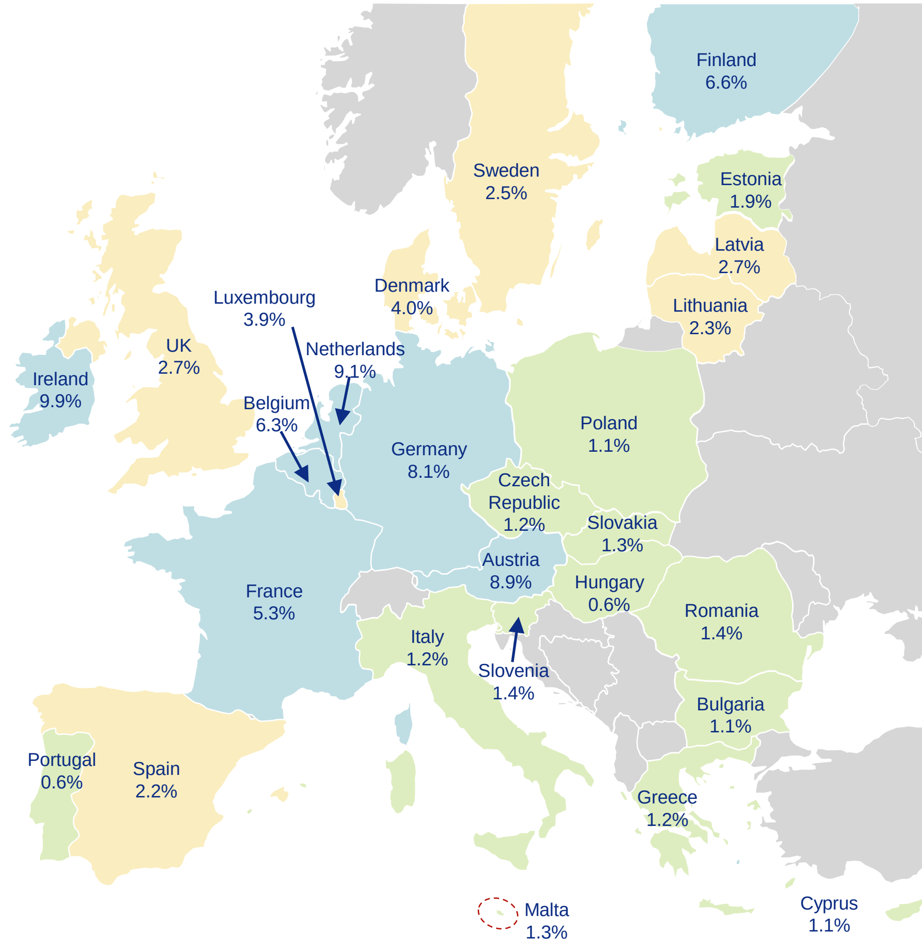
**Major ND(L) flows over 0.4 billion cigarettes 2011[(1)]**

Source: (1) KPMG analysis based on ND(L) research

# Non-domestic (legal) share of consumption

**Non-domestic (legal) flows as a percentage of consumption are typically higher in Central and Western Member States.**

**ND(L) share of total consumption by country 2011(1)**



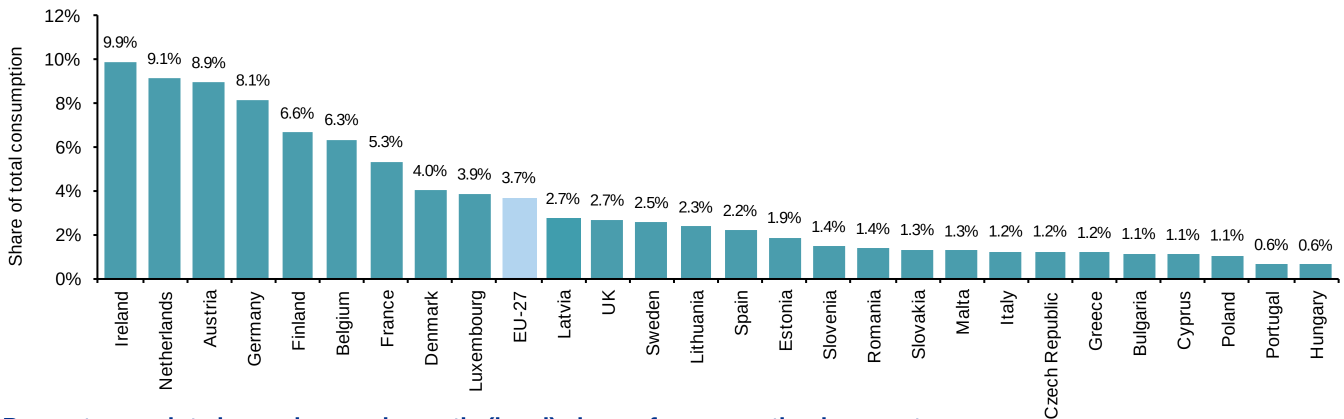

Key:
- Higher than 5.0%
- 2.0% to 5.0%
- Less than 2.0%

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

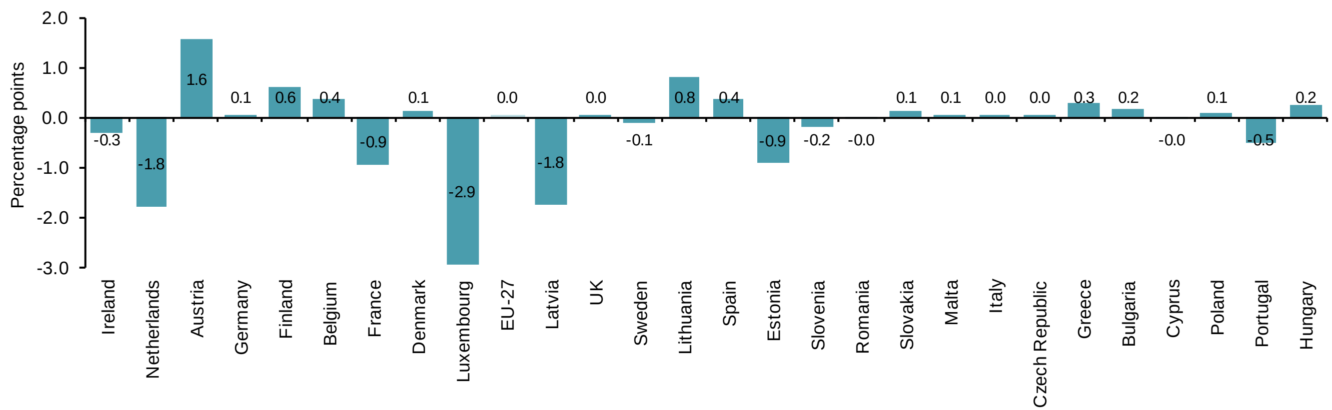
# Change in non-domestic (legal) share of consumption

**Ireland and the Netherlands had the highest non-domestic (legal) shares of consumption at over 9% in 2011.**

## Non-domestic (legal) share of consumption by country 2011(1)




## Percentage point change in non-domestic (legal) share of consumption by country 2010-2011(1)

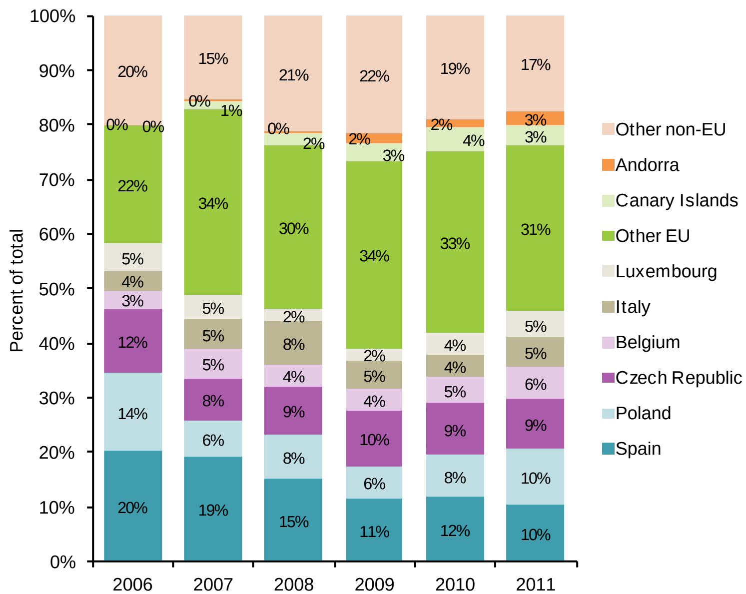



Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

# Non-domestic (legal) flows by country of origin

**ND(L) flows between the EU-27 Member States accounted for 76.3% of total ND(L) inflows in 2011, compared to 75.2% the previous year.**

**Non-domestic (legal) flows by country of origin 2006-2011(1)(a)**




**ND(L) inflows by country of origin(1)**

| Source | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Spain | 20.2% | 19.3% | 15.0% | 11.4% | 11.8% | 10.4% |
| Poland | 14.3% | 6.5% | 8.3% | 6.1% | 7.7% | 10.3% |
| Czech Republic | 11.8% | 7.8% | 8.8% | 10.1% | 9.4% | 9.0% |
| Belgium | 3.4% | 5.4% | 4.1% | 4.0% | 4.9% | 6.0% |
| Italy | 3.5% | 5.3% | 7.8% | 5.2% | 4.0% | 5.2% |
| Luxembourg | 5.0% | 4.6% | 2.2% | 2.3% | 3.9% | 4.8% |
| France | 2.6% | 5.9% | 4.8% | 4.5% | 4.4% | 4.6% |
| Germany | 3.2% | 4.5% | 2.7% | 3.2% | 3.9% | 3.8% |
| Slovenia | 0.3% | 1.0% | 1.8% | 2.4% | 2.5% | 2.8% |
| UK | 1.3% | 3.8% | 2.9% | 3.5% | 3.0% | 2.6% |
| Greece | 3.0% | 3.4% | 2.6% | 3.9% | 3.5% | 2.6% |
| Hungary | 0.4% | 1.2% | 1.5% | 2.0% | 1.9% | 2.4% |
| Netherlands | 1.8% | 2.1% | 1.7% | 2.2% | 3.4% | 2.0% |
| Portugal | 2.3% | 2.1% | 2.0% | 2.9% | 2.0% | 1.6% |
| Denmark | 0.4% | 0.5% | 2.1% | 1.2% | 0.9% | 1.4% |
| Other EU27 | 6.3% | 9.4% | 8.2% | 8.6% | 7.9% | 6.6% |
| Total EU27 Member State | 79.9% | 82.8% | 76.4% | 73.4% | 75.2% | 76.3% |
| Canary Islands | 0.0% | 1.5% | 2.2% | 3.2% | 4.2% | 3.4% |
| Andorra | 0.2% | 0.4% | 0.1% | 1.7% | 1.7% | 2.8% |
| Russia | 1.3% | 0.5% | 0.9% | 1.9% | 1.1% | 1.1% |
| Turkey | 1.0% | 0.7% | 0.4% | 0.4% | 0.4% | 0.2% |
| Switzerland | 0.0% | 0.3% | 0.4% | 0.2% | 0.4% | 0.1% |
| Other non-EU | 17.7% | 13.8% | 19.7% | 19.2% | 17.0% | 16.1% |
| Total non-EU | 20.1% | 17.2% | 23.6% | 26.6% | 24.8% | 23.7% |
| **Total** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** |

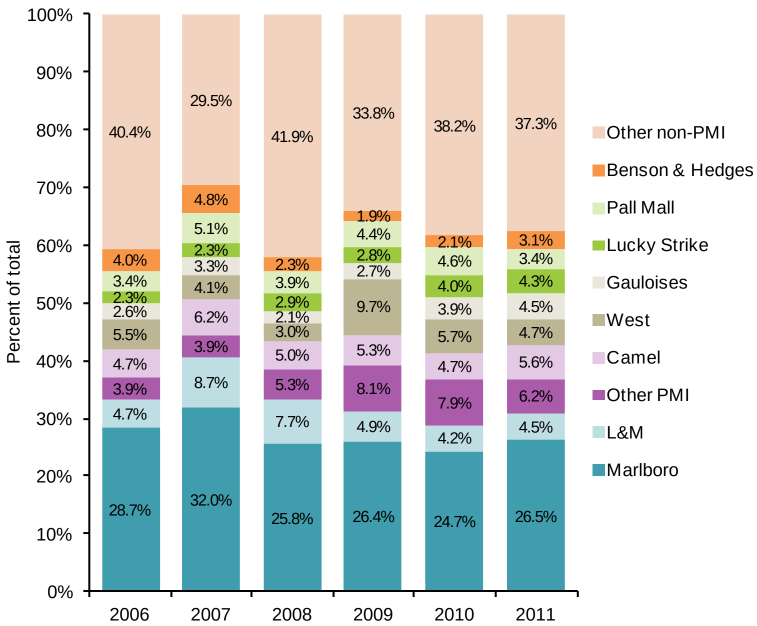
Note: (a) ND(L) by origin shares are based on country of purchase rather than variant purchased. As a result, these shares may include purchases of Duty Free variants made when travelling outside the EU

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

# Non-domestic (legal) flows by brand

**Overall PMI share of non-domestic (legal) flows increased slightly to 37.1% in 2011.**

**Non-domestic (legal) flows by brand 2006-2011[1]**




**Non-domestic (legal) inflows by brand[1]**

| Source | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Marlboro | 28.7% | 32.0% | 25.8% | 26.4% | 24.7% | 26.5% |
| L&M | 4.7% | 8.7% | 7.7% | 4.9% | 4.2% | 4.5% |
| Philip Morris | 1.0% | 1.0% | 1.0% | 1.2% | 1.9% | 2.6% |
| Chesterfield | 1.2% | 1.1% | 0.7% | 1.8% | 2.0% | 1.7% |
| Next | 0.3% | 0.2% | 0.8% | 2.3% | 0.4% | 0.4% |
| Basic | 0.0% | 0.0% | 0.2% | 0.0% | 0.1% | 0.2% |
| Other PMI | 1.5% | 1.7% | 2.6% | 2.8% | 3.6% | 1.2% |
| PMI total | 37.3% | 44.7% | 38.7% | 39.4% | 36.8% | 37.1% |
| Camel | 4.7% | 6.2% | 5.0% | 5.3% | 4.7% | 5.6% |
| West | 5.5% | 4.1% | 3.0% | 9.7% | 5.7% | 4.7% |
| Gauloises | 2.6% | 3.3% | 2.1% | 2.7% | 3.9% | 4.5% |
| Lucky Strike | 2.3% | 2.3% | 2.9% | 2.8% | 4.0% | 4.3% |
| Pall Mall | 3.4% | 5.1% | 3.9% | 4.4% | 4.6% | 3.4% |
| Benson & Hedges | 4.0% | 4.8% | 2.3% | 1.9% | 2.1% | 3.1% |
| Winston | 1.1% | 1.0% | 1.0% | 1.0% | 2.4% | 2.1% |
| Fortuna | 0.3% | 1.5% | 0.0% | 0.0% | 1.4% | 1.6% |
| Davidoff | 0.9% | 0.7% | 1.2% | 1.2% | 1.0% | 1.5% |
| John Player Special | 1.6% | 2.4% | 1.2% | 1.5% | 2.0% | 1.3% |
| Prince | 0.6% | 1.6% | 1.1% | 1.1% | 0.9% | 1.0% |
| Dunhill | 1.4% | 0.7% | 1.7% | 0.7% | 0.8% | 0.8% |
| Hb | 0.9% | 0.8% | 1.6% | 0.3% | 0.6% | 0.7% |
| Silk Cut | 1.2% | 1.2% | 0.7% | 1.1% | 0.8% | 0.7% |
| Kent | 0.0% | 0.7% | 0.6% | 0.4% | 0.6% | 0.6% |
| Other non-PMI | 32.5% | 18.8% | 32.8% | 26.6% | 27.7% | 27.2% |
| Non-PMI | 62.7% | 55.3% | 61.3% | 60.6% | 63.2% | 62.9% |
| **Total** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** |

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

# Contents

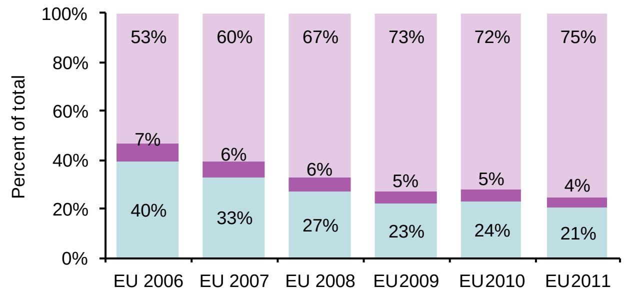
# C&C inflows and country comparison overview

| | |
|---|---|
| **Total EU counterfeit and contraband volumes increased to 65.3 billion cigarettes in 2011** | **Total C&C volumes accounted for 10.4% of total consumption in 2011 compared to 9.9% in 2010**<br>▪ Latvia, Lithuania and Bulgaria remain the markets with the highest share of illicit products, though all three experienced declines in counterfeit and consumption levels in 2011.<br>▪ In volume terms, Germany and France were the two largest destination countries for C&C inflows and accounted for over a third of total EU C&C inflows.<br>▪ Declining C&C volumes in Romania and Bulgaria were more than offset by increases in Spain, France, Poland, Greece and Germany in 2011. |
| **The share of counterfeit and contraband originating from outside the EU remained broadly stable at 60.0% in 2011** | **Unspecified product was the largest non-EU source for C&C in 2011, accounting for 11% of consumption in 2011**<br>▪ Unspecified product is that which does not bear any specific market or Duty Free labelling.<br>▪ The share of C&C accounted for by Unspecified increased from 7% in 2010 to 11% in 2011.<br>**Ukraine and Russia remain major source markets for C&C, both representing 8% of consumption in 2011**<br>▪ The share of C&C accounted for by these countries fell from 14% and 10% respectively in 2010.<br>▪ Poland accounts for the largest share of intra-EU C&C flows by source country at 12.9% in 2011 compared to 11.7% in 2010 |
| **The share of illicit cigarette consumption in Mediterranean countries increased significantly in 2011.** | **C&C share of consumption in the Mediterranean region increased to 6.5% in 2011, up from 4.1% the previous year and equivalent to 12.6 billion cigarettes**<br>▪ Spain and Greece have seen significant increases in the volume of C&C consumed in 2011 compared to 2010.<br>**In 2011, C&C volumes in Eastern border countries declined for the first time since 2006**<br>▪ Significant declines in C&C consumption were observed in Romania and Bulgaria during 2011; these countries had previously experienced rapid growth in the illicit trade since 2007.<br>**C&C volumes increased slightly in the Western and Central EU countries in 2011.**<br>▪ This increase was primarily driven by France and Germany, whilst volumes in Czech Republic and the UK declined. |

# C&C volumes by category

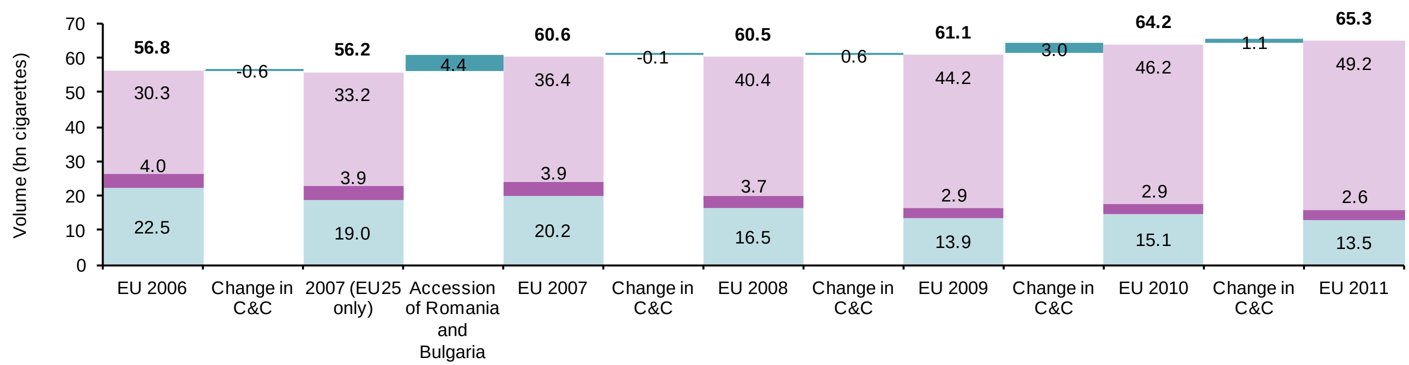
**Counterfeit and contraband inflows increased by 1.1 billion cigarettes to 65.3 billion in 2011.**

### C&C cigarette volumes by category 2006-2011[(1)]




| CAGR (%) | 2006-2007 [(a)] | 2007-2008 | 2008-2009 | 2009-2010 | 2010-2011 |
|---|---|---|---|---|---|
| Non-PMI C&C | 9.8% | 10.7% | 9.6% | 4.3% | 6.6% |
| PMI counterfeit | -2.4% | -7.0% | -19.4% | -1.1% | -11.8% |
| PMI contraband | -15.4% | -18.3% | -15.6% | 8.2% | -10.6% |
| **Total C&C** | **-1.1%** | **-0.1%** | **1.0%** | **5.0%** | **1.7%** |

### C&C cigarette volumes by category 2006-2011[(1)]



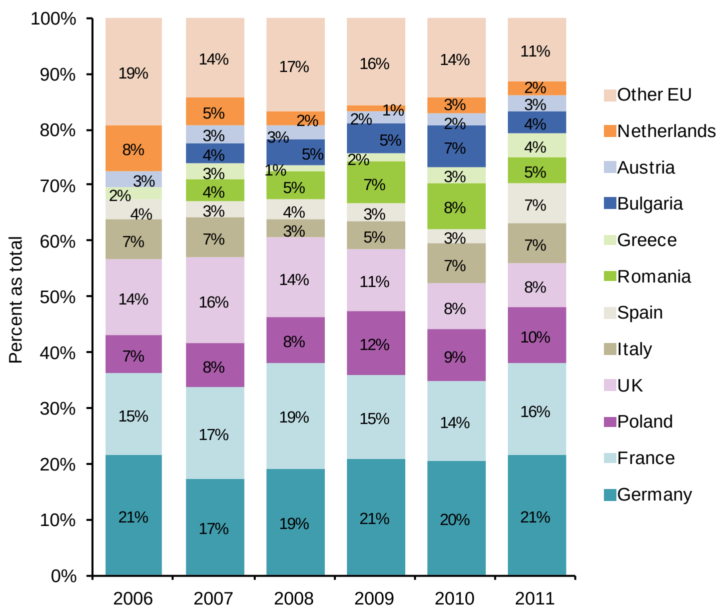

Note: (a) Percentage change 2006-2007 is for EU-25 only

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

# C&C volumes by destination country

**Germany, France, Poland and the UK together accounted for over half of total EU counterfeit and contraband consumption in 2011.**

## C&C volumes by destination country 2006-2011(1)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption** | 8.3% | 8.4% | 8.6% | 8.9% | 9.9% | 10.4% |
| **C&C share of non-domestic** | 64.7% | 66.6% | 67.6% | 70.9% | 73.0% | 73.7% |

## C&C volume by destination(1)(a)

| Destination | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Germany | 12.1 | 10.4 | 11.5 | 12.7 | 13.1 | 14.0 |
| France | 8.5 | 10.0 | 11.5 | 9.2 | 9.3 | 10.7 |
| Poland | 3.8 | 4.7 | 4.9 | 7.1 | 5.8 | 6.7 |
| UK | 7.8 | 9.4 | 8.6 | 6.7 | 5.4 | 5.0 |
| Italy | 4.0 | 4.3 | 2.0 | 3.0 | 4.5 | 4.8 |
| Spain | 2.1 | 1.8 | 2.1 | 1.9 | 1.8 | 4.6 |
| Romania | n/a | 2.2 | 3.1 | 4.6 | 5.3 | 3.1 |
| Greece | 1.2 | 1.9 | 0.7 | 1.0 | 1.8 | 2.7 |
| Bulgaria | n/a | 2.2 | 2.7 | 3.3 | 4.8 | 2.7 |
| Austria | 1.7 | 2.0 | 1.5 | 1.3 | 1.4 | 1.9 |
| Netherlands | 4.6 | 3.0 | 1.5 | 0.6 | 1.8 | 1.6 |
| Lithuania | 2.3 | 1.6 | 0.9 | 1.1 | 1.6 | 1.1 |
| Ireland | 0.7 | 1.2 | 1.6 | 1.4 | 1.2 | 1.0 |
| Finland | 0.6 | 1.1 | 1.1 | 0.8 | 0.9 | 0.9 |
| Latvia | 0.3 | 0.2 | 0.2 | 0.8 | 1.0 | 0.8 |
| Belgium | 0.9 | 0.8 | 0.7 | 1.3 | 0.7 | 0.7 |
| Sweden | 0.9 | 0.9 | 0.9 | 0.7 | 0.7 | 0.6 |
| Czech Republic | 0.1 | 0.1 | 1.3 | 1.1 | 0.9 | 0.6 |
| Hungary | 3.3 | 1.7 | 1.4 | 1.0 | 0.8 | 0.5 |
| Estonia | 0.4 | 0.2 | 0.1 | 0.5 | 0.3 | 0.3 |
| Portugal | 0.6 | 0.3 | 0.5 | 0.3 | 0.3 | 0.3 |
| Slovenia | 0.3 | 0.2 | 0.6 | 0.3 | 0.2 | 0.2 |
| Denmark | 0.2 | 0.2 | 0.5 | 0.3 | 0.3 | 0.2 |
| Malta | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 |
| Slovakia | 0.3 | 0.1 | 0.4 | 0.1 | 0.1 | 0.1 |
| Luxembourg | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 |
| Cyprus | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| **Total** | **56.8** | **60.6** | **60.5** | **61.1** | **64.2** | **65.3** |

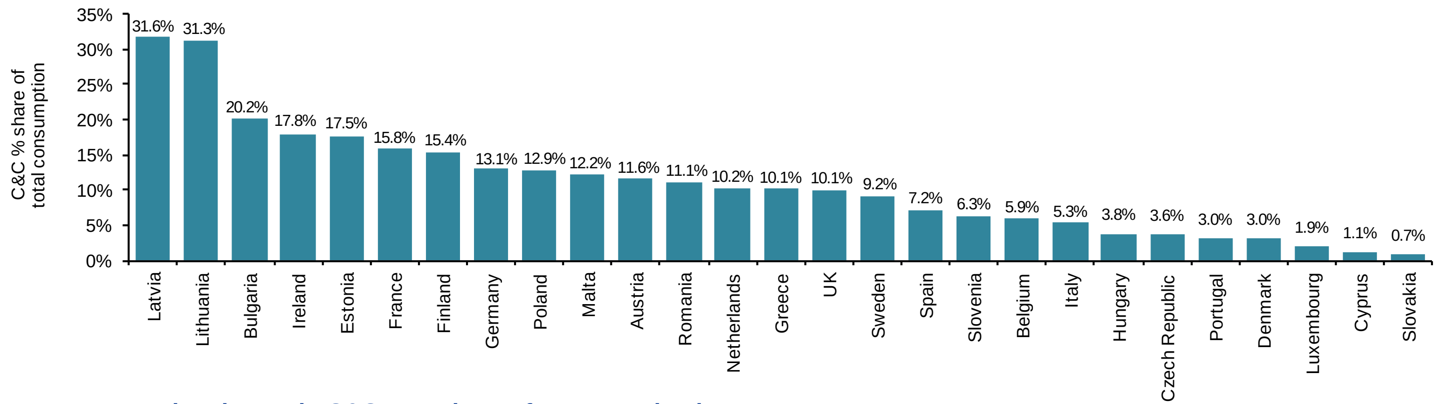
Note (a) Volumes in billion cigarettes
Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

# C&C inflows share of total consumption

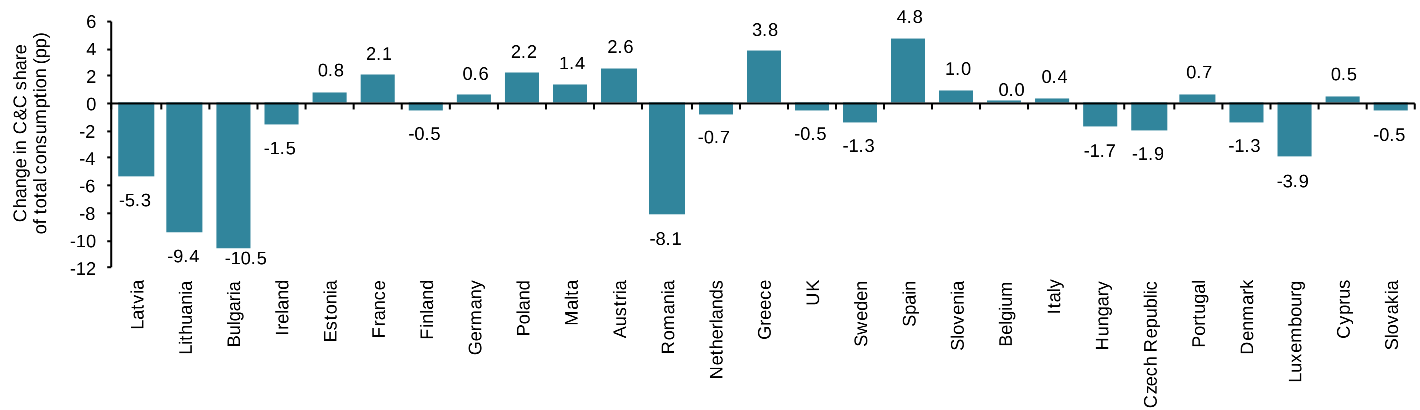
**Latvia had the highest C&C share of consumption at 31.6% in 2011.**

**Spain and Greece experienced the largest increases in C&C consumption between 2010 and 2011 at 4.8 and 3.8 percentage points respectively.**

**C&C as a share of consumption by country 2011(1)**




**Percentage point change in C&C as a share of consumption by country 2010-2011(1)**



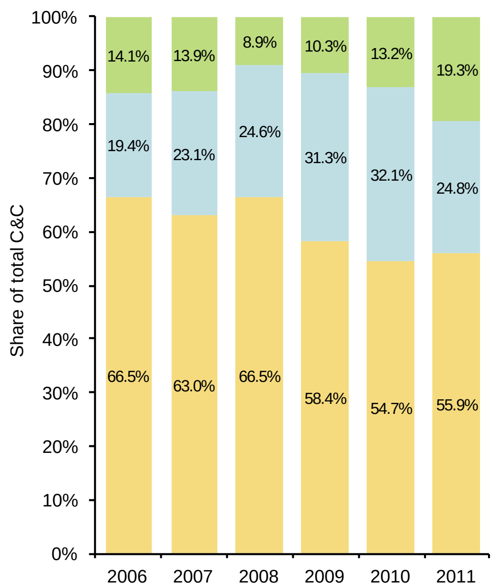

Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

# C&C inflows by destination regions

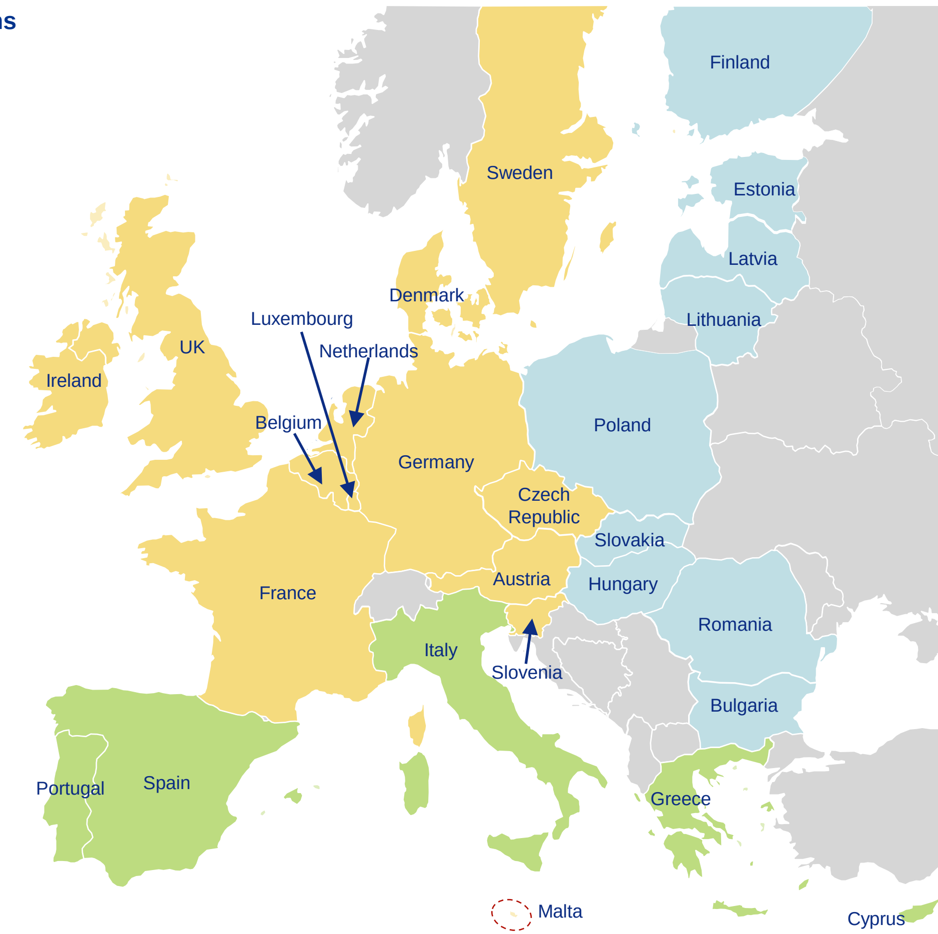
**The share of EU illicit cigarette consumption accounted for by the Mediterranean countries increased significantly to 19% in 2011.**

**Over the same period the share accounted for by Eastern border countries declined from 32% to 25%.**

**Share of total EU C&C inflows by destination regions 2006-2011(1)**




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C (bn cigarettes)** | 56.8 | 60.6 | 60.5 | 61.1 | 64.2 | 65.3 |



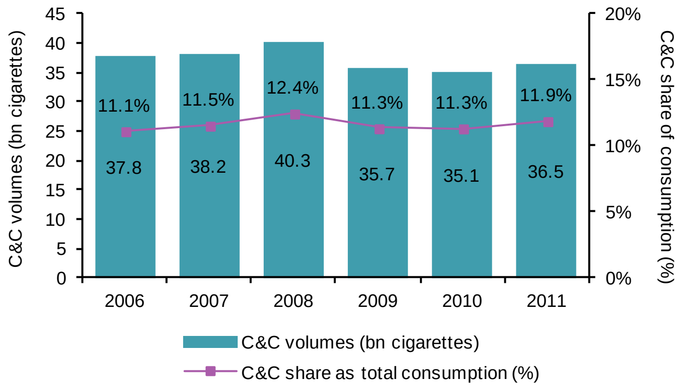

Key:
- Eastern border EU countries – Bulgaria, Estonia, Finland, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia
- Western and Central EU countries – Austria, Belgium, Czech Republic, Denmark, France, Germany, Ireland, Luxembourg, Netherlands, Slovenia, Sweden and UK
- Mediterranean EU countries – Cyprus, Greece, Italy, Malta, Portugal and Spain

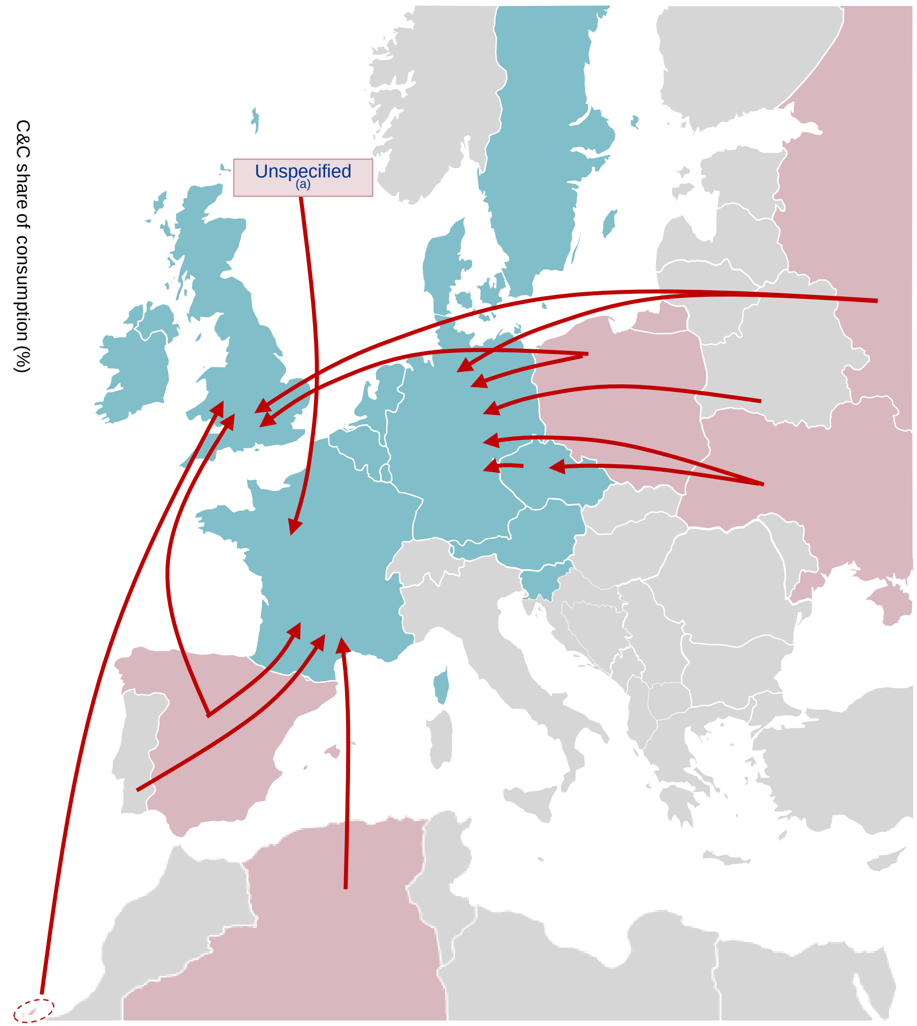
Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

# C&C inflows by destination regions

**Counterfeit and contraband share of consumption in the Western and Central EU markets increased to 11.9% and 36.5 billion cigarettes in 2011.**

## C&C inflows to Western and Central EU countries 2006-2011[(1)]




Key:
- Western and Central EU countries
- Source countries with inflows of over 1 billion cigarettes in 2011
- C&C flows of over 0.4 billion cigarettes in 2011

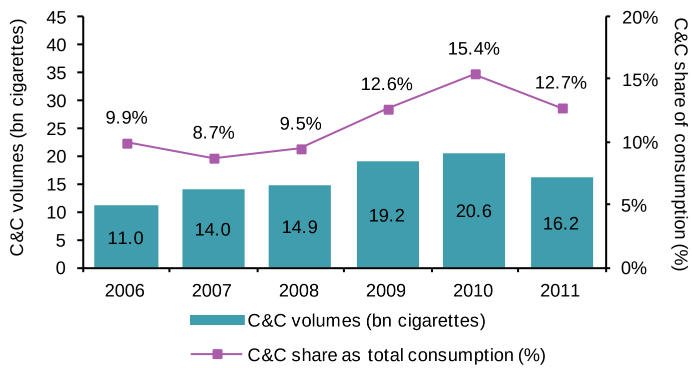
Note: (a) Packs which have no clear indication of origin were classified as "Unspecified"

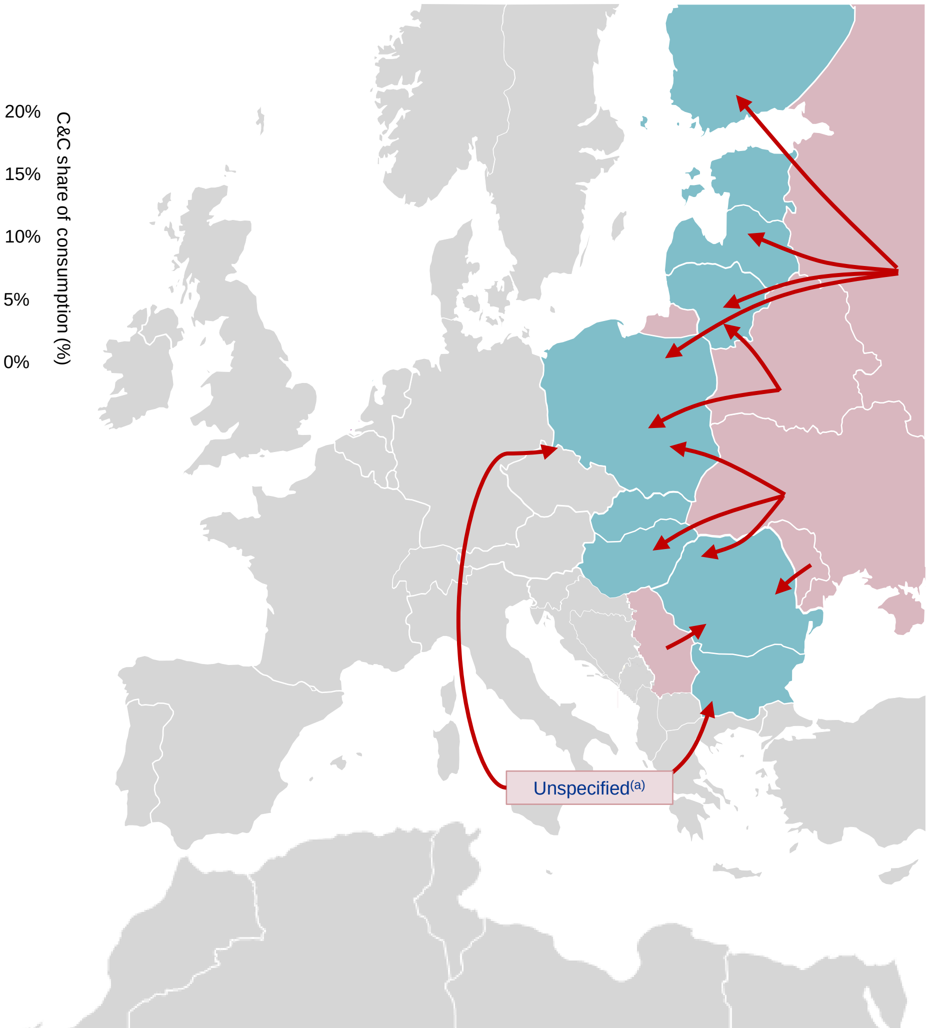
Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

# C&C inflows by destination regions

**Counterfeit and contraband as a share of consumption in Eastern border countries declined to 12.7% in 2011.**

**C&C inflows to Eastern border EU countries 2006-2011[1]**




Key:
- Eastern border EU countries
- Source countries with inflows of over 1 billion cigarettes in 2011
- C&C flows of over 0.4 billion cigarettes in 2011

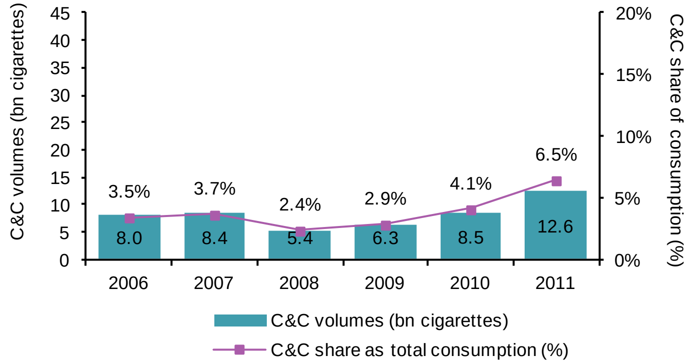
Note: (a) Packs which have no clear indication of origin were classified as “Unspecified”

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

# C&C inflows by destination regions

**Counterfeit and contraband increased significantly in the Mediterranean countries in 2011 to account for 12.6 billion cigarettes and 6.5% of consumption.**

**C&C inflows to Mediterranean EU countries 2006-2011[1]**





Key:
- Mediterranean EU countries
- Source countries with inflows of over 1 billion cigarettes in 2011
- C&C flows of over 0.4 billion cigarettes in 2011

Note: (a) Packs which have no clear indication of origin were classified as "Unspecified"

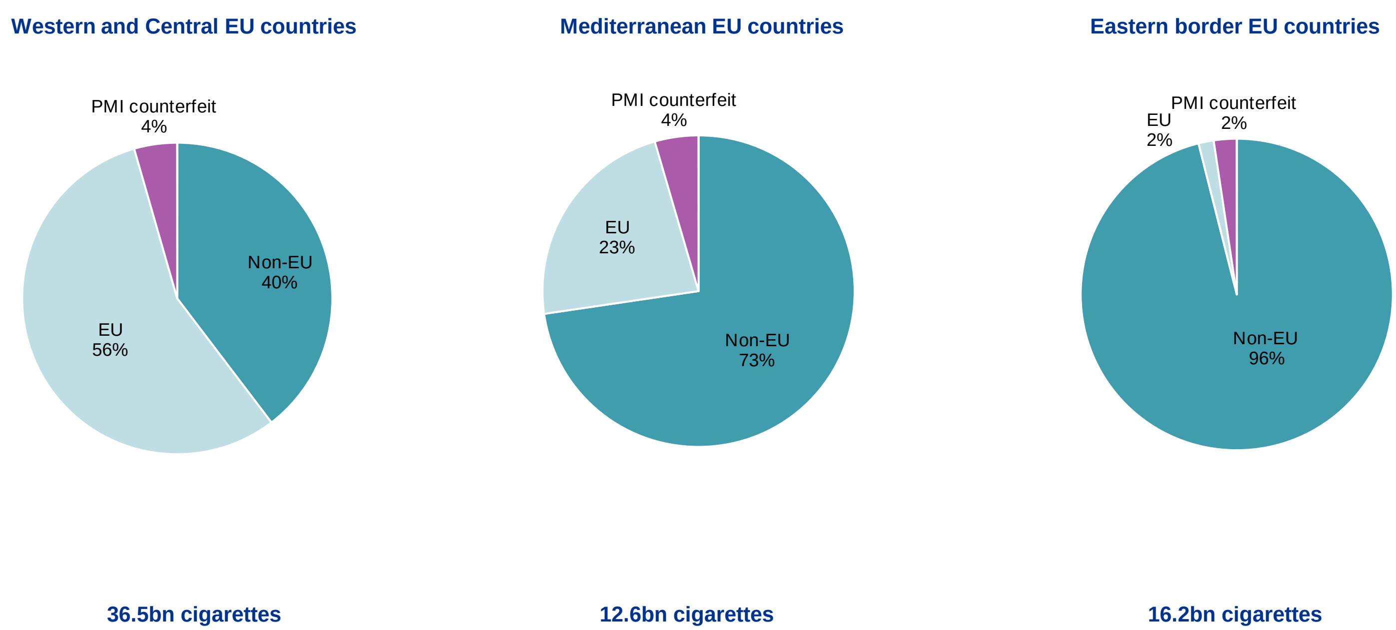
Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

# C&C inflows by destination regions

**Non-EU sources accounted for the majority of counterfeit and contraband inflows in the Eastern border and Mediterranean EU countries.**

**In contrast, EU sources predominated in the Western and Central EU counties.**

**Share of C&C inflows by origin 2011(1)**

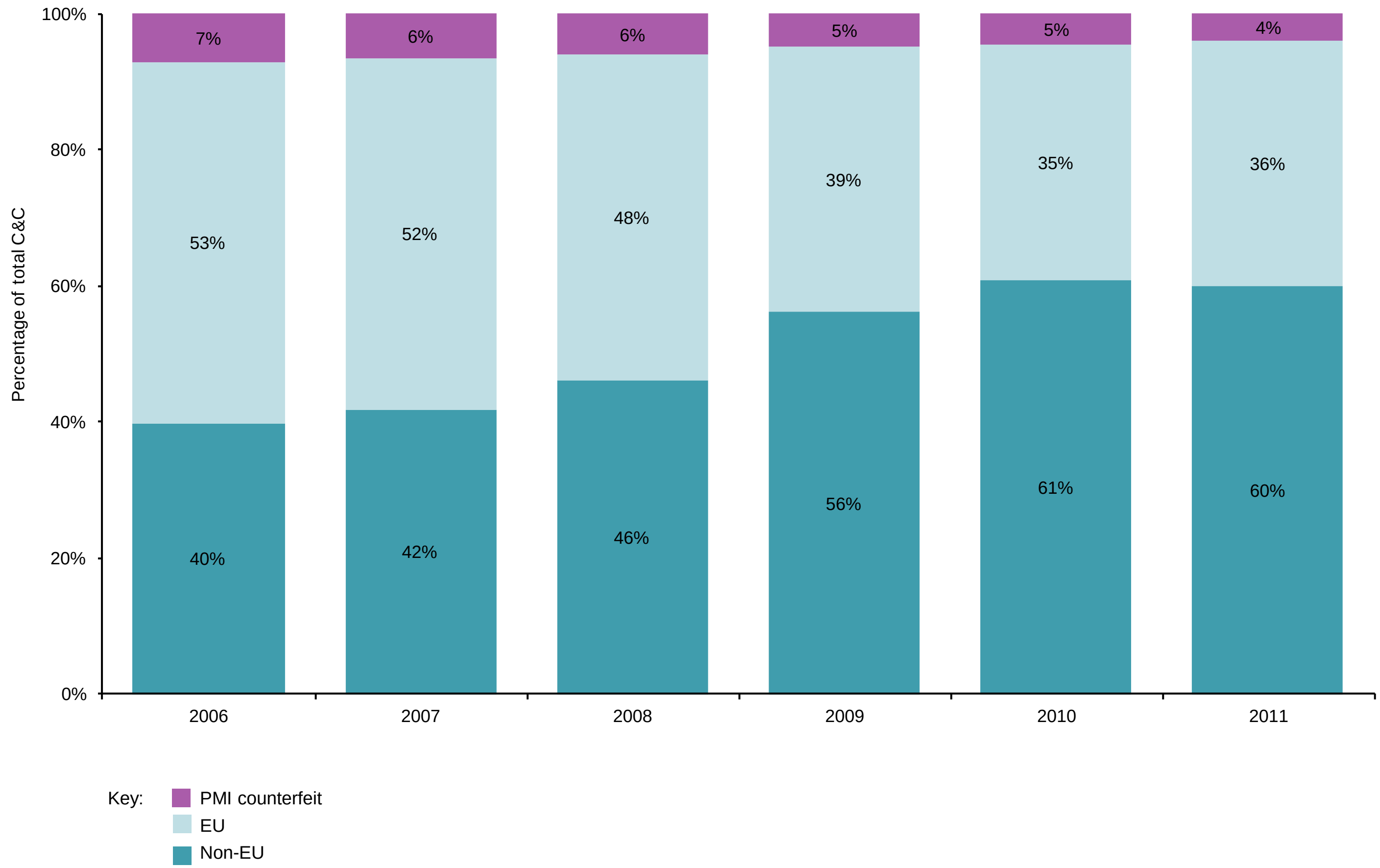



Source: (1) KPMG analysis based on EPS, LDS and ND(L) research

# C&C inflows by origin

**At a total level the share of counterfeit and contraband originating from outside the EU remained broadly stable at 60% in 2011.**

**C&C inflows by origin, 2006-2011[(1)]**

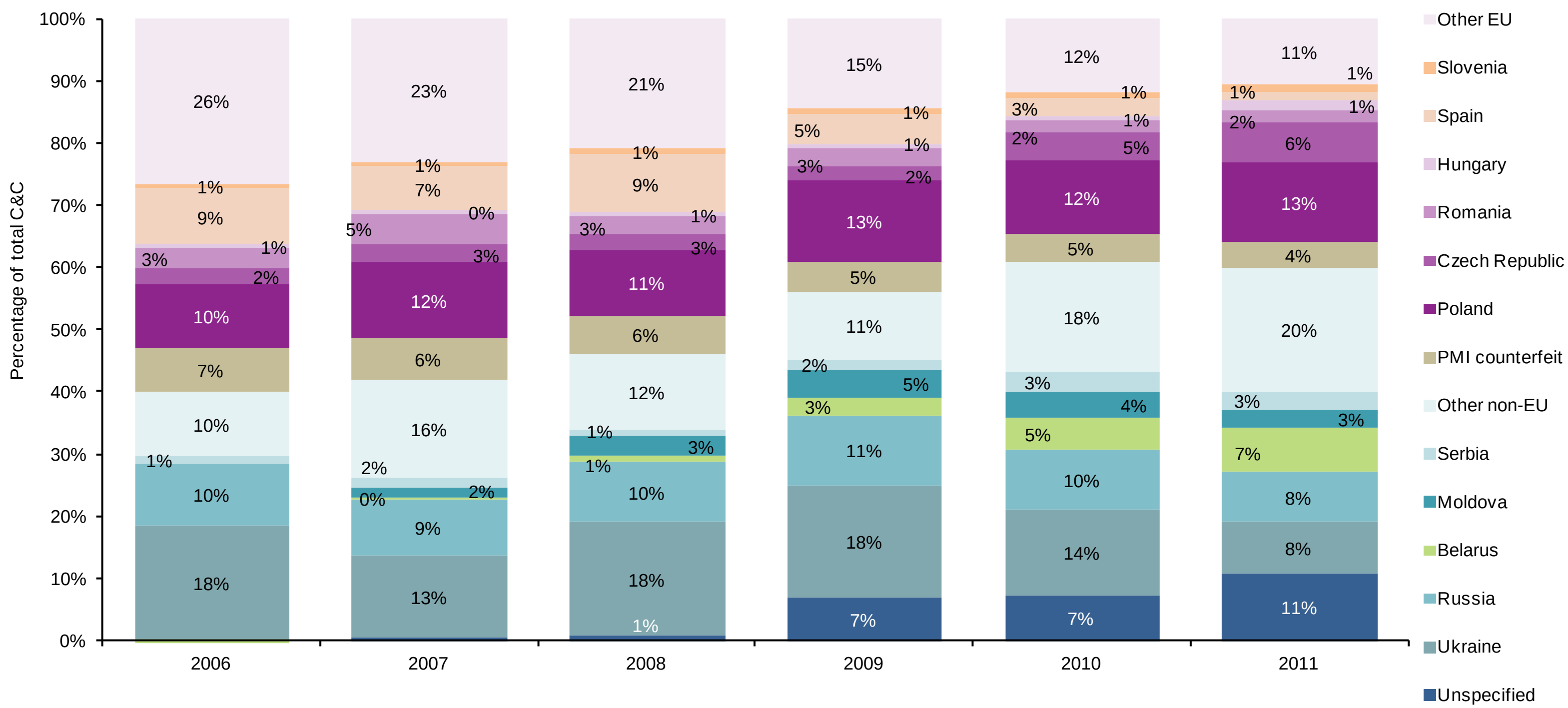



Source: (1) KPMG analysis based on Empty Pack Surveys, legal domestic sales and non-domestic (legal) research

# C&C flows by country of origin

**Unspecified products became the largest source of illicit products from outside the EU in 2011; Russian and Ukrainian inflows declined over the same period.**

**C&C inflows by origin, 2006-2011[(1)(a)]**




Note: (a) Unspecified packs are packs which do not bear any specific market or Duty Free labelling

Source: (1) KPMG analysis based on Empty Pack Surveys, legal domestic sales and non-domestic (legal) research

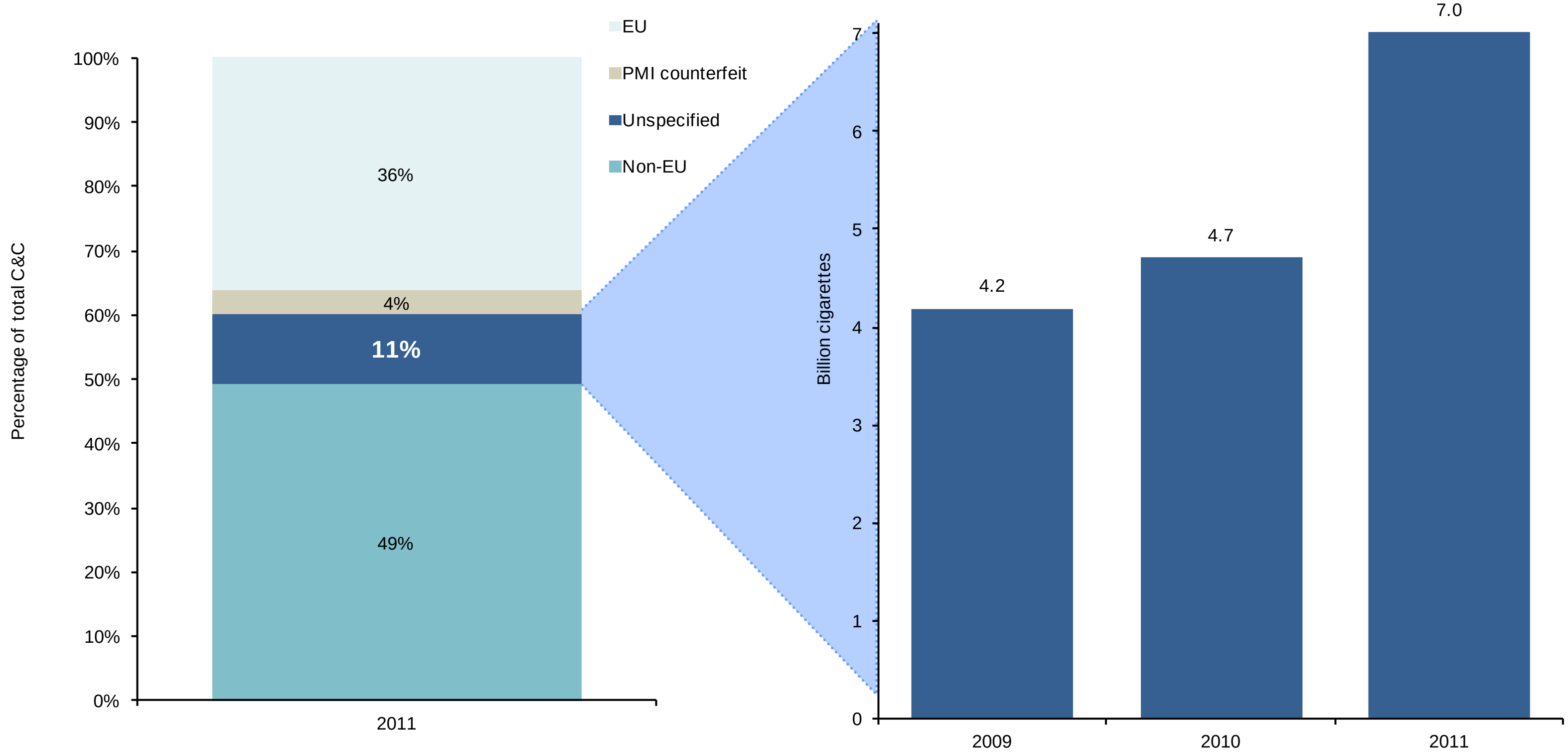
# Consumption of Unspecified product

**The level of Unspecified products consumed in the EU increased to 7.0 billion in 2011.**

**All Unspecified brands are classed as Illicit Whites.**

**C&C inflows by origin 2011[1]**

**Unspecified contraband inflows from non-EU countries, 2009-2011[1][a]**



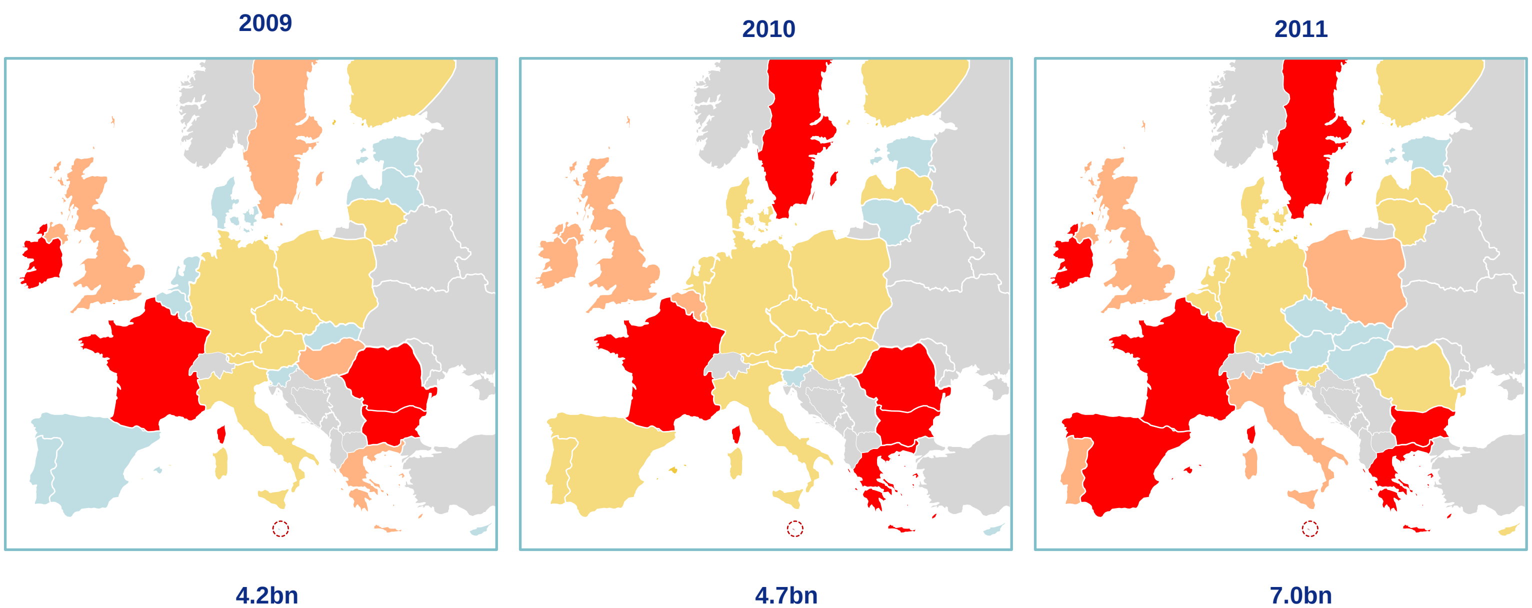

Note: (a) Unspecified packs are packs which do not bear any specific market or Duty Free labelling

Source: (1) KPMG analysis based on Empty Pack Surveys, legal domestic sales and non-domestic (legal) research

# Major destination markets for Unspecified product

**The growth in consumption of Unspecified product has been driven by increases in the Mediterranean countries in particular.**

## Unspecified share of total consumption 2009-2011[(1)(a)]




Key:
- No Unspecified observed
- Accounts for 0% - 0.49% consumption
- Accounts for 0.5% - 0.9% consumption
- Accounts for more than 1.0% consumption

Note: (a) Unspecified refers to packs which do not bear any specific market or Duty Free labelling

Source: (1) KPMG analysis based on Empty Pack Surveys, legal domestic sales and non-domestic (legal) research

# Contents

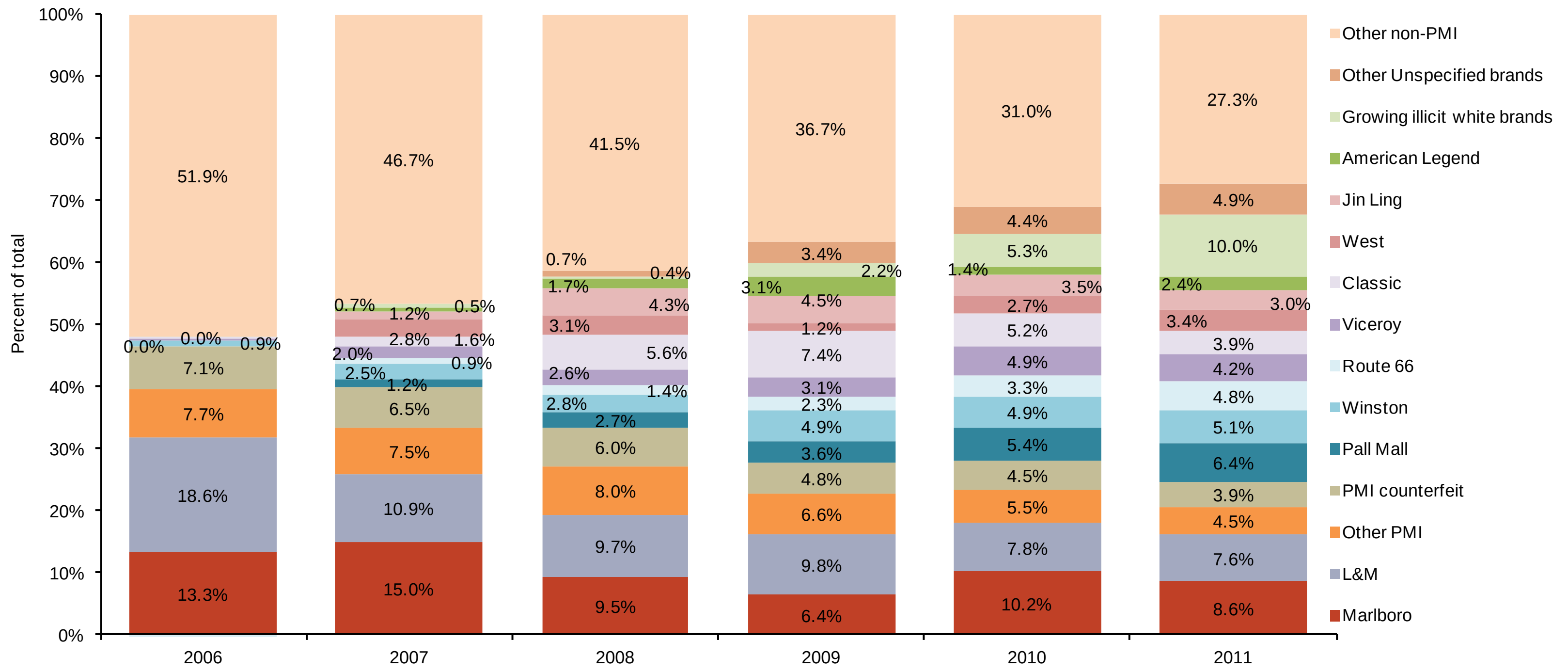
# C&C inflows and brand comparison overview

| | |
|---|---|
| **The share of EU counterfeit and contraband accounted for by Marlboro, Viceroy and Classic declined in 2011, while those of Pall Mall, Route 66 and American Legend increased** | **Consumption of counterfeit and contraband Marlboro, Viceroy and Classic declined in 2011**<br>■ Contraband volumes of Marlboro fell from 6.5 billion cigarettes in 2010, to 5.6 billion in 2011<br>■ The share of EU counterfeit and contraband accounted for by volumes of Viceroy and Classic fell from 5% to 4% for both brands<br>**Pall Mall and Route 66 accounted for an increased share of EU counterfeit and contraband in 2011**<br>■ Pall Mall's share increased from 5% in 2010 to 6% in 2011 and Route 66's share increased from 3% in 2010 to 5% in 2011 |
| **Illicit white volumes increased to 24% of total EU counterfeit and contraband, exceeding 15 billion cigarettes in 2011** | **The overall decline in the three largest Illicit White (Jin Ling, Classic and American Legend) volumes was more than offset by volume growth in a number of fast growing illicit brands**<br>■ American Legend was the only established Illicit White to experience increased volumes in 2011 due to increased penetration in France;<br>■ The number of illicit brands in the EU with volumes of over 200 million grew significantly in 2011, with fast growing illicit brands accounting for 6.5 billion cigarettes, reflecting increasing fragmentation of overall illicit volumes at a brand level;<br>– The growing illicit brands of Fest, Gold Mount, Minsk, Premier, Fast, Raquel, Ducal, Marble, CK, Kiss, NZ, Austin, GR, Magnat and Queen accounted for 10% of total counterfeit and contraband consumption in 2011, doubling from 5% in 2010.<br>– A number of Illicit Whites are entirely or partly of Unspecified variant, including; American Legend, Gold Mount, Raquel, Ducal and Austin.<br>– Karelia, Kaanee American Tobacco and H.Van Landewyck were the largest manufacturers of Unspecified product, representing a combined share of 44% of the EU total in 2011. |
| **PMI contraband share of EU counterfeit and contraband inflows declined to 20.7% in 2011, down from 23.5% in 2010** | **PMI contraband volumes fell from 15.1 billion cigarettes in 2010 to 13.5 billion cigarettes in 2011**<br>■ The decline in total PMI contraband flows was largely driven by reduced illicit flows of Marlboro.<br>■ Marlboro inflows decreased from 10.2% of total EU C&C inflows in 2010 to 8.6% in 2011. |

# Share of C&C flows by brand

**The share of counterfeit and contraband accounted for by Marlboro, Viceroy and Classic declined in 2011 whilst the share of Pall Mall, Route 66, American Legend and a number of growing Illicit White brands increased.**

**C&C inflows by brand, 2006-2011[(1)(a)]**




Note: (a) Growing illicit brands include; Austin, CK, Ducal, Fast, Fest, Gold Mount, GR, Kiss, Magnat, Marble, Minsk, NZ, Premier, Queen and Raquel

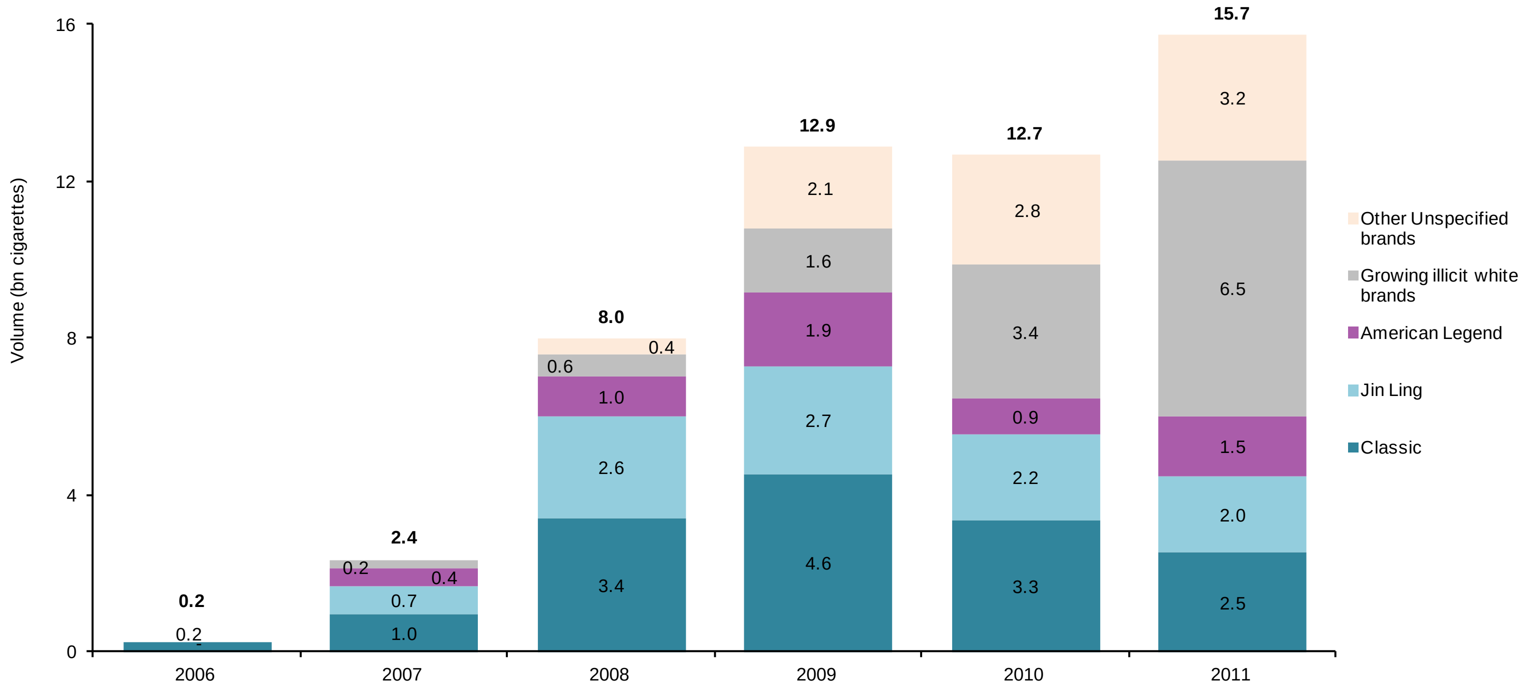
Source: (1) KPMG analysis based on Empty Pack Surveys, legal domestic sales and non-domestic (legal) research

# Consumption of Illicit Whites

**Illicit white volumes increased to 24% of counterfeit and contraband volumes, despite the decline of Jin Ling and Classic.**

**In 2011, 18 Illicit White brands had volumes of over 200 million cigarettes.**

**Consumption of key and growing Illicit White brands, 2006-2011[1][a]**




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **% of total EU C&C** | **0%** | **4%** | **13%** | **21%** | **20%** | **24%** |

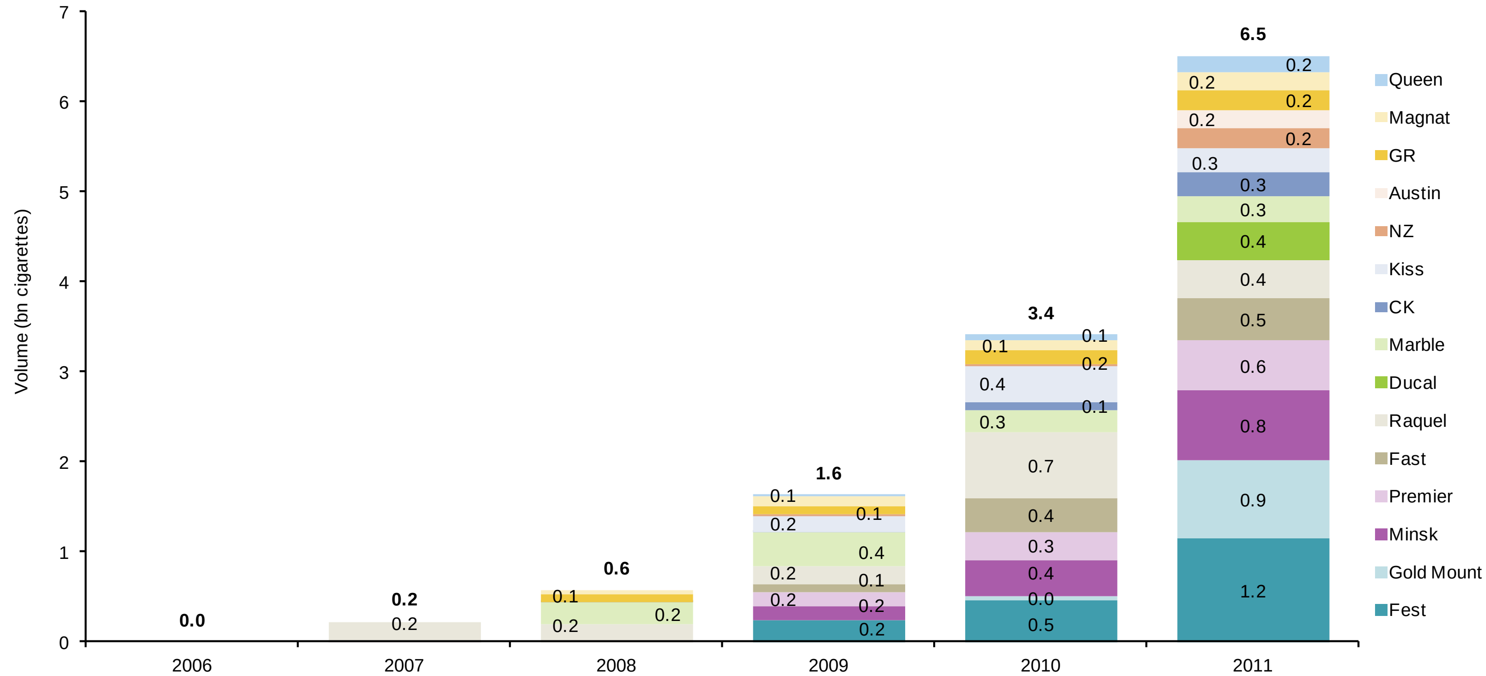
Note: (a) This analysis covers Illicit White brands with an inflow greater than 200 million sticks in 2011 as well as Unspecified brands.

Source: (1) KPMG analysis based on Empty Pack Surveys, legal domestic sales and non-domestic (legal) research

# Consumption of growing Illicit White brands

**The share of counterfeit and contraband flows accounted for by fast growing Illicit White brands doubled in 2011, reaching 6.5 billion cigarettes.**

**Consumption of growing Illicit White brands, 2006-2011[(1)(a)]**




| % of total EU C&C | 0% | 0% | 1% | 3% | 5% | 10% |
|---|---|---|---|---|---|---|

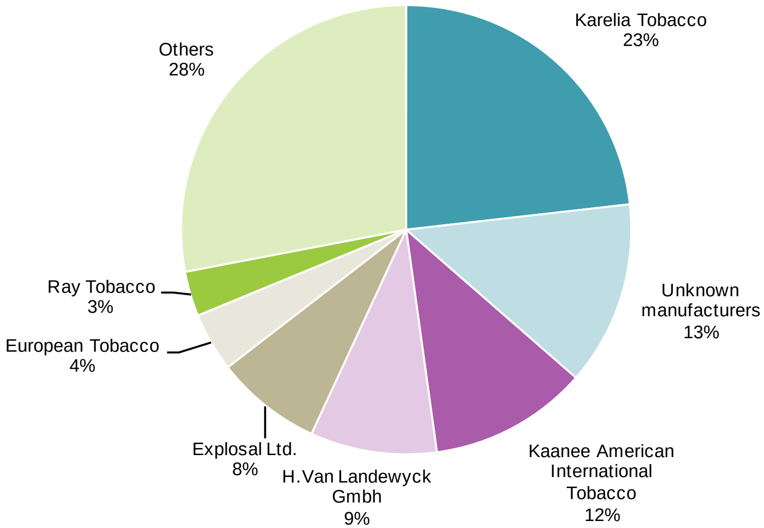
Note: (a) Fast growing illicit brands are defined as those with an inflow greater than 200 million sticks in 2011

Source: (1) KPMG analysis based on Empty Pack Surveys, legal domestic sales and non-domestic (legal) research

# Unspecified brands by manufacturer

**Karelia, Kaanee American International Tobacco and H. Van Landewyck accounted for 44% of Unspecified volumes consumed in the EU in 2011.**

**C&C inflows from Unspecified market by manufacturer, 2011[(1)(a)]**




**100% = 7.0 billion cigarettes**

**Selected brands for major manufacturers of Unspecified**

| Manufacturer | Brand |
|---|---|
| Karelia Tobacco | American Legend<br>Karelia |
| Unknown manufacturers | Goal<br>Amigos<br>Lampsi |
| Kaanee American International Tobacco | Gold Mount |
| H.Van Landewyck Gmbh | Ducal<br>Austin |
| Explosal Ltd. | Raquel<br>Gold Classic |
| European Tobacco | President<br>Hd |
| Ray Tobacco | Walton |

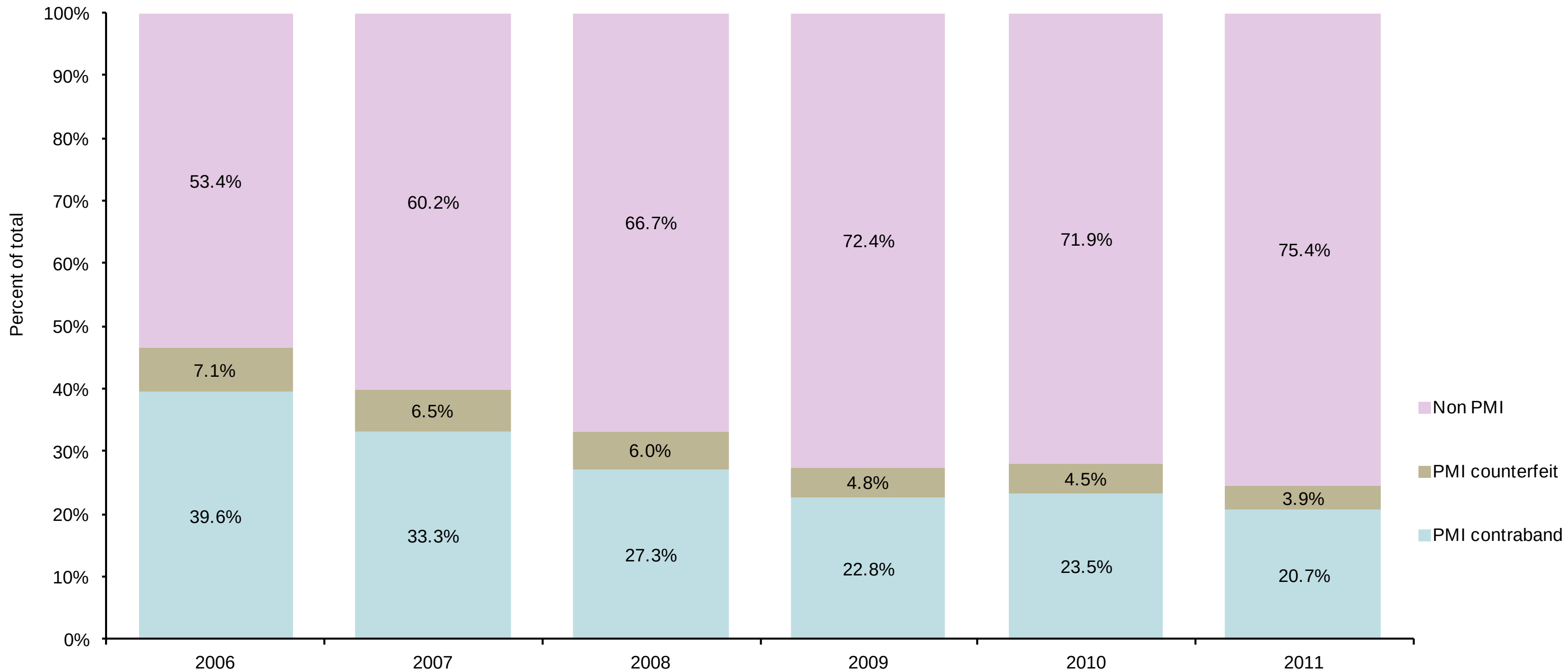
Note: (a) All Unspecified brands are classed as Illicit Whites

Source: (1) KPMG analysis based on Empty Pack Surveys, legal domestic sales and non-domestic (legal) research

# PMI counterfeit and contraband share of EU total

**Genuine PMI product share of EU counterfeit and contraband consumption declined to 20.7% in 2011.**

**PMI share of C&C consumption, 2006-2011(1)**




Source: (1) KPMG analysis based on Empty Pack Surveys, legal domestic sales and non-domestic (legal) research

# Contents

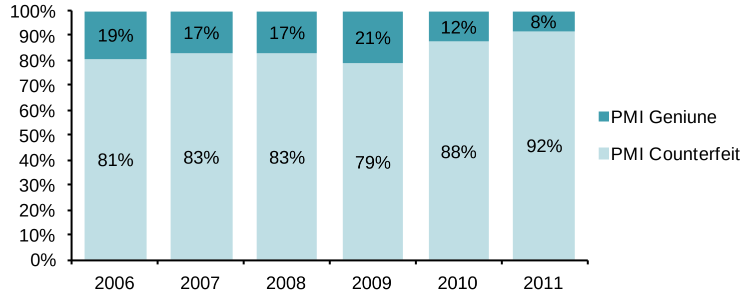
# Seizure data for PMI product

| Counterfeit product accounted for 92% of seizure volumes in 2011 | **Seizure data is dominated by counterfeit products**<br>■ Anecdotal evidence suggests that counterfeit is more likely to be transported in large shipments such as containers<br>– Average seizure size for counterfeit product was approximately 444,000 cigarettes in 2011, compared to 26,000 cigarettes for genuine product<br>– In addition, smaller seizures of less than five cases and instances of individuals attempting to exceed import allowances may not be reported<br>■ The availability of low cost 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 |
|---|---|

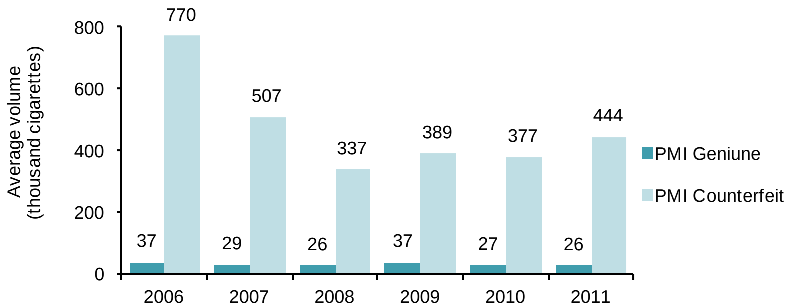
# Counterfeit share of PMI seizures

**Counterfeit products accounted for 92% of PMI seizure volumes in 2011.**

### Counterfeit share of cigarette seizures (all EU PMI seizures), 2006-2011[(1)(a)(b)]




### Average number of cigarettes per seizure event (all EU PMI seizures), 2006-2011[(1)(a)(b)]




### Counterfeit product accounted for the majority of seized cigarettes in the EU in 2011

- The share of counterfeit as a proportion of total seizures has increased by 4 percentage points from 2010 to 2011

### 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 444,000 cigarettes, compared to 26,000 cigarettes of genuine product

### Seizure data is weighted towards counterfeit product

- Customs and investigations reports suggest that counterfeit is more likely to be transported in large shipments such as containers
- The availability of low cost genuine product from outside the EU means that it can be moved in a large number of smaller quantities which may be more difficult to detect and intercept
- Smaller seizure volumes and instances of individuals attempting to exceed import allowances may not be reported

Notes: (a) Seizures data presented is based on EU-27 countries for 2007-2011, and EU-25 countries for 2006

(b) Seizure data in this report is based upon the most recently available sources. Variances with the Project Star 2010 report and seizure data presented for prior years are attributable to additional seizure data received after publication of the Project Star 2010 report

Source: (1) PMI Management, based on notifications received from local law enforcement as supplied to KPMG on 17 May 2012

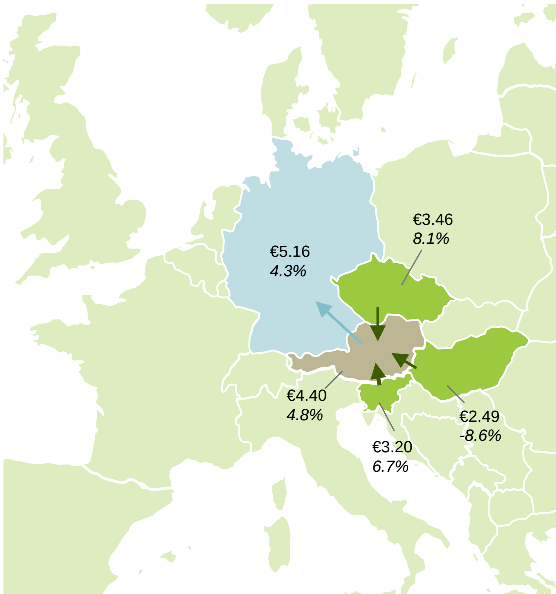
# Contents

# Contents – country detail

# Market overview

**The share of cigarette consumption in Austria accounted for by counterfeit and contraband increased to 11.6% in 2011.**

### Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows[(1)(2)(a)(b)(c)(d)]

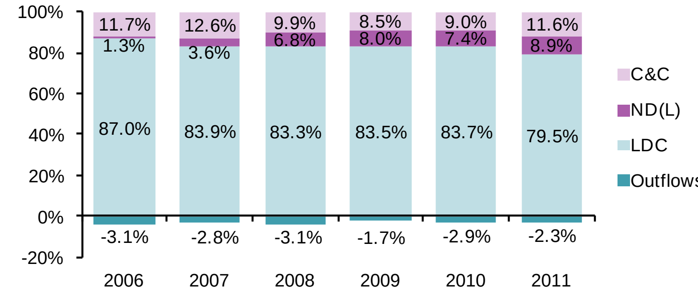



Key:
- Austria
- Top three source countries
- Top destination country

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) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) Relative cigarette prices in the Czech Republic and Hungary are subject to fluctuations as result of exchange rate changes of the Koruna and Forint respectively versus the Euro
(d) Arrow size indicates relative cigarette flow volume

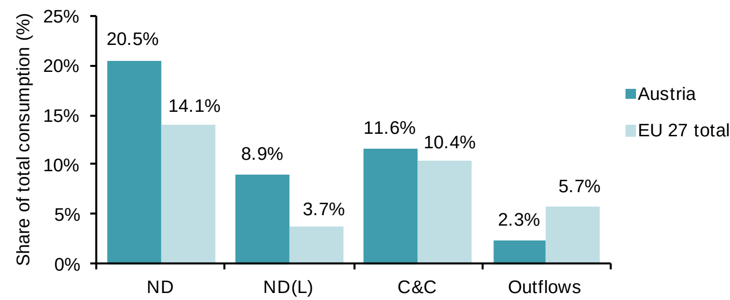
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011
(3) Synovate/Ipsos ND(L) research 2006, 2008, 2010 and 2011(Ipsos acquired Synovate in 2011)

### Share of Austria consumption by type 2006-2011[(1)(3)]




| Volume (bn cigarettes) | 14.9 | 15.8 | 15.3 | 15.7 | 15.7 | 16.0 |
|---|---|---|---|---|---|---|

### Comparison of EU and Austrian consumption by type 2011[(1)(3)]



# Total cigarette consumption

**Consumption of non-domestic cigarettes has increased to 3.28 billion in 2011, driven largely by an increase in the volume of inflows from Hungary and Slovenia.**

**Total Austria cigarette consumption** (1)(2)

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 13.40 | 13.66 | 13.20 | 13.39 | 13.54 | 13.09 |
| Outflows | -0.46 | -0.45 | -0.48 | -0.27 | -0.45 | -0.36 |
| Legal domestic consumption (LDC) | 12.94 | 13.22 | 12.72 | 13.12 | 13.09 | 12.72 |
| Non-domestic legal(ND(L)) | 0.20 | 0.56 | 1.04 | 1.25 | 1.15 | 1.43 |
| Counterfeit and contraband (C&C) | 1.74 | 1.98 | 1.51 | 1.34 | 1.41 | 1.85 |
| Total non-domestic | 1.94 | 2.54 | 2.55 | 2.59 | 2.56 | 3.28 |
| **Total cigarette consumption** | **14.87** | **15.76** | **15.27** | **15.71** | **15.65** | **16.00** |

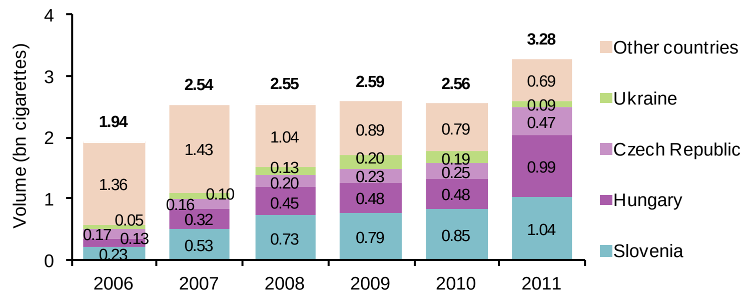
**Austria Other Tobacco Product market** (3)(a)(b)

| Billion cigarette equivalent | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| OTP (LDS) | 0.56 | 0.71 | 0.71 | 0.61 | 0.68 | 0.75 |

**Cigarette outflows from Austria** (1)

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Germany | 0.23 | 0.17 | 0.20 | 0.18 | 0.33 | 0.28 |
| Other EU | 0.24 | 0.28 | 0.28 | 0.09 | 0.12 | 0.09 |
| **Total cigarette outflows** | **0.46** | **0.45** | **0.48** | **0.27** | **0.45** | **0.36** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011** (1)(2)




Notes: (a) Other Tobacco Products (OTP) include fine cut and pipe tobacco. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams

(b) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

(2) Synovate/Ipsos ND(L) research 2006, 2008, 2009, 2010 and 2011

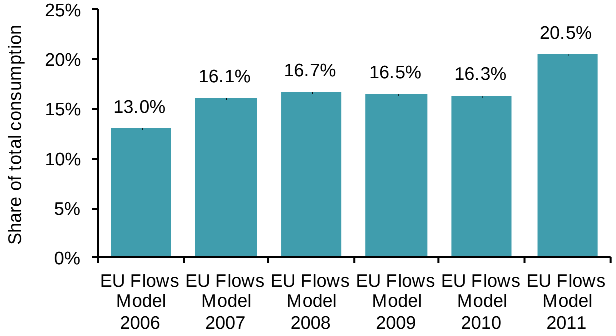
(3) In Market Sales data provided by PMI.

# Comparison of external sources for non-domestic estimates

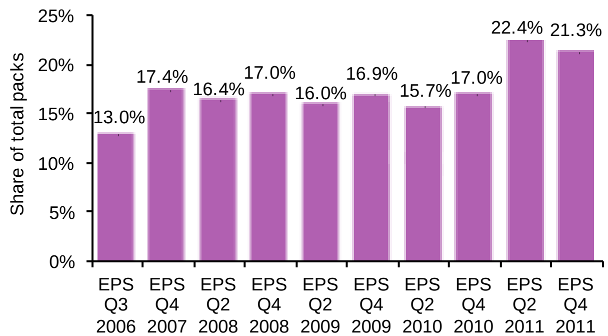
**The EU Flows Model estimate for non-domestic consumption in 2011 was calculated using results from Empty Pack surveys conducted in Quarter 2 and Quarter 4.**

**The EU Flows Model suggests an increase in non-domestic incidence, from 16.3% in 2010 to 20.5% in 2011.**

### EU Flows Model non-domestic market estimates(1)




### EPS non-domestic market estimates(2)(3)




Sources: (1) KPMG EU Flows Model
(2) Austrian Chamber of Commerce Empty Pack surveys 2006-2010
Full PMI results were available along with total non-domestic share
(3) National Manufacturers Association Empty Pack survey 2011
(4) Slovenian Statistics Bureau, extracted March 2012.

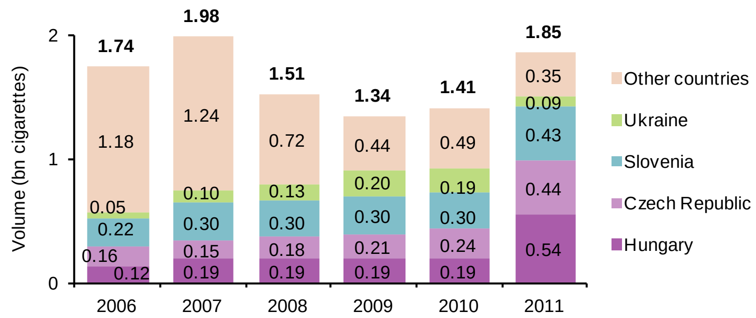
### Non-domestic incidence of 20.5% for the 2011 EU Flows Model uses the arithmetic average of the two Empty Pack Surveys conducted in 2011

- The EU Flows model estimates non-domestic incidence to be 20.5% in 2011.
- An adjustment was made to limit the level of Slovenian non-domestic inflows in the year as these appeared overstated given price and visitor trends in 2011.
  - The Slovenian Statistics Bureau estimated that Austrian tourists to Slovenia increased by 23% in December 2011[4].
  - The increase in inflows from Slovenia between 2010 and 2011 has therefore been capped at a 23% increase from the 2010 inflow in the 2011 EU Flows Model.

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows were 1.85 billion cigarettes in 2011, compared with 1.41 billion cigarettes in 2010.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)]



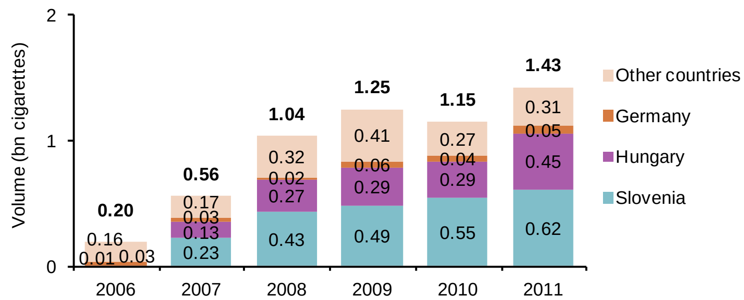

| | | | | | | |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **12%** | **13%** | **10%** | **9%** | **9%** | **12%** |
| **C&C share of ND:** | **90%** | **78%** | **59%** | **52%** | **55%** | **56%** |

Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research 2006, 2008, 2009, 2010 and 2011
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

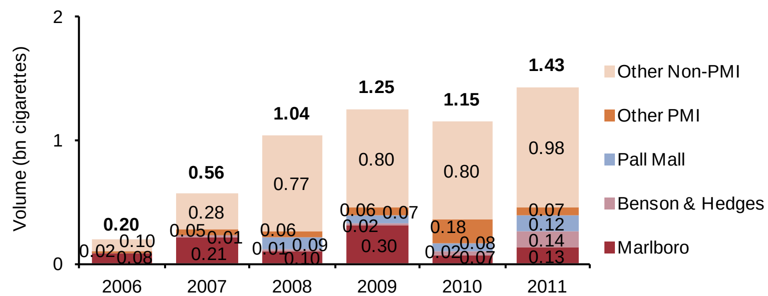
**Non–domestic (legal) inflows increased to 1.43 billion in 2011.**

## Non-domestic (legal) by origin 2006-2011 (1)(2)(3)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **1%** | **4%** | **7%** | **8%** | **7%** | **9%** |
| **ND(L) share of non-domestic:** | **10%** | **22%** | **41%** | **48%** | **45%** | **44%** |

## Non-domestic (legal) by brand 2006-2011 (1)(2)(3)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | **47%** | **47%** | **15%** | **29%** | **22%** | **14%** |

## ND(L) analysis

| | 1 Population 19+ | | 2 Propensity to travel | | 3 Propensity to purchase | | 4 Ave. no. of trips | | Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **6.6m** | x | **50%** | x | **44%** | x | **4.0** | x | **247** | = | **1.43** |
| EU rank 2011 | **15** | | **13** | | **2** | | **5** | | **5** | | **3** |

**ND(L) analysis: 2008-2011**

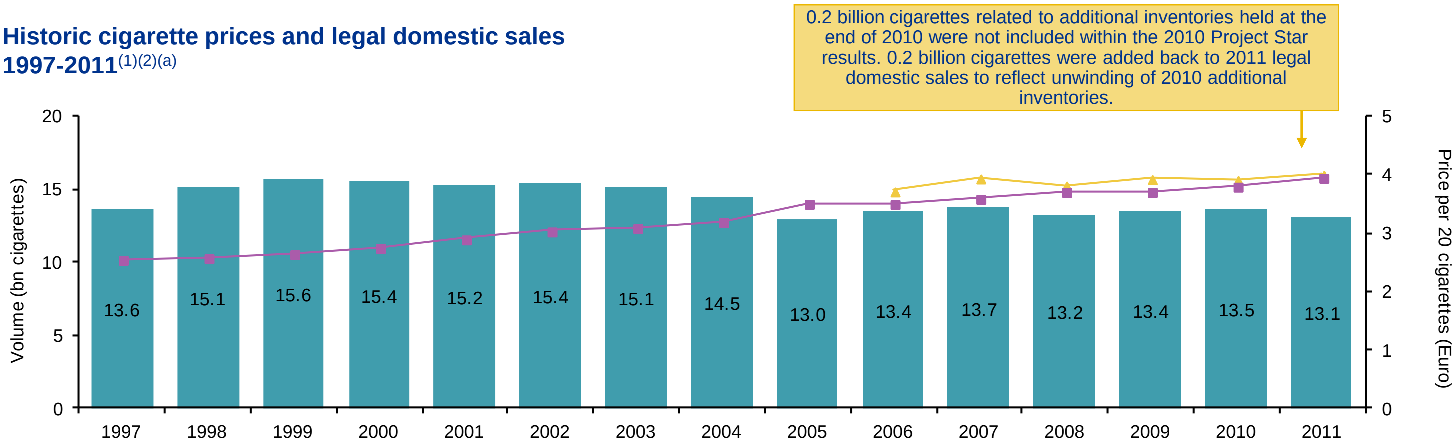
| | | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 13.4% | 23.4% | 18.3% | 21.9% |
| Average annual cigarettes purchased | 3 x 4 | 1,175 | 807 | 959 | 993 |

Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research 2006, 2008, 2009, 2010 and 2011
(3) Interviews with PMI Local Management

# Historic sales and pricing trends

**Legal domestic cigarette sales declined by 3.4% to 13.1 billion cigarettes in 2011.**

## Historic cigarette prices and legal domestic sales 1997-2011[1][2][a]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarette legal domestic sales* | *2.9%* | *-3.9%* | *0.8%* | *-0.3%* | *-3.4%* |
| *Weighted average cigarette pack price* | *3.3%* | *4.9%* | *1.4%* | *3.2%* | *4.0%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *1.8%[b]* | *0.9%* | *2.3%* |
| *OTP legal domestic sales[3][c]* | *n/a* | *n/a* | *2.5%* | *10.7%* | *10.4%* |

Note: (a) Sales of manufactured cigarettes in 2010 were adjusted down by 0.2bn to reflect higher inventories, with a corresponding upwards adjustment made to sales in 2011.
(b) CAGR from 2006 to 2009
(c) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams

Sources: (1) In Market Sales supplied by PMI based on data from local distributor
(2) PMI Management and EU Tax Tables
(3) In Market Sales data provided by PMI.

### Legal domestic sales declined by 3.4% in 2011

- An increase in excise duty on tobacco products came into effect in the first quarter of 2011.

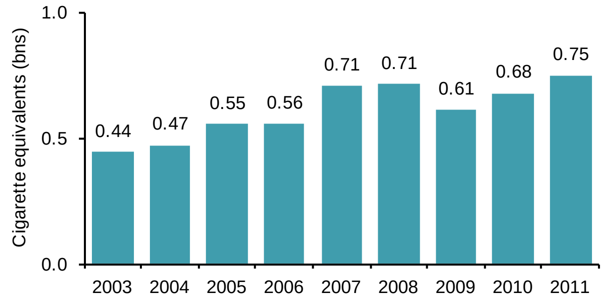
### The EU Flows Model results reflect an adjustment for unwinding of additional inventories held at the end of 2010

- In 2010, 0.2 billion of legal domestic sales were removed from the original estimate of 13.7 billion cigarettes to account for additional inventories which were held at the end of the year, resulting in an adjusted legal domestic sales volume of 13.5 billion.
- In 2011, PMI Austria indicated that there was no significant excess inventory held at the end of the year and therefore 0.2 billion cigarettes were added back to the original estimate of 12.9 billion cigarettes to reflect the unwinding of inventories within the year, resulting in adjusted legal domestic sales of 13.1 billion.

# OTP market size and growth

**Sales of smoking tobacco products increased to by 10.4% to 0.75 billion cigarette equivalents in 2011.**

## Smoking tobacco sales in billion cigarette equivalents 2003-2011[(1)(a)]




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes):** | 15.1 | 14.5 | 13.0 | 13.4 | 13.7 | 13.2 | 13.4 | 13.5 | 13.1 |

| CAGR (%) | 2003-2007 | 2007-2011 | 2010-2011 |
|---|---|---|---|
| *Smoking tobacco* | *12.4%* | *1.5%* | *10.4%* |
| *Manufactured cigarettes* | *-2.4%* | *-1.1%* | *-3.4%* |

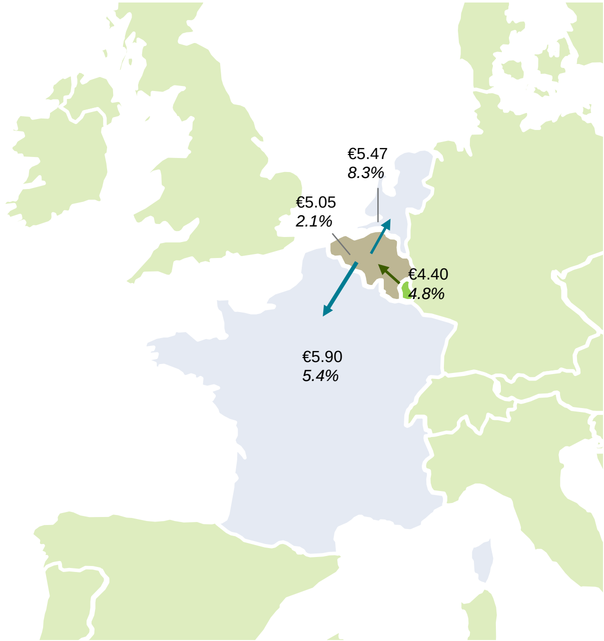
Note: (a) Smoking tobacco volumes have been calculated at one stick per 0.75 grams
Source: (1) OTP volumes supplied by PMI

# Contents – country detail

# Market overview

**The share of cigarette consumption in Belgium accounted for by counterfeit and contraband was stable at 5.9% in 2011.**

## Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows[(1)(3)(a)(b)]

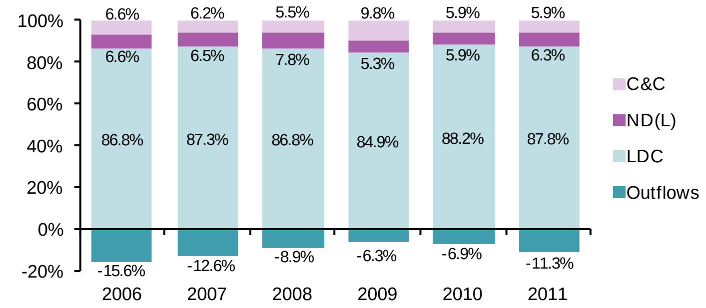



Key: Belgium
Major source countries
Major destination countries

Notes: (a) Map shows flows over 1% of consumption. Arrow size indicates relative cigarette flow volume. Countries which are both source and destination countries are coded according to the larger flow.
(b) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011

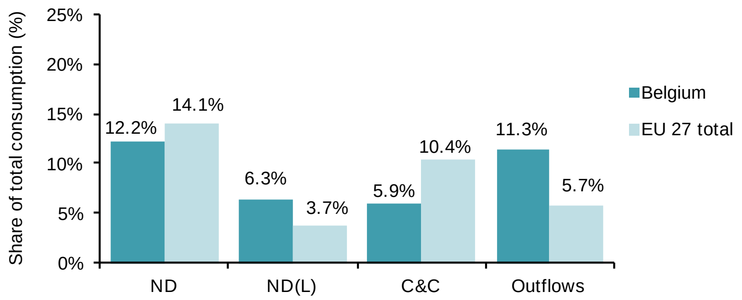
Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Synovate/Ipsos ND(L) research 2006-2008 and 2010, AC Nielsen ND(L) research 2011
(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

## Share of Belgium consumption by type 2006-2011[(1)(2)]




| Volume (bn cigarettes) | 13.1 | 12.5 | 12.4 | 12.9 | 12.4 | 12.0 |
|---|---|---|---|---|---|---|

## Comparison of EU and Belgium consumption by type 2011[(1)(2)]



# Total cigarette consumption

**Consumption of non-domestic cigarettes remained stable at 1.46 billion cigarettes in 2011.**

| Total Belgium cigarette consumption [1][2] | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarettes** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| Legal domestic sales (LDS) | 13.39 | 12.49 | 11.89 | 11.74 | 11.73 | 11.86 |
| Outflows | -2.04 | -1.58 | -1.10 | -0.81 | -0.85 | -1.35 |
| Legal domestic consumption (LDC) | 11.35 | 10.92 | 10.78 | 10.93 | 10.89 | 10.50 |
| Non-domestic legal (ND(L)) | 0.86 | 0.81 | 0.96 | 0.68 | 0.73 | 0.76 |
| Counterfeit and contraband (C&C) | 0.86 | 0.77 | 0.68 | 1.27 | 0.73 | 0.71 |
| Total non-domestic | 1.73 | 1.58 | 1.64 | 1.95 | 1.46 | 1.46 |
| **Total cigarette consumption** | **13.07** | **12.50** | **12.42** | **12.88** | **12.35** | **11.97** |

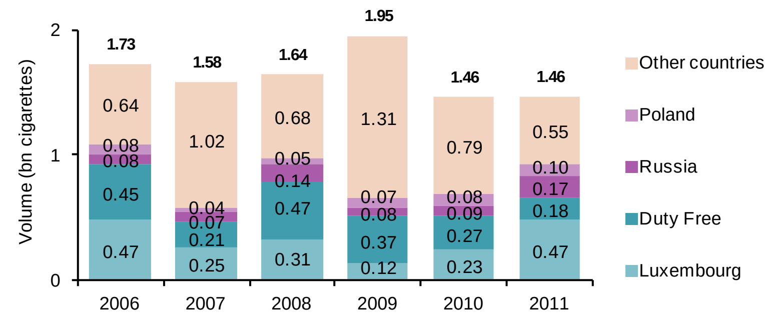
| Belgium Other Tobacco Product market [3][a][b][c] | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarette equivalent** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| OTP (LDS) | 12.22 | 10.01 | 8.60 | 9.68 | 10.73 | 11.24 |

| Cigarette outflows from Belgium [1] | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarettes** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| France | 0.53 | 0.73 | 0.71 | 0.48 | 0.43 | 0.90 |
| Netherlands | 0.54 | 0.73 | 0.13 | 0.15 | 0.24 | 0.29 |
| Other EU | 0.96 | 0.12 | 0.26 | 0.18 | 0.19 | 0.16 |
| **Total cigarette outflows** | **2.04** | **1.58** | **1.10** | **0.81** | **0.85** | **1.35** |

Notes: (a) Smoking tobacco volumes include the categories ‘Roll Your Own’ (RYO) and ‘Make Your Own’ (MYO). Sales of Cigarillos have not been included.
(b) Volumes have been calculated at one cigarette per 0.75 grams for the RYO category and for the MYO category 4% is converted at 0.50 grams per cigarette and 96% is converted at 0.75 grams per cigarette
(c) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Synovate/Ipsos ND(L) research 2006-2008 and 2010, AC Nielsen ND(L) research 2011
(3) 2011 OTP volumes are based on IMS data provided by PMI. Prior to 2008, OTP data provided by PMI is based on tax stamps.

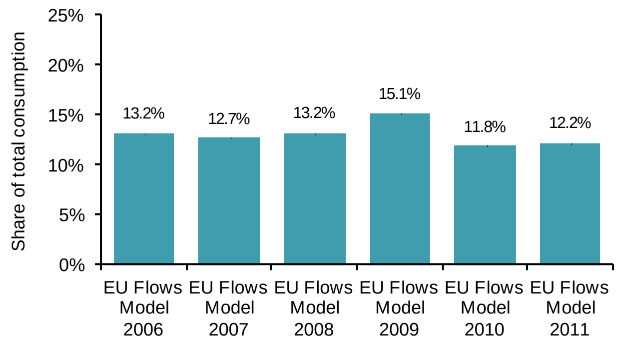
## Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011[1][2]



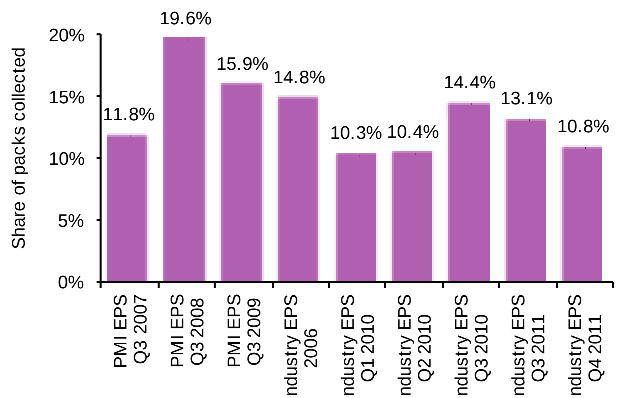
# Comparison of external sources for non-domestic estimates

**The EU Flows Model estimate for non-domestic consumption in 2011 is based on the arithmetic average of the Q2 and Q4 2011 Empty Pack Surveys.**

## EU Flows Model non-domestic market estimates(1)




## EPS non-domestic market estimates(2)(3)(a)



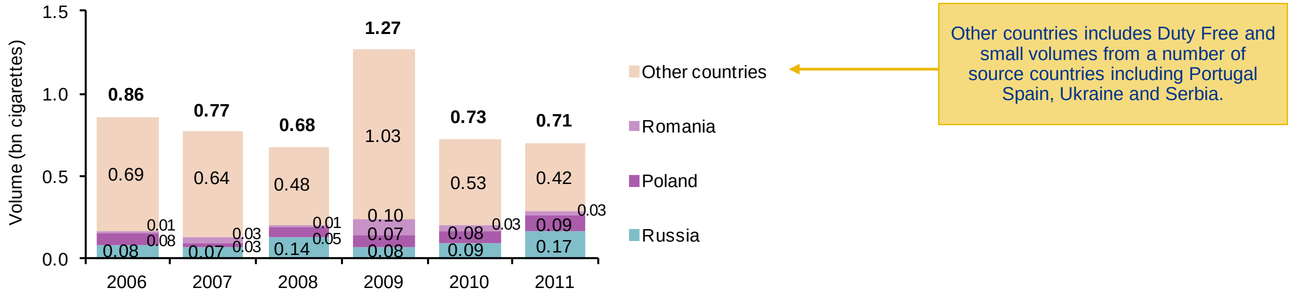

Note (a) 818 packs have been excluded from the Q4 EPS sample for the purpose of the EU Flows model as they were collected in January/February 2012. Non-domestic incidence in the Q4 EPS excluding those packs collected in 2012 was 11.1%,; this figure has been used in the EU Flows model for 2011.

Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys Q3 2007, Q3 2008, Q4 2009
(3) Industry market surveys 2006, 2010 – 2011

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows declined slightly to 0.71 billion cigarettes in 2011.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)]



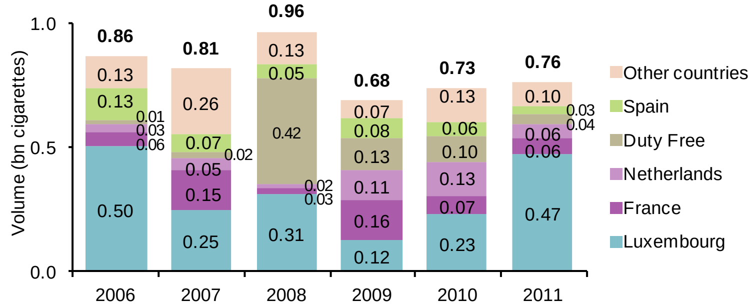

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **7%** | **6%** | **5%** | **5%** | **6%** | **6%** |
| **C&C share of ND:** | **50%** | **49%** | **41%** | **65%** | **50%** | **48%** |

Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research 2006-2008 and 2010, AC Nielsen ND(L) research 2011
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

**Non-domestic (legal) inflows increased slightly to 0.76 billion cigarettes in 2011, driven largely by cross border shopping trips to Luxembourg.**

## Non-domestic (legal) by origin 2006-2011[(1)(2)(3)(a)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **7%** | **6%** | **8%** | **5%** | **6%** | **6%** |
| **ND(L) share of non-domestic:** | **50%** | **51%** | **59%** | **35%** | **50%** | **52%** |

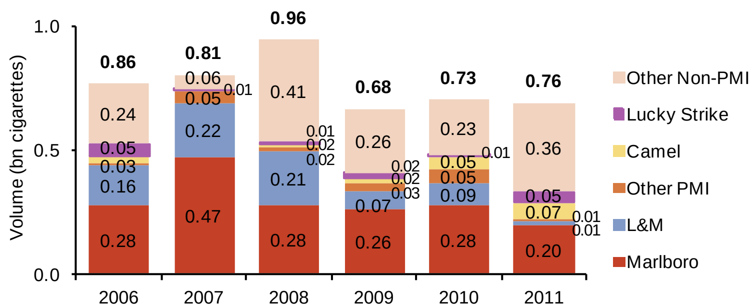
## ND(L) analysis

| | 1 | | 2 | | 3 | | 4 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Population 19+ | | Propensity to travel | | Propensity to purchase | | Ave. no. of trips | | Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
| Values 2011 | **8.3m** | x | **60%** | x | **12%** | x | **3.5** | x | **343** | = | **0.76** |
| EU rank 2011 | **12** | | **9** | | **26** | | **8** | | **2** | | **6** |

**ND(L) analysis: 2008-2011**

| | **2008** | **2009** | **2010** | **2011** |
|---|---|---|---|---|
| Propensity to travel and purchase cigarettes 1 x 2 | 18.0% | 16.0% | 17.2% | 7.5% |
| Average annual cigarettes purchased 3 x 4 | 652 | 518 | 524 | 1,215 |

## Non-domestic (legal) by brand 2006-2011[(1)(2)(3)(a)]



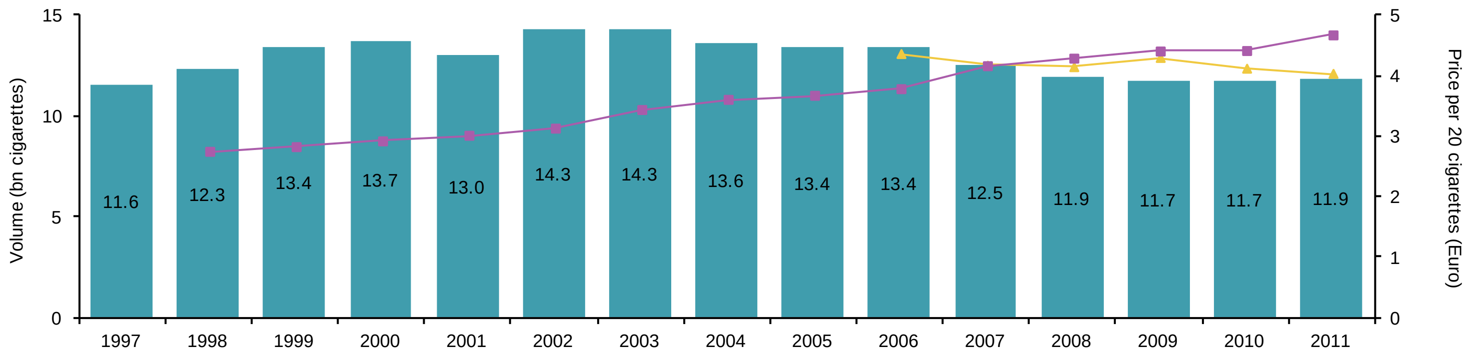

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | **51%** | **91%** | **53%** | **54%** | **57%** | **29%** |

Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research 2006-2008 and 2010, AC Nielsen ND(L) research 2011
(3) Interviews with PMI Local Management

# Historic sales and pricing trends

**Legal domestic cigarette sales volumes increased to 11.9 billion cigarettes in 2011.**

### Historic cigarette prices and legal domestic sales 1997-2011[(1)(2)]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarette legal domestic sales* | *3.0%* | *0.7%* | *-3.2%* | *0.5%* | *1.0%* |
| *Weighted average cigarette pack price* | *n/a* | *5.1%* | *4.6%* | *3.0%* | *5.9%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *-0.5%[(a)]* | *-3.1%* | *-2.1%* |
| *OTP legal domestic sales[(3)(b)]* | *n/a* | *n/a* | *-3.0%* | *7.8%* | *4.7%* |

Note: (a) CAGR is 2006-2009
(b) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams for fine cut

Sources: (1) In Market Sales supplied by PMI based on tax stamp and AC Nielsen Audit data
(2) PMI Management and EU Tax Tables
(3) 2011 OTP volumes are based on IMS data provided by PMI. Volumes have been calculated at one cigarette per 0.75 grams for the RYO category and for the MYO category 4% is converted at 0.50 grams per cigarette and 96% is converted at 0.75 grams per cigarette. Prior to 2008, OTP data provided by PMI is based on tax stamps.

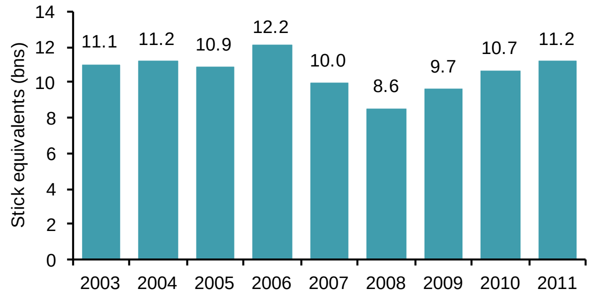
**Legal domestic sales increased by 0.2bn from 2010 to 2011, whilst the average pack price increased by 5.9%.**

- Estimates for legal domestic sales based on tax stamp data may vary to the figures used above,
  - For the purposes of Project Star, tax stamp data has not been used due to the impact of trade loading by retailers in response to price increases.

# OTP market size and growth

**Sales of smoking tobacco increased by 4.7% to 11.2 billion stick equivalents in 2011.**

## Other Tobacco Products sales in billion stick equivalents 2003-2011[(1)(a)(b)(c)(d)]




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes)** | 14.3 | 13.6 | 13.4 | 13.4 | 12.5 | 11.9 | 11.7 | 11.7 | 11.9 |

| CAGR (%) | 2003-2007 | 2007-2011 | 2010-2011 |
|---|---|---|---|
| *Smoking tobacco* | *-2.6%* | *2.9%* | *4.7%* |
| *Manufactured cigarettes* | *-3.3%* | *-1.3%* | *1.0%* |

Notes: (a) Smoking tobacco volumes include the categories 'Roll Your Own' (RYO) and 'Make Your Own' (MYO). Sales of Cigarillos have not been included.

(b) Volumes have been calculated at one cigarette per 0.75 grams for the RYO category and for the MYO category 4% is converted at 0.50 grams per cigarette and 96% is converted at 0.75 grams per cigarette

(c) 2009 OTP data shown in this report is 0.4 billion lower than the number stated in the Project Star report in 2010. The difference is due to the revision of data and conversion rates used in the data received from PMI. The updated figure is used for this report.

(d) 2010 OTP data shown in this report is 0.7 billion lower than the number stated in the Project Star report in 2010. The difference is due to the revision of data and conversion rates used in the data received from PMI. The updated figure is used for this report.

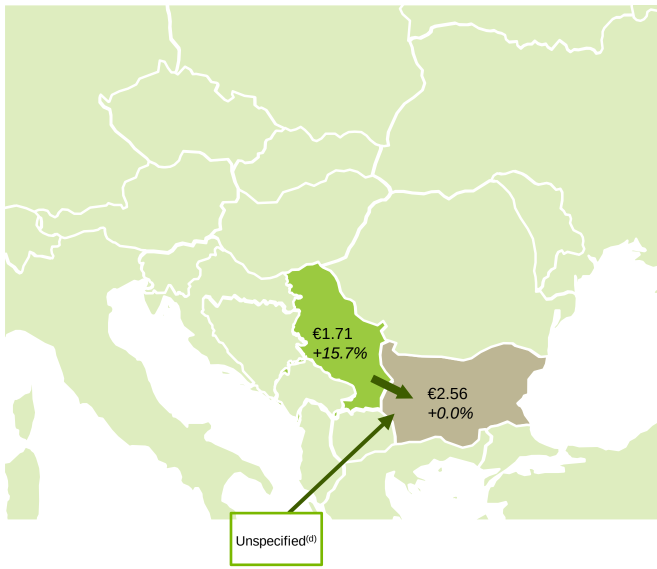
Source: (1) 2011 OTP volumes are based on IMS data provided by PMI. Prior to 2008, OTP data provided by PMI is based on tax stamps.

# Contents – country detail

# Market overview

**The share of cigarette consumption in Bulgaria accounted for by counterfeit and contraband declined to 20.2% in 2011.**

## Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows(1)(3)(a)(b)(c)

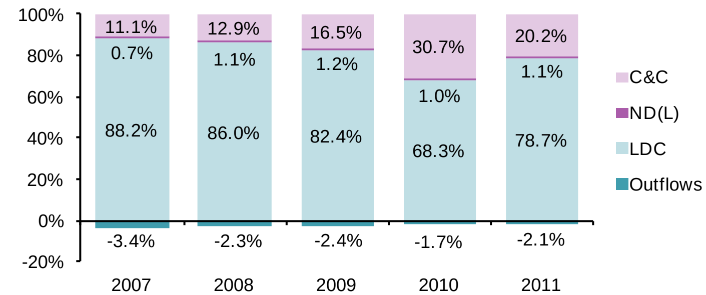



Key: Bulgaria; Top two source countries

Notes:
(a) Map shows flows of over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow
(b) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) Relative cigarette prices in Bulgaria, Serbia and Ukraine are subject to fluctuations as result of exchange rate changes of their respective currencies versus the Euro
(d) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". Unspecified market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack

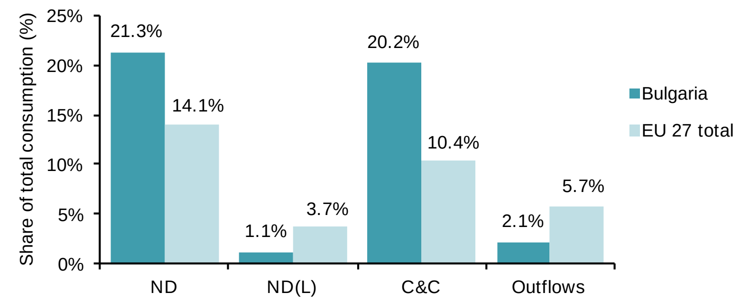
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Synovate/Ipsos ND(L) research 2007-2010 (Ipsos acquired Synovate in 2011)
(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

## Share of Bulgaria consumption by type 2007-2011(1)(2)




| Volume (bn cigarettes) | 19.7 | 21.3 | 19.8 | 15.6 | 13.4 |
|---|---|---|---|---|---|

## Comparison of EU and Bulgaria consumption by type 2011(1)(2)



# Total non-domestic consumption

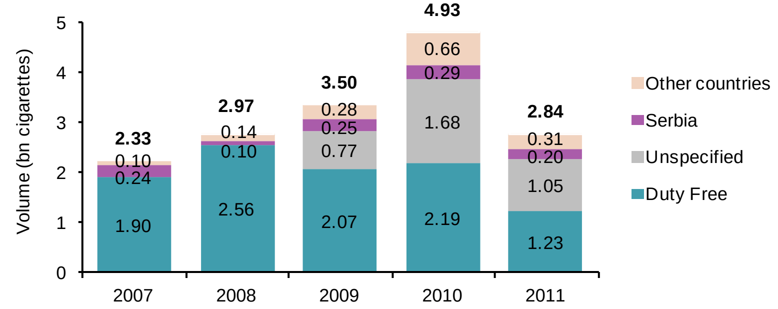
**Consumption of non-domestic cigarettes declined to 2.84 billion cigarettes in 2011.**

**Outflows from Bulgaria increased slightly to 290 million cigarettes in 2011.**

**Total Bulgaria consumption** (1)(2)

| Billion cigarettes | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 18.06 | 18.77 | 16.80 | 10.91 | 10.80 |
| Outflows | -0.67 | -0.49 | -0.47 | -0.27 | -0.29 |
| Legal domestic consumption (LDC) | 17.38 | 18.28 | 16.33 | 10.64 | 10.51 |
| Non-domestic legal (ND(L)) | 0.14 | 0.22 | 0.23 | 0.15 | 0.15 |
| Counterfeit and contraband (C&C) | 2.19 | 2.75 | 3.26 | 4.78 | 2.69 |
| Total non-domestic | 2.33 | 2.97 | 3.50 | 4.93 | 2.84 |
| **Total consumption** | **19.71** | **21.25** | **19.83** | **15.57** | **13.36** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2007-2011**(1)(2)(a)




**Outflows from Bulgaria** (1)

| Billion cigarettes | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Germany | 0.05 | 0.04 | 0.04 | 0.03 | 0.07 |
| UK | 0.09 | 0.13 | 0.09 | 0.03 | 0.06 |
| Other EU | 0.53 | 0.33 | 0.34 | 0.20 | 0.16 |
| **Total outflows** | **0.67** | **0.49** | **0.47** | **0.27** | **0.29** |

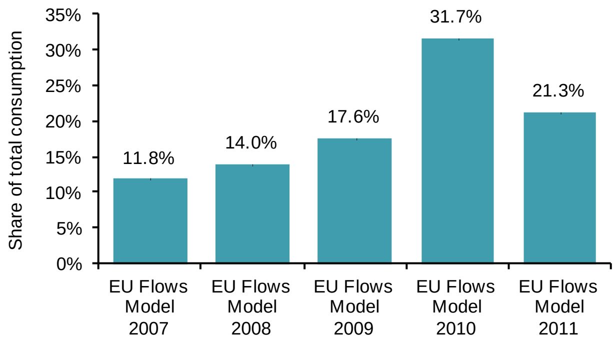
Note: (a) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". Unspecified market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack

Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research 2007-2010

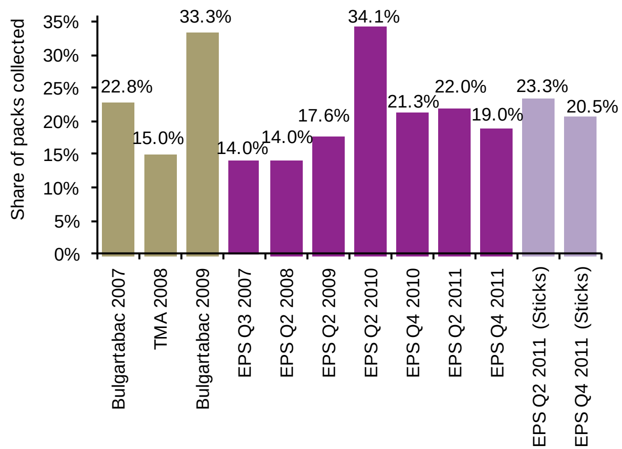
# Comparison of external sources for non-domestic estimates

**The EU Flows Model shows a decline in non-domestic incidence to 21.3% in 2011.**

**EU Flows Model non-domestic market estimates[(1)]**




**EPS and other non-domestic market estimates[(2)]**




**The EU Flows Model shows a 10.4 percentage point decline in non-domestic incidence level in Bulgaria in 2011**

- The EU Flows Model estimate for non-domestic share of total consumption uses the results of PMI Empty Pack Surveys (EPS) conducted in the second and fourth quarters of 2011
- To reflect an improvement in the economic situation in the fourth quarter of 2011 a weighting was applied to the EPS results.
  - The quarter two EPS was weighted to represent the first nine months of 2011
  - The quarter four EPS was weighted to represent the last three months of 2011

**For reasons of consistency of treatment across the EU, Project Star calculates non-domestic incidence based on the share of packs collected by source market**

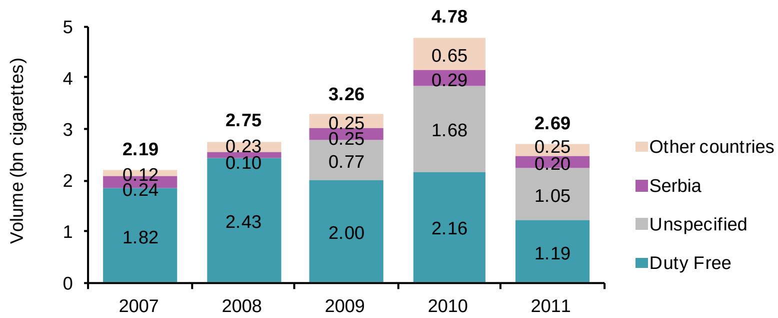
- Using a stick based approach, which allocates a weighting to each pack to reflect the number of cigarettes contained within, the non-domestic incidence for Bulgaria would be 22.6%, a difference of 1.3 percentage points from the pack based measure used in this report
  - This difference reflects that a proportion of domestic packs collected were packets of 10 cigarettes, whilst nearly all non-domestic packs were packets of 20 cigarettes.
  - The difference between the pack and cigarettes based approach has been consistent for the period for which data is available.
- It is not currently possible to measure non-domestic incidence using the stick based methodology in all EU Member States.

Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys 2007-2011

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows declined to 2.69 billion cigarettes in 2011, driven by reduced inflows of all major market variants.**

## Counterfeit and contraband by origin 2007-2011[1][2][a]




| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| **C&C share of consumption:** | **11%** | **13%** | **16%** | **31%** | **20%** |
| **C&C share of ND:** | **94%** | **92%** | **93%** | **97%** | **95%** |

Note: (a) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". 'Unspecified' market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack. Unspecified packs may be counterfeit

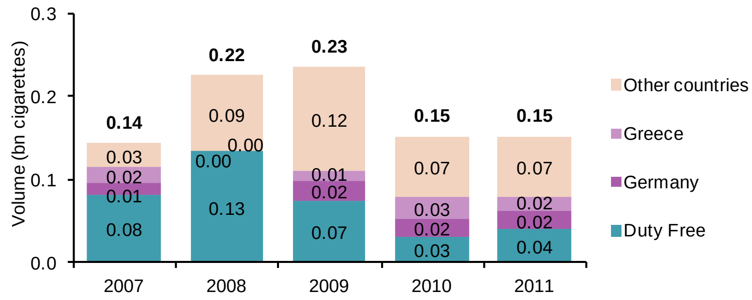
Sources: (1) KPMG EU Flows Model

(2) Synovate/Ipsos ND(L) research 2007- 2010

# Non-domestic (legal) breakdown

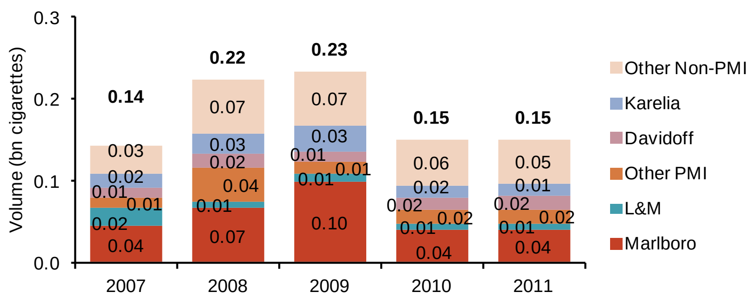
**Non-domestic (legal) inflows remained stable at 0.15 billion cigarettes in 2011.**

## Non-domestic (legal) by origin 2007-2011[1][2]




| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **1%** | **1%** | **1%** | **1%** | **1%** |
| **ND(L) share of non-domestic:** | **6%** | **8%** | **7%** | **3%** | **5%** |

## Non-domestic (legal) by brand 2007-2011[1][2]




| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| **PMI share of ND(L)** | **56%** | **52%** | **53%** | **42%** | **43%** |

## ND(L) analysis

| | Population 19+ (1) | | Propensity to travel (2) | | Propensity to purchase (3) | | Ave. no. of trips (4) | | Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **5.8** | x | **33%** | x | **30%** | x | **2.2** | x | **119** | = | **0.15** |
| EU rank 2011 | **16** | | **22** | | **11** | | **19** | | **13** | | **17** |

**ND(L) analysis: 2008-2011**

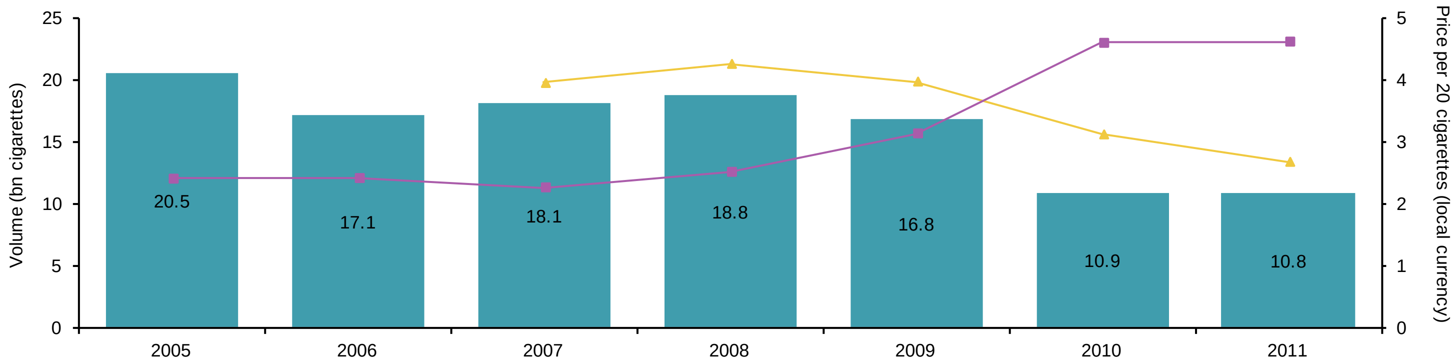
| | | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 10.1% | 10.8% | 9.8% | 9.8% |
| Average annual cigarettes purchased | 3 x 4 | 375 | 367 | 266 | 266 |

Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research 2007- 2010

# Historic sales and pricing trends

**Legal domestic cigarette sales declined by 1.0% in 2011, whilst the average pack price increased by 0.4%.**

## Historic cigarette prices and legal domestic sales 2005-2011[(1)(2)(a)(b)(c)]




| CAGR (%) | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|
| *Legal domestic sales* | *-4.8%* | *-19.8%* | *-1.0%* |
| *Weighted average pack price* | *6.9%* | *21.4%* | *0.4%* |
| *Consumption* | *0.3%[(c)]* | *-17.9%* | *-14.2%* |

Notes: (a) Government data for sales of cigarette tax stamps suggested sales of 19.6 billion cigarettes in 2006, 21.9 billion cigarettes in 2007, 17.5 billion cigarettes in 2008, 11.7 billion cigarettes in 2009 and 10.8 billion in 2010. However, the government tax stamp sales estimate was distorted by high levels of inventory built up prior to price increases in 2008, 2009 and 2010. Therefore, to reflect actual retail sales in the calendar year 2008, for the purposes of Project Star the In Market Sales estimate based on AC Nielsen Retail Audit data was used as the estimate for LDS.

(b) In Market Sales for 2011 indicate Legal Domestic Sales of 11.1 billion cigarettes. However, LDS estimates by PMI local management are equal to 10.8 billion cigarettes, the figure used in the above analysis.

(c) CAGR is from 2007 to 2009

Sources: (1) In Market Sales supplied by PMI based on AC Nielsen Retail Audit data and EU, ERC and Excise Tax yearly data

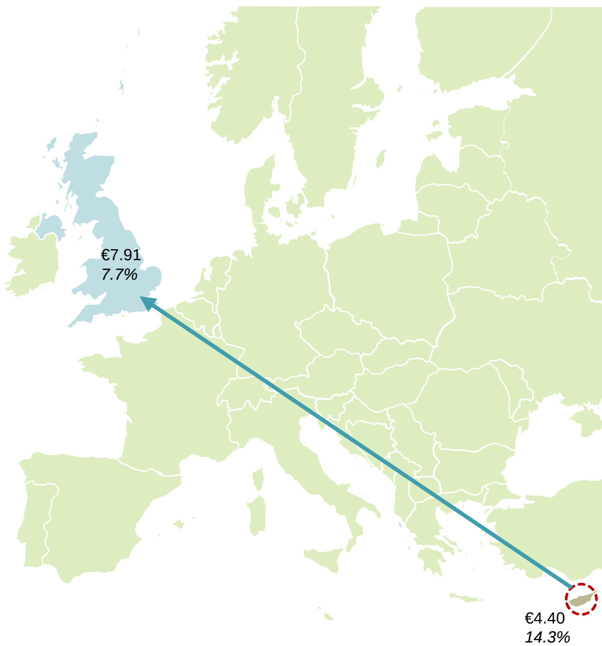
(2) PMI Management and EU Tax Tables

# Contents – country detail

# Market overview

**The share of cigarette consumption in Cyprus accounted for by counterfeit and contraband increased to 1.1% in 2011, but remains significantly below total EU levels.**

### Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows[(1)(3)(a)(b)(c)(d)]

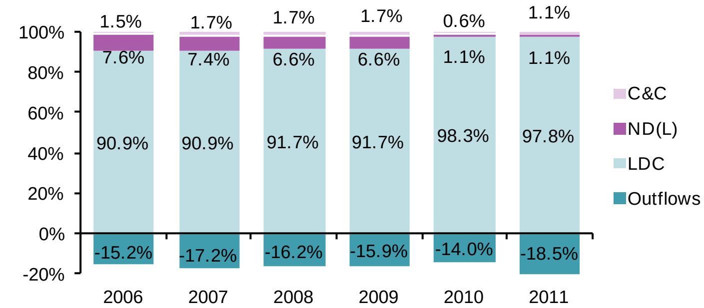



Key: Cyprus
Major destination country

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) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) Relative cigarette prices in the UK are subject to fluctuations as result of exchange rate changes versus the Euro
(d) Arrow size indicates relative cigarette flow volume

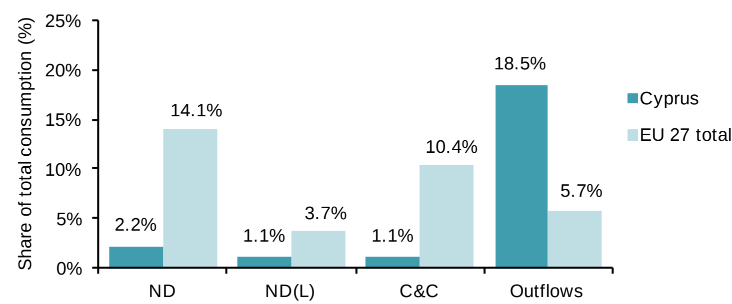
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) AC Nielsen ND(L) research 2006
(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

### Share of Cyprus consumption by type 2007-2011[(1)(2)]




| Volume (bn cigarettes) | 1.51 | 1.55 | 1.60 | 1.58 | 1.56 | 1.30 |
|---|---|---|---|---|---|---|

### Comparison of EU and Cyprus consumption by type 2011[(1)(2)]



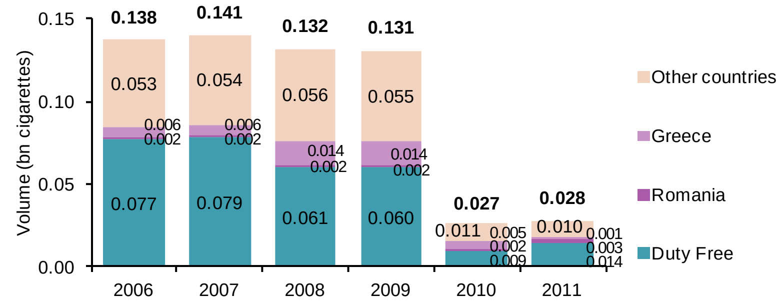
# Total non-domestic consumption

**Consumption of non-domestic cigarettes remained broadly stable in 2011 at 29 million cigarettes.**

**Total Cyprus consumption** [1][2]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 1.60 | 1.67 | 1.72 | 1.71 | 1.75 | 1.51 |
| Outflows | -0.23 | -0.27 | -0.26 | -0.25 | -0.22 | -0.24 |
| Legal domestic consumption (LDC) | 1.38 | 1.40 | 1.46 | 1.45 | 1.53 | 1.27 |
| Non-domestic legal (ND(L)) | 0.12 | 0.11 | 0.10 | 0.10 | 0.02 | 0.01 |
| Counterfeit and contraband (C&C) | 0.02 | 0.03 | 0.03 | 0.03 | 0.01 | 0.01 |
| Total non-domestic | 0.14 | 0.14 | 0.13 | 0.13 | 0.03 | 0.03 |
| **Total consumption** | **1.51** | **1.55** | **1.59** | **1.58** | **1.56** | **1.29** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011** [1][2]




**Outflows from Cyprus** [1][2][3][a]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| UK | 0.21 | 0.25 | 0.24 | 0.21 | 0.20 | 0.20 |
| Other EU | 0.02 | 0.02 | 0.02 | 0.04 | 0.02 | 0.03 |
| **Total outflows** | **0.23** | **0.27** | **0.26** | **0.25** | **0.22** | **0.24** |

Note (a) Outflows from Cyprus to the UK are adjusted each year to reflect tourism trends. In 2011, according to the national statistics office in Cyprus the number of tourist arrivals from the UK increased by 2.5% in 2011 compared to 2010.

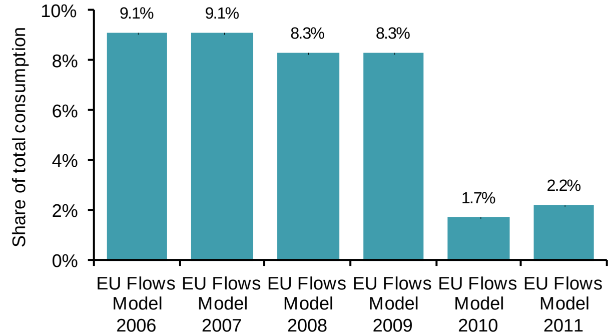
Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management
(2) AC Nielsen ND(L) research 2006
(3) National statistics office of Cyprus, Tourist arrivals January to December 2010-2011, accessed March 2012

# Comparison of external sources for non-domestic estimates

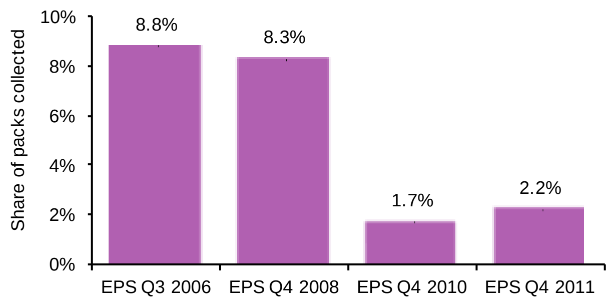
**The EU flows model indicates a 0.5 percentage point increase in non-domestic consumption from 2010 to 2011.**

**The EU Flows Model estimate for non-domestic consumption in 2011 uses the results of the PMI Empty Pack Survey carried out in the fourth quarter of that year.**

## EU Flows Model non-domestic estimates(1)




## EPS non-domestic estimates(2)

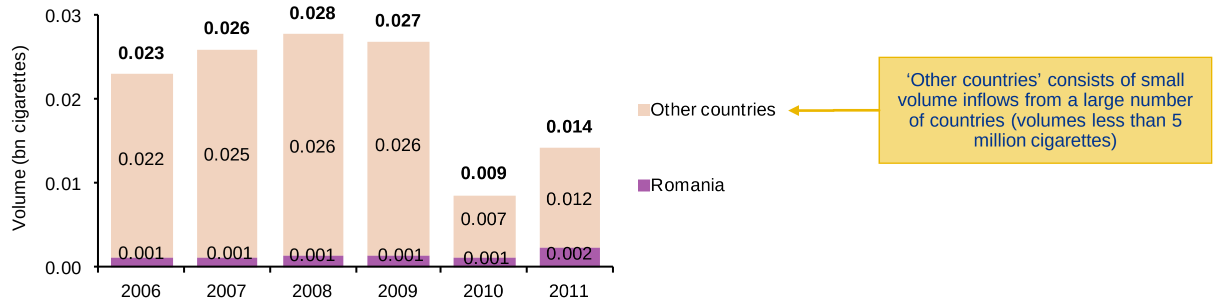



Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys 2006, 2008, 2010 and 2011

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows increased to 14 million cigarettes in 2011, compared to 9 million cigarettes in 2010.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)]



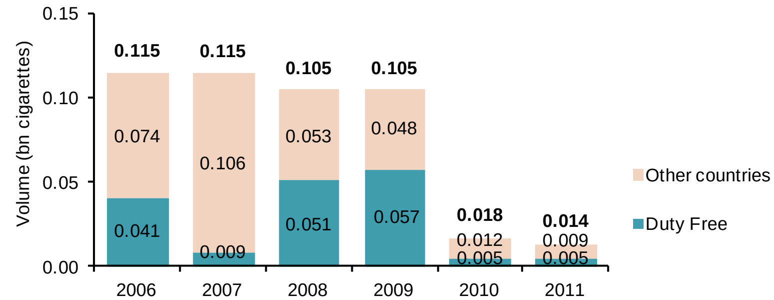

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **2%** | **2%** | **2%** | **2%** | **1%** | **1%** |
| **C&C share of ND:** | **17%** | **17%** | **21%** | **20%** | **33%** | **50%** |

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

# Non-domestic (legal) breakdown

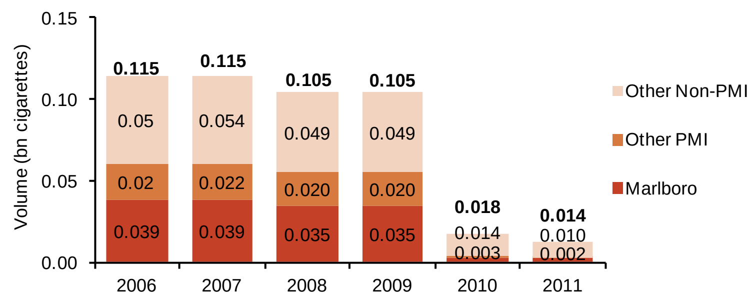
**Non-domestic (legal) inflows declined to 14 million cigarettes in 2011.**

**Non-domestic (legal) by origin 2006-2011** [1][2][3][a]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **8%** | **8%** | **7%** | **7%** | **1%** | **1%** |
| **ND(L) share of non-domestic:** | **83%** | **83%** | **79%** | **80%** | **67%** | **50%** |

**Non-domestic (legal) by brand 2006-2011** [1][2][3][a]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | **53%** | **53%** | **53%** | **53%** | **20%** | **17%** |

**ND(L) analysis**

| | 1 Population 19+ | | 2 Propensity to travel | | 3 Propensity to purchase | | Ave. no. of trips | | 4 Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **0.6m** | **x** | **64%** | **x** | **41%** | **x** | **1.8** | **x** | **63** | **=** | **0.02** [(a)] |
| EU rank 2011 | **25** | | **8** | | **3** | | **23** | | **21** | | **26** |

**Non-domestic (legal) research was updated in 2011 to reflect trends from the Empty Pack Survey and changes in tourism**

- The number of outbound passengers from Cyprus to other countries declined slightly in 2011[4][b] .

Notes: (a) Adjustments have been made to the raw ND(L) data to ensure inflows from source markets are representative, this can result in a variance between the raw ND(L) analysis and the EU Flows Model output

(b) According to the National Statistics Office in Cyprus the total volume of outbound passengers from Cyprus to EU destinations declined by approximately 3% between 2010 and 2011

Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research 2006

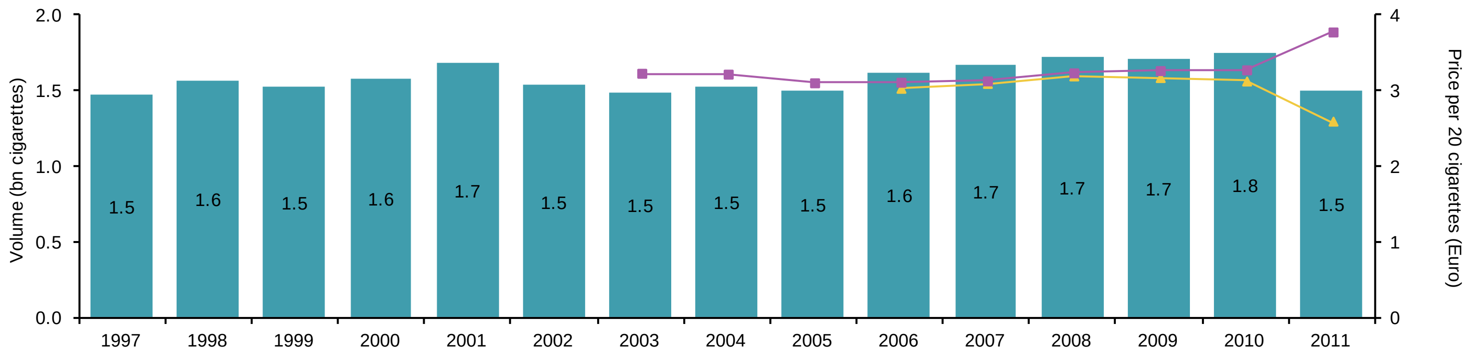
(3) Interviews with PMI Local Management

(4) National Statistics Office of Cyprus, Statistics on residents of Cyprus travelling abroad 2011, accessed March 2011

# Historic sales and pricing trends

**Legal domestic cigarette sales declined by 14.1% in 2011, whilst the average pack price increased by 15.3%.**

## Historic cigarette prices and legal domestic sales 1997-2011(1)(2)




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Legal domestic sales* | *3.5%* | *-2.9%* | *3.3%* | *-6.0%* | *-14.1%* |
| *Weighted average pack price* | *n/a* | *n/a* | *1.3%* | *7.5%* | *15.3%* |
| *Consumption* | *n/a* | *n/a* | *1.5%[(a)]* | *-9.5%* | *-17.0%* |

Note (a) CAGR 2006-2009
Sources: (1) PMI sales and estimates by local distributor
(2) PMI Management and EU Tax Tables

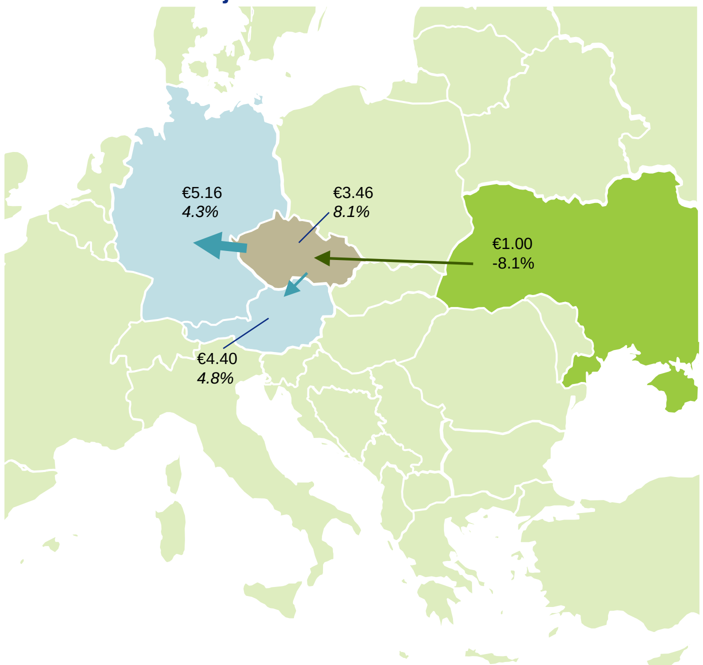
# Contents – country detail

# Market overview

**The share of cigarette consumption in the Czech Republic accounted for by counterfeit and contraband declined to 3.6% in 2011.**

**Outflows from the Czech Republic continued to increase in 2011, with Germany the key destination market.**

## Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows[1][3][a][b][c][d]

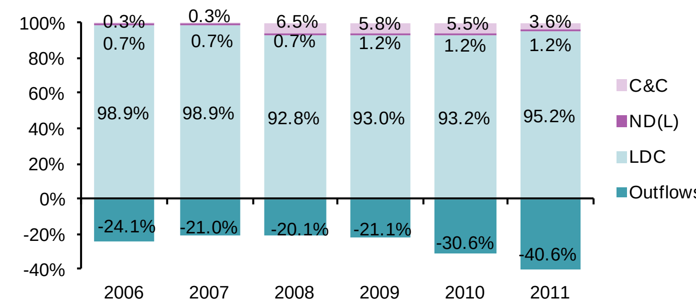



Key:
- Czech Republic
- Major source country
- Major destination countries

Notes:
(a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow
(b) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) Relative cigarette prices in the Czech Republic and Ukraine are subject to fluctuations as a result of exchange rate changes of their respective currencies versus the Euro
(d) Arrow size indicates relative cigarette flow volume

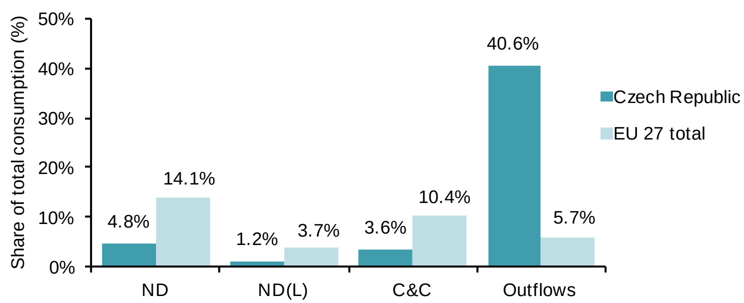
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) AC Nielsen ND(L) research 2006, 2008, 2009 and Synovate/Ipsos ND(L) research 2011 (Ipsos acquired Synovate in 2011)
(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

## Share of Czech Republic consumption by type 2006-2011[1][2]




| Volume (bn cigarettes) | 19.8 | 20.0 | 20.2 | 19.0 | 17.0 | 15.5 |
|---|---|---|---|---|---|---|

## Comparison of EU and Czech consumption by type 2011[1][2]



# Total cigarette consumption

**Consumption of non-domestic cigarettes declined to 0.75 billion cigarettes in 2011, compared to 1.15 billion in the previous year.**

**The main driver for this change was a continued decline in the volume of inflows from Ukraine.**

**Total Czech Republic cigarette consumption** (1)(2)

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 24.31 | 23.97 | 22.77 | 21.65 | 21.06 | 21.06 |
| Outflows | -4.76 | -4.19 | -4.06 | -4.00 | -5.21 | -6.30 |
| Legal domestic consumption (LDC) | 19.54 | 19.78 | 18.71 | 17.65 | 15.85 | 14.76 |
| Non-domestic legal (ND(L)) | 0.15 | 0.15 | 0.15 | 0.23 | 0.21 | 0.19 |
| Counterfeit and contraband (C&C) | 0.06 | 0.06 | 1.30 | 1.09 | 0.94 | 0.56 |
| Total non-domestic | 0.21 | 0.21 | 1.45 | 1.32 | 1.15 | 0.75 |
| **Total cigarette consumption** | **19.75** | **19.99** | **20.16** | **18.97** | **17.01** | **15.51** |

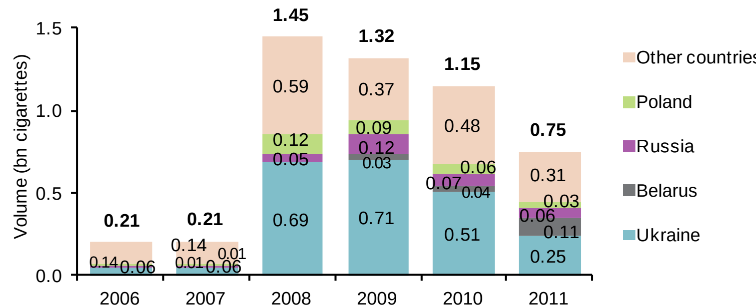
**Czech Republic Other Tobacco Product market** (3)(a)(b)

| Billion cigarette equivalents | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| OTP (LDS) | 0.69 | 1.66 | 0.28 | 0.82 | 1.11 | 1.36 |

**Cigarette outflows from Czech Republic** (1)

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Germany | 3.77 | 3.28 | 3.53 | 3.53 | 4.66 | 5.69 |
| Austria | 0.17 | 0.16 | 0.20 | 0.23 | 0.25 | 0.47 |
| Other EU | 0.82 | 0.76 | 0.33 | 0.24 | 0.30 | 0.14 |
| **Total cigarette outflows** | **4.76** | **4.19** | **4.06** | **4.00** | **5.21** | **6.30** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011** (1)(2)




Notes: (a) Other Tobacco Products (OTP) include fine cut and pipe tobacco. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams

(b) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

(2) AC Nielsen ND(L) research 2006, 2008 and 2009, Synovate/Ipsos ND(L) research 2011 (Ipsos acquired Synovate in 2011)

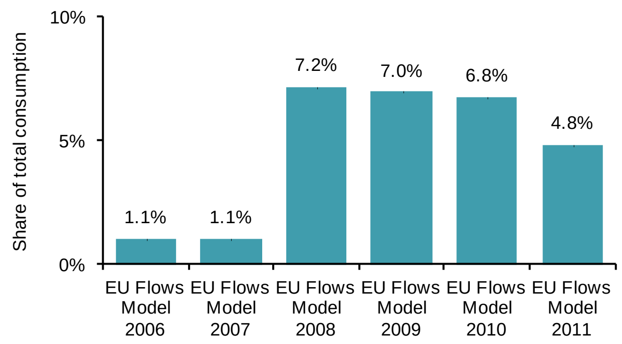
(3) Data provided by PMI, sourced from media and customs statistics, 2011

# Comparison of external sources for non-domestic estimates

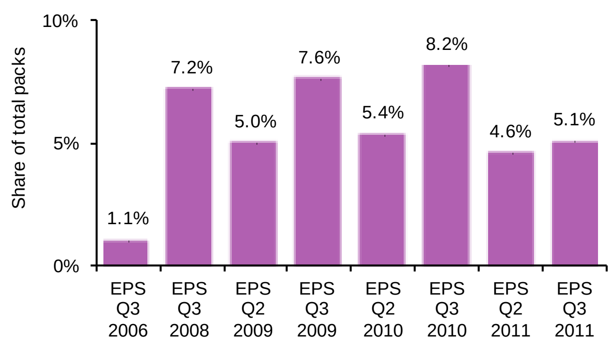
**The 2011 EU Flows Model results for the Czech Republic suggest a decline in non-domestic incidence in 2011.**

**The EU Flows Model uses an average of the Q2 and Q3 Empty Pack Surveys.**

**EU Flows Model non-domestic market estimates(1)**




**EPS non-domestic market estimates(2)(3)**



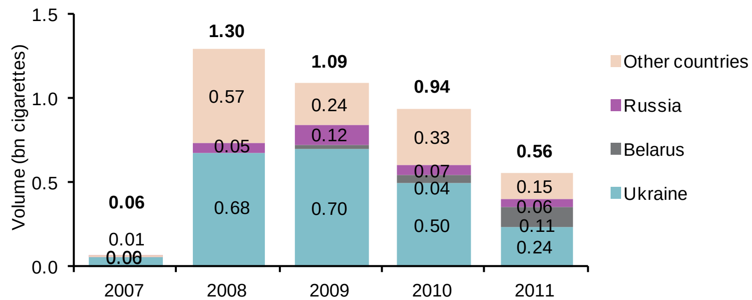

Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys, Q3 2006, Q3 2008
(3) Empty Pack Surveys for the Czech Republic Tobacco Manufacturers' Association (NMA) conducted by Ultex, Q2 2009, Q3 2009, Q2 2010, Q3 2010, Q2 2011 and Q3 2011

**Non-domestic incidence of 4.8% for the 2011 EU Flows Model uses the arithmetic average of the two Empty Pack Surveys conducted in 2011.**

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows declined to 0.56 billion cigarettes in 2011, down from 0.94 billion in 2010.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)]




| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| **C&C share of consumption:** | **0%** | **6%** | **6%** | **6%** | **4%** |
| **C&C share of ND:** | **30%** | **90%** | **83%** | **82%** | **74%** |

## Counterfeit and contraband inflows declined to 0.56 billion cigarettes in 2011

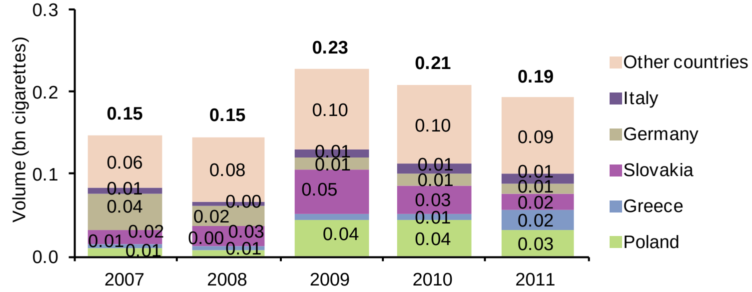
- The decline in C&C was driven by a fall in inflows from Ukraine, but was partially offset by a growth in inflows from Belarus.

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, 2008 and 2009, Synovate/Ipsos ND(L) research 2011 (Ipsos acquired Synovate in 2011)
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

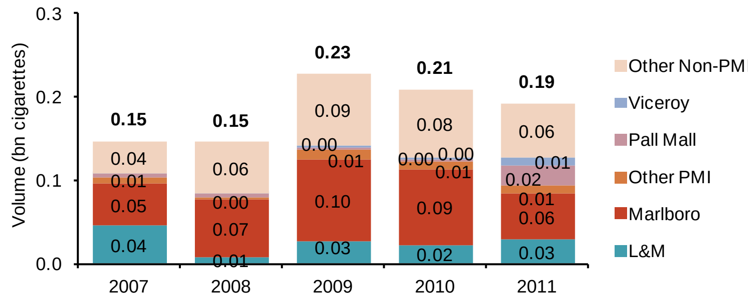
**Non-domestic (legal) volumes declined to 0.19 billion cigarettes in 2011.**

## Non-domestic (legal) by origin 2006-2011(1)(2)(3)




| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **1%** | **1%** | **1%** | **1%** | **1%** |
| **ND(L) share of non-domestic:** | **70%** | **10%** | **17%** | **18%** | **26%** |

## Non-domestic (legal) by brand 2006-2011(1)(2)(3)




| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| **PMI share of ND(L)** | **70%** | **54%** | **60%** | **59%** | **48%** |

## ND(L) analysis

| | ① Population 19+ | | ② Propensity to travel | | ③ Propensity to purchase | | ④ Ave. no. of trips | | Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **8.3m** | x | **50%** | x | **25%** | x | **3.1** | x | **60** | = | **0.19** |
| EU rank 2011 | **12** | | **13** | | **15** | | **12** | | **23** | | **15** |

**ND(L) analysis: 2008-2011**

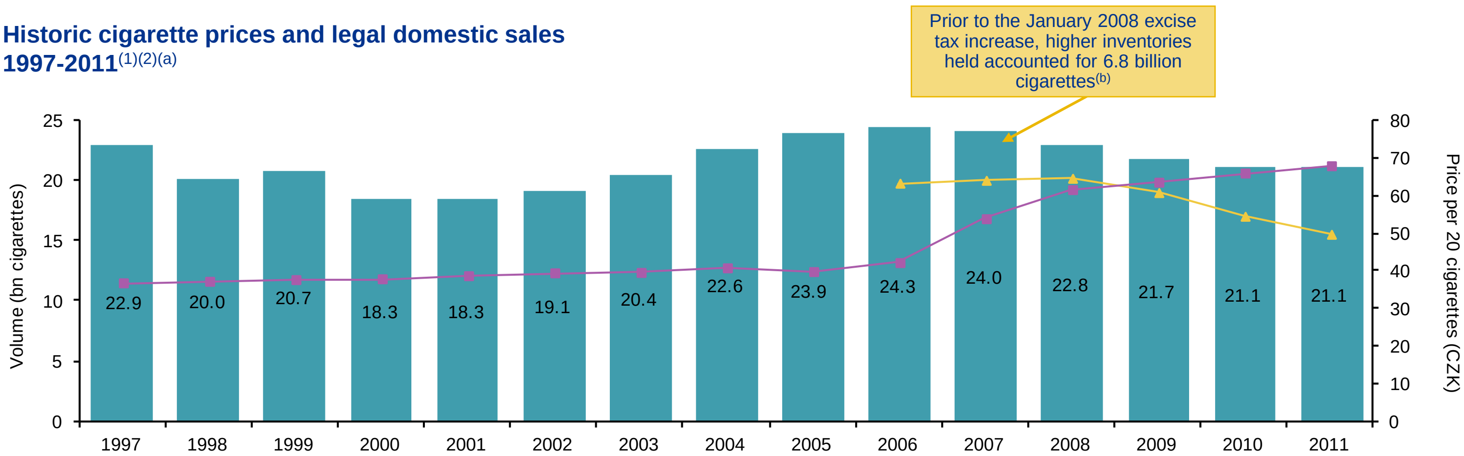
| | | **2008** | **2009** | **2010** | **2011** |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 5.0% | 6.2% | 6.2% | 12.7% |
| Average annual cigarettes purchased | 3 x 4 | 349 | 438 | 402 | 183 |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, 2008 and 2009, Synovate/Ipsos ND(L) research 2011 (Ipsos acquired Synovate in 2011)
(3) Interviews with PMI Local Management

# Historic sales and pricing trends

**Legal domestic cigarette sales remained flat between 2010 and 2011.**

## Historic cigarette prices and legal domestic sales 1997-2011 [(1)(2)(a)]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| ■ *Manufactured cigarette legal domestic sales* | *-5.4%* | *6.9%* | *-2.5%* | *-1.4%* | *0.0%* |
| ■ *Weighted average cigarette pack price* | *1.3%* | *0.7%* | *12.4%* | *3.4%* | *2.9%* |
| ■ *Manufactured cigarette consumption* | *n/a* | *n/a* | *-1.3%* [(a)] | *-9.6%* | *-8.8%* |
| *OTP legal domestic sales* [(3)(c)] | *n/a* | *n/a* | *-0.2%* | *28.7%* | *22.5%* |

Note: (a) CAGR from 2006 to 2009
(b) Sales of manufactured cigarettes in 2007 include an adjustment down by 6.8 billion sticks from 30.8 billion cigarettes to 24.0 billion cigarettes to reflect higher inventories, with a corresponding upwards adjustment made to sales in 2008 from 16.0 billion cigarettes to 22.8 billion cigarettes.
(c) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams

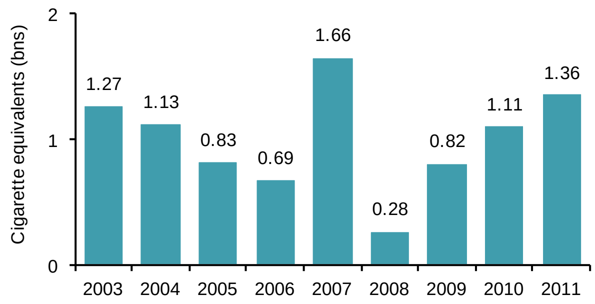
Sources: (1) PMI sales, PWC estimates and Nielsen data
(2) PMI Management and EU Tax Tables
(3) Data provided by PMI, sourced from media and customs statistics, 2011

Czech Republic

# OTP market size and growth

**Sales of smoking tobacco increased by 22.5% to 1.36 billion cigarette equivalents in 2011.**

**Smoking tobacco sales in billion cigarette equivalents 2003-2011(1)(a)(b)**




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes)[2]** | 20.4 | 22.6 | 23.9 | 24.3 | 30.7[c] | 16.0[c] | 21.7 | 21.1 | 21.1 |

| CAGR (%) | 2003-2006 | 2006-2009 | 2008-2009 | 2009-2010 | 2010-2011 |
|---|---|---|---|---|---|
| *Smoking tobacco* | *-18.5%* | *6.1%* | *190.6%* | *35.2%* | *22.5%* |
| *Manufactured cigarettes* | *6.0%* | *-3.8%* | *-4.9%* | *-2.7%* | *0.0%* |

**In 2011 sales of smoking tobacco reached the highest level since 2007**

- Volume sales have increased consistently since 2008, however the sales trend between 2007 and 2009 was distorted by increased inventory holdings at the end of 2007 prior to an increase in excise tax

**OTP values include both Roll Your Own (RYO) and Make Your Own (MYO) products**

- MYO seizures by Czech customs indicate that a significant illicit OTP market may operate in the Czech Republic[3]
  - In 2011 24.6 tons of illicit tobacco was seized[3]

Notes: (a) Smoking tobacco volumes have been calculated at one stick per 0.75 grams
(b) Cigars/cigarillos have been excluded from this analysis
(c) Sales of manufactured cigarettes in 2007 were adjusted down by 6.8 billion sticks to reflect higher inventories, with a corresponding upwards adjustment made to sales in 2008

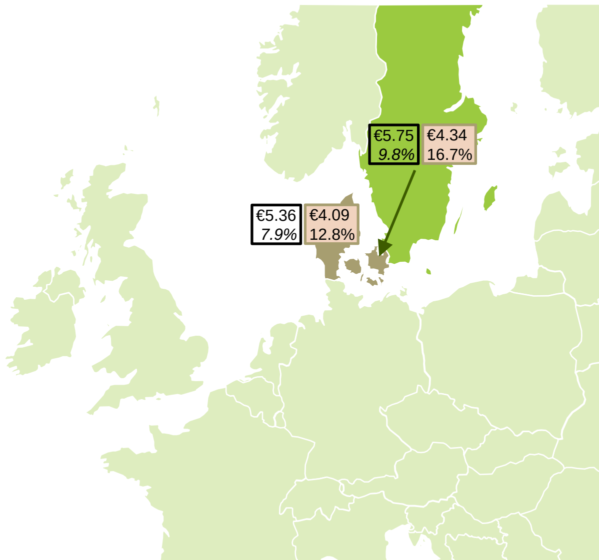
Source: (1) OTP volumes based on PMI sales, PWC estimates and Nielsen data
(2) Manufactured cigarettes sales from In Market Sales supplied by PMI based on shipment data,
(3) Data provided by PMI, sourced from media and customs statistics, 2011

# Contents – country detail

# Market overview

**The share of cigarette consumption in Denmark accounted for by counterfeit and contraband declined to 3.0% in 2011, significantly below the EU average of 10.4%**

## Marlboro and cheapest brand 2011 price comparison in Euros, percentage change from 2010 and major flows[(1)(2)(a)(b)(c)(d)]

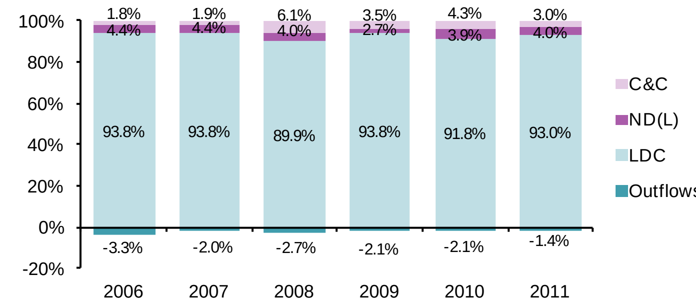



Key:
- Denmark
- Top source country
- 2011 pack of 20 Marlboro KS price in Euros and percentage change from 2010
- 2011 pack of 20 cheapest available brand price in Euros and percentage change from 2010

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) Based on pack price of 20 Marlboro King Size and pack price of 20 of the cheapest brand available as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
- (c) Relative cigarette prices in Sweden and Denmark are subject to fluctuations as a result of exchange rate changes of their respective currencies versus the Euro
- (d) Arrow size indicates relative cigarette flow volume

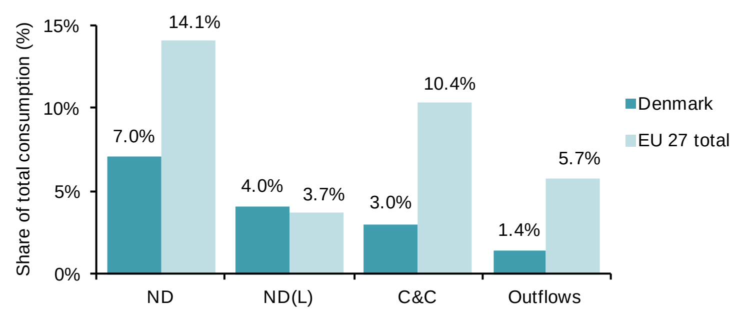
Sources:
- (1) KPMG EU Flows Model and interviews with PMI Local Management
- (2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011
- (3) Synovate/Ipsos ND(L) research 2006, 2008 and 2011 (Ipsos acquired Synovate in 2011)

## Share of Denmark consumption by type 2006-2011[(1)(3)]




| Volume (bn cigarettes) | 8.3 | 8.3 | 8.4 | 8.1 | 7.9 | 7.6 |
|---|---|---|---|---|---|---|

## Comparison of EU and Denmark consumption by type 2011[(1)(3)]



# Total cigarette consumption

**Consumption of non-domestic cigarettes declined to 0.53 billion cigarettes in 2011, compared to 0.65 billion the previous year.**

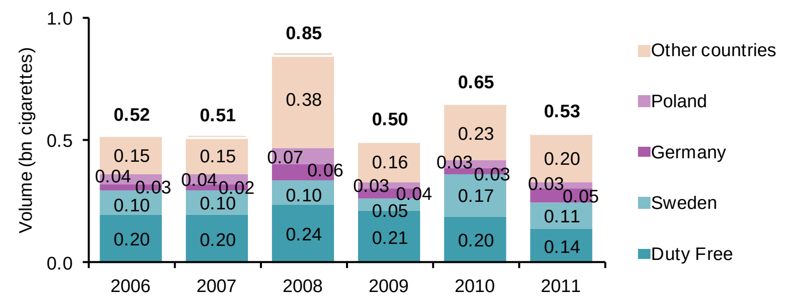
## Total Denmark cigarette consumption [1][2]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 8.08 | 7.93 | 7.79 | 7.75 | 7.39 | 7.13 |
| Outflows | -0.28 | -0.17 | -0.23 | -0.17 | -0.17 | -0.10 |
| Legal domestic consumption (LDC) | 7.80 | 7.76 | 7.56 | 7.58 | 7.22 | 7.03 |
| Non-domestic legal (ND(L)) | 0.36 | 0.36 | 0.34 | 0.22 | 0.31 | 0.30 |
| Counterfeit and contraband (C&C) | 0.15 | 0.15 | 0.51 | 0.28 | 0.34 | 0.23 |
| Total non-domestic | 0.52 | 0.51 | 0.85 | 0.50 | 0.65 | 0.53 |
| **Total cigarette consumption** | **8.32** | **8.28** | **8.41** | **8.08** | **7.87** | **7.56** |

## Denmark Other Tobacco Product market [3][a][b]

| Billion cigarette equivalent | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| OTP (LDS) | 1.34 | 1.25 | 1.09 | 1.05 | 0.91 | 0.90 |

## Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011[1][2]



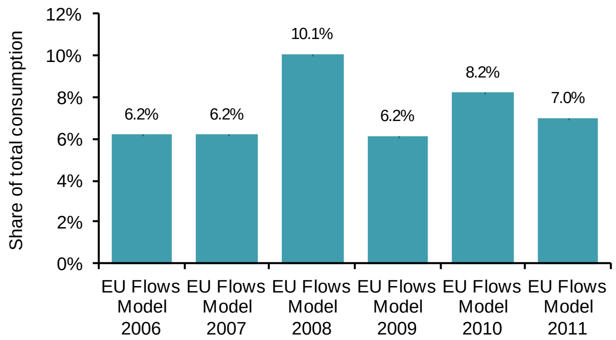

Notes:
(a) Other Tobacco Products (OTP) include fine cut and pipe tobacco. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams
(b) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Synovate/Ipsos ND(L) research 2006, 2008 and 2011
(3) OTP volumes pre 2006 supplied by Mac Baren distributors. Volumes from 2006 supplied by NMA

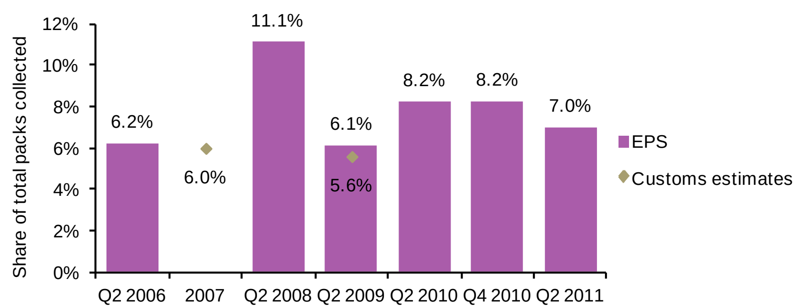
# Comparison of external sources for non-domestic estimates

**The EU Flows Model estimate for non-domestic consumption in 2011 is based on the results of the Empty Pack survey conducted in Q2 2011.**

**EU Flows Model non-domestic market estimates[(1)]**




**EPS and other non-domestic market estimates[(2)(3)(4)]**




**The Q2 PMI Empty Pack Survey was considered to be representative of the continuing trend of declining non-domestic incidence**

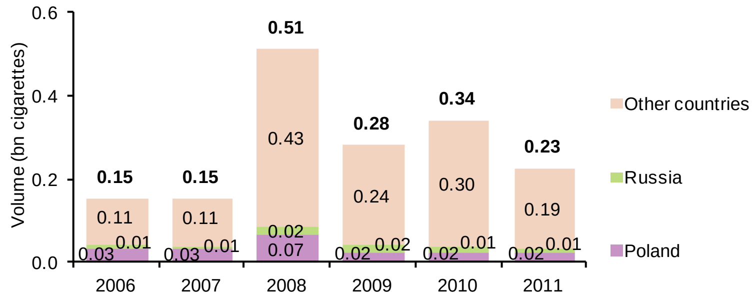
- Danish custom's most recent estimate of non-domestic incidence of 5.6% in 2009 supports the view of Denmark being a country with low levels of illicit trade relative to other EU Member States.

Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys 2006 - 2011
(3) Q4 2011 Empty Pack Survey undertaken by BAT utilising the same methodology as PMI Empty Pack Surveys
(4) Danish Chamber of Commerce estimates – 'Status over Grænsehandel' 2007 & 2010

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows declined to 0.23 billion cigarettes in 2011.**

## Counterfeit and contraband by origin 2006-2011[1][2]



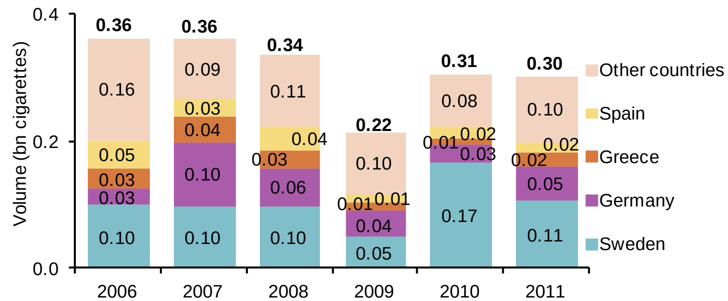

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **2%** | **2%** | **6%** | **3%** | **4%** | **3%** |
| **C&C share of ND:** | **30%** | **30%** | **60%** | **57%** | **53%** | **43%** |

Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research 2006, 2008 and 2011

# Non-domestic (legal) breakdown

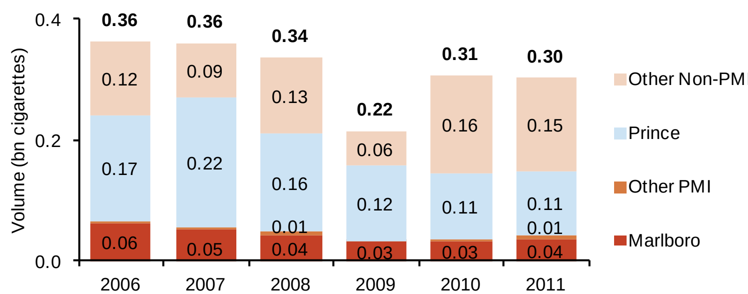
**Non-domestic (legal) consumption declined slightly to 0.30 billion cigarettes in 2011.**

## Non-domestic (legal) by origin 2006-2011[(1)(2)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **4%** | **4%** | **4%** | **3%** | **4%** | **4%** |
| **ND(L) share of non-domestic:** | **70%** | **70%** | **40%** | **43%** | **47%** | **57%** |

## Non-domestic (legal) by brand 2006-2011[(1)(2)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of total** | **18%** | **15%** | **15%** | **16%** | **12%** | **14%** |

## ND(L) analysis

| | 1 Population 19+ | | 2 Propensity to travel | | Propensity to purchase | | 3 Ave. no. of trips | | 4 Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **4.2** | x | **67%** | x | **25%** | x | **5.1** | x | **84** | = | **0.30** |
| EU rank 2011 | **18** | | **6** | | **16** | | **2** | | **18** | | **14** |

**ND(L) analysis: 2008-2011**

| | | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 21.0% | 21.0% | 21.0% | 16.8% |
| Average annual cigarettes purchased | 3 x 4 | 244 | 244 | 348 | 427 |

**Non-domestic (legal) inflows declined from 0.31 billion in 2010 to 0.30 billion in 2011**

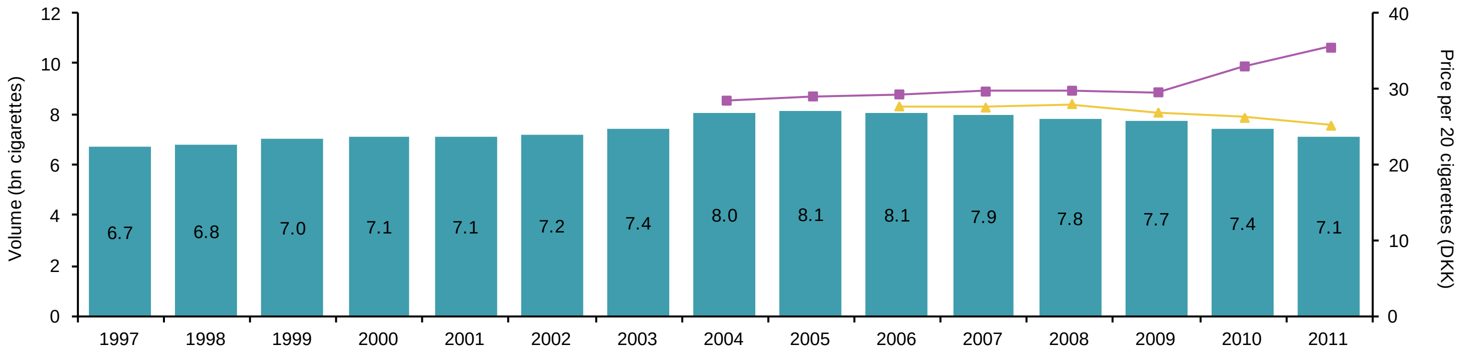
- Swedish non-domestic (legal) inflows declined in 2011;
  - Travel trends for the main link between the two countries (the Øresund bridge) show that both rail and road traffic has remained at broadly the same level since 2008[(3)]

Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research 2006, 2008 and 2011
(3) Tendensoresund.org, data to 2010

# Historic sales and pricing trends

**Legal domestic cigarette sales declined to 7.1 billion in 2011.**

### Historic cigarette prices and legal domestic sales 1997-2011[1][2]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarette legal domestic sales* | *1.6%* | *3.3%* | *-1.1%* | *-4.1%* | *-3.5%* |
| *Weighted average cigarette pack price* | *n/a* | *n/a* | *0.5%* | *9.5%* | *7.5%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *-1.0%[a]* | *-3.3%* | *-3.9%* |
| *OTP legal domestic sales[3][b]* | *n/a* | *n/a* | *-8.4%* | *-7.4%* | *-1.3%* |

Note: (a) CAGR from 2006 to 2009
(b) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams

Sources: (1) In Market Sales supplied by PMI based on data from local distributor
(2) PMI Management and EU Tax Tables
(3) OTP volumes pre 2006 supplied by Mac Baren distributors. Volumes from 2006 supplied by NMA

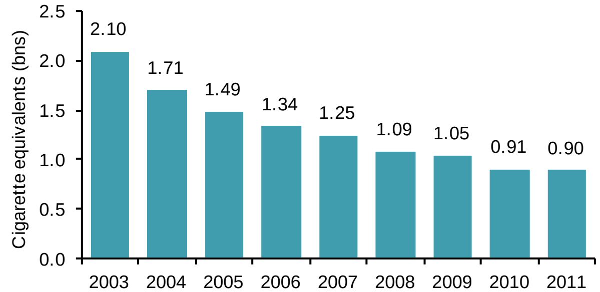
### Legal domestic sales declined by 3.5% in 2011, whilst the average pack price increased by 7.5%

- The weighted average price has increased by 9.5% year-on-year between 2009 and 2011.
- In March 2011, pack sizes changed from 20 cigarettes a pack to 19 cigarettes a pack for a majority of brands.

# OTP market size and growth

**Sales of smoking tobacco products declined slightly to 0.90 billion cigarette equivalents in 2011.**

## Smoking tobacco sales in billion cigarette equivalents 2003-2011[(1)(a)(b)]




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes):** | 7.4 | 8.0 | 8.1 | 8.1 | 7.9 | 7.8 | 7.7 | 7.4 | 7.1 |

| CAGR (%) | 2003-2007 | 2007-2011 | 2010-2011 |
|---|---|---|---|
| *Smoking tobacco* | *-12.1%* | *-8.0%* | *-1.3%* |
| *Manufactured cigarettes* | *1.7%* | *-2.6%* | *-3.5%* |

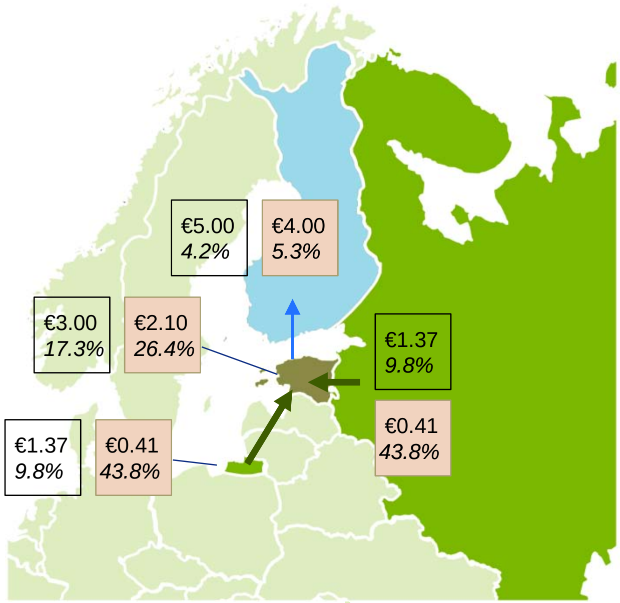
Notes: (a) Smoking tobacco volumes have been calculated at one stick per 0.75 grams
(b) Cigars/cigarillos and smokeless tobacco have been excluded from this analysis
Source: (1) OTP volumes pre 2006 supplied by Mac Baren distributors. Volumes from 2006 supplied by NMA

# Contents – country detail

# Market overview

**The share of cigarette consumption in Estonia accounted for by counterfeit and contraband increased to 17.5% in 2011.**

## Marlboro and cheapest available brand 2011 price comparison in Euros, percentage change from 2010 and major flows(1)(3)(a)(b)(c)(d)

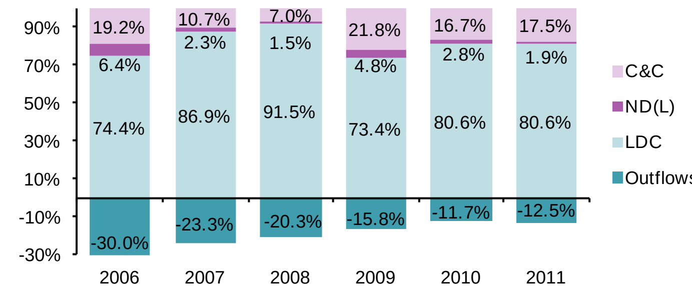



Key:
- Estonia
- Major source country
- Major destination country
- 2011 pack of 20 Marlboro KS price in Euros and percentage change from 2010.
- 2011 pack of 20 cheapest available brand price in Euros and percentage change from 2010.

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) Based on pack price of 20 Marlboro King Size and pack price of 20 of the cheapest brand available as at July 1st 2010 and 2011
- (c) Relative cigarette prices in Russia (prior to 1 January 2011) are subject to fluctuations as a result of exchange rate changes of their respective currencies versus the Euro
- (d) Arrow size indicates relative cigarette flow volume

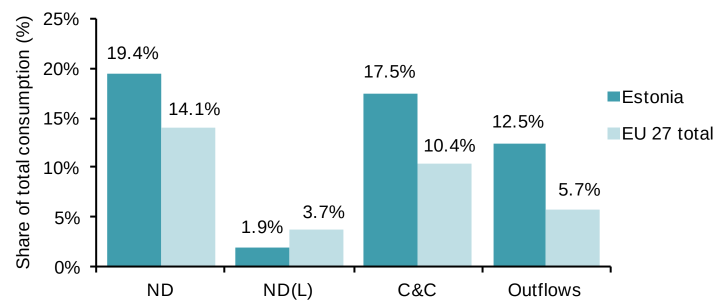
Sources:
- (1) KPMG EU Flows Model and interviews with PMI Local Management.
- (2) AC Nielsen ND(L) research 2006, 2007, 2009 and 2011.
- (3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at July 2010 and July 2011

## Share of Estonia consumption by type 2006-2011(1)(2)




| Volume (bn cigarettes) | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 1.9 |
|---|---|---|---|---|---|---|

## Comparison of EU and Estonia consumption by type 2011(1)(2)



# Total non-domestic consumption

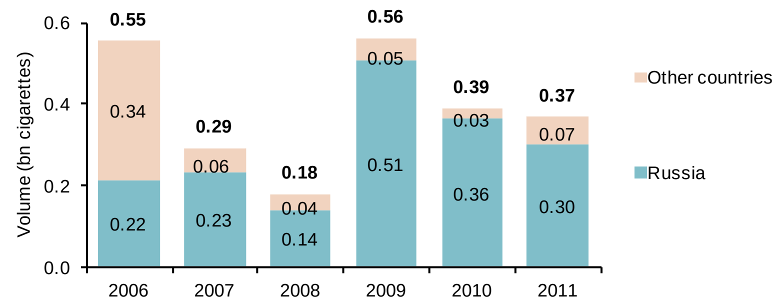
**Non-domestic consumption declined slightly to 0.37 billion cigarettes in 2011.**

**Russia remains the major source market.**

## Total Estonia consumption [1][2]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 2.26 | 2.46 | 2.37 | 1.89 | 1.85 | 1.77 |
| Outflows | -0.65 | -0.52 | -0.43 | -0.33 | -0.24 | -0.24 |
| Legal domestic consumption (LDC) | 1.61 | 1.94 | 1.94 | 1.55 | 1.61 | 1.53 |
| Non-domestic legal (ND(L)) | 0.14 | 0.05 | 0.03 | 0.10 | 0.06 | 0.04 |
| Counterfeit and contraband (C&C) | 0.42 | 0.24 | 0.15 | 0.46 | 0.33 | 0.33 |
| Total non-domestic | 0.55 | 0.29 | 0.18 | 0.56 | 0.39 | 0.37 |
| **Total consumption** | **2.16** | **2.23** | **2.12** | **2.11** | **2.00** | **1.90** |

## Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011 [1][2]




## Outflows from Estonia [1]

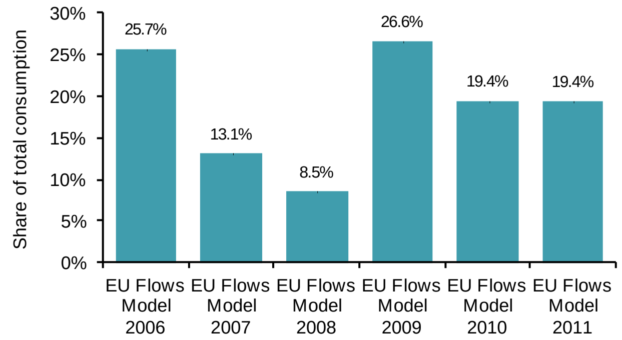
| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Finland | 0.43 | 0.25 | 0.25 | 0.27 | 0.21 | 0.20 |
| Other EU | 0.22 | 0.27 | 0.18 | 0.06 | 0.03 | 0.03 |
| **Total outflows** | **0.65** | **0.52** | **0.43** | **0.33** | **0.24** | **0.23** |

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management
(2) AC Nielsen ND(L) research 2006, 2007, 2009 and 2011

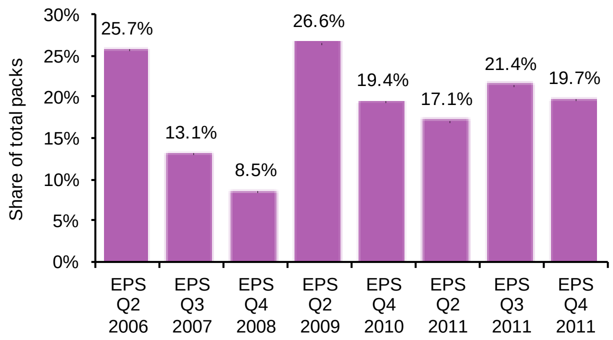
# Comparison of external sources for non-domestic estimates

**The EU Flows Model estimate for non-domestic consumption in 2011 is based on equally weighted EPS results, and indicates stable non-domestic incidence from 2010 to 2011.**

**EU Flows Model non-domestic market estimates**(1)




**EPS non-domestic market estimates**(2)




**Non-domestic incidence of 19.4% for the 2011 EU Flows Model uses the average of the three Empty Pack Surveys conducted in 2011**

- An equal weighting has been applied for each EPS conducted during the year.

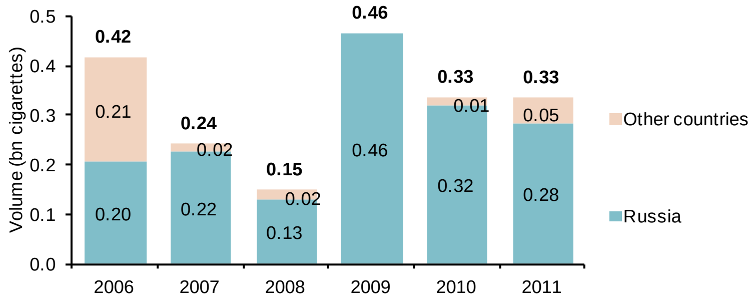
Sources: (1) KPMG EU Flows model
(2) PMI Empty Pack Surveys 2006-2011

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows remained stable at 0.33 billion cigarettes in 2011.**

**Russia remains the largest counterfeit and contraband source market despite a decline in volume to 280 million cigarettes in 2011.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)]



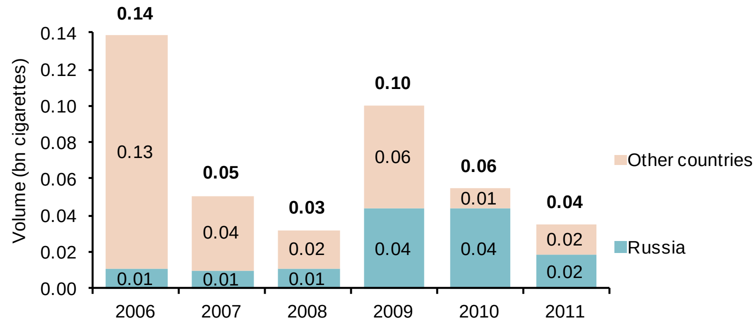

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| C&C share of consumption: | 19% | 11% | 7% | 22% | 17% | 18% |
| C&C share of ND: | 75% | 82% | 82% | 82% | 86% | 90% |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, 2007, 2009 and 2011
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

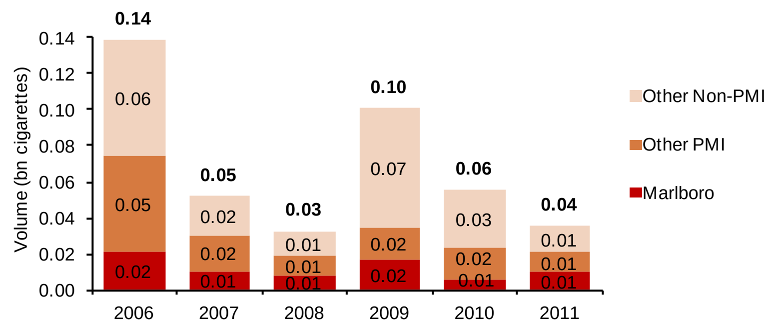
**Non-domestic (legal) inflows declined to 0.04 billion cigarettes in 2011.**

## Non-domestic (legal) by origin 2006-2011[(1)(2)(3)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **6%** | **2%** | **2%** | **5%** | **3%** | **2%** |
| **ND(L) share of non-domestic:** | **25%** | **18%** | **18%** | **18%** | **14%** | **10%** |

## Non-domestic (legal) by brand 2006-2011[(1)(2)(3)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | **54%** | **59%** | **58%** | **35%** | **43%** | **58%** |

## ND(L) analysis

| | 1 Population 19+ | | 2 Propensity to travel | | Propensity to purchase | | 3 Ave. no. of trips | | 4 Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **1.0m** | **x** | **55%** | **x** | **25%** | **x** | **3.3** | **x** | **75** | **=** | **0.04** |
| EU rank 2011 | **24** | | **11** | | **17** | | **10** | | **20** | | **25** |

**ND(L) analysis: 2008-2011**

| | | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 9.0% | 13.4% | 13.4% | 13.7% |
| Average annual cigarettes purchased | 3 x 4 | 349 | 726 | 398 | 250 |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, 2007, 2009 and 2011
(3) Interviews with PMI Local Management

# Historic sales and pricing trends

**Legal domestic sales have declined steadily between 2009 and 2011.**

### Historic cigarette prices and legal domestic sales 2000-2011[1][2]


| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Legal domestic sales* | *n/a* | *2.8%* | *-5.4%* | *-3.1%* | *-4.2%* |
| *Weighted average pack price* | *n/a* | *n/a* | *13.9%* | *8.7%* | *14.8%* |
| *Consumption* | *n/a* | *n/a* | *-0.7%[a]* | *-5.1%* | *-4.8%* |

Note: (a) CAGR from 2006 to 2009

(b) For the years 2006-2010 weighted average price has been translated into Euros at average Kourna/Euro rate for the respective year.

Sources: (1) PMI sales and estimates based on Nielsen data

(2) PMI Management and EU Tax Tables

**The rate of decline in legal domestic sales in the Estonian market has slowed following a significant drop in legal domestic sales between 2008 and 2009**

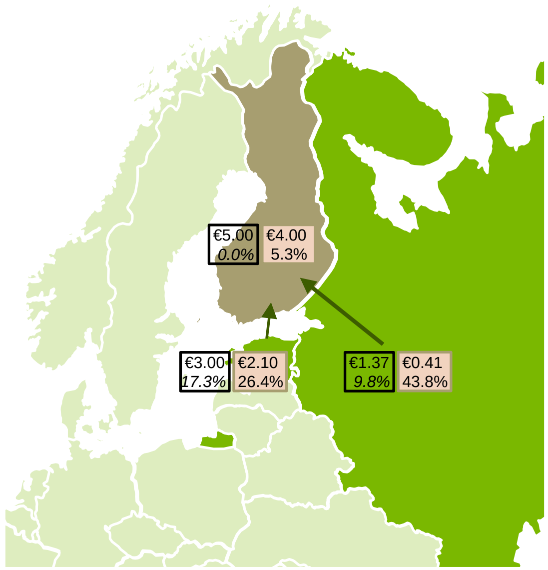
- The weighted average pack price increased from €2.10 to €2.41 in 2011, the largest increase since 2008.

# Contents – country detail

# Market overview

**The share of cigarette consumption in Finland accounted for by counterfeit and contraband declined slightly to 15.4% in 2011.**

## Marlboro and cheapest brand 2011 price comparison in Euros, percentage change from 2010 and major flows[(1)(2)(a)(b)(c)(d)]

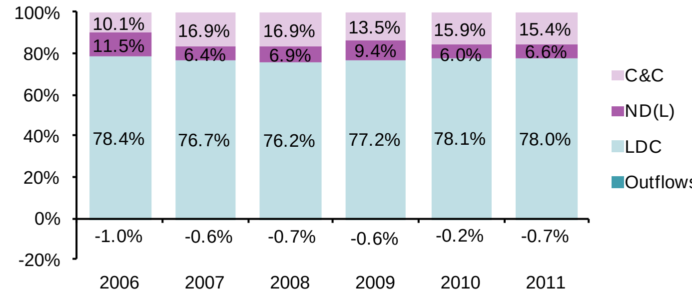



Key:
- Finland
- Top two source countries
- 2011 pack of 20 Marlboro KS price in Euros and percentage change from 2010
- 2011 pack of 20 cheapest available brand price in Euros and percentage change from 2010

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) Based on pack price of 20 Marlboro King Size and pack price of 20 of the cheapest brand available as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) Relative cigarette prices in Russia are subject to fluctuations as a result of exchange rate changes of their respective currencies versus the Euro
(d) Arrow size indicates relative cigarette flow volume

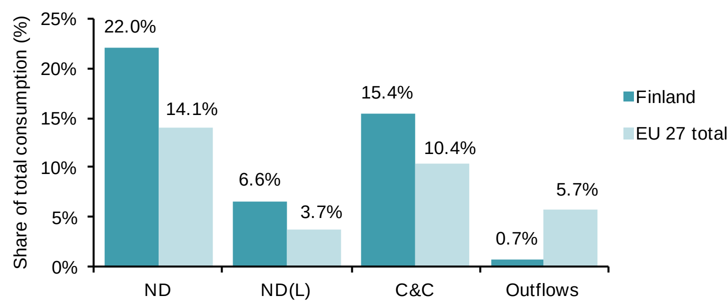
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011
(3) Synovate/Ipsos ND(L) research, 2006-2011 (Ipsos acquired Synovate in 2011)

## Share of Finland consumption by type 2006-2011[(1)(3)]




| Volume (bn cigarettes) | 6.4 | 6.4 | 6.4 | 6.3 | 6.0 | 6.1 |
|---|---|---|---|---|---|---|

## Comparison of EU and Finland consumption by type 2011[(1)(3)]



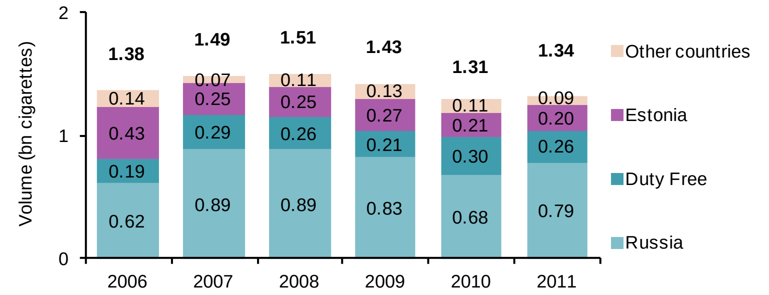
# Total cigarette consumption

**Consumption of non-domestic cigarettes increased to 1.34 billion cigarettes in 2011, compared to 1.31 billion in the previous year.**

**Total Finland cigarette consumption** [1][2]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 5.05 | 4.95 | 4.90 | 4.88 | 4.68 | 4.76 |
| Outflows | -0.07 | -0.04 | -0.05 | -0.04 | -0.01 | -0.04 |
| Legal domestic consumption (LDC) | 4.99 | 4.91 | 4.85 | 4.85 | 4.67 | 4.72 |
| Non-domestic legal (ND(L)) | 0.73 | 0.41 | 0.44 | 0.59 | 0.36 | 0.40 |
| Counterfeit and contraband (C&C) | 0.64 | 1.08 | 1.07 | 0.85 | 0.95 | 0.93 |
| Total non-domestic | 1.38 | 1.49 | 1.51 | 1.43 | 1.31 | 1.34 |
| **Total cigarette consumption** | **6.36** | **6.41** | **6.37** | **6.28** | **5.97** | **6.06** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011**[1][2]




**Finland Other Tobacco Products market** [3][a][b]

| Billion cigarette equivalent | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| OTP (LDS) | 1.06 | 1.06 | 1.01 | 1.00 | 0.98 | 0.98 |

Notes: (a) Other Tobacco Products (OTP) include fine cut and pipe tobacco. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams

(b) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

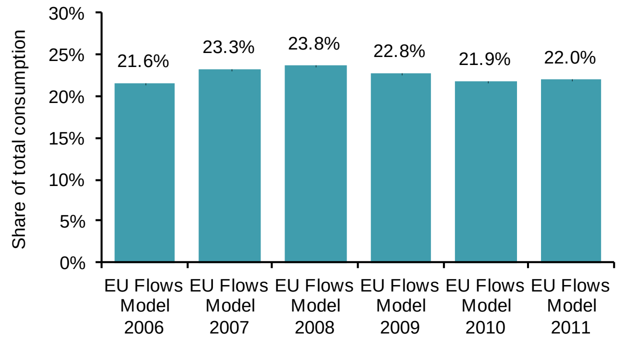
(2) Synovate/Ipsos ND(L) research, 2006-2011

(3) OTP volumes supplied by the Finnish Food and Drink Ind. Federation

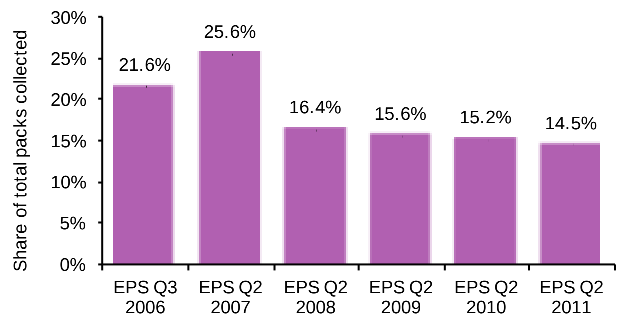
# Comparison of external sources for non-domestic estimates

**The EU Flows Model estimate for non-domestic incidence is higher than the Empty Pack Survey estimate due to an adjustment to Russian inflows.**

### EU Flows Model non-domestic market estimates(1)




### EPS non-domestic market estimates(2)




### PMI EPS results report lower levels of inflows from Russia compared to the Project Star results from 2007 to 2010

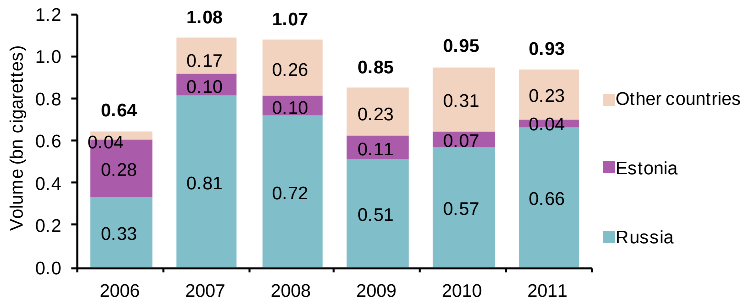
- The levels of Russian inflows implied by the EPS surveys carried out from 2008 to 2011 are not supported by analysis of external sources; including relative price changes, changes in cross-border travel trends and interview programme responses from Finnish Border Guard personnel.(3)
- In 2011, inflows from Russia have been uplifted by 0.53 billion cigarettes to 0.79 billion cigarettes.
  - The Russian inflow has been adjusted to reflect the trends in border crossings and seizure levels between 2010 and 2011.

Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys 2006-2011
(3) KPMG interview programme conducted 14th March – 21st March 2012

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows declined slightly to 0.93 billion cigarettes in 2011.**

**Counterfeit and contraband by origin 2006-2011**(1)(2)(3)



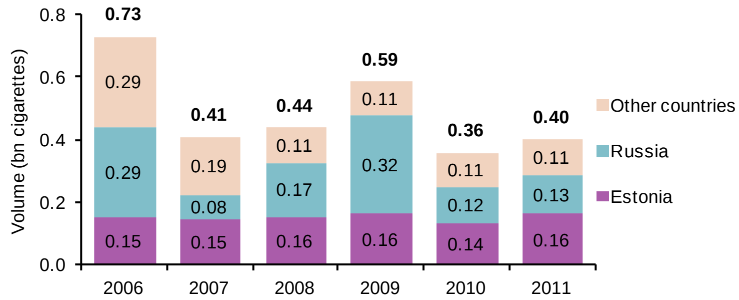

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **10%** | **17%** | **17%** | **13%** | **16%** | **15%** |
| **C&C share of ND:** | **47%** | **73%** | **71%** | **59%** | **72%** | **70%** |

Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research, 2006-2011
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

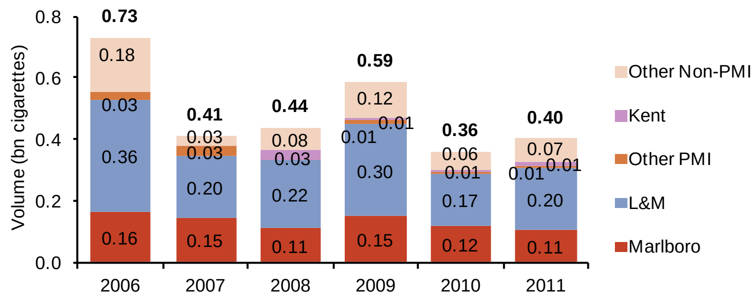
**Non-domestic (legal) consumption increased to 0.40 billion cigarettes in 2011.**

## Non-domestic (legal) by origin 2006-2011[(1)(2)(3)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **12%** | **6%** | **7%** | **9%** | **6%** | **7%** |
| **ND(L) share of non-domestic:** | **53%** | **27%** | **29%** | **41%** | **28%** | **30%** |

## Non-domestic (legal) by brand 2006-2011[(1)(2)(3)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of total** | **76%** | **91%** | **77%** | **79%** | **81%** | **78%** |

## ND(L) analysis

| | ① Population 19+ | | ② Propensity to travel | | ③ Propensity to purchase | | ④ Ave. no. of trips | | Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **4.1** | x | **63%** | x | **38%** | x | **2.1** | x | **195** | = | **0.40** |
| EU rank 2011 | **19** | | **9** | | **5** | | **20** | | **8** | | **11** |

**ND(L) analysis: 2008-2011**

| | | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | ① x ② | 22.5% | 24.0% | 21.6% | 24.2% |
| Average annual cigarettes purchased | ③ x ④ | 475 | 594 | 409 | 407 |

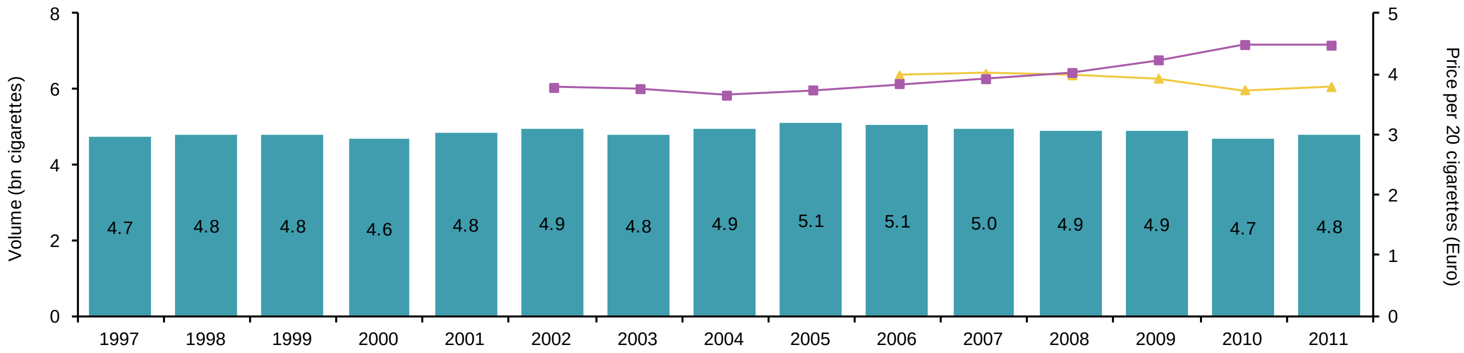
Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research, 2006-2011
(3) Interviews with PMI Local Management

Finland

# Historic sales and pricing trends

**Legal domestic cigarette sales increased slightly to 4.8 billion in 2011.**

### Historic cigarette prices and legal domestic sales 1997-2011[1][2]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarette legal domestic sales* | *0.6%* | *1.2%* | *-1.0%* | *-1.2%* | *1.8%* |
| *Weighted average cigarette pack price* | *n/a* | *-0.4%[a]* | *3.2%* | *2.8%* | *-0.2%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *-0.4%[b]* | *-1.8%* | *1.4%* |
| *OTP legal domestic sales[3][c]* | *n/a* | *n/a* | *-3.0%* | *-0.9%* | *-0.5%* |

Notes: (a) CAGR from 2002 to 2005
(b) CAGR from 2006 to 2011
(c) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams

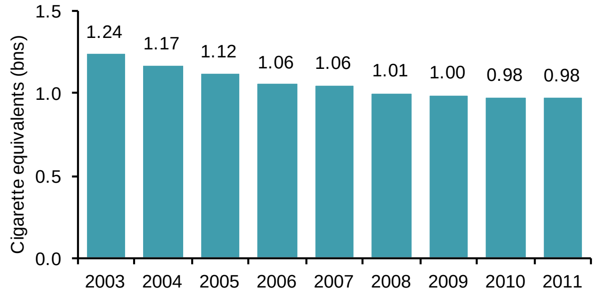
Sources: (1) In Market Sales supplied by PMI based on data from local distributor
(2) PMI Management and EU Tax Tables
(3) OTP volumes supplied by the Finnish Food and Drink Ind. Federation

**Legal domestic sales increased by 1.8% in 2011, whilst the average pack price declined by 0.2%**

# OTP market size and growth

**Sales of smoking tobacco products remained stable at 0.98 billion cigarette equivalents in 2011.**

**Smoking tobacco sales in billion cigarette equivalents 2003-2011**(1)(a)(b)




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes):** | 4.8 | 4.9 | 5.1 | 5.1 | 5.0 | 4.9 | 4.9 | 4.7 | 4.8 |

| CAGR (%) | 2003-2007 | 2007-2011 | 2010-2011 |
|---|---|---|---|
| *Smoking tobacco* | *-4.0%* | *-1.9%* | *-0.5%* |
| *Manufactured cigarettes* | *0.8%* | *-1.0%* | *1.8%* |

Notes: (a) Smoking tobacco volumes have been calculated at one stick per 0.75 grams
(b) Cigars/cigarillos and smokeless tobacco have been excluded from this analysis
Source: (1) OTP volumes supplied by the Finnish Food and Drink Ind. Federation

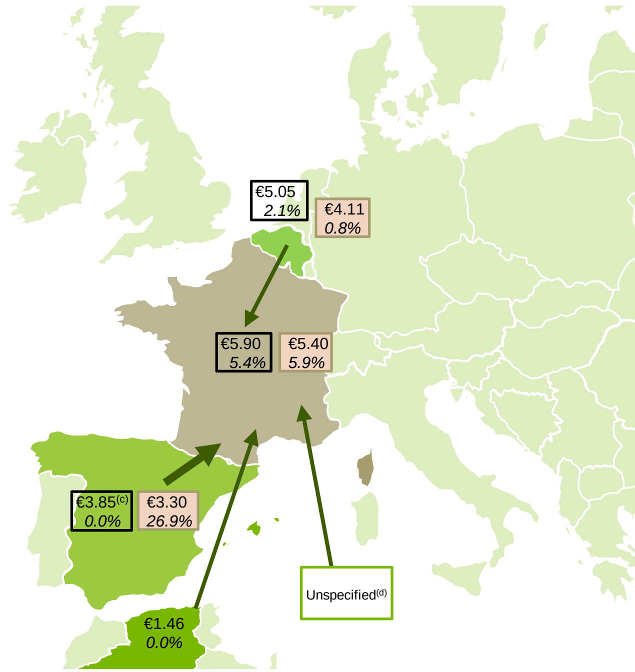
Project Star 2011

# Contents – country detail

# Market overview

**The share of cigarette consumption in France accounted for by counterfeit and contraband increased by 2.1 percentage points to 15.8% in 2011.**

### Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows[(1)(3)(a)(b)]

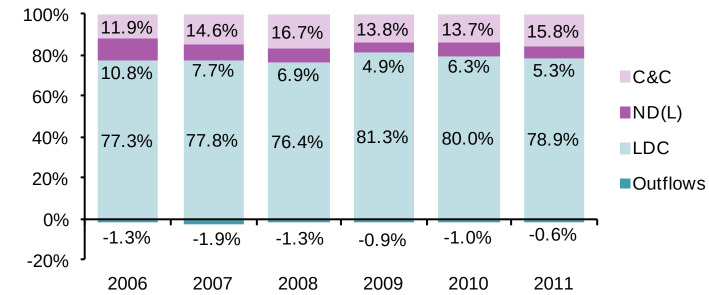



Key:
- France
- Top source countries
- 2011 pack of 20 Marlboro KS price in Euros and percentage change from 2010
- 2011 pack of 20 cheapest available brand price in Euros and percentage change from 2010

Note:
(a) Map shows flows of over 6% of consumption. Countries which are both source and destination countries are coded according to the larger flow
(b) Arrow size indicates relative cigarette flow volume
(c) A number of price changes took place in Spain between April and October in 2011, the average price of Marlboro for the year per IMS data was €4.15
(d) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". Unspecified market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack

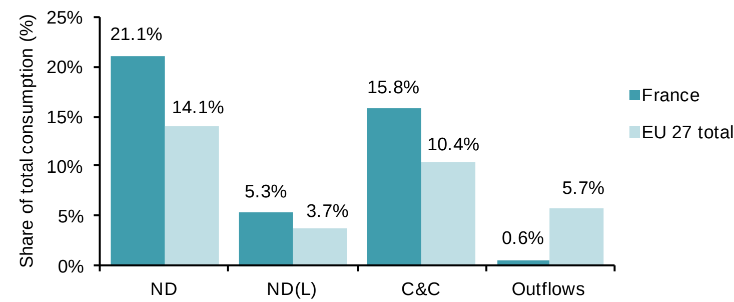
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) AC Nielsen ND(L) research, 2006-2011
(3) Retail selling prices supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

### Share of France consumption by type 2006-2011[(1)(2)]




| | | | | | | |
|---|---|---|---|---|---|---|
| **Volume (bn cigarettes)** | **71.0** | **69.0** | **69.0** | **66.9** | **67.6** | **68.1** |

### Comparison of EU and France consumption by type 2011[(1)(2)]



# Total cigarette consumption

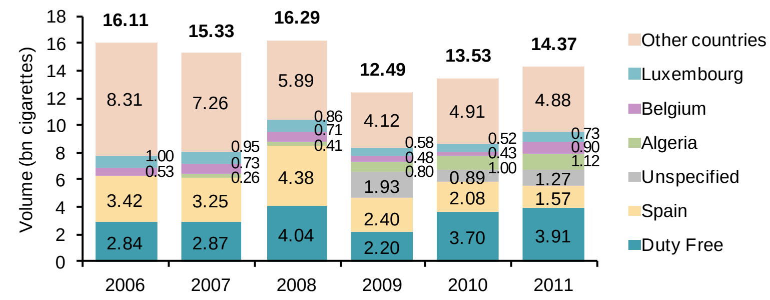
**Consumption of non-domestic cigarettes increased to 14.37 billion cigarettes in 2011, compared to 13.53 billion in the previous year.**

| Total France cigarette consumption[1][2] | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarettes** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| Legal domestic sales (LDS) | 55.77 | 54.95 | 53.59 | 54.99 | 54.80 | 54.11 |
| Outflows | -0.91 | -1.32 | -0.92 | -0.61 | -0.68 | -0.42 |
| Legal domestic consumption (LDC) | 54.86 | 53.63 | 52.67 | 54.38 | 54.11 | 53.69 |
| Non-domestic legal (ND(L)) | 7.66 | 5.29 | 4.74 | 3.29 | 4.24 | 3.63 |
| Counterfeit and contraband (C&C) | 8.45 | 10.04 | 11.55 | 9.20 | 9.29 | 10.74 |
| Total non-domestic | 16.11 | 15.33 | 16.29 | 12.49 | 13.53 | 14.37 |
| **Total cigarette consumption** | **70.97** | **68.95** | **68.96** | **66.86** | **67.64** | **68.06** |

| France Other Tabacco Product market[3][c][d] | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarette equivalent** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| OTP (LDS) | 10.39 | 10.26 | 10.41 | 9.68 | 10.77 | 11.17 |

| Cigarette outflows from France[1][a] | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarettes** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| Netherlands | 0.37 | 0.35 | 0.12 | 0.08 | 0.35 | 0.13 |
| Other EU | 0.54 | 0.97 | 0.81 | 0.53 | 0.33 | 0.28 |
| **Total cigarette outflows** | **0.91** | **1.32** | **0.92** | **0.61** | **0.68** | **0.42** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011**[1][2][b]



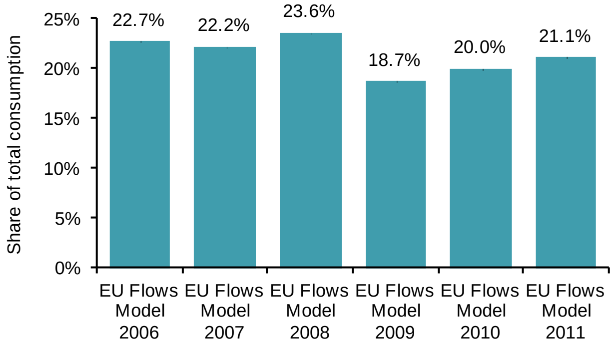

Notes:
(a) High level analysis of the Swiss Empty Pack Survey results indicate outflows from France to Switzerland. However, Switzerland is not covered within the scope of Project Star and therefore it is not possible for KPMG to reliably estimate the volume of these outflows. Furthermore, as cigarette prices in France are more expensive than in Switzerland, any outflows are likely to be incidental and/or driven by inbound tourism.
(b) Since 2009, packs which had no clear indication of origin were classified as “Unspecified”. Unspecified market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of ‘Duty Free’ on the pack
(c) Other Tobacco Products (OTP) include fine cut and pipe tobacco. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams
(d) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) AC Nielsen ND(L) research, 2006-2011
(3) OTP volumes based on Altadis Distribution France data supplied by PMI

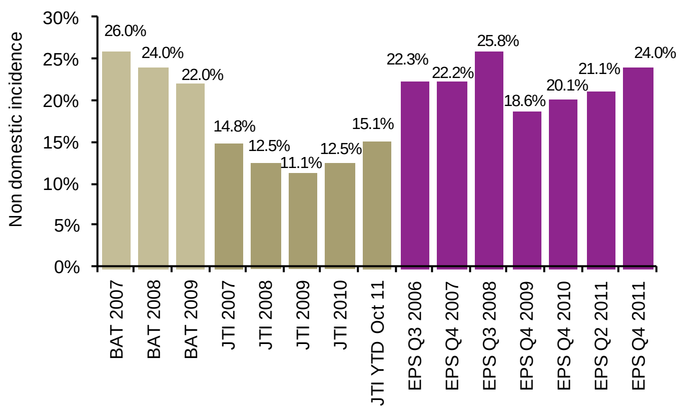
# Comparison of external sources for non-domestic estimates

**The EU Flows Model estimate of increasing non-domestic consumption in 2011 is directionally consistent with the Empty Pack Survey and JTI estimates.**

## Non-domestic market estimates[1]




## Other non-domestic market estimates[2][3]




### The EU Flows Model indicates non-domestic consumption in 2011 to be 21.1%, slightly higher than in 2010

- The Q2 EPS has been weighted to represent the first three quarters of 2011 and the Q4 EPS has been weighted to represent the final three months of the year,
  - This reflects the price changes that occurred in October 2011.
- Non-domestic incidence of American Legend in Marseille increased significantly in the Q2 EPS, however this was considered to be only a short term trend that was highly concentrated in Marseille,
  - 74% of all American Legend packs collected in the Q2 EPS were found in Marseille
  - The American Legend incidence in Marseille in the Q2 EPS was considered representative of only three months in the year and has been weighted accordingly.
- Alternative estimates by JTI for the period to October 2011 suggest non-domestic incidence of 15.1%, an increase of 2.6 percentage points compared to 2010.

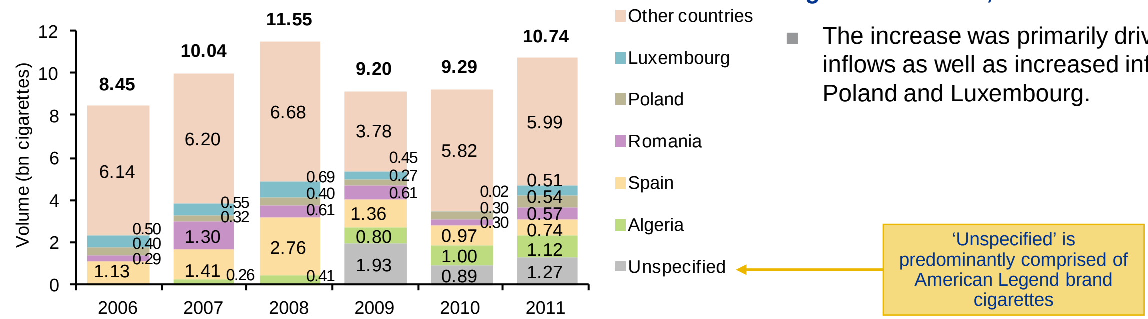
Sources: (1) KPMG EU Flows Model 2006-2011
(2) PMI Empty Pack Surveys- 2006-2011.
(3) JTI and BAT non-domestic market surveys, cited in Revue Des Tabacs magazine, December 2007 to December 2011.

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows increased to 10.74 billion cigarettes in 2011**

**Flows of American Legend increased from 0.79 billion cigarettes in 2010 to 1.21 billion cigarettes in 2011.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)(a)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **12%** | **15%** | **17%** | **14%** | **14%** | **16%** |
| **C&C share of ND:** | **52%** | **66%** | **71%** | **74%** | **69%** | **75%** |

**Counterfeit and contraband inflows accounted for 10.74 billion cigarettes in 2011, an increase of 1.45 versus prior year**

- The increase was primarily driven by increased 'Unspecified' inflows as well as increased inflows from Algeria, Romania, Poland and Luxembourg.

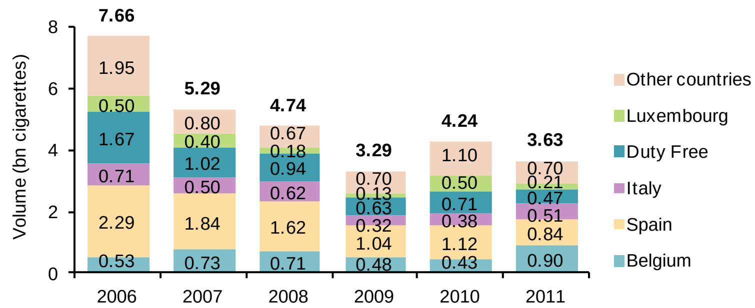
Note: (a) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". 'Unspecified' market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack. Unspecified packs may be counterfeit

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research, 2006-2011
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

**Non-domestic (legal) inflows declined to 3.63 billion cigarettes in 2011, driven by a lower average number of trips compared to the previous year.**

## Non-domestic (legal) by origin 2006-2011[1][2][3][a]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **11%** | **8%** | **7%** | **5%** | **6%** | **5%** |
| **ND(L) share of non-domestic:** | **48%** | **34%** | **29%** | **26%** | **31%** | **25%** |

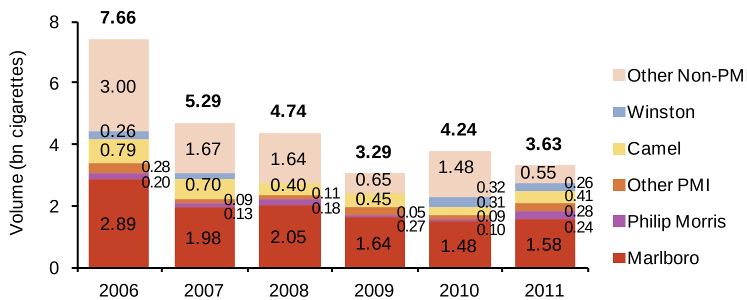
## ND(L) analysis

| | 1 Population 19+ | | 2 Propensity to travel | | Propensity to purchase | | 3 Ave. no. of trips | | 4 Ave. purchases (cigarettes) | | Total ND(L) (cigarettes) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **49.6m** | x | **38%** | x | **28%** | x | **3.9** | x | **175** | = | **3.63** |
| EU rank 2011 | **2** | | **21** | | **13** | | **6** | | **9** | | **2** |

### ND(L) analysis: 2008-2011

| | | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 12.8% | 12.2% | 11.9% | 10.7% |
| Average annual cigarettes purchased | 3 x 4 | 646 | 504 | 729 | 681 |

## Non-domestic (legal) by brand 2006-2011[1][2][3]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | **44%** | **42%** | **49%** | **60%** | **40%** | **58%** |

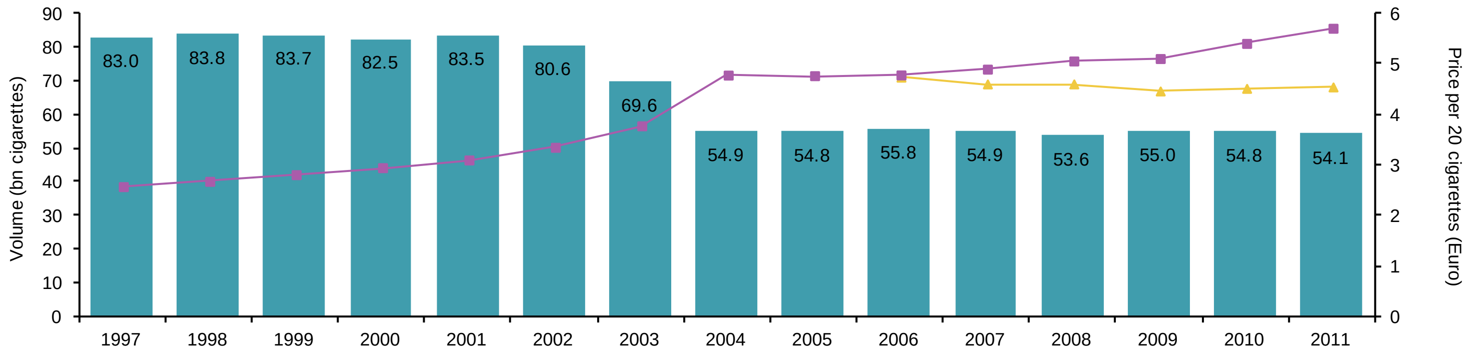
Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research, 2006 - 2011
(3) Interviews with PMI Local Management

# Historic sales and pricing trends

**Legal domestic sales declined to 54.1 billion cigarettes in 2011.**

**There was a 5.6% increase in average pack price over the same period.**

**Historic cigarette prices and legal domestic sales 1997-2011[1][2]**




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarette legal domestic sales* | *0.1%* | *-10.0%* | *0.1%* | *-0.8%* | *-1.3%* |
| *Weighted average cigarette pack price* | *4.8%* | *11.4%* | *1.7%* | *5.7%* | *5.6%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *-2.0%[a]* | *0.9%* | *0.6%* |
| *OTP legal domestic sales[3][b]* | *n/a* | *n/a* | *-1.7%* | *7.5%* | *3.8%* |

Note: (a) CAGR is 2006-2009
(b) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams

Sources: (1) Altadis distribution France (monthly data)
(2) PMI Management and EU Tax Tables
(3) OTP volumes based on Altadis Distribution France data supplied by PMI

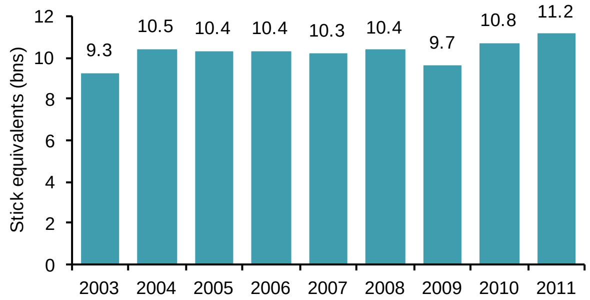
**Legal domestic sales declined by 1.3% between 2010 and 2011, while the average pack price increased by 5.6% over this period**

- Prices rose on average by €0.30 cents in October 2011.
- Declining legal domestic sales in 2011 were offset by rising non-domestic incidence, leading to an increase in total consumption.

# OTP market size and growth

**Sales of smoking tobacco increased to 11.2 billion cigarette equivalents in 2011.**

## Smoking tobacco sales in billion stick equivalents 2003-2011[1][a][b]




| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes)** | 69.6 | 54.9 | 54.8 | 55.8 | 54.9 | 53.6 | 55.0 | 54.8 | 54.1 |

| **CAGR (%)** | **2003-2007** | **2007-2011** | **2010-2011** |
|---|---|---|---|
| *Smoking tobacco* | *2.4%* | *2.2%* | *3.8%* |
| *Manufactured cigarettes* | *-5.8%* | *-0.4%* | *-1.3%* |

Note: (a) Smoking tobacco volumes have been calculated at one cigarette per 0.75 grams
(b) Categories included in 'Smoking tobacco' are Roll Your Own (RYO), Make Your Own (MYO) and Pipe Tobacco

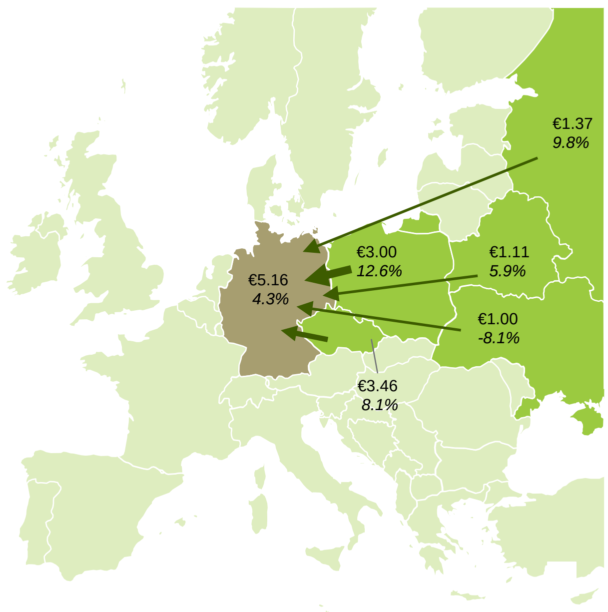
Source: (1) OTP volumes based on Altadis Distribution France data supplied by PMI

# Contents – country detail

# Market overview

**The share of cigarette consumption in Germany accounted for by counterfeit and contraband increased to 13.1% in 2011.**

## Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows[1][2][a][b][c][d]

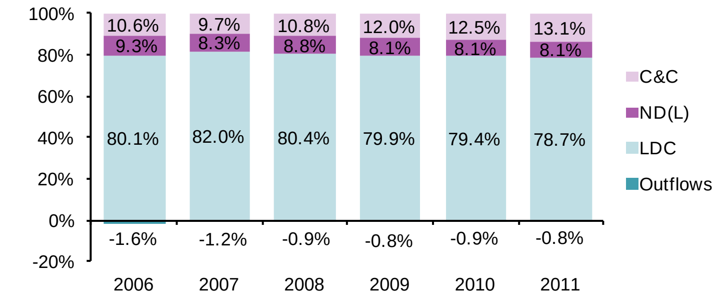



Key:
- Germany
- Top five source countries

Notes:
(a) Map shows flows over 0.5% of consumption. Countries which are both source and destination countries are coded according to the larger flow
(b) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) Relative cigarette prices in Poland, Russia, the Czech Republic and Ukraine are subject to fluctuations as result of exchange rate changes of their respective currencies versus the Euro
(d) Arrow size indicates relative cigarette flow volume

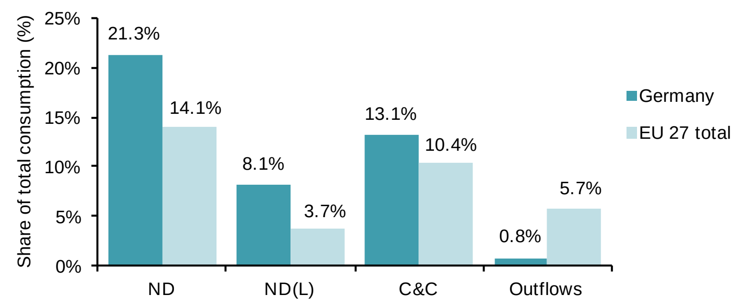
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011
(3) GFK ND(L) research 2006, Synovate/Ipsos ND(L) research 2007-2011 (Ipsos acquired Synovate in 2011)

## Share of Germany consumption by type 2006-2011[1][3]




| | | | | | | |
|---|---|---|---|---|---|---|
| **Volume (bn cigarettes)** | **114.0** | **107.3** | **106.9** | **106.0** | **104.5** | **106.2** |

## Comparison of EU and Germany consumption by type 2011[1][3]



# Total cigarette consumption

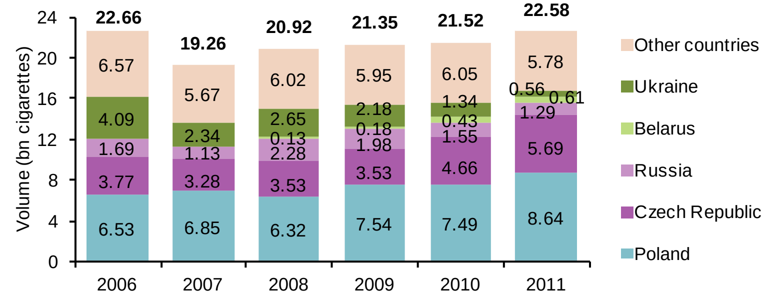
**Consumption of non-domestic cigarettes increased to 22.58 billion cigarettes in 2011.**

| Total Germany cigarette consumption[1][2] | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarettes** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| Legal domestic sales (LDS) | 93.17 | 89.34 | 86.95 | 85.49 | 83.91 | 84.47 |
| Outflows | -1.86 | -1.31 | -0.97 | -0.84 | -0.95 | -0.86 |
| Legal domestic consumption (LDC) | 91.31 | 88.03 | 85.97 | 84.65 | 82.96 | 83.60 |
| Non-domestic legal (ND(L)) | 10.55 | 8.87 | 9.39 | 8.62 | 8.43 | 8.62 |
| Counterfeit and contraband (C&C) | 12.11 | 10.39 | 11.53 | 12.73 | 13.09 | 13.96 |
| Total non-domestic | 22.66 | 19.26 | 20.92 | 21.35 | 21.52 | 22.58 |
| **Total cigarette consumption** | **113.97** | **107.30** | **106.89** | **106.00** | **104.48** | **106.19** |

| Germany Other Tobacco Product market[3][a][b] | | | | | | |
|---|---|---|---|---|---|---|
| **Billion Cigarette Equivalents** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| OTP (LDS) | 36.28 | 33.20 | 33.03 | 35.52 | 34.03 | 35.32 |

| Cigarette Outflows from Germany[1] | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarettes** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| Netherlands | 0.45 | 0.29 | 0.20 | 0.13 | 0.35 | 0.25 |
| France | 0.68 | 0.23 | 0.19 | 0.24 | 0.22 | 0.21 |
| Other EU | 0.72 | 0.78 | 0.58 | 0.47 | 0.37 | 0.41 |
| **Total cigarette outflows** | **1.86** | **1.31** | **0.97** | **0.84** | **0.95** | **0.86** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011**[1][2]




Notes: (a) Other Tobacco Products (OTP) include fine cut and pipe tobacco. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams

(b) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

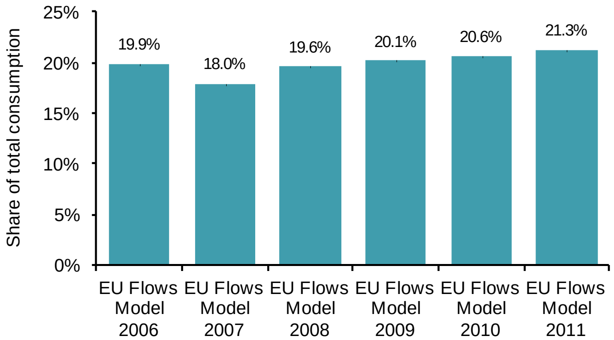
(2) GFK ND(L) research 2006, Synovate/Ipsos ND(L) research 2007-2011

(3) OTP volumes supplied by PMI In Market Sales data, offtake panels and publications

# Comparison of external sources for non-domestic estimates

**Non-domestic incidence increased in 2011 according to both the Yellow Bag survey and the EU Flows Model.**

## EU Flows Model non-domestic market estimates(1)




## YBS non-domestic market estimates(2)


Sources: (1) KPMG EU Flows Model
(2) Yellow Bag surveys 2006-2011

**EU Flows Model estimates for non-domestic consumption are directionally consistent with the trends highlighted by the Yellow Bag survey results**

- The Yellow Bag survey is conducted on a monthly basis.
- The non-domestic incidence represents a consolidated output from all 2011 monthly results.

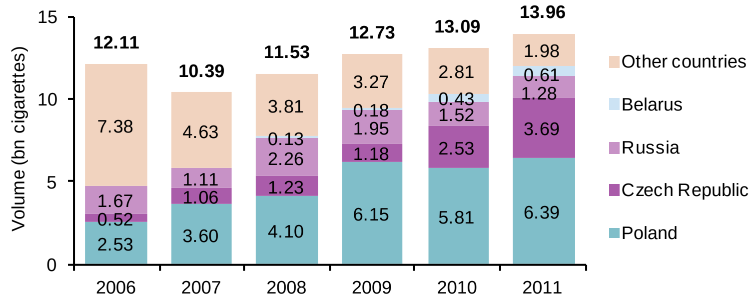
**Czech and Polish inflow levels appeared to be overstated in the 2011 Yellow Bag survey results compared to estimates from corroborating KPMG analysis**

- As in 2010, the Görlitz collection centre was included in the Yellow Bag sample but recorded very high levels of Czech and Polish variant packs which, while reflecting its proximity to the border, were not felt to be representative of the wider region.
  - Therefore, in both 2010 and 2011 results the Görlitz centre results were excluded from the EU Flows Model calculation.

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows increased by 0.87 billion cigarettes in 2011, with the growth being driven by Czech and Polish inflows.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **11%** | **10%** | **11%** | **12%** | **13%** | **13%** |
| **C&C share of ND:** | **53%** | **54%** | **55%** | **60%** | **61%** | **62%** |

### The overall level of counterfeit and contraband inflows increased in 2011

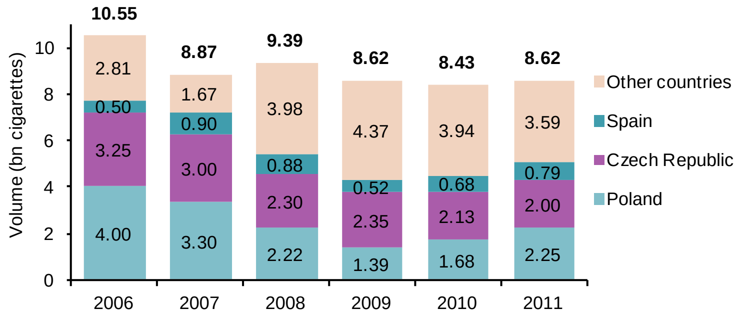
- Increased levels reflect growth in flows from Czech and Poland and Belarus, despite a decline in the flow from Russia.

Sources: (1) KPMG EU Flows Model
(2) GFK ND(L) research 2006, Synovate/Ipsos ND(L) research 2007-2011
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

**Non-domestic (legal) inflows increased to 8.62 billion cigarettes from 2010 to 2011.**

## Non-domestic (legal) by origin 2006-2011[(1)(2)(3)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **9%** | **8%** | **9%** | **8%** | **8%** | **8%** |
| **ND(L) share of non-domestic:** | **47%** | **46%** | **45%** | **40%** | **39%** | **38%** |

Sources: (1) KPMG EU Flows Model
(2) GFK ND(L) research 2006, Synovate/Ipsos ND(L) research 2007-2011
(3) Interviews with PMI Local Management

## ND(L) analysis

| | 1 Population 19+ | | 2 Propensity to travel | | 3 Propensity to purchase | | 4 Ave. no. of trips | | Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **66.5m** | x | **49%** | x | **39%** | x | **1.7** | x | **391** | = | **8.63** |
| EU rank 2011 | **1** | | **15** | | **4** | | **24** | | **1** | | **1** |

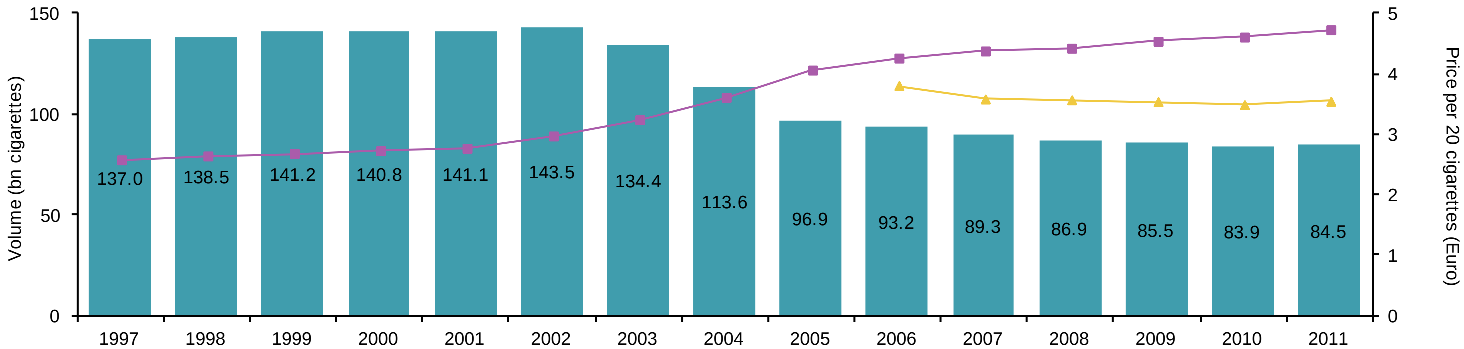
**ND(L) analysis: 2008-2011**

| | | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 18.1% | 22.5% | 18.2% | 19.1% |
| Average annual cigarettes purchased | 3 x 4 | 771 | 568 | 695 | 679 |

# Historic sales and pricing trends

**Legal domestic cigarette sales increased by 0.7% in 2011, while the average pack price increased by 2.6% over this period.**

## Historic cigarette prices and legal domestic sales 1997-2011[(1)(2)]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarette legal domestic sales* | *0.7%* | *-9.0%* | *-3.1%* | *-0.6%* | *0.7%* |
| *Weighted average cigarette pack price* | *1.8%* | *10.1%* | *2.8%* | *2.1%* | *2.6%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *-2.4%[(a)]* | *0.1%* | *1.6%* |
| *OTP legal domestic sales [(5)(b)]* | *n/a* | *n/a* | *-3.4%* | *-0.3%* | *3.8%* |

Note: (a) CAGR from 2006 to 2009
(b) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams

Sources: (1) In Market Sales supplied by PMI based on IMS segment data, offtake panels and publications
(2) PMI Management and EU Tax Tables
(3) 'Germany to raise Taxes on Tobacco, Cut Energy Subsidies Less Than Planned', Bloomberg.com, October 2010
(4) Analysis of In Market Sales data provided by PMI, 2011
(5) OTP volumes supplied by PMI In Market Sales data, offtake panels and publications

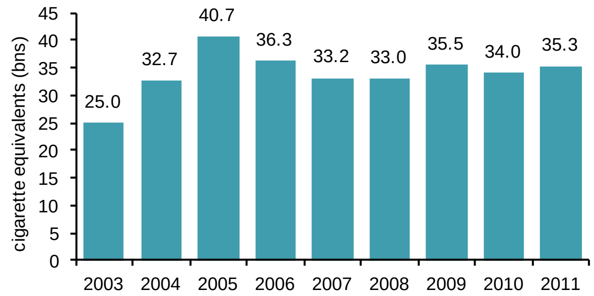
### Legal domestic sales increased by 0.7% in 2011 whilst the average pack price increased by 2.6%

- Germany introduced tobacco excise price increases in 2011 which resulted in an average retail selling price increase of €0.20 cents for many brands.[(3)(4)]
  - Excise tax increased between €0.04 and €0.08 a pack of 19 cigarettes in 2011.[(3)]
- These tax changes also impacted the OTP (Other Tobacco Products) sector.
  - Excise tax increased between €0.12 and €0.14 for a 40 gram pack of smoking tobacco in 2011[(3)].

# OTP market size and growth

**Sales of smoking tobacco products increased to 35.3 billion cigarette equivalents in 2011.**

**Smoking tobacco sales in billion cigarette equivalents 2003-2011**[(1)(a)]




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes):** | 134.4 | 113.6 | 96.9 | 93.2 | 89.3 | 86.9 | 85.5 | 83.9 | 84.5 |

| CAGR (%) | 2003-2007 | 2007-2011 | 2010-2011 |
|---|---|---|---|
| *Smoking tobacco* | *7.4%* | *1.6%* | *3.8%* |
| *Manufactured cigarettes* | *-9.7%* | *-1.4%* | *0.7%* |

Note: (a) Smoking tobacco volumes have been calculated at one stick per 0.75 grams
Source: (1) OTP volumes supplied by PMI In Market Sales data, offtake panels and publications

# Contents – country detail

# Market overview

**The share of cigarette consumption in Greece accounted for by counterfeit and contraband continued to increase in 2011, reaching 10.1%.**

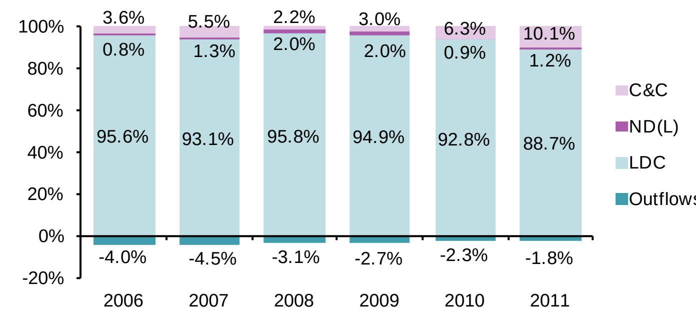
### Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows(1)(3)(a)(b)(c)(d)


Key:
- Greece
- Top destination country
- Top source country

Notes:
(a) Map shows flows over 0.5% of consumption. Countries which are both source and destination countries are coded according to the larger flow.
(b) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011.
(c) Arrow size indicates relative cigarette flow volume
(d) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". Unspecified market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack

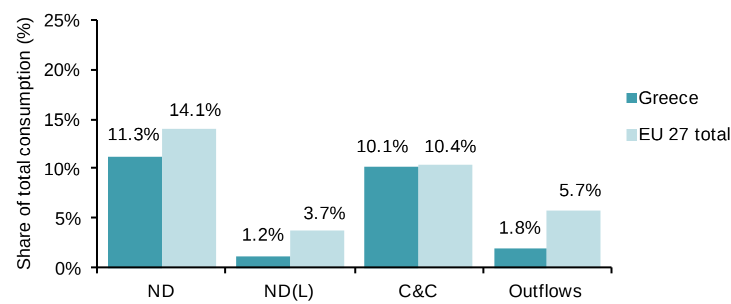
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Synovate/Ipsos ND(L) research 2006 -2008, 2011 (Ipsos acquired Synovate in 2011)
(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

### Share of Greece consumption by type 2006-2011(1)(2)




| Volume (bn cigarettes) | 33.7 | 33.6 | 32.6 | 31.7 | 29.2 | 26.8 |
|---|---|---|---|---|---|---|

### Comparison of EU and Greek consumption by type 2011(1)(2)



# Total cigarette consumption

**Consumption of non-domestic cigarettes increased to 3.02 billion cigarettes in 2011.**

**The principal driver for the growth in non-domestic was the increase in volumes of ‘Unspecified’ cigarettes to over 1.2 billion in 2011.**

**Total Greece cigarette consumption** (1)(2)

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 33.57 | 32.74 | 32.23 | 30.97 | 27.78 | 24.24 |
| Outflows | -1.34 | -1.49 | -1.02 | -0.85 | -0.66 | -0.50 |
| Legal domestic consumption (LDC) | 32.22 | 31.25 | 31.21 | 30.11 | 27.12 | 23.75 |
| Non-domestic legal (ND(L)) | 0.26 | 0.45 | 0.64 | 0.64 | 0.26 | 0.32 |
| Counterfeit and contraband (C&C) | 1.22 | 1.85 | 0.72 | 0.97 | 1.83 | 2.70 |
| Total non-domestic | 1.48 | 2.30 | 1.36 | 1.61 | 2.09 | 3.02 |
| **Total cigarette consumption** | **33.70** | **33.55** | **32.57** | **31.72** | **29.21** | **26.77** |

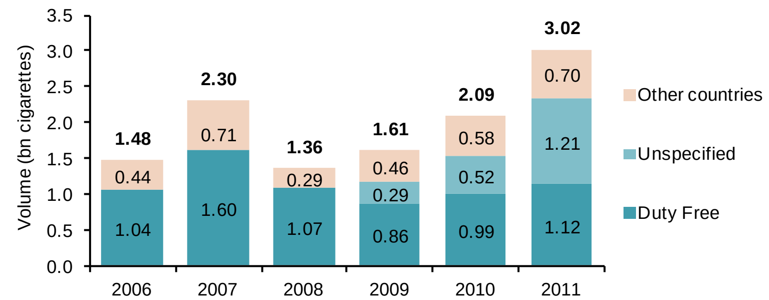
**Greece Other Tobacco Product market** (3)(b)(c)

| Billion cigarette equivalent | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| OTP (LDS) | 1.57 | 1.72 | 1.82 | 2.00 | 2.29 | 2.85 |

**Cigarette outflows from Greece** (1)(2)

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Germany | 0.27 | 0.28 | 0.24 | 0.26 | 0.19 | 0.17 |
| UK | 0.68 | 0.76 | 0.32 | 0.28 | 0.16 | 0.12 |
| Other EU | 0.39 | 0.45 | 0.46 | 0.32 | 0.31 | 0.20 |
| **Total cigarette outflows** | **1.34** | **1.49** | **1.02** | **0.85** | **0.66** | **0.50** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011**(1)(2)(a)



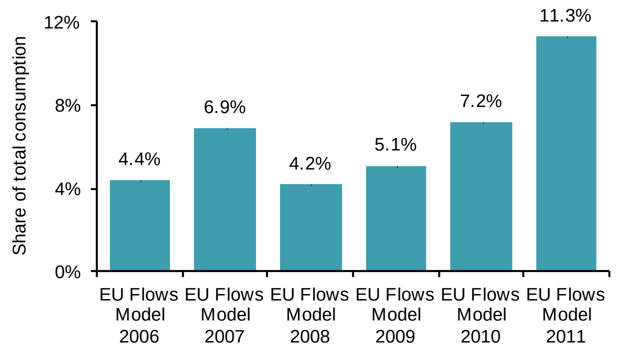

Notes: (a) Since 2009, packs which had no clear indication of origin were classified as “Unspecified”. Unspecified market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of ‘Duty Free’ on the pack
(b) Other Tobacco Products (OTP) include fine cut and pipe tobacco. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams
(c) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Synovate/Ipsos ND(L) research 2006, 2008 - 2011
(3) OTP volumes supplied by PMI based on actual IMS for PMI and on estimates for other manufacturers

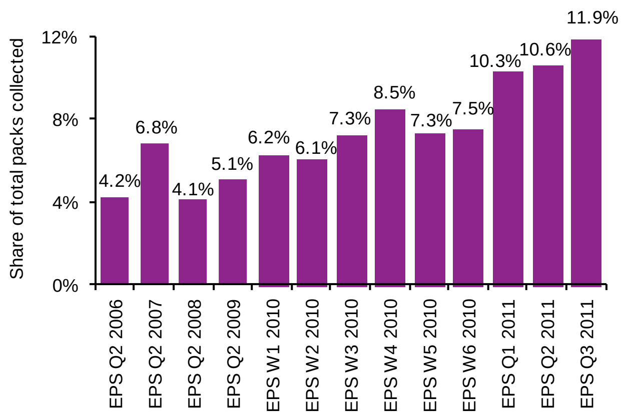
# Comparison of external sources for non-domestic estimates

**The EU Flows Model estimate for non-domestic consumption in 2011 is based on the Empty Pack Surveys conducted during the year and highlights the continued increased in non-domestic incidence.**

## EU Flows Model non-domestic market estimates(1)




## EPS non-domestic market estimates(2)(a)(b)




**The 2011 non-domestic incidence in Greece of 11.3% is calculated using a weighting of 25% for the first and second quarter Empty Pack Surveys and a 50% weighting for the third quarter**

- The Q3 2011 Empty Pack Survey was carried out in September and was deemed to be representative of market conditions in the second half of the year.
- In 2010 six Empty Pack Surveys were carried out, non-domestic incidence was calculated by applying an equal weighting to all six surveys.

Note: (a) In 2010 six Empty Pack Surveys were undertaken between May – November in 2010
(b) Empty Pack Surveys were undertaken in February/March, May and September in 2011

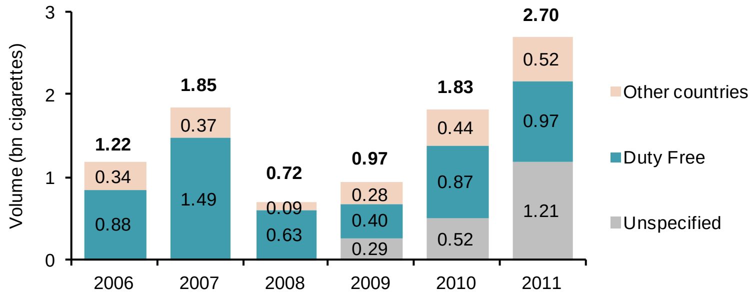
Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys 2006-2011

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows increased to 2.70 billion cigarettes in 2011, compared to 1.83 billion cigarettes in 2010.**

**The growth in C&C was largely driven by an increase in 'Unspecified' inflows.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)(a)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **4%** | **6%** | **2%** | **3%** | **6%** | **10%** |
| **C&C share of ND:** | **83%** | **80%** | **53%** | **60%** | **88%** | **90%** |

Note: (a) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". 'Unspecified' market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack. Unspecified packs may be counterfeit

Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research 2006 – 2008 and 2011
(3) Interviews with PMI Local Management

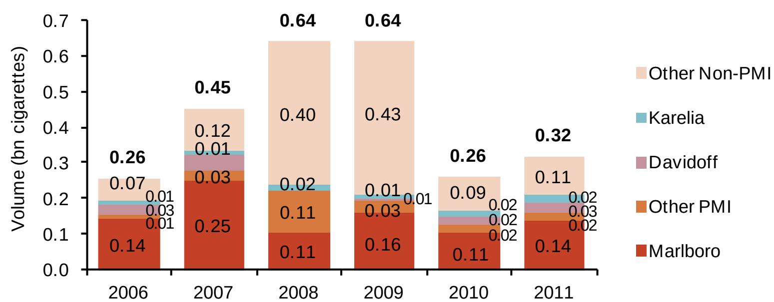
# Non-domestic (legal) breakdown

**Non-domestic (legal) inflows increased slightly to 0.32 billion cigarettes in 2011, but remain significantly down on pre-2010 levels.**

### Non-domestic (legal) by origin 2006-2011 (1)(2)(3)


| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **1%** | **1%** | **2%** | **2%** | **1%** | **1%** |
| **ND(L) share of non-domestic:** | **17%** | **20%** | **47%** | **40%** | **12%** | **10%** |

### Non-domestic (legal) by brand 2006-2011 (1)(2)(3)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | **61%** | **61%** | **34%** | **30%** | **49%** | **51%** |

### ND(L) analysis

| | (1) Population 19+ | | (2) Propensity to travel | | (2) Propensity to purchase | | (3) Ave. no. of trips | | (4) Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **8.7m** | x | **34%** | x | **39%** | x | **3.0** | x | **92** | = | **0.32** |
| EU rank 2011 | **9** | | **20** | | **7** | | **13** | | **17** | | **13** |

**ND(L) analysis: 2008-2011**

| | | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 25.2% | 25.2% | 12.3% | 13.0% |
| Average annual cigarettes purchased | 3 x 4 | 290 | 290 | 242 | 212 |

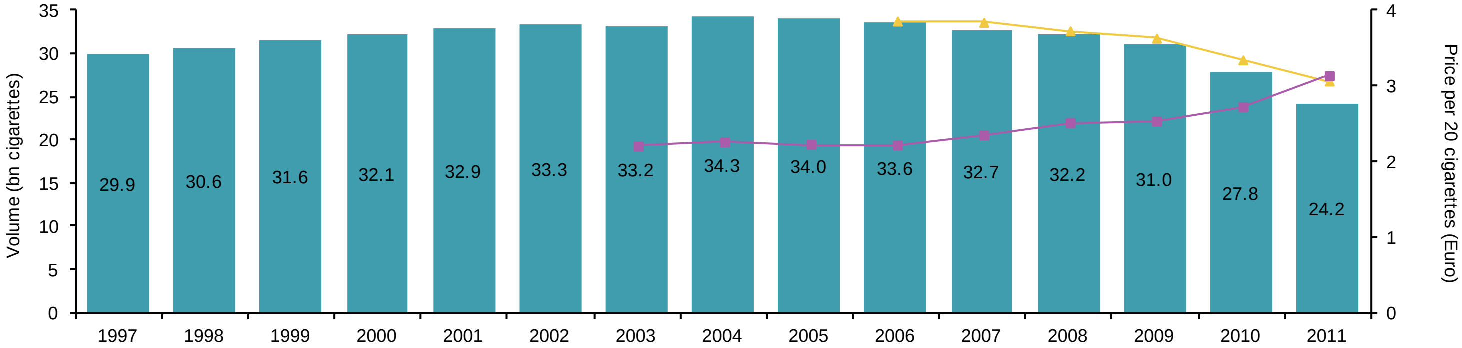
Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research 2006, 2008 - 2011
(3) Interviews with PMI Local Management

Greece

# Historic sales and pricing trends

**Legal domestic cigarette sales declined to 24.2 billion cigarettes in 2011, the second successive year of significant falls in market volume.**

## Historic cigarette prices and legal domestic sales 1997-2011(1)(2)(3)




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarette legal domestic sales* | *2.4%* | *0.8%* | *-2.3%* | *-11.5%* | *-12.7%* |
| *Weighted average cigarette pack price* | *n/a* | *n/a* | *5.3%* | *9.3%* | *3.8%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *-2.0%[a]* | *-8.1%* | *-8.4%* |
| *OTP legal domestic sales[4][b]* | *n/a* | *n/a* | *9.7%* | *19.4%* | *24.4%* |

Note (a) CAGR is 2006-2009
(b) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams

Sources: (1) PMI sales and estimates based on Nielsen data
(2) PMI Management and EU Tax Tables
(3) Discussions with local PMI management
(4) OTP volumes supplied by PMI based on actual IMS for PMI and on estimates for other manufacturers

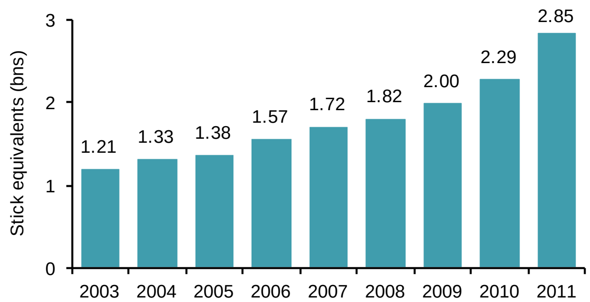
**Legal domestic sales declined by 12.7% in 2011, whilst the average pack price increased by 3.8%**

- Over the same period sales of smoking tobacco increased by 24.4% to 2.85 billion cigarette equivalents.

# OTP market size and growth

**Smoking tobacco sales increased by 24.4% to 2.85 billion cigarette equivalents in 2011.**

## Smoking tobacco sales in billion stick equivalents 2003-2011[(1)(a)]




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes)** | 33.2 | 34.3 | 34.0 | 33.6 | 32.7 | 32.2 | 31.0 | 27.8 | 24.2 |

| CAGR (%) | 2003-2007 | 2007-2011 | 2010-2011 |
|---|---|---|---|
| *Smoking tobacco* | *9.3%* | *13.4%* | *24.4%* |
| *Manufactured cigarettes* | *-0.4%* | *-7.2%* | *-12.7%* |

Note: (a) Smoking tobacco volumes have been calculated at one cigarette per 0.75 grams

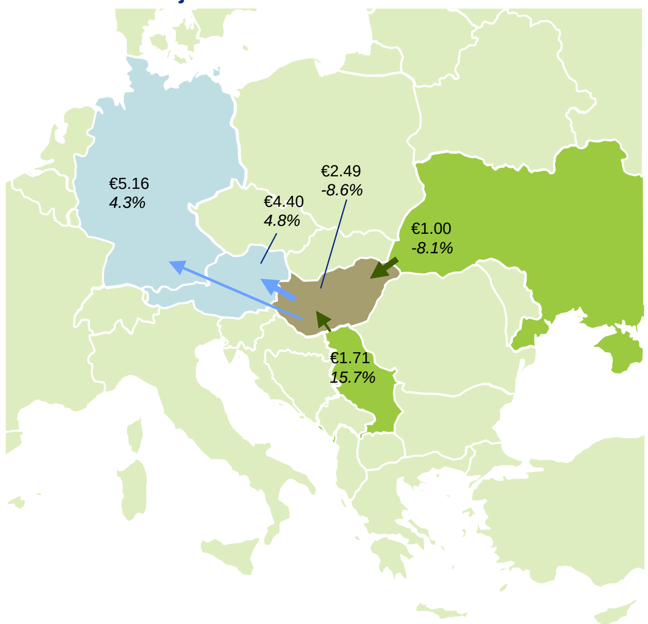
Source: (1) OTP volumes supplied by PMI based on actual IMS for PMI and on estimates for other manufacturers

# Contents – country detail

# Market overview

**The share of cigarette consumption in Hungary accounted for by counterfeit and contraband continued to decline in 2011, reaching 3.8%.**

## Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows(1)(3)(a)(b)(c)(d)

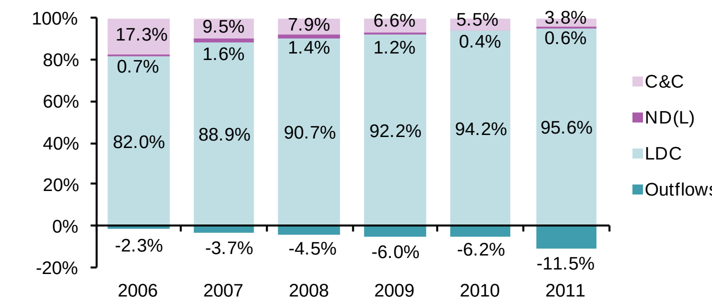



Key:
- Hungary
- Major source countries
- Major destination countries

Notes:
(a) Map shows flows over 0.75% of consumption. Countries which are both source and destination countries are coded according to the larger flow
(b) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) Relative cigarette prices in Hungary, Ukraine and Serbia are subject to fluctuations as a result of exchange rate changes of their respective currencies versus the Euro
(d) Arrow size indicates relative cigarette flow volume
(e) Total cigarette volume in Hungary relates to consumption of manufactured cigarettes only; all Other Tobacco Products are excluded

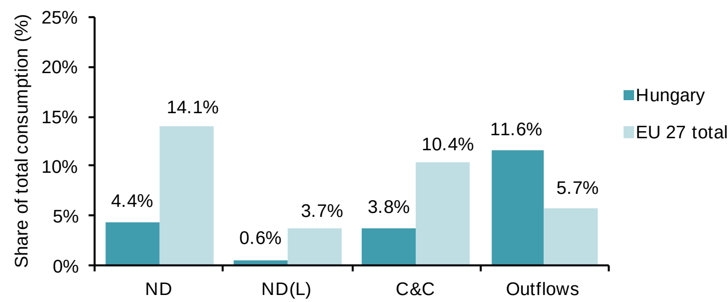
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) AC Nielsen ND(L) research 2006, 2007, 2008 and 2009. Synovate/Ipsos ND(L) research 2010 (Ipsos acquired Synovate in 2011)
(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

## Share of Hungary consumption by type 2006-2011(1)(2)(e)




| Volume (bn cigarettes) | 18.8 | 17.8 | 17.1 | 15.6 | 14.1 | 13.0 |
|---|---|---|---|---|---|---|

## Comparison of EU and Hungary consumption by type 2011(1)(2)



# Total cigarette consumption

**Consumption of non-domestic cigarettes declined to 0.57 billion cigarettes in 2011, driven by a decline in inflows from Ukraine and Serbia.**

**There was a significant increase in outflows to Austria which accounted for 0.99 billion cigarettes in 2011.**

**Total Hungary cigarette consumption[(1)(2)]**

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 15.87 | 16.46 | 16.30 | 15.30 | 14.18 | 13.94 |
| Outflows | -0.44 | -0.66 | -0.78 | -0.93 | -0.87 | -1.50 |
| Legal domestic consumption (LDC) | 15.43 | 15.80 | 15.53 | 14.36 | 13.31 | 12.44 |
| Non-domestic legal (ND(L)) | 0.14 | 0.28 | 0.24 | 0.18 | 0.05 | 0.08 |
| Counterfeit and contraband (C&C) | 3.26 | 1.69 | 1.35 | 1.03 | 0.78 | 0.49 |
| Total non-domestic | 3.40 | 1.97 | 1.59 | 1.21 | 0.83 | 0.57 |
| **Total cigarette consumption** | **18.83** | **17.77** | **17.11** | **15.57** | **14.14** | **13.01** |

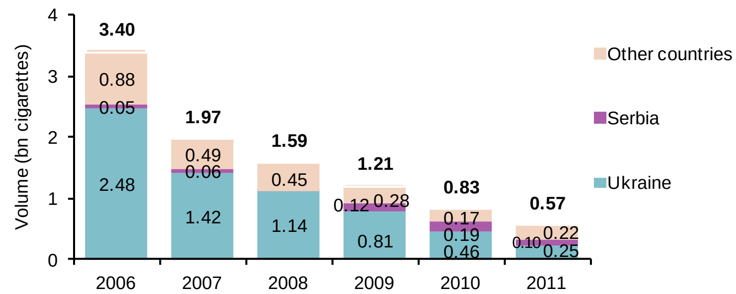
**Hungary Other Tobacco Product market[(3)(a)(b)]**

| Billion cigarette equivalent | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| OTP (LDS) | 2.40 | 2.87 | 3.20 | 3.77 | 4.98 | 5.42 |

**Cigarette outflows from Hungary[(1)]**

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Austria | 0.13 | 0.32 | 0.45 | 0.48 | 0.48 | 0.99 |
| Germany | 0.12 | 0.12 | 0.13 | 0.16 | 0.17 | 0.21 |
| UK | 0.03 | 0.10 | 0.04 | 0.10 | 0.02 | 0.09 |
| Other EU | 0.16 | 0.12 | 0.16 | 0.19 | 0.20 | 0.21 |
| **Total cigarette outflows** | **0.44** | **0.66** | **0.78** | **0.93** | **0.87** | **1.50** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011[(1)(2)]**




Notes: (a) Other Tobacco Products (OTP) include fine cut and pipe tobacco. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams

(b) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

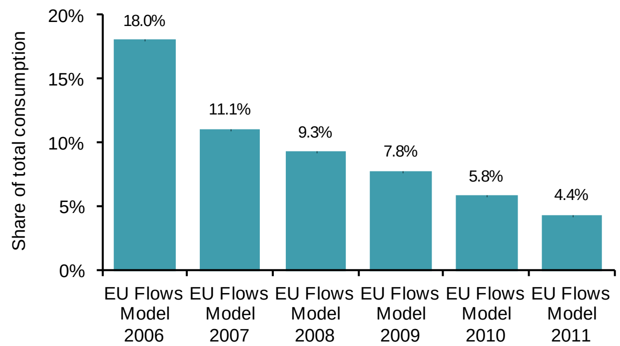
(2) AC Nielsen ND(L) research 2006, 2007, 2008 and 2009. Synovate/Ipsos ND(L) research 2010

(3) OTP volumes based on PMI estimates

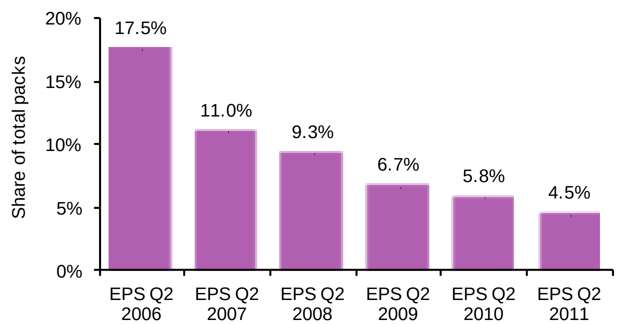
# Comparison of external sources for non-domestic estimates

**The EU Flows Model estimate for non-domestic consumption shows a continued decline in non-domestic incidence.**

## EU Flows Model non-domestic market estimates(1)(2)(3)




## EPS non-domestic market estimates(2)(a)




Note: (a) Non-domestic estimate based on unadjusted EPS results for main sample cities, in line with results displayed for 2006-2011.

Sources: (1) KPMG EU Flows Model
(2) Empty Pack Survey results 2006-2011 carried out by GfK for MDSZ, the local manufacturers association; all collections were undertaken during May and June of each year
(3) CityPopulation.de, data extracted March 2012

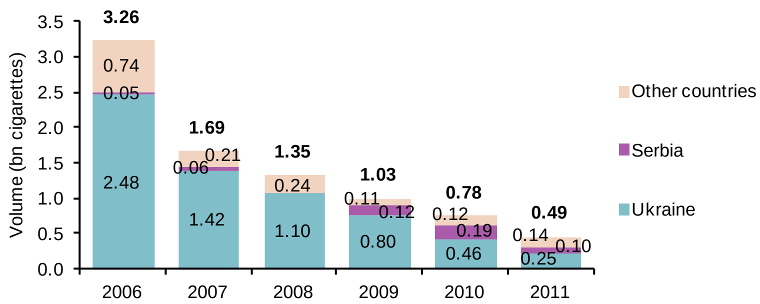
**The 2011 non-domestic incidence in Hungary of 4.4% is calculated by applying a population weighting to the MDSZ Empty Pack Survey**

- Results for the 20 largest cities from the EPS were included in the EU Flows Model in 2011, comprising 15 cities from the main sample and the 5 largest cities from the additional sample.(3)
- This approach is consistent with previous years and the method applied in all EU markets.

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows declined to 0.49 billion cigarettes in 2011. This was driven largely by a decline in inflows from Ukraine and Serbia.**

**Counterfeit and contraband by origin 2006-2011**(1)(2)(3)



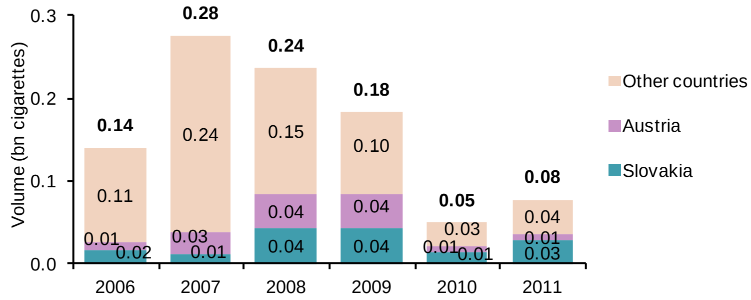

| | | | | | | |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **17%** | **10%** | **8%** | **7%** | **5%** | **4%** |
| **C&C share of ND:** | **96%** | **86%** | **85%** | **85%** | **94%** | **86%** |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, 2007, 2008 and 2009, Synovate/Ipsos ND(L) research 2010
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

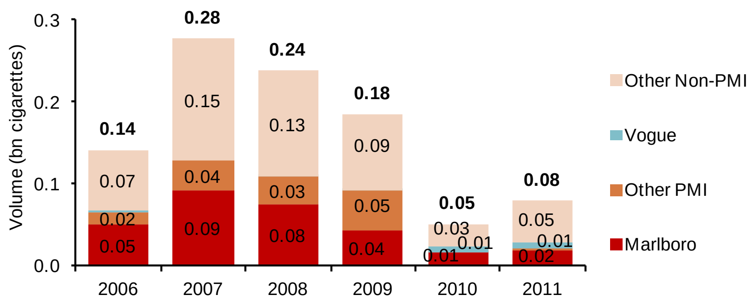
**Non-domestic (legal) inflows increased to 0.08 billion cigarettes in 2011, but remain significantly below pre 2010 levels.**

## Non-domestic (legal) by origin 2006-2011[1][2][3]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **1%** | **2%** | **1%** | **1%** | **0%** | **1%** |
| **ND(L) share of non-domestic:** | **4%** | **14%** | **15%** | **15%** | **6%** | **14%** |

## Non-domestic (legal) by brand 2006-2011[1][2][3]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | **47%** | **46%** | **46%** | **50%** | **31%** | **27%** |

## ND(L) analysis

| | ① Population 19+ | | ② Propensity to travel | | Propensity to purchase | | ③ Ave. no. of trips | | ④ Ave. purchases (cigarettes) | | Total ND(L) (cigarettes) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **7.9m** | x | **26%** | x | **13%** | x | **8.1** | x | **36** | = | **0.08** |
| EU rank 2011 | **13** | | **25** | | **25** | | **1** | | **27** | | **20** |

### ND(L) analysis: 2008-2011

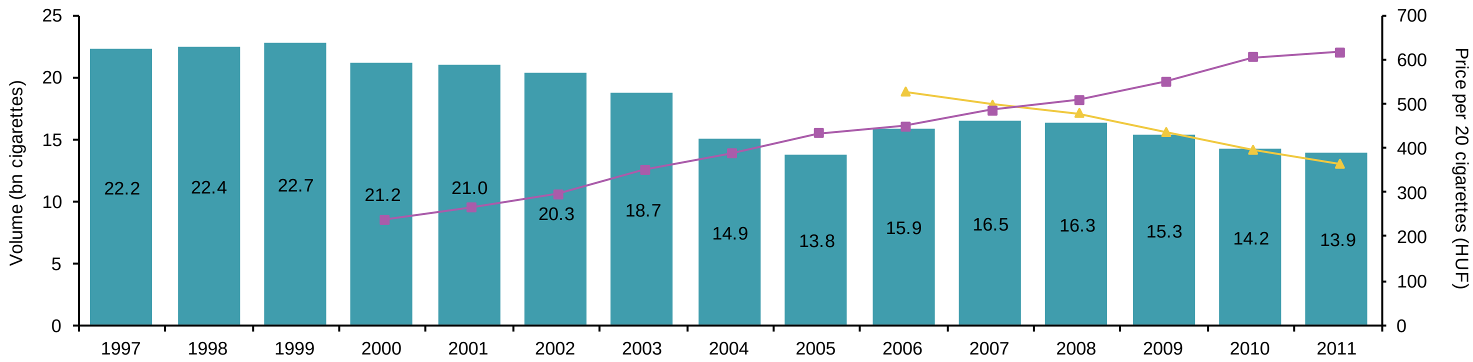
| | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|
| Propensity to travel and purchase cigarettes ① x ② | 4.9% | 4.1% | 2.6% | 3.4% |
| Average annual cigarettes purchased ③ x ④ | 451 | 502 | 198 | 295 |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, 2007, 2008 and 2009, Synovate/Ipsos ND(L) research 2010
(3) Interviews with PMI Local Management

# Historic sales and pricing trends

**Legal domestic cigarette sales volumes declined by 1.7% in 2011.**

## Historic cigarette prices and legal domestic sales 1997-2011(1)(2)




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarette legal domestic sales* | *-1.3%* | *-10.0%* | *2.6%* | *-4.5%* | *-1.7%* |
| *Weighted average cigarette pack price* | *n/a* | *13.0%* | *6.1%* | *5.8%* | *1.6%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *-6.1%(a)* | *-8.6%* | *-8.0%* |
| *OTP legal domestic sales(3)(b)* | *n/a* | *n/a* | *12.0%* | *19.9%* | *8.8%* |

Note: (a) CAGR from 2006 to 2009
(b) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams

Sources: (1) PMI sales and estimates based on Nielsen data
(2) PMI Management and EU Tax Tables
(3) OTP volumes based on PMI estimates

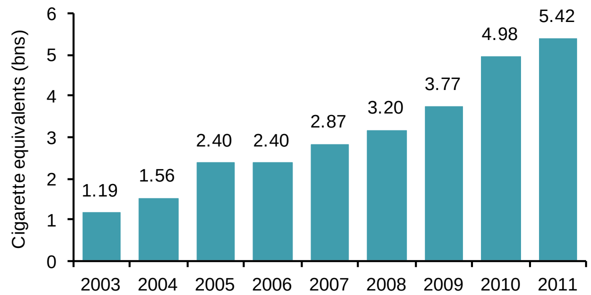
### Legal domestic sales volumes have declined since 2007

- Over the same period non-domestic incidence has also declined, resulting in a significant fall in consumption of manufactured cigarettes.
- Sales volumes of Other Tobacco Products have increased significantly, rising from 2.9 billion stick equivalents in 2007 to 5.4 billion stick equivalents in 2011.

# OTP market size and growth

**Volume sales of Other Tobacco Products increased by 8.8% in 2011 to reach 5.42 billion cigarette equivalents.**

### Smoking tobacco sales in billion cigarette equivalents 2003-2011[1][a]




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes)** | 18.7 | 14.9 | 13.8 | 15.9 | 16.5 | 16.3 | 15.3 | 14.2 | 13.9 |

| CAGR (%) | 2003-2007 | 2007-2011 | 2010-2011 |
|---|---|---|---|
| *Smoking tobacco* | *24.7%* | *17.2%* | *8.8%* |
| *Manufactured cigarettes* | *-3.1%* | *-4.1%* | *-1.7%* |

### Increased OTP sales between 2007-2011 have corresponded with a decline in manufactured cigarette sales

- In 2011 OTP smoking incidence increased significantly:
  - OTP smoking incidence increased 9.8 percentage points from 4.5% to 14.3% from 2010 to 2011[1]

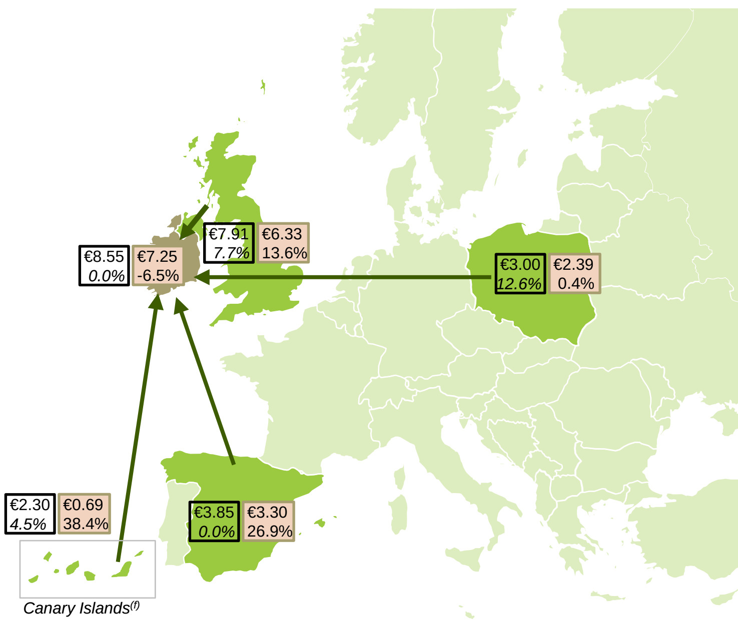
Notes: (a) Smoking tobacco volumes have been calculated at one cigarette per 0.75 grams
(b) OTP prices have been calculated using the average annual HUF-EUR exchange rate in 2011
Source: (1) OTP volumes based on PMI estimates

# Contents – country detail

# Market overview

**The share of cigarette consumption in Ireland accounted for by counterfeit and contraband declined slightly to 17.8% in 2011, but remained high compared with the EU total of 10.4%.**

## Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows(1)(2)(a)(b)(c)(d)(e)

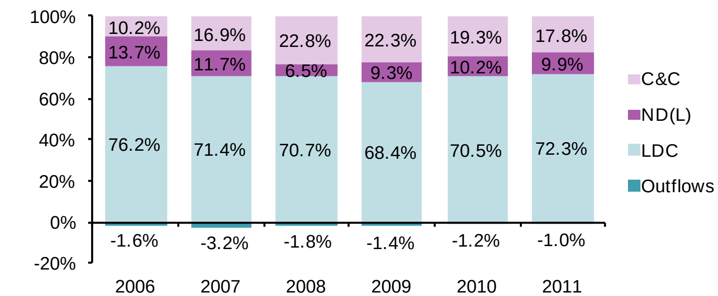



Key:
- Ireland
- Top four source markets
- 2011 pack of 20 Marlboro KS price in Euros and percentage change from 2010
- 2011 pack of 20 cheapest available brand price in Euros and percentage change from 2010

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) Based on pack price of 20 Marlboro King Size and pack price of 20 of the cheapest brand available as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) A number of price changes took place in Spain between April and October in 2011 the average Marlboro price for 2011 per IMS data was €4.15.
(d) Relative cigarette prices in Poland and the United Kingdom are subject to fluctuations as a result of exchange rate changes of their respective currencies versus the Euro
(e) Arrow size indicates relative cigarette flow volume
(f) Canary Islands are not shown to scale

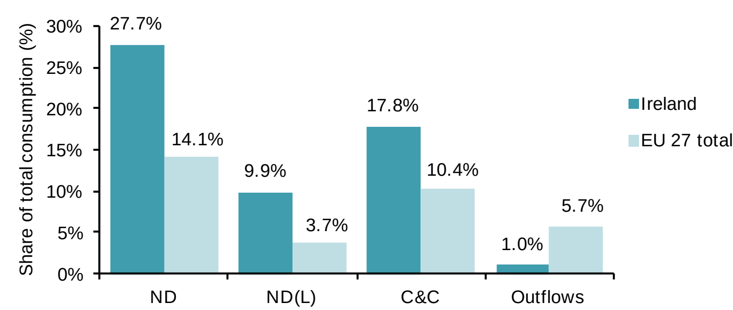
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011
(3) Synovate/Ipsos ND(L) research 2006-2011 (Ipsos acquired Synovate in 2011)

## Share of Ireland consumption by type 2006-2011(1)(3)




| Volume (bn cigarettes) | 7.2 | 7.2 | 7.0 | 6.5 | 6.0 | 5.6 |
|---|---|---|---|---|---|---|

## Comparison of EU and Ireland consumption by type 2011(1)(3)



# Total cigarette consumption

**Consumption of non-domestic cigarettes declined to 1.54 billion cigarettes in 2011, compared to 1.76 billion in the previous year.**

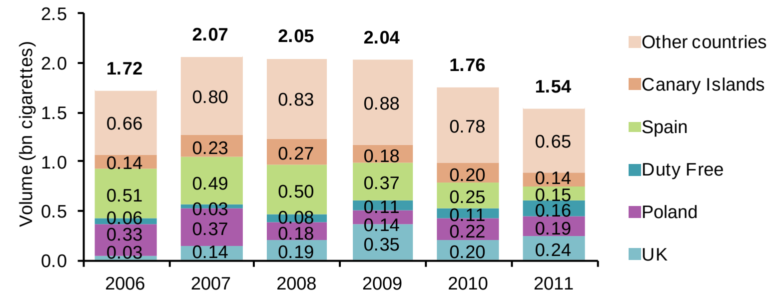
**Total Ireland cigarette consumption**

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 5.63 | 5.39 | 5.08 | 4.52 | 4.28 | 4.09 |
| Outflows | -0.12 | -0.23 | -0.13 | -0.09 | -0.07 | -0.06 |
| Legal domestic consumption (LDC) | 5.52 | 5.16 | 4.96 | 4.43 | 4.21 | 4.03 |
| Non-domestic legal (ND(L)) | 0.99 | 0.85 | 0.45 | 0.60 | 0.61 | 0.55 |
| Counterfeit and contraband (C&C) | 0.74 | 1.22 | 1.60 | 1.44 | 1.15 | 0.99 |
| Total non-domestic | 1.72 | 2.07 | 2.05 | 2.04 | 1.76 | 1.54 |
| **Total cigarette consumption** | **7.24** | **7.23** | **7.01** | **6.47** | **5.97** | **5.57** |

**Ireland Other Tobacco Product market** (3)(a)(b)

| Billion cigarette equivalent | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| OTP (LDS) | 0.15 | 0.16 | 0.17 | 0.29 | 0.25 | 0.34 |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011**(1)(2)




Notes: (a) Other Tobacco Products (OTP) data is based on duty paid volumes of Roll Your Own (RYO). Duty paid figures may not coincide with sales figures. OTP volumes are shown on an equivalent cigarettes basis and have been calculated at one cigarette per 0.75 grams

(b) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

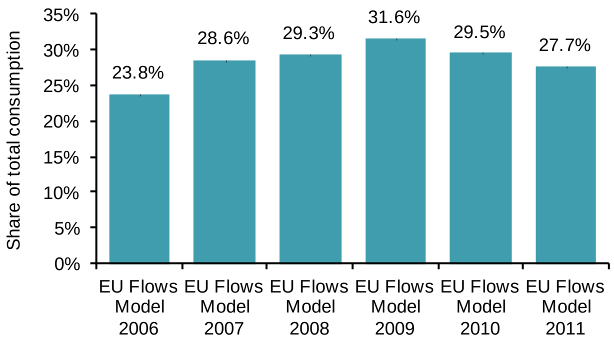
(2) Synovate ND(L) research, 2006-2011

(3) OTP volumes are based on Irish Revenue data

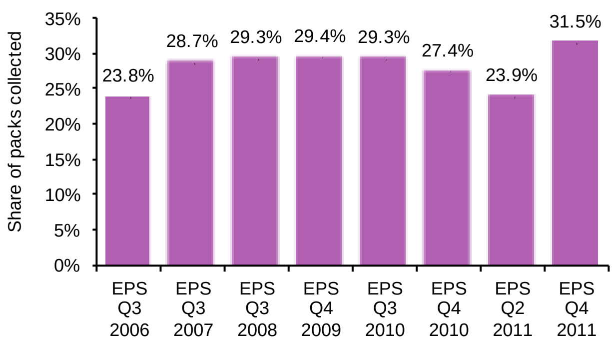
# Comparison of external sources for non-domestic estimates (1/2)

**The EU Flows Model estimate for non-domestic consumption in 2011 is calculated using the Empty Pack Survey results from the second and fourth quarters of 2011.**

**EU Flows Model non-domestic market estimates(1)**




**EPS and other non-domestic market estimates(2)**




Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys 2006-2011

**The 2011 non-domestic incidence in Ireland of 27.7% is calculated using the arithmetic average of the two Empty Pack Surveys conducted in 2011**

- The first EPS took place in May, and the second during October and November.

**There is significant variance between the non-domestic incidence estimates from the two Empty Pack Surveys carried out in 2011**

- 2011 was the first year in which an Empty Pack Survey was carried out in the second quarter of the year;
  - The Q2 EPS gave a non-domestic estimate of 23.9%, whilst the Q4 EPS gave a non-domestic estimate of 31.5%.
- This difference may reflect seasonality in non-domestic inflows.

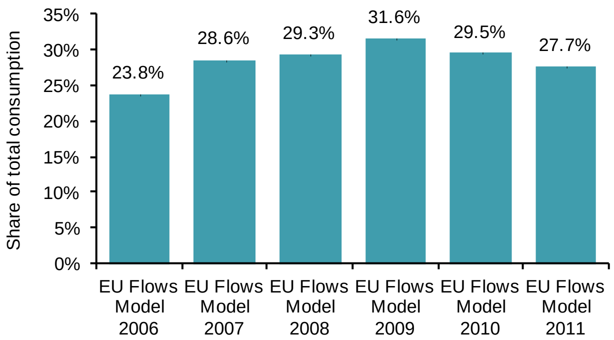
**For reasons of consistency of treatment across the EU, Project Star calculates non-domestic incidence based on the share of packs collected by source market**

- Using a stick based approach, which allocates a weighting to each pack to reflect the number of cigarettes, the non-domestic incidence for Ireland would be 26.9% in 2011, a difference of 0.8 percentage points from the pack based measure used in this report;
  - This difference reflects that nearly all domestic packs collected were packets of 20 cigarettes, whilst some non-domestic packs were packets of 10 cigarettes.
  - The difference between the pack and stick based approach has been consistent for the period for which data is available.
- It is not currently possible to measure non-domestic incidence using the stick based methodology in all EU Member States.

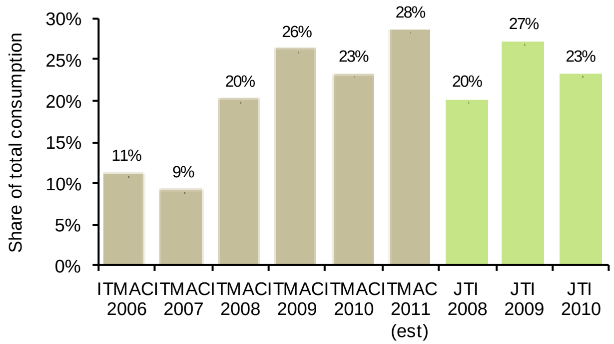
# Comparison of external sources for non-domestic estimates (2/2)

**The EU Flows Model results have historically been higher than other estimates of non-domestic incidence.**

## EU Flows Model non-domestic market estimates[1]




## Other non-domestic market estimates[2][3][a][c]




Note: (a) ITMAC 2011 figure is a KPMG estimate based on ITMAC revenue loss data
(b) 2010 JTI estimate of 23% shown is the midpoint of an 22% to 24% range estimate
(c) The JTI survey was discontinued in 2011

Sources: (1) KPMG EU Flows Model
(2) Irish Tobacco Manufacturers Advisory Committee website, accessed May 2012
(3) Steve Payne, Director JTI Ireland, Tom McGurck Show, 4FM, broadcast on 19th March 2008
(4) JTI Illicit tobacco trade review 2011

**The ITMAC and JTI estimates of non-domestic incidence between 2006 and 2010 have been lower than the EU Flows Model estimates**

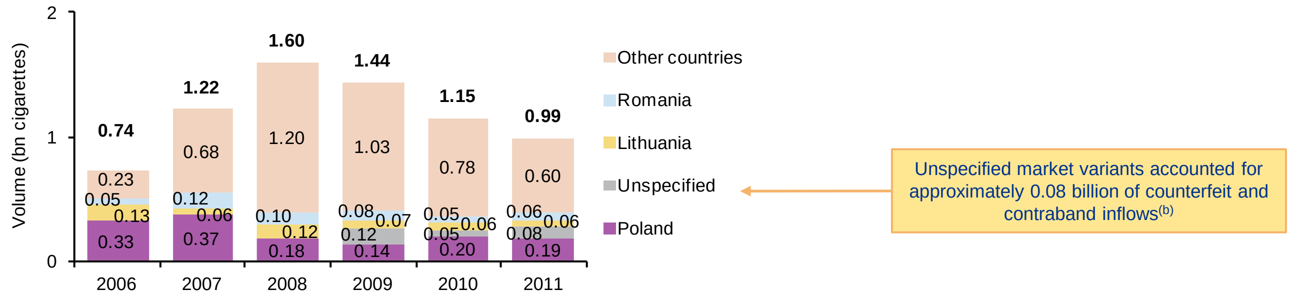
- The initial ITMAC estimate on non-domestic incidence in 2011 is in line with the EU Flows model estimate;
  - However, the initial ITMAC estimate for 2011 is based on tobacco revenue loss data[a].

**The JTI non-domestic incidence survey was discontinued in 2011**

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows declined to 0.99 billion cigarettes in 2011.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)(a)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **10%** | **17%** | **23%** | **22%** | **19%** | **18%** |
| **C&C share of ND:** | **43%** | **59%** | **78%** | **71%** | **65%** | **64%** |

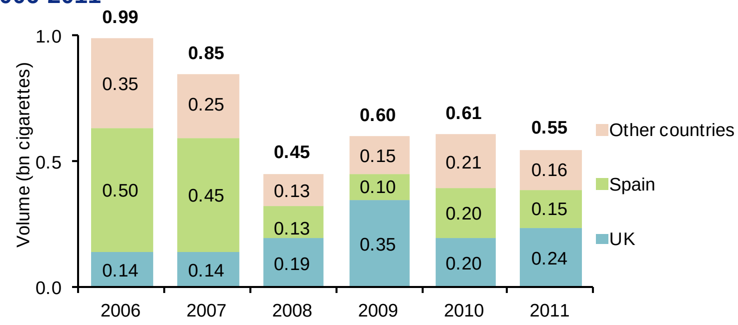
Note: (a) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". 'Unspecified' market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack. Unspecified packs may be counterfeit

Sources: (1) KPMG EU Flows Model
(2) Synovate ND(L) research, 2006-2011
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

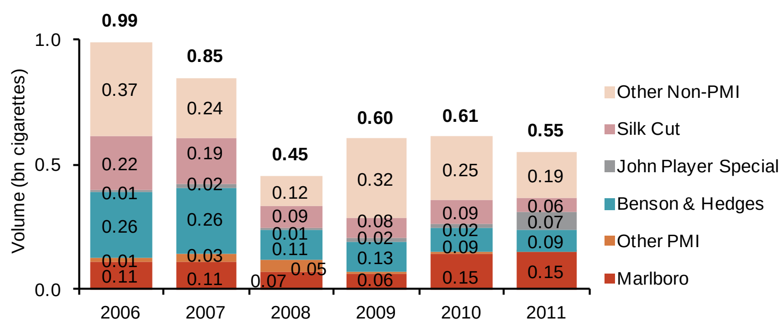
**Non-domestic (legal) inflows declined to 0.55 billion cigarettes in 2011 and remain significantly below pre 2007 levels.**

## Non-domestic (legal) by origin 2006-2011(1)(2)(3)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **14%** | **12%** | **6%** | **9%** | **10%** | **10%** |
| **ND(L) share of non-domestic:** | **57%** | **41%** | **22%** | **29%** | **35%** | **36%** |

## Non-domestic (legal) by brand 2006-2011(1)(2)(3)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of total** | **13%** | **17%** | **26%** | **11%** | **24%** | **27%** |

## ND(L) analysis

| | 1 Population 19+ | | 2 Propensity to travel | | Propensity to purchase | | 3 Ave. no. of trips | | 4 Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **3.4m** | x | **72%** | x | **32%** | x | **2.5** | x | **285** | = | **0.55** |
| EU rank 2011 | **20** | | **2** | | **9** | | **17** | | **3** | | **9** |

**ND(L) analysis: 2008-2011**

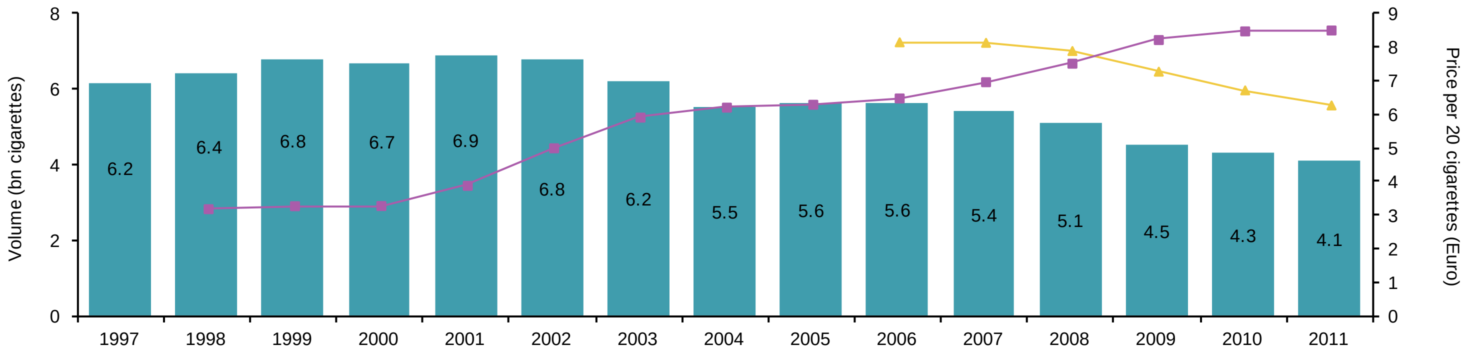
| | | **2008** | **2009** | **2010** | **2011** |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 21.4% | 20.8% | 33.1% | 22.8% |
| Average annual cigarettes purchased | 3 x 4 | 692 | 930 | 543 | 708 |

Sources: (1) KPMG EU Flows Model
(2) Synovate ND(L) research, 2006-2011
(3) Interviews with PMI Local Management

# Historic sales and pricing trends

**Legal domestic cigarette sales declined to 4.1 billion cigarettes in 2011.**

## Historic cigarette prices and legal domestic sales 1997-2011(1)(2)




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarette legal domestic sales* | *2.9%* | *-5.0%* | *-5.3%* | *-4.9%* | *-4.6%* |
| *Weighted average cigarette pack price* | *6.8%(a)* | *12.8%* | *6.9%* | *1.7%* | *0.3%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *-3.7%(b)* | *-7.2%* | *-6.7%* |
| *OTP legal domestic sales(3)(c)* | *n/a* | *n/a* | *26.1%(b)* | *7.1%* | *31.8%* |

Notes: (a) CAGR is from 1998 to 2001
(b) CAGR is from 2006 to 2009
(c) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams

Sources: (1) In Market Sales supplied by PMI based on JP&S estimates of total market volumes
(2) PMI Management and EU Tax Tables
(3) Smoking tobacco volumes are based on Irish Revenue data

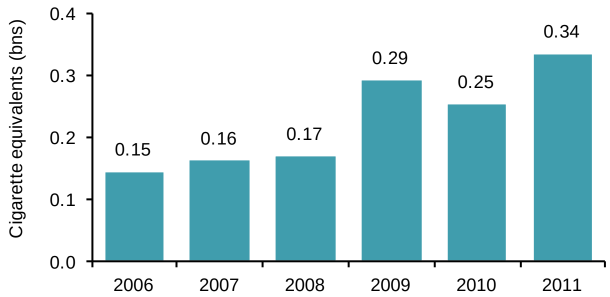
### Legal domestic sales declined by 4.6% in 2011, whilst the average pack price increased by 0.3%

- Excise duty on a packet of 20 cigarettes was increased by around €0.25 in December 2011.

# OTP market size and growth

**Sales of smoking tobacco increased by 31.8% in 2011, reaching 0.34 billion cigarette equivalents.**

**Smoking tobacco sales in billion cigarette equivalents 2006-2011**[1][a][b]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes)** | 5.6 | 5.4 | 5.1 | 4.5 | 4.3 | 4.1 |

| **CAGR (%)** | **2006-2009** | **2009-2011** | **2010-2011** |
|---|---|---|---|
| *Smoking tobacco* | *26.1%* | *7.1%* | *31.8%* |
| *Manufactured cigarettes* | *-7.1%* | *-4.9%* | *-4.6%* |

Notes: (a) Smoking tobacco volumes have been calculated at one cigarette per 0.75 grams
(b) Data is based on duty paid volumes of Roll Your Own (RYO). Duty paid figures may not coincide with sales figures.

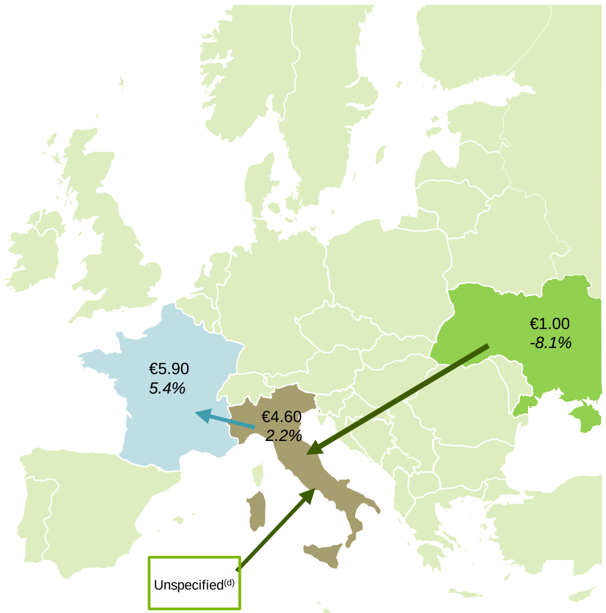
Source: (1) Smoking tobacco volumes are based on Irish Revenue data

# Contents – country detail

# Market overview

**The share of cigarette consumption in Italy accounted for by counterfeit and contraband increased to 5.3% in 2011.**

### Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows[(1)(2)(a)(b)(c)(d)]

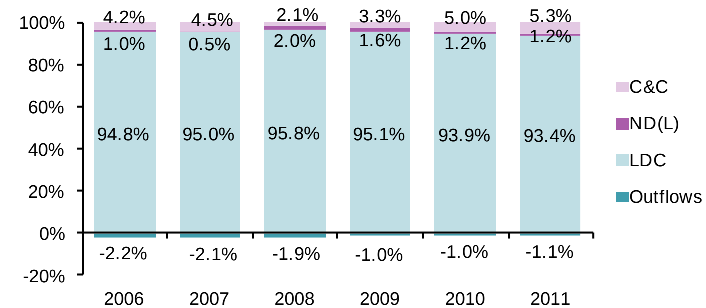



Key:
- Italy
- Top source country
- Top destination country

Notes:
(a) Map shows flows over 0.5% of consumption. Countries which are both source and destination countries are coded according to the larger flow
(b) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) Relative cigarette prices in Ukraine are subject to fluctuations as a result of exchange rate changes versus the Euro
(d) Arrow size indicates relative cigarette flow volume

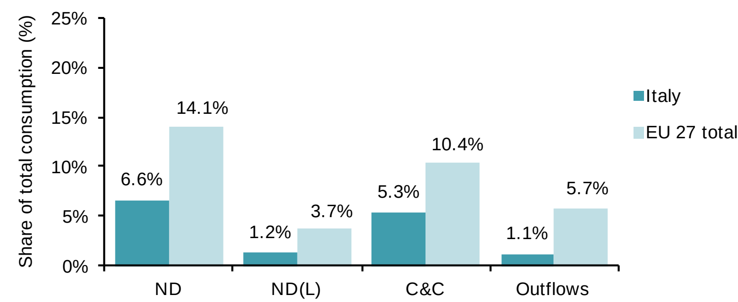
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011
(3) Synovate/Ipsos ND(L) research 2008 - 2011 (Ipsos acquire Synovate in 2011)

### Share of Italy consumption by type 2006-2011[(1)(3)]




| Volume (bn cigarettes) | 96.7 | 95.6 | 94.1 | 92.7 | 91.8 | 90.4 |
|---|---|---|---|---|---|---|

### Comparison of EU and Italy consumption by type 2011[(1)(3)]



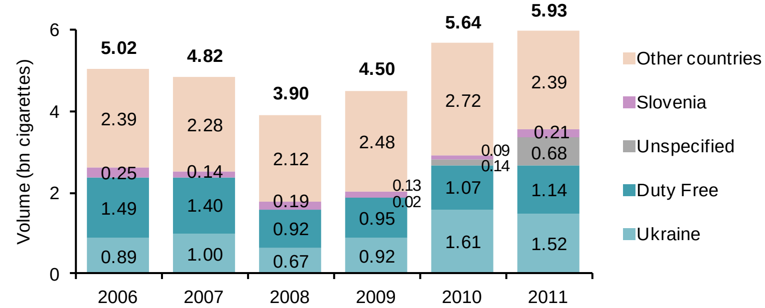
# Total cigarette consumption

**Consumption of non-domestic cigarettes increased to 5.93 billion cigarettes in 2011, compared to 5.64 billion the previous year.**

**Total Italy cigarette consumption** [1][2]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 93.81 | 92.81 | 92.00 | 89.16 | 87.05 | 85.47 |
| Outflows | -2.13 | -2.01 | -1.83 | -0.92 | -0.93 | -1.01 |
| Legal domestic consumption (LDC) | 91.68 | 90.80 | 90.17 | 88.24 | 86.12 | 84.46 |
| Non-domestic legal (ND(L)) | 0.98 | 0.51 | 1.91 | 1.46 | 1.09 | 1.12 |
| Counterfeit and contraband (C&C) | 4.04 | 4.31 | 2.00 | 3.04 | 4.55 | 4.81 |
| Total non-domestic | 5.02 | 4.82 | 3.90 | 4.50 | 5.64 | 5.93 |
| **Total cigarette consumption** | **96.70** | **95.62** | **94.08** | **92.74** | **91.76** | **90.39** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011** [1][2][a]




**Italy Other Tobacco Product market** [3][b][c]

| Billion cigarette equivalent | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| OTP (LDS) | 1.14 | 1.57 | 1.66 | 2.07 | 2.66 | 3.83 |

**Cigarette outflows from Italy** [1]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| France | 0.71 | 0.50 | 0.62 | 0.32 | 0.38 | 0.51 |
| Netherlands | 0.65 | 0.45 | 0.25 | 0.06 | 0.21 | 0.18 |
| Germany | 0.16 | 0.13 | 0.09 | 0.08 | 0.11 | 0.10 |
| Other EU | 0.62 | 0.93 | 0.87 | 0.46 | 0.23 | 0.23 |
| **Total cigarette outflows** | **2.13** | **2.01** | **1.83** | **0.92** | **0.93** | **1.01** |

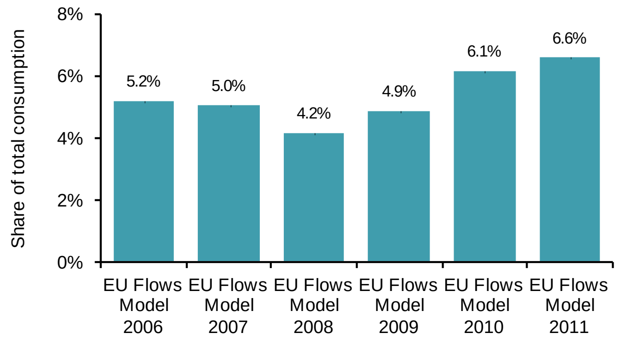
Note: (a) 'Unspecified market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack
(b) Other Tobacco Products (OTP) include fine cut and pipe tobacco. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams
(c) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Synovate/Ipsos ND(L) research 2006, 2008 - 2011
(3) OTP volumes are based on IMS data provided by PMI

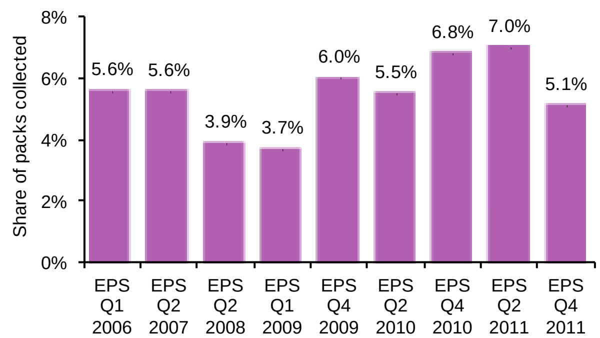
# Comparison of external sources for non-domestic estimates

**The EU Flows Model suggests an increase in non-domestic incidence, from 6.1% in 2010 to 6.6% in 2011.**

## EU Flows Model non-domestic market estimates(1)




## EPS non-domestic market estimates(2)




Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys 2006-2011

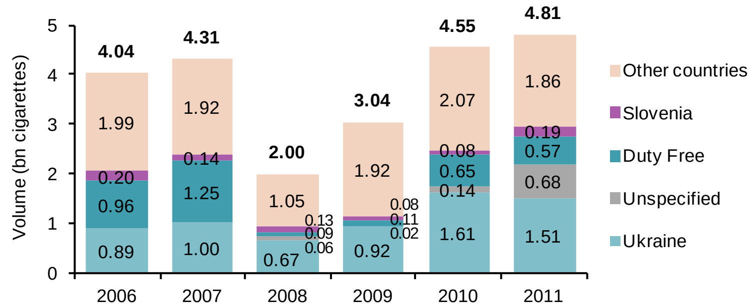
**The 2011 EU Flows Model estimate for non-domestic incidence in Italy of 6.6% is calculated weighting the two Empty Pack Surveys carried out in 2011**

- The Q2 2011 EPS has been weighted to represent the first ten months of 2011.
- The Q4 2011 EPS survey took place in December 2011 and was deemed more representative of two months of the year.

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows increased to 4.81 billion cigarettes in 2011, driven largely by an increase in 'Unspecified' inflows.**

### Counterfeit and contraband by origin 2006-2011[(1)(2)(a)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **4%** | **5%** | **2%** | **3%** | **5%** | **5%** |
| **C&C share of ND:** | **80%** | **89%** | **51%** | **68%** | **81%** | **81%** |

Note: (a) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". 'Unspecified' market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack. Unspecified packs may be counterfeit

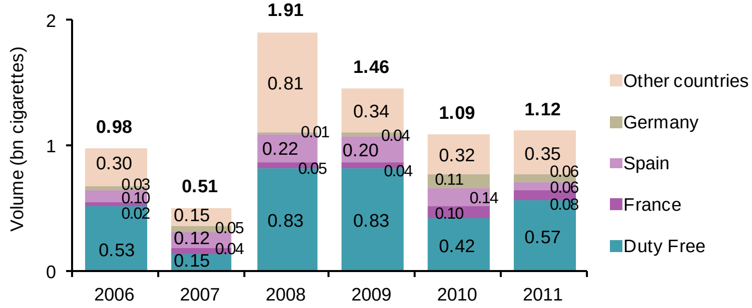
Sources: (1) KPMG EU Flows Model

(2) Synovate/Ipsos ND(L) research 2006 - 2011

# Non-domestic (legal) breakdown

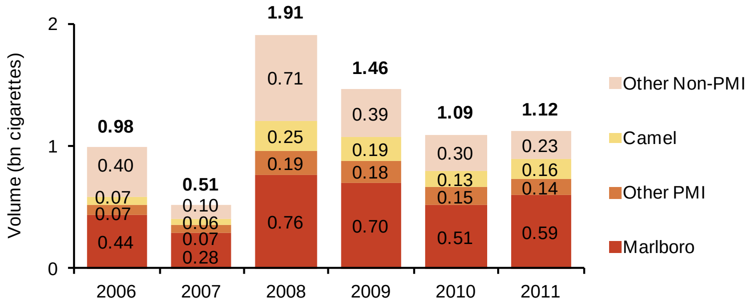
**Non-domestic (legal) inflows remained relatively stable in 2011 at 1.12 billion cigarettes.**

## Non-domestic (legal) by origin 2006-2011 (1)(2)(3)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **20%** | **11%** | **49%** | **32%** | **19%** | **19%** |
| **ND(L) share of non-domestic:** | **1%** | **1%** | **2%** | **2%** | **1%** | **1%** |

## Non-domestic (legal) by brand 2006-2011 (1)(2)(3)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | **52%** | **69%** | **50%** | **60%** | **61%** | **65%** |

## ND(L) analysis

| | 1 Population 19+ | | 2 Propensity to travel | | Propensity to purchase | | 3 Ave. no. of trips | | 4 Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **48.1** | x | **40%** | x | **23%** | x | **1.5** | x | **167** | = | **1.12** |
| EU rank 2011 | **4** | | **17** | | **19** | | **26** | | **10** | | **6** |

**ND(L) analysis: 2008-2011**

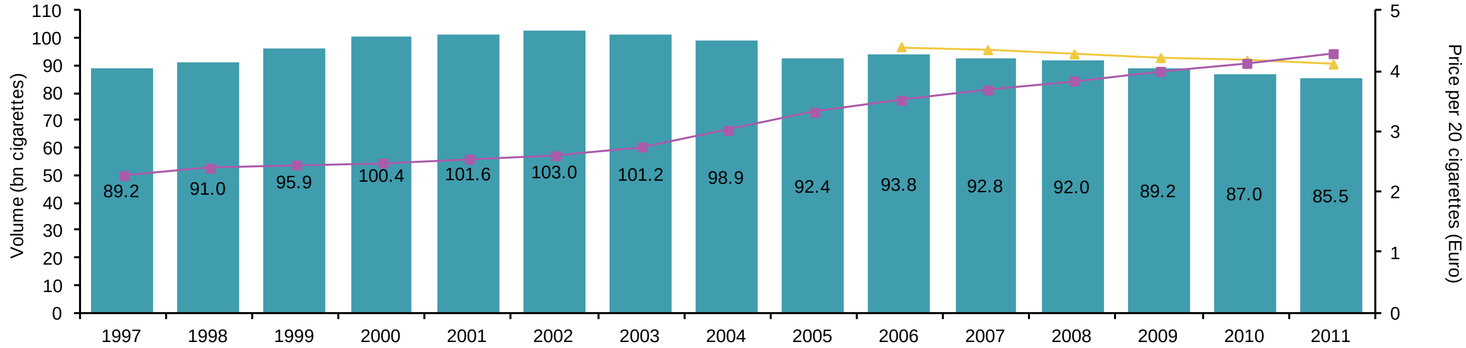
| | | **2008** | **2009** | **2010** | **2011** |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 14.3% | 11.8% | 8.3% | 9.2% |
| Average annual cigarettes purchased | 3 x 4 | 279 | 257 | 274 | 255 |

Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research 2007 - 2011

# Historic sales and pricing trends

**Legal domestic cigarette sales declined to 85.5 billion cigarettes in 2011.**

## Historic cigarette prices and legal domestic sales 1997-2011[1][2]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Legal cigarette legal domestic sales* | *3.3%* | *-2.3%* | *-0.9%* | *-2.1%* | *-1.8%* |
| *Weighted average cigarette pack price* | *2.9%* | *6.9%* | *4.8%* | *3.6%* | *3.9%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *-1.4%[a]* | *-1.3%* | *-1.5%* |
| *OTP legal domestic sales[3][b]* | *n/a* | *n/a* | *18.9%* | *36.0%* | *44.0%* |

Note (a) CAGR is 2006-2009
(b) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams
Sources: (1) PMI sales and estimates based on Nielsen data
(2) PMI Management and EU Tax Tables
(3) OTP volumes are based on IMS data provided by PMI

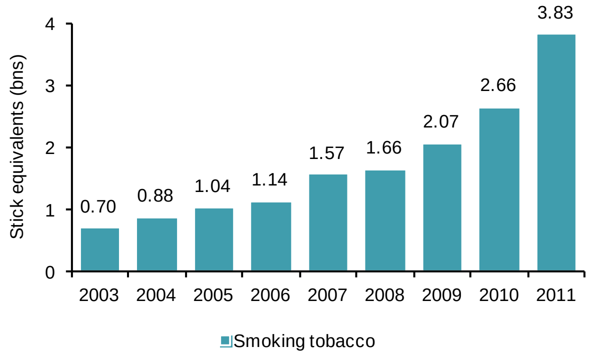
### Legal domestic sales declined by 1.8% in 2011, whilst the average pack price increased by 3.9%

- Two price increases took place in Italy during 2011;
  - In July prices increased on average by 2%, adding approximately €0.10 cents to the majority of brands.
  - In October prices increased again, on average by 4%, adding approximately €0.20 cents to the majority of brands
- Sales of smoking tobacco increased by 44% to 3.83 billion stick equivalents in 2011

# OTP market size and growth

**Sales of smoking tobacco increased by 44% to 3.83 billion stick equivalents in 2011.**

**Other Tobacco Products sales in billion stick equivalents 2003-2011**(1)(a)(b)




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes)** | 101.2 | 98.9 | 92.4 | 93.8 | 92.8 | 92.0 | 89.2 | 87.0 | 85.5 |

| CAGR (%) | 2003-2007 | 2007-2011 | 2010-2011 |
|---|---|---|---|
| *Smoking tobacco* | *22.2%* | *25.0%* | *44.0%* |
| *Manufactured cigarettes* | *-2.1%* | *-3.1%* | *-1.8%* |

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

(b) Smoking tobacco volumes include the categories 'Roll Your Own' (RYO), 'Make Your Own' (MYO) and pipe tobacco. Sales of Cigarillos have not been included.

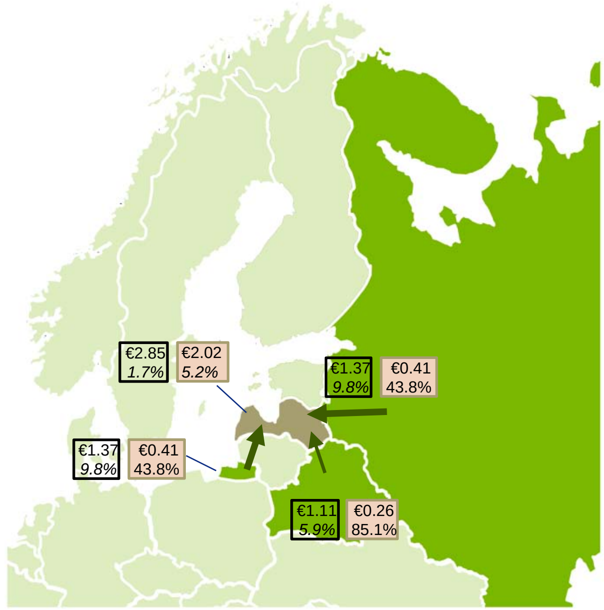
Source: (1) OTP volumes are based on IMS data provided by PMI

# Contents – country detail

# Market overview

**The share of cigarette consumption in Latvia accounted for by counterfeit and contraband declined to 31.6% in 2011 but remained high compared to the EU average of 10.4%.**

## Marlboro and cheapest available brand 2011 price comparison in Euros, percentage change from 2010 and major flows[(1)(3)(a)(b)(c)(d)(e)]

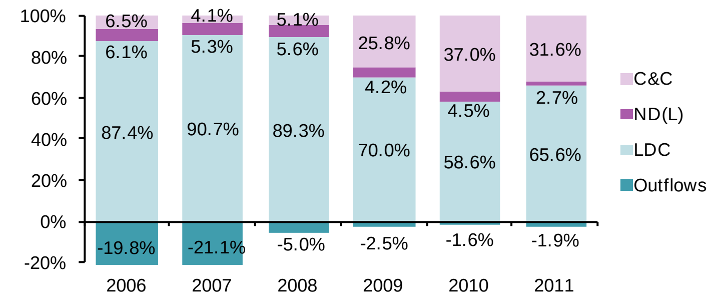



Key:
- Latvia
- Major source countries
- 2011 pack of 20 Marlboro KS price in Euros and percentage change from 2010
- 2011 pack of 20 cheapest available brand price in Euros and percentage change from 2010

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) Based on pack prices as at July 1st 2010 and 2011
- (c) Relative cigarette prices in Latvia, Russia and Belarus are subject to fluctuations as a result of exchange rate changes of their respective currencies versus the Euro
- (d) Price in Belarus refers to the Kent brand, which is an equivalent premium category brand to Marlboro (which is not sold in Belarus).
- (e) Arrow size indicates relative cigarette flow volume

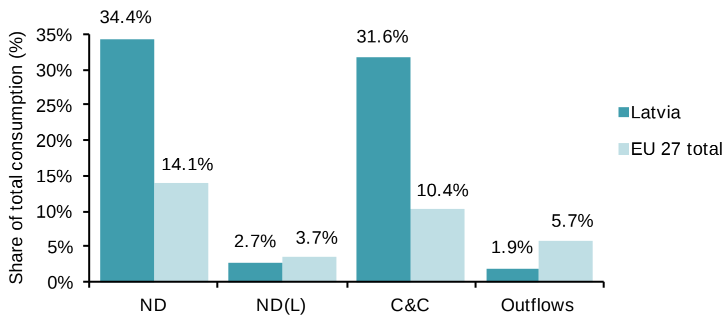
Sources:
- (1) KPMG EU Flows Model and interviews with PMI Local Management
- (2) AC Nielsen ND(L) research 2006, 2008, 2009 and 2011
- (3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

## Share of Latvia consumption by type 2006-2011[(1)(2)]




| Volume (bn cigarettes) | 4.2 | 4.2 | 3.7 | 2.9 | 2.8 | 2.6 |
|---|---|---|---|---|---|---|

## Comparison of EU and Latvia consumption by type 2011[(1)(2)]



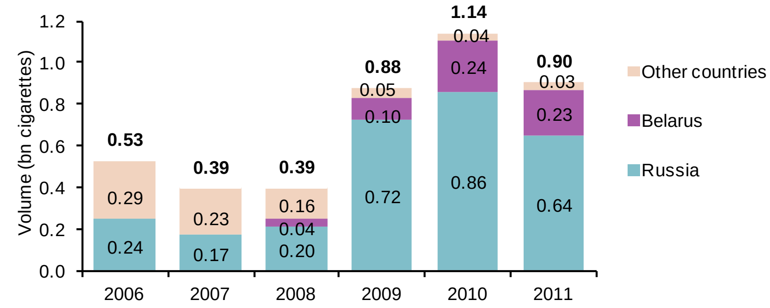
# Total cigarette consumption

**Consumption of non-domestic cigarettes declined to 0.9 billion cigarettes in 2011, driven by lower flows from Russia which remains the largest source country.**

**Total Latvia consumption** (1)(2)

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 4.45 | 4.71 | 3.46 | 2.12 | 1.65 | 1.77 |
| Outflows | -0.82 | -0.89 | -0.18 | -0.07 | -0.04 | -0.05 |
| Legal domestic consumption (LDC) | 3.63 | 3.82 | 3.28 | 2.04 | 1.61 | 1.72 |
| Non-domestic legal (ND(L)) | 0.25 | 0.22 | 0.21 | 0.12 | 0.12 | 0.07 |
| Counterfeit and contraband (C&C) | 0.27 | 0.17 | 0.19 | 0.75 | 1.02 | 0.83 |
| Total non-domestic | 0.53 | 0.39 | 0.39 | 0.88 | 1.14 | 0.90 |
| **Total consumption** | **4.15** | **4.22** | **3.67** | **2.92** | **2.75** | **2.63** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011** (1)(2)




**Outflows from Latvia** (1)

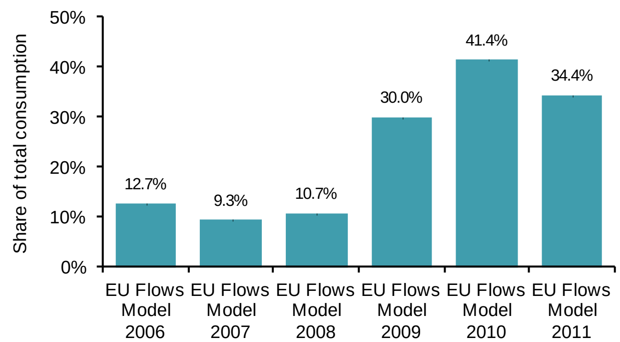
| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| UK | 0.23 | 0.33 | 0.04 | 0.02 | 0.01 | 0.02 |
| Ireland | 0.13 | 0.20 | 0.02 | 0.02 | 0.02 | 0.01 |
| Other EU | 0.46 | 0.36 | 0.12 | 0.03 | 0.02 | 0.02 |
| **Total outflows** | **0.82** | **0.89** | **0.18** | **0.07** | **0.04** | **0.05** |

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management
(2) AC Nielsen ND(L) research 2006, 2008, 2009 and 2011

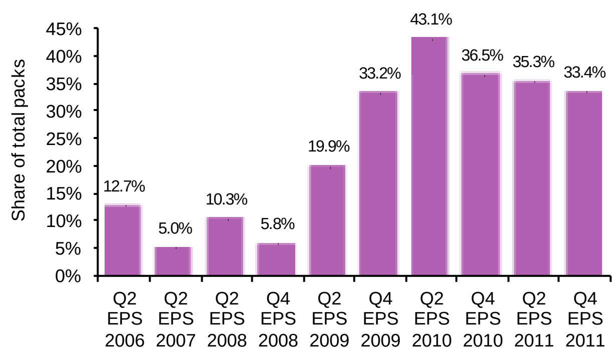
# Comparison of external sources for non-domestic estimates

**The EU Flows Model estimate for non-domestic consumption in 2011 is calculated based on the weighted results of the Q2 and Q4 Empty Pack Surveys.**

## EU Flows Model non-domestic market estimates(1)




## EPS and other non-domestic market estimates(2)(3)




Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys 2006-2011

**The 2011 non-domestic incidence in Latvia of 34.4% is calculated by applying an equal weighting to the two Empty Pack Surveys conducted during the year**

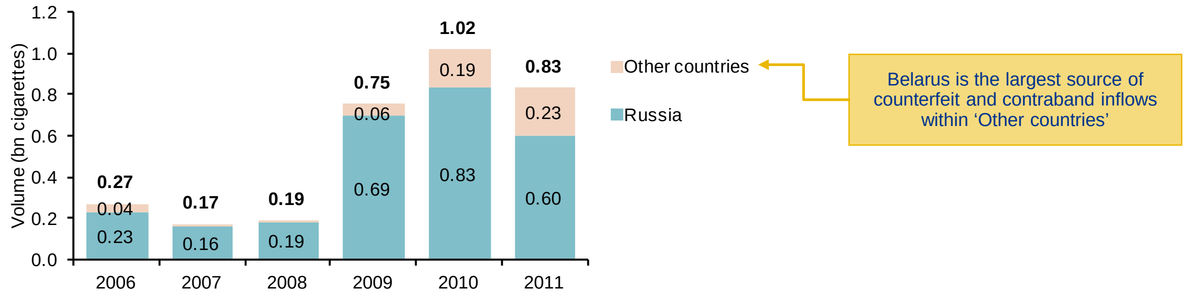
- Both the Empty Pack Surveys and the EU Flows Model show a decline in non-domestic incidence during 2011.

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows declined to 0.83 billion cigarettes in 2011 from 1.02 billion cigarettes in 2010.**

**Although declining, Russian inflows account for the majority of counterfeit and contraband in Latvia at 0.60 billion cigarettes in 2011.**

## Counterfeit and contraband by origin 2006-2011(1)(2)(3)



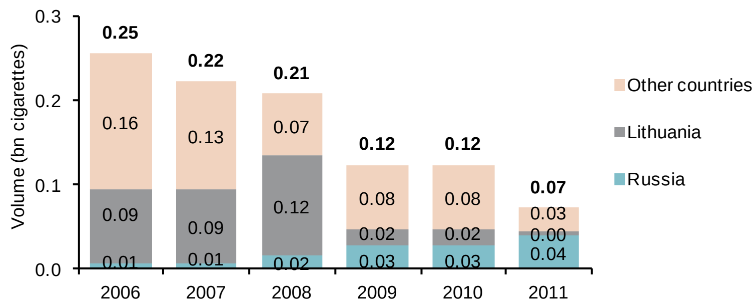

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **7%** | **4%** | **5%** | **26%** | **37%** | **32%** |
| **C&C share of ND:** | **52%** | **44%** | **48%** | **86%** | **89%** | **92%** |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, 2008, 2009 and 2011
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

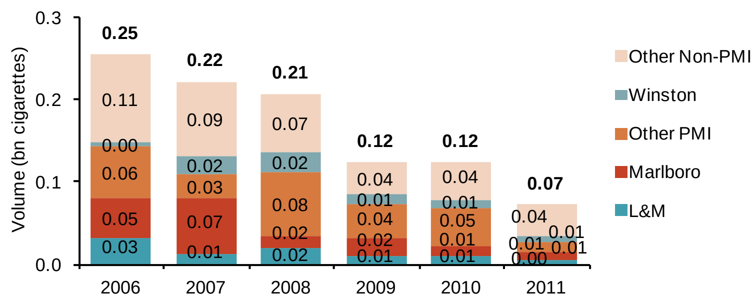
**Non-domestic (legal) inflows declined to 0.07 billion cigarettes in 2011 and account for just 3% of overall cigarette consumption.**

## Non-domestic (legal) by origin 2006-2011[(1)(2)(3)(a)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **6%** | **5%** | **6%** | **4%** | **4%** | **3%** |
| **ND(L) share of non-domestic:** | **48%** | **56%** | **52%** | **14%** | **11%** | **8%** |

## Non-domestic (legal) by brand 2006-2011[(1)(2)(3)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | **56%** | **49%** | **54%** | **60%** | **55%** | **37%** |

## ND(L) analysis

| | (1) Population 19+ | | (2) Propensity to travel | | Propensity to purchase | | (3) Ave. no. of trips | | (4) Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **1.8m** | x | **40%** | x | **36%** | x | **2.4** | x | **115** | = | **0.07** |
| EU rank 2011 | **22** | | **19** | | **6** | | **18** | | **14** | | **21** |

**ND(L) analysis: 2008-2011**

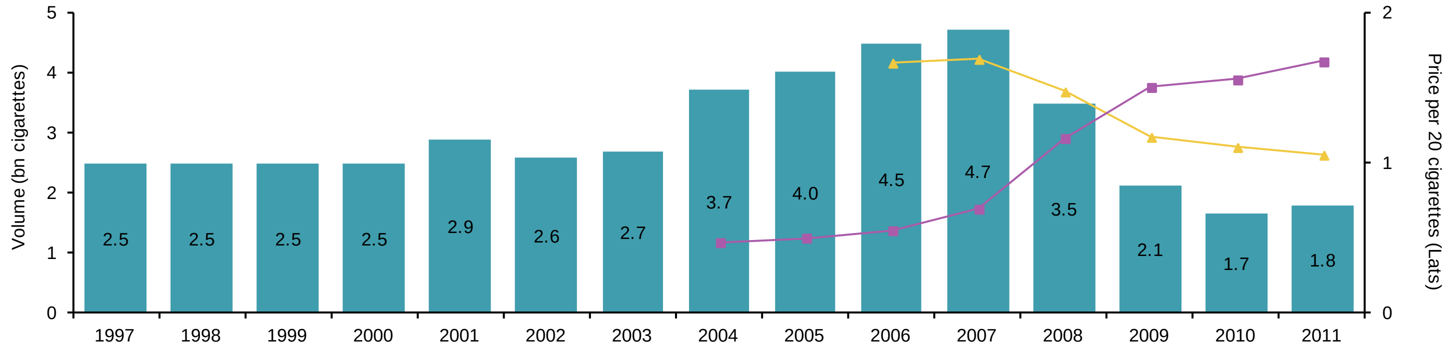
| | | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 15.3% | 9.5% | 9.5% | 14.4% |
| Average annual cigarettes purchased | 3 x 4 | 390 | 716 | 716 | 276 |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, 2008, 2009 and 2011
(3) Interviews with PMI Local Management

# Historic sales and pricing trends

**Legal domestic cigarette sales increased to 1.8 billion cigarettes in 2011 from 1.7 billion cigarettes in 2010.**

### Historic cigarette prices and legal domestic sales 1997-2011[(1)(2)(a)(b)(c)]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Legal domestic sales* | *3.9%* | *8.6%* | *-14.7%* | *-8.4%* | *7.3%* |
| *Weighted average pack price* | *n/a* | *n/a* | *31.8%* | *5.5%* | *7.7%* |
| *Consumption* | *n/a* | *n/a* | *-11.1%[(d)]* | *-5.1%* | *-4.5%* |

Notes: (a) This report and Project Star 2007, 2008 , 2009 and 2010 results use 4.7 billion cigarettes as estimated legal domestic sales (LDS) in Latvia in 2007. However, PMI internal estimates indicate that LDS in 2007 was 4.5 billion cigarettes. Use of the 4.5 billion cigarette estimate for LDS in 2007 implies a total consumption of 4.0 billion cigarettes, which is in line with the implied consumption decline between 2007 and 2008

(b) Legal domestic sales were adjusted upwards by 0.24 billion cigarettes in the 2008 EU Flows Model to control for the impact of inventory loading

(c) Differences in estimates of legal domestic sales can occur between AC Nielsen estimates and estimates based on tax stamp data. Latvian customs reported legal domestic sales of 1.77 billion cigarettes in 2010 and 1.91 billion cigarettes in 2011. This results in an estimated increase in legal domestic sales of 7.7% between 2010 and 2011. For purposes of consistency throughout project Star, AC Nielsen estimates have been used in this report.

(d) CAGR from 2006 to 2009

Sources: (1) PMI sales and estimates based on AC Nielsen data

(2) PMI Management and EU Tax Tables

**Legal domestic sales increased by 7.3% in 2011, whilst the average pack price increased by 7.7%**

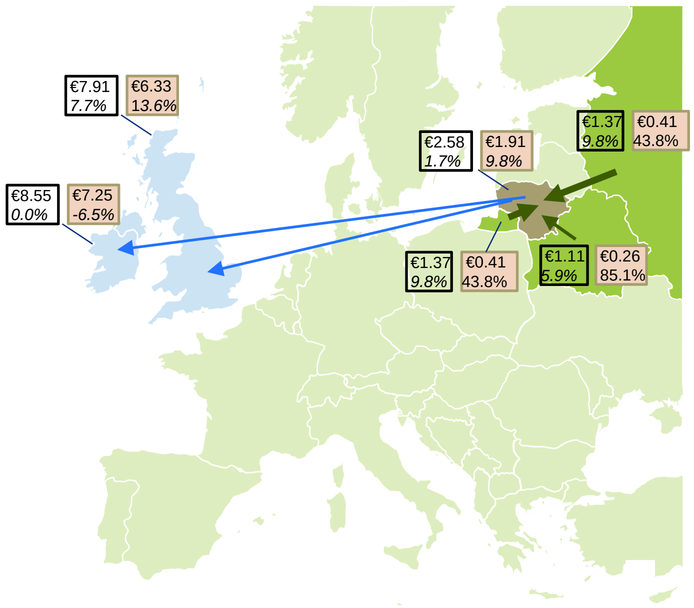
# Contents – country detail

Lithuania

# Market overview

**The share of cigarette consumption in Lithuania accounted for by counterfeit and contraband declined from 40.7% in 2010, to 31.3% in 2011.**

### Marlboro and cheapest available brand 2011 price comparison in Euros, percentage change from 2010 and major flows(1)(3)(a)(b)(c)(d)(e)

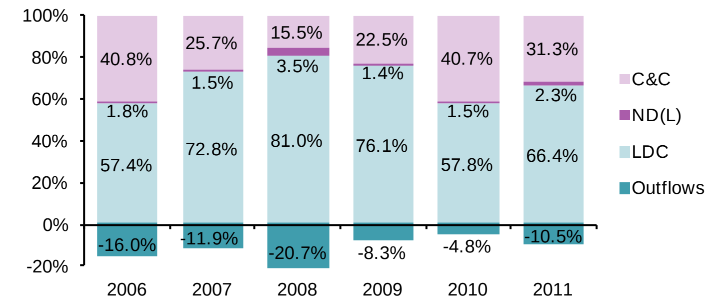



Key:
- Lithuania
- Major source countries
- Major destination countries
- 2011 pack of 20 Marlboro KS price in Euros and percentage change from 2010
- 2011 pack of 20 cheapest available brand price in Euros and percentage change from 2010

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) Based on pack price of 20 Marlboro King Size and pack price of 20 of the cheapest brand available as at July 1st 2010 and 20111
(c) Relative cigarette prices in Lithuania, Russia, Belarus and the UK are subject to fluctuations as a result of exchange rate changes of their respective currencies versus the Euro
(d) Price in Belarus refers to the Kent brand, which is an equivalent premium category brand to Marlboro (which is not sold in Belarus).
(e) Arrow size indicates relative cigarette flow volume

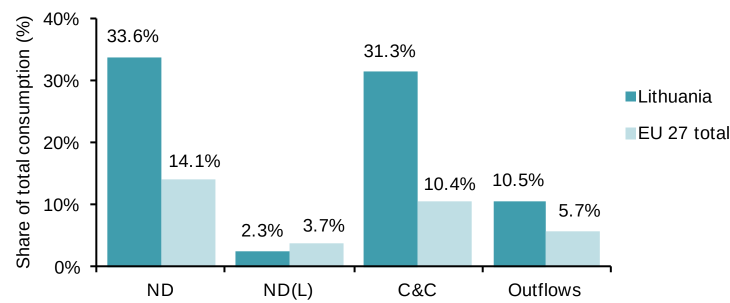
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) AC Nielsen ND(L) research 2006, 2007, 2009, 2010 and 2011
(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

### Share of Lithuania consumption by type 2006-2011(1)(2)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Volume (bn cigarettes) | 5.6 | 6.2 | 5.7 | 4.9 | 4.0 | 3.5 |

### Comparison of EU and Lithuania consumption by type 2011(1)(2)



# Total cigarette consumption

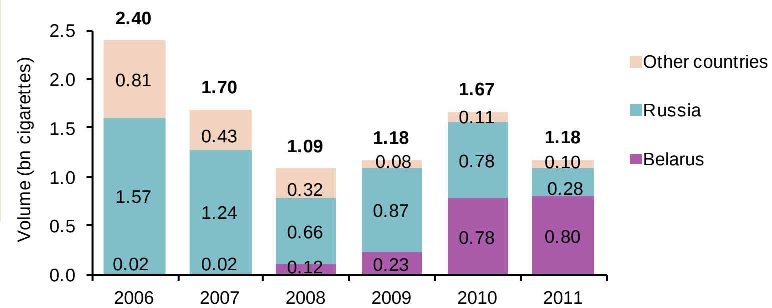
**Non-domestic consumption declined to 1.18 billion cigarettes in 2011, driven by a fall in inflows from Russia.**

**Belarus is the primary source of inflows, accounting for 0.80 billion cigarettes in 2011.**

**Total Lithuania consumption** [1][2]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 4.14 | 5.27 | 5.84 | 4.17 | 2.48 | 2.70 |
| Outflows | -0.90 | -0.74 | -1.19 | -0.41 | -0.19 | -0.37 |
| Legal domestic consumption (LDC) | 3.24 | 4.53 | 4.65 | 3.76 | 2.29 | 2.34 |
| Non-domestic legal (ND(L)) | 0.10 | 0.09 | 0.20 | 0.07 | 0.06 | 0.08 |
| Counterfeit and contraband (C&C) | 2.30 | 1.60 | 0.89 | 1.11 | 1.61 | 1.10 |
| Total non-domestic | 2.40 | 1.70 | 1.09 | 1.18 | 1.67 | 1.18 |
| **Total consumption** | **5.65** | **6.23** | **5.74** | **4.94** | **3.96** | **3.52** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011**[1][2]




**Outflows from Lithuania**

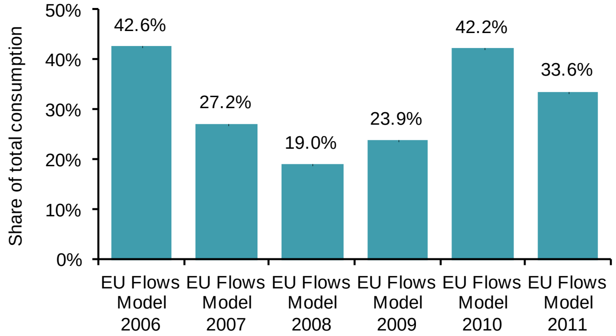
| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| UK | 0.20 | 0.15 | 0.32 | 0.19 | 0.06 | 0.21 |
| Ireland | 0.13 | 0.06 | 0.12 | 0.07 | 0.06 | 0.06 |
| Germany | 0.04 | 0.05 | 0.05 | 0.02 | 0.02 | 0.03 |
| Other EU | 0.54 | 0.48 | 0.69 | 0.13 | 0.04 | 0.07 |
| **Total outflows** | **0.90** | **0.74** | **1.19** | **0.41** | **0.19** | **0.37** |

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management
(2) AC Nielsen ND(L) research 2006, 2007, 2009, 2010 and 2011

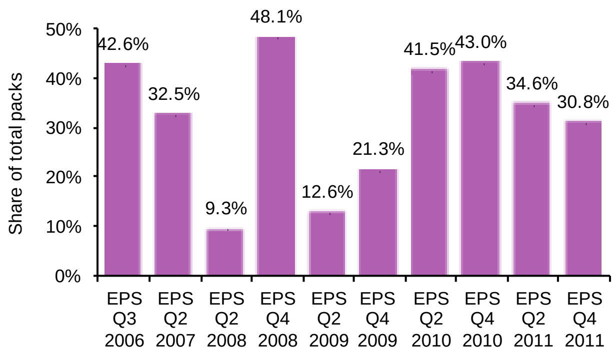
# Comparison of external sources for non-domestic estimates

**The EU Flows Model estimate for non-domestic consumption is calculated by weighting the Empty Pack Survey results from the second and fourth quarters of 2011.**

## EU Flows Model non-domestic market estimates(1)




## EPS non-domestic market estimates(2)




**The EU Flows Model indicates a decline in non-domestic incidence to 33.6% in 2011.**

- To reflect the timing of price changes in 2011, the first EPS wave in Q2 has been weighted to represent the first nine months of the year, whilst the second wave from the Q4 results is weighted to represent the final three months of the year.

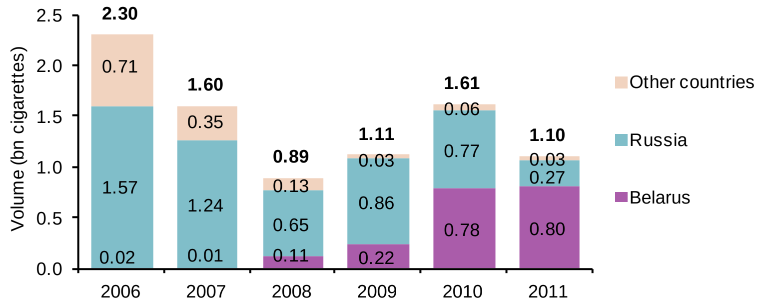
Sources: (1) KPMG EU Flows model 2006-2011
(2) PMI Empty Pack Surveys 2006-2011

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows declined to 1.10 billion cigarettes in 2011, driven by lower inflows from Russia.**

**Belarus remains the major source of counterfeit and contraband inflow.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)]



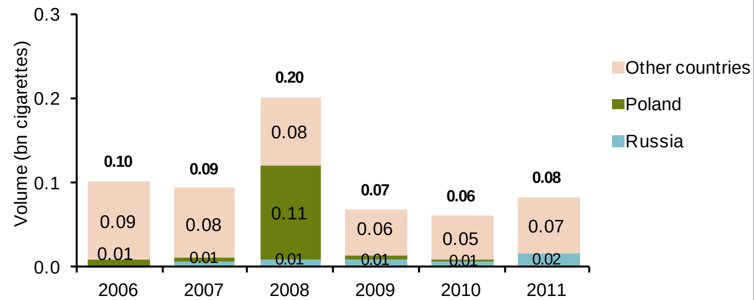

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **41%** | **26%** | **15%** | **23%** | **41%** | **31%** |
| **C&C share of ND:** | **96%** | **95%** | **82%** | **94%** | **96%** | **93%** |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, 2007, 2009, 2010 and 2011
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

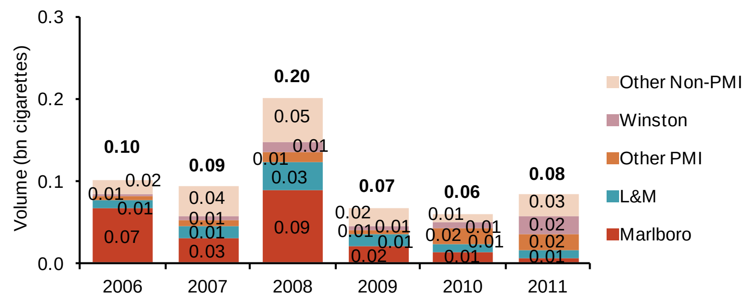
**Non-domestic (legal) volumes increased slightly to 0.08 billion cigarettes in 2011, but remain small compared to total non-domestic consumption.**

## Non-domestic (legal) by origin 2006-2011[(1)(2)(3)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | 2% | 1% | 4% | 1% | 2% | 2% |
| **ND(L) share of non-domestic:** | 4% | 5% | 18% | 6% | 4% | 7% |

## Non-domestic (legal) by brand 2006-2011[(1)(2)(3)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | 81% | 57% | 67% | 59% | 68% | 41% |

## ND(L) analysis

| | 1 Population 19+ | | 2 Propensity to travel | | 2 Propensity to purchase | | 3 Ave. no. of trips | | 4 Ave. purchases (cigarettes) | | Total ND(L) (cigarettes) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | 2.9m | x | 43% | x | 32% | x | 4.4 | x | 48 | = | 0.08 |
| EU rank 2011 | 21 | | 16 | | 10 | | 4 | | 26 | | 19 |

### ND(L) analysis: 2008-2011

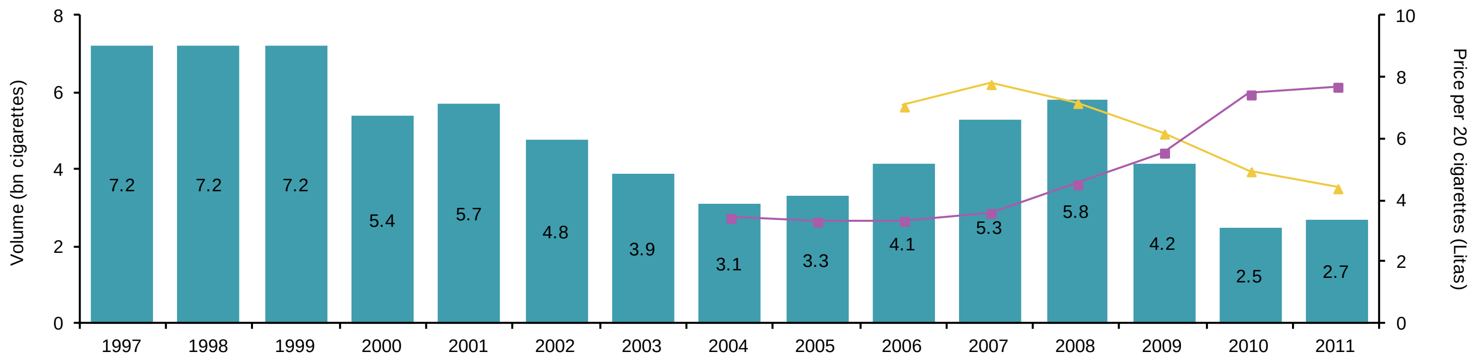
| | | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 14.7% | 6.6% | 10.0% | 13.7% |
| Average annual cigarettes purchased | 3 x 4 | 223 | 360 | 211 | 211 |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, 2007, 2009, 2010 and 2011
(3) Interviews with PMI Local Management

# Historic sales and pricing trends

**Legal domestic sales increased to 2.7 billion cigarettes in 2011, up from 2.5 billion cigarettes in 2010 but still significantly below pre-2010 levels.**

### Historic cigarette prices and legal domestic sales 1997-2011[(1)(2)]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Legal domestic sales* | *-5.7%* | *-12.8%* | *6.0%* | *-19.5%* | *9.1%* |
| *Weighted average pack price* | *n/a* | *n/a* | *13.8%* | *17.7%* | *3.4%* |
| *Consumption* | *n/a* | *n/a* | *-4.4%[(a)]* | *-15.6%* | *-11.2%* |

Note: (a) CAGR from 2006 to 2009

(b) Differences in estimates of legal domestic sales can occur between AC Nielsen estimates and estimates based on tax stamp data. Lithuanian customs reported legal domestic sales increases of 12.1% between 2010 and 2011. For purposes of consistency throughout project Star, AC Nielsen estimates have been used in this report.

Sources: (1) PMI sales and estimates based on Nielsen data

(2) PMI Management and EU Tax Tables

**Legal domestic sales increased by 9.1% in 2011, whilst the average pack price increased by 3.4 %**

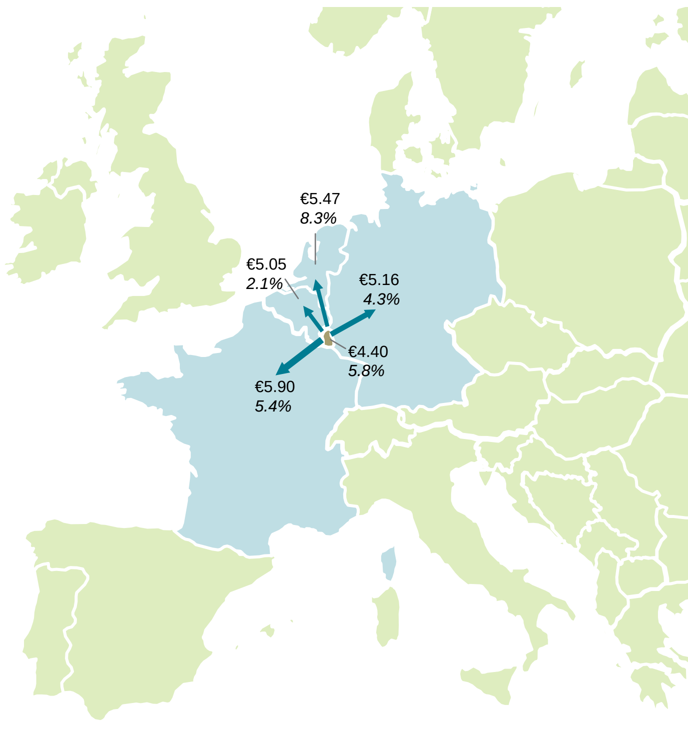
# Contents – country detail

# Market overview

**Luxembourg has very high outflows reflecting its low prices relative to the surrounding countries.**

**Outflows from Luxembourg increased slightly in 2011 and remain significant at approximately three times domestic consumption.**

## Marlboro 2011 price comparison in Euros, percentage change from 2011 and major flows[1][3][a][b]




Key: Luxembourg; Major destination countries

Notes: (a) Map shows flows over 10% of consumption. Countries which are both source and destination countries are coded according to the larger flow

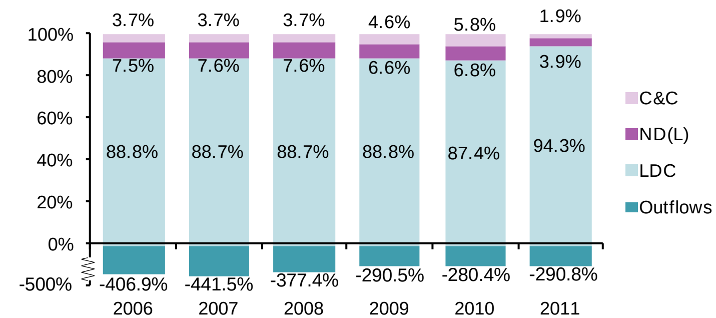
(b) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

(2) Synovate/Ipsos ND(L) research 2006 (Ipsos acquired Synovate in 2011)

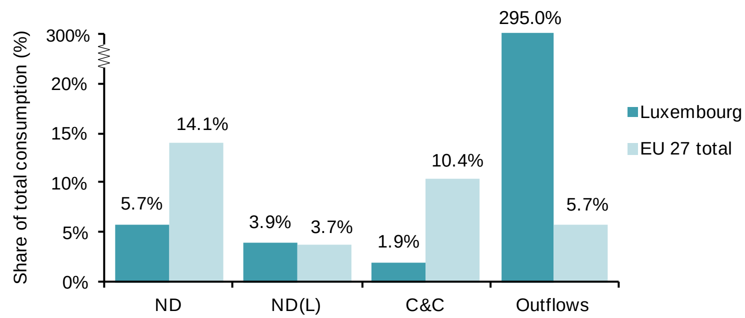
(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

## Share of Luxembourg consumption by type 2006-2011[1][2]




| Volume (bn cigarettes) | 0.96 | 0.95 | 0.95 | 1.10 | 1.07 | 1.02 |
|---|---|---|---|---|---|---|

## Comparison of EU and Luxembourg consumption by type 2011[1][2]



# Total cigarette consumption

**Consumption of non-domestic products accounted for 0.06 billion cigarettes in 2011.**

## Total Luxembourg cigarette consumption[1][2]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 4.77 | 5.05 | 4.43 | 4.15 | 3.93 | 3.94 |
| Outflows | -3.92 | -4.20 | -3.59 | -3.18 | -3.00 | -2.98 |
| Legal domestic consumption (LDC) | 0.85 | 0.84 | 0.84 | 0.97 | 0.93 | 0.96 |
| | | | | | | |
| Non-domestic legal (ND(L)) | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.04 |
| Counterfeit and contraband (C&C) | 0.04 | 0.04 | 0.04 | 0.05 | 0.06 | 0.02 |
| Total non-domestic | 0.11 | 0.11 | 0.11 | 0.12 | 0.13 | 0.06 |
| | | | | | | |
| **Total cigarette consumption** | **0.96** | **0.95** | **0.95** | **1.10** | **1.07** | **1.02** |

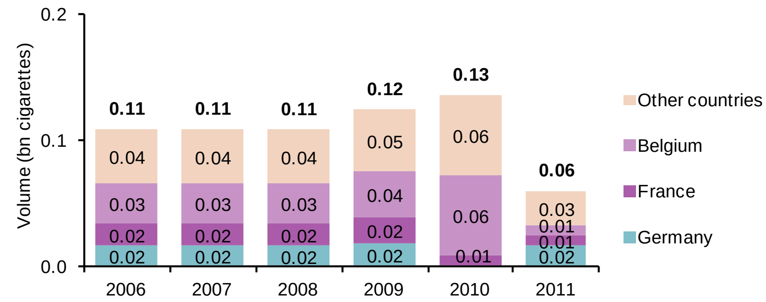
## Luxembourg Other Tobacco Product market

| Billion cigarette equivalent | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| OTP (LDS) | 3.87 | 4.82 | 4.53 | 4.33 | 5.20 | 5.11 |

## Cigarette outflows from Luxembourg[1]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| France | 1.00 | 0.95 | 0.86 | 0.58 | 0.52 | 0.73 |
| Belgium | 0.47 | 0.25 | 0.31 | 0.12 | 0.23 | 0.47 |
| Germany | 0.35 | 0.38 | 0.44 | 0.80 | 0.38 | 0.41 |
| Other EU | 2.10 | 2.63 | 1.97 | 1.68 | 1.87 | 1.37 |
| **Total cigarette outflows** | **3.92** | **4.20** | **3.59** | **3.18** | **3.00** | **2.98** |

## Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011[1][2]




Notes: (a) Other Tobacco Products (OTP) include fine cut and pipe tobacco. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams

(b) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

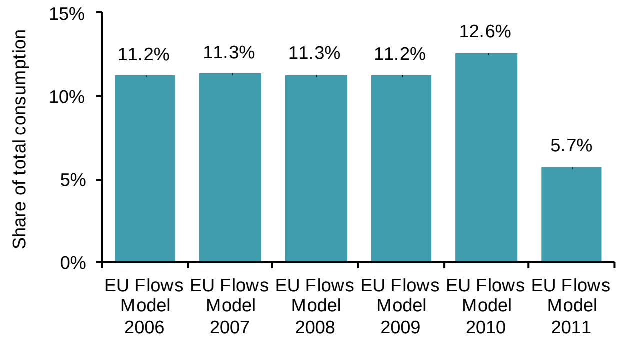
(2) Synovate/Ipsos ND(L) research, 2006

(3) In market sales data provided by PMI, based on Tax Stamp data

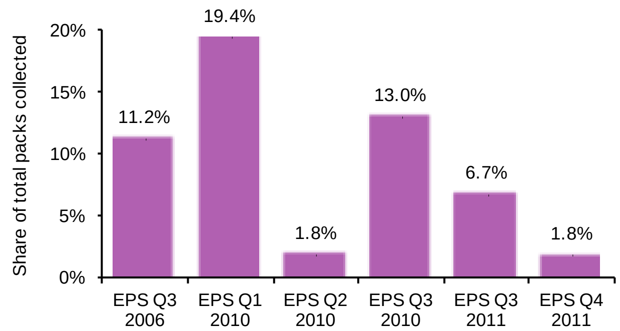
# Comparison of external sources for non-domestic estimates

**The 2011 EU Flows Model estimate shows a decline in non-domestic consumption in Luxembourg.**

**EU Flows Model non-domestic estimates[(1)(a)]**




**EPS non-domestic market estimates[(2)]**




Note (a) Prior to 2010 the EU Flows Model was based on the results of Empty Pack Survey conducted by PMI in Q3 2006.

Sources: (1) KPMG EU Flows Model 2006 - 2011

(2) PMI Empty Pack Surveys 2006 - 2011

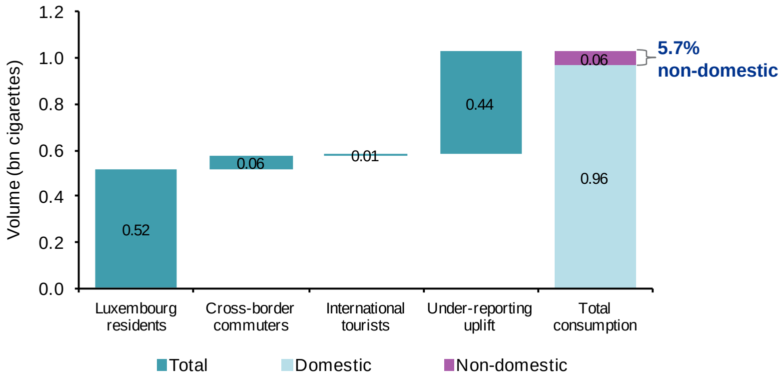
**The EU Flows Model shows a 6.9 percentage point decline in non-domestic incidence level in Luxembourg in 2011.**

- The 2011 EU Flows Model estimate for non-domestic consumption share is based on the results of the Industry Empty Pack Survey conducted in 2011.
  - In Q3 and Q4 2011 Empty Pack Survey sampling was not collected proportionately to the population of the two cities sampled (Luxembourg city and Esch-sur-Alzette).
  - For the purpose of Project Star, the Empty Pack Survey results have been reweighted to reflect the relative population of both cities.

# Estimation of consumption

**KPMG's estimate of total consumption in Luxembourg is based on the same methodology as in prior years.**

**Consumption estimates 2011**(1)(2)(3)(4)




| Consumption calculation 2011 | Luxembourg | Belgium |
|---|---|---|
| Population 15+ (million)[1] | 0.4 | 8.7 |
| Smoking incidence[2][b][c] | | |
| • Regular smokers | 22.0% | 13.6% |
| • Occasional smokers | 4.6% | 1.4% |
| Avg. daily consumption[2] | 15.0[d] | 15.5 |
| Implied consumption (bn cigarettes)[a] | 0.52 | 6.82 |
| KPMG consumption (bn cigarettes)[4] | n/a | 11.98 |
| Implied understatement | 57% | 57% |
| Consumption estimate (bn cigarettes) | 1.02 | 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[2][3] to adjust the estimation of the consumption in 2011.**

- 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 57% by performing the same calculation for Belgium, and comparing the result to our own consumption estimates.
- Applying an uplift for under-reporting implies total consumption of 1.02 billion cigarettes.

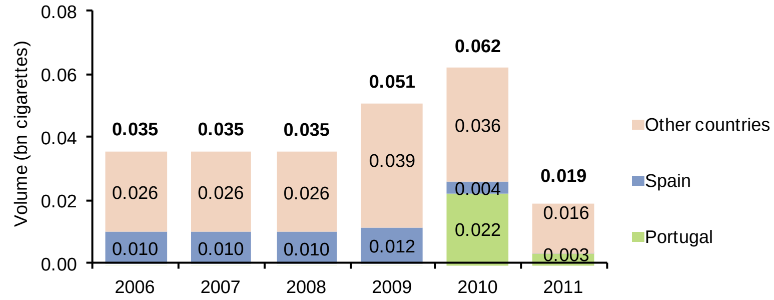
Notes:
(a) Implied consumption for Luxembourg includes 0.07 billion cigarettes attributed to international commuters and tourists
(b) 2011 Luxembourg regular smokers incidence is based on a 2011 report from the Luxembourg Cancer Foundation
(c) Figures for smoking incidence in Belgium relate to 2010 GCTS figures
(d) Average daily consumption in Luxembourg is calculated as an average of GCTS daily consumption figures for the Netherlands and Belgium. There is no GCTS data available for Luxembourg.

Sources:
(1) Oxford Economic Forecasts (OEF)
(2) GCTS (Global Consumer Tracking Survey) provided by PMI
(3) Report by the Luxembourg Cancer Foundation, cited in a news article by Hello News, 'Number of smokers in Luxembourg at record low', published 15 February 2012
(4) KPMG EU Flows Model

# Counterfeit and contraband breakdown

**Counterfeit and contraband volumes declined from 62 million in 2010, to 19 million cigarettes in 2011.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)]



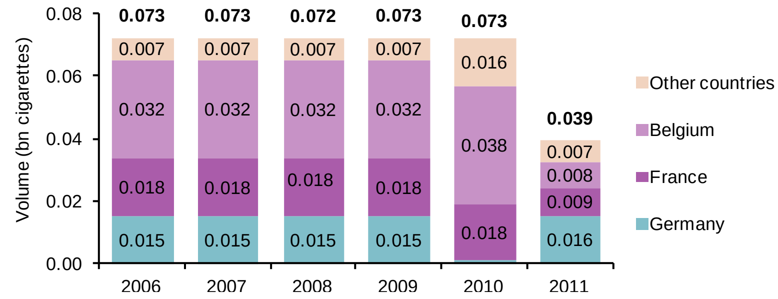

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **4%** | **4%** | **4%** | **5%** | **6%** | **2%** |
| **C&C share of ND:** | **33%** | **33%** | **33%** | **41%** | **46%** | **33%** |

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

# Non-domestic (legal) breakdown

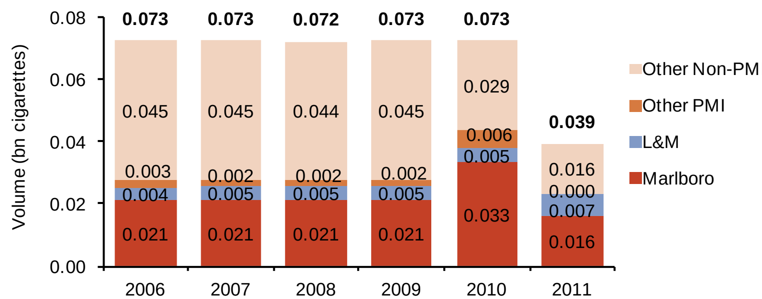
**Non-domestic (legal) inflows declined to 39 million cigarettes in 2011.**

## Non-domestic (legal) by origin 2006-2011[(1)(2)(3)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **8%** | **8%** | **8%** | **7%** | **7%** | **4%** |
| **ND(L) share of non-domestic:** | **67%** | **67%** | **67%** | **59%** | **54%** | **67%** |

## Non-domestic (legal) by brand 2006-2011[(1)(2)(3)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | **38%** | **38%** | **38%** | **38%** | **60%** | **60%** |

## ND(L) analysis

| | ① Population 19+ | | ② Propensity to travel | | ③ Propensity to purchase | | Ave. no. of trips | | ④ Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **0.36m** | x | **88%** | x | **54%** | x | **2.0** | x | **113** | = | **0.04** |
| EU rank 2011 | **26** | | **1** | | **1** | | **21** | | **15** | | **24** |

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

# Historic sales and pricing trends

**Legal domestic cigarette sales were stable at 3.9 billion in 2011, whilst the average pack price increased by 7.2%.**

## Historic cigarette prices and legal domestic sales 1997-2011[(1)(2)]


| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarette legal domestic sales* | *-1.9%* | *2.2%* | *-5.5%* | *-2.6%* | *0.2%* |
| *Weighted average cigarette pack price* | *n/a* | *6.8%* | *3.7%* | *3.7%* | *7.2%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *4.4%[(a)]* | *-3.3%* | *-4.1%* |
| *OTP legal domestic sales[(3)(b)]* | *n/a* | *n/a* | *2.3%* | *8.6%* | *-1.6%* |

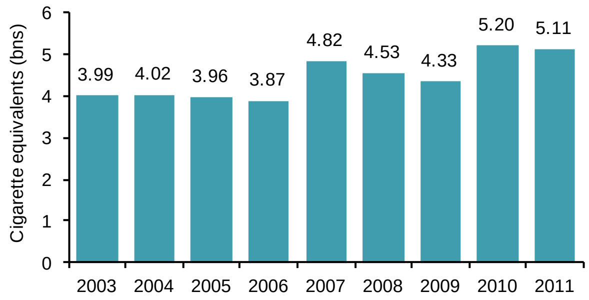
Note (a) CAGR is 2006-2009
(b) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams

Sources: (1) In Market Sales supplied by PMI based on actual IMS for PMI brands and estimates for UK brands and other based on tax stamp data
(2) PMI Management and EU Tax Tables
(3) In market sales data provided by PMI, based on Tax Stamp data

# OTP market size and growth

**Sales of smoking tobacco products declined to 5.11 billion cigarette equivalents in 2011.**

## Smoking tobacco sales in billion cigarette equivalents 2003-2011[(1)(a)]




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes):** | 5.6 | 6.5 | 5.2 | 4.8 | 5.0 | 4.4 | 4.2 | 3.9 | 3.9 |

| **CAGR (%)** | **2003-2007** | **2007-2011** | **2010-2011** |
|---|---|---|---|
| ■ *Smoking tobacco* | *4.8%* | *1.5%* | *-1.6%* |
| *Manufactured cigarettes* | *-4.3%* | *19.9%* | *-1.6%* |

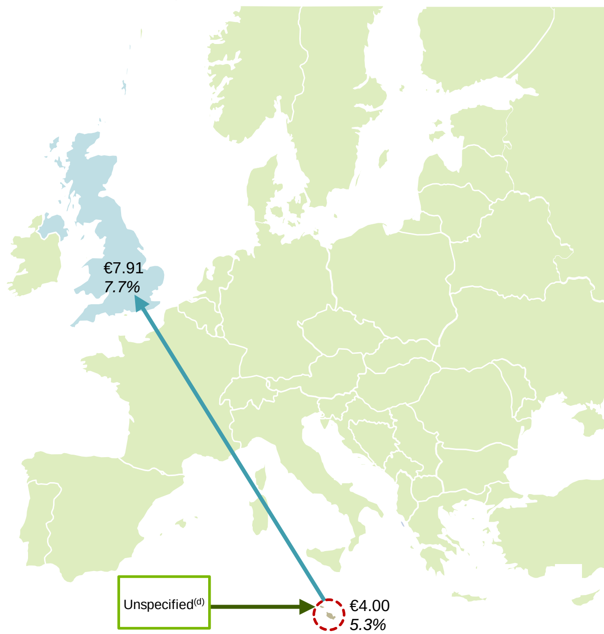
Note: (a) Smoking tobacco volumes have been calculated at one stick per 0.75 grams
Source: (1) In market sales data provided by PMI, based on Tax Stamp data

# Contents – country detail

# Market overview

**The share of cigarette consumption in Malta accounted for by counterfeit and contraband increased to 12.2% in 2011.**

## Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows[(1)(3)(a)(b)(c)(d)]

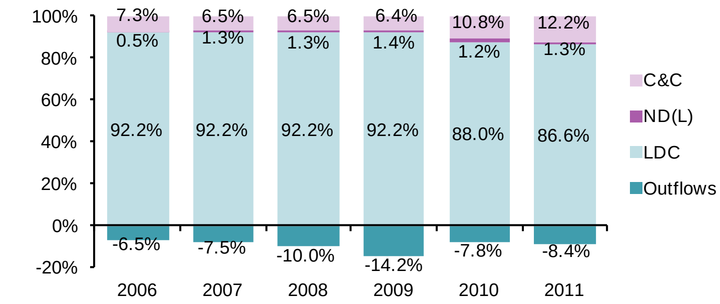



Key:
- Malta
- Top destination country
- Top source country

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) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) Relative cigarette prices in the UK are subject to fluctuations as result of exchange rate changes versus the Euro
(d) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". Unspecified market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack

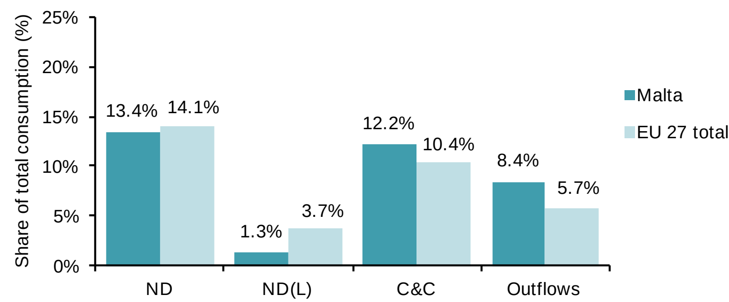
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Synovate/Ipsos ND(L) research 2006 (Ipsos acquired Synovate in 2011)
(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

## Share of Malta consumption by type 2007-2011[(1)(2)]




| Volume (bn cigarettes) | 0.54 | 0.54 | 0.52 | 0.50 | 0.57 | 0.55 |
|---|---|---|---|---|---|---|

## Comparison of EU and Malta consumption by type, 2011[(1)(2)]

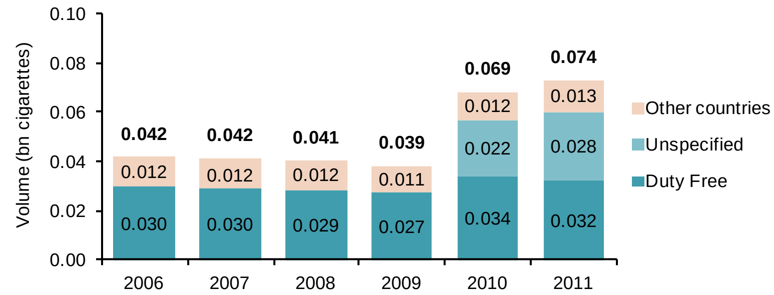


# Total non-domestic consumption

**Consumption of non-domestic cigarettes increased to 74 million cigarettes in 2011, compared to 69 million in the previous year.**

| Total Malta consumption[1][2] | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarettes** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| Legal domesticsales (LDS) | 0.535 | 0.535 | 0.535 | 0.529 | 0.550 | 0.520 |
| Outflows | -0.035 | -0.040 | -0.053 | -0.071 | -0.045 | -0.046 |
| Legal domestic consumption (LDC) | 0.500 | 0.495 | 0.482 | 0.458 | 0.505 | 0.474 |
| Non-domestic legal (ND(L)) | 0.003 | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 |
| Counterfeit and contraband (C&C) | 0.040 | 0.035 | 0.034 | 0.032 | 0.062 | 0.067 |
| Total non-domestic | 0.042 | 0.042 | 0.041 | 0.039 | 0.069 | 0.074 |
| **Total consumption** | **0.542** | **0.536** | **0.523** | **0.497** | **0.574** | **0.547** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011[1][2][a]**




| Outflows from Malta | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarettes** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| UK | 0.027 | 0.027 | 0.044 | 0.039 | 0.035 | 0.037 |
| Other EU | 0.008 | 0.013 | 0.009 | 0.031 | 0.009 | 0.009 |
| **Total outflows** | **0.035** | **0.040** | **0.053** | **0.071** | **0.045** | **0.046** |

Notes: (a) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". Unspecified market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack

(b) Outflows from Malta to the UK have been adjusted to reflect tourism trends in 2011, according to the national statistics office in Malta the number of tourist arrivals from the UK increased by 5.9% in 2011 compared to 2010

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

(2) Synovate/Ipsos ND(L) Research 2006

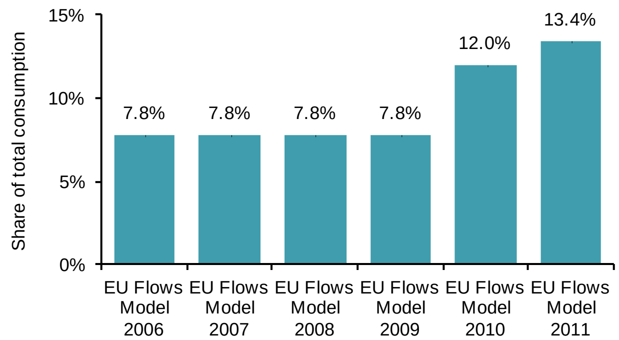
(3) National statistics office of Malta, Tourist arrivals 2010/2011, accessed March 2012

# Comparison of external sources for non-domestic estimates

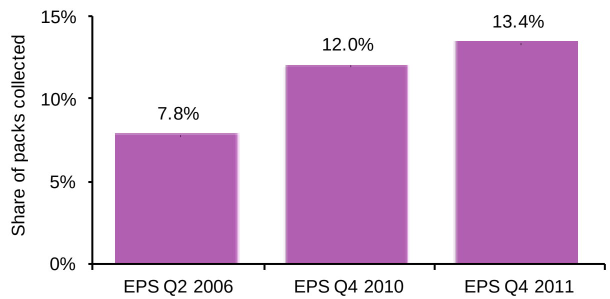
The EU Flows Model indicates a 1.4 percentage point increase in non-domestic consumption in 2011.

The EU Flows Model estimate for non-domestic consumption in 2011 uses the results of the PMI Empty Pack Survey carried out in the fourth quarter of that year.

## EU Flows Model non-domestic incidence estimates[1]




## EPS non-domestic market estimates[2]

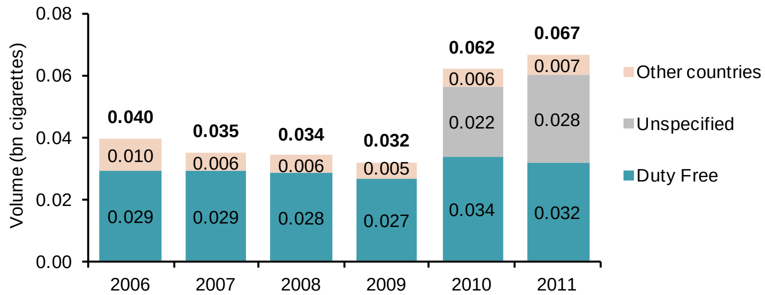



Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys 2006-2011

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows to Malta increased to 67 million cigarettes in 2011.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(a)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **7%** | **7%** | **6%** | **6%** | **11%** | **12%** |
| **C&C share of ND:** | **93%** | **84%** | **83%** | **82%** | **90%** | **91%** |

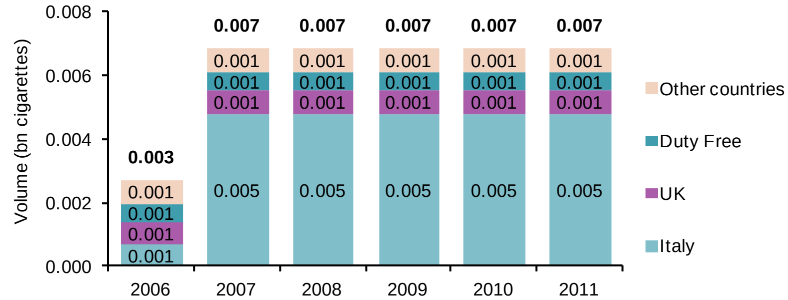
Note: (a) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". 'Unspecified' market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack. Unspecified packs may be counterfeit

Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) Research 2006

# Non-domestic (legal) breakdown

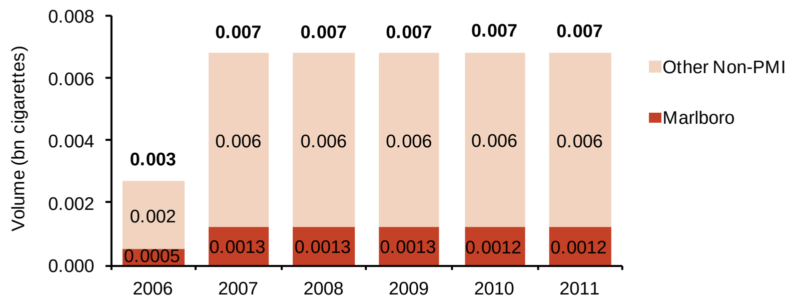
**Non-domestic (legal) inflows have remained stable at 7 million year on year.**

## Non-domestic (legal) by origin 2006-2011[(1)(2)(a)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | 1% | 1% | 1% | 1% | 1% | 1% |
| **ND(L) share of non-domestic:** | 7% | 16% | 17% | 18% | 10% | 9% |

## Non-domestic (legal) by brand 2006-2011[(1)(2)(a)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | 20% | 20% | 20% | 20% | 19% | 19% |

'Other Non-PMI' includes brands Benson & Hedges, Lambert & Butler and Superkings.

### ND(L) analysis

| | 1 | | 2 | | 3 | | 4 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Population 19+ | | Propensity to travel | | Propensity to purchase | | Ave. no. of trips | | Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
| Values 2011 | 0.3m | x | 30% | x | 8% | x | 4.6 | x | 196 | = | 0.01 |
| EU rank 2011 | 27 | | 23 | | 27 | | 3 | | 7 | | 27 |

**Non-domestic (legal) research was not been updated between 2007-2011, but corroborating research has not indicated any significant changes to 2006 results.**

- The total change in the volume of outbound passengers from Malta to other counties remained broadly stable in 2011.[(3)(b)]

Notes: (a) ND(L) research was not updated between 2007 - 2011 but corroborating research has not indicated any significant changes to 2006 results

(b) According to the National Statistics Office of Malta the volume of outbound passengers from Cyprus to EU destinations increased by approximately 5% between 2010 and 2011

Sources: (1) KPMG EU Flows Model

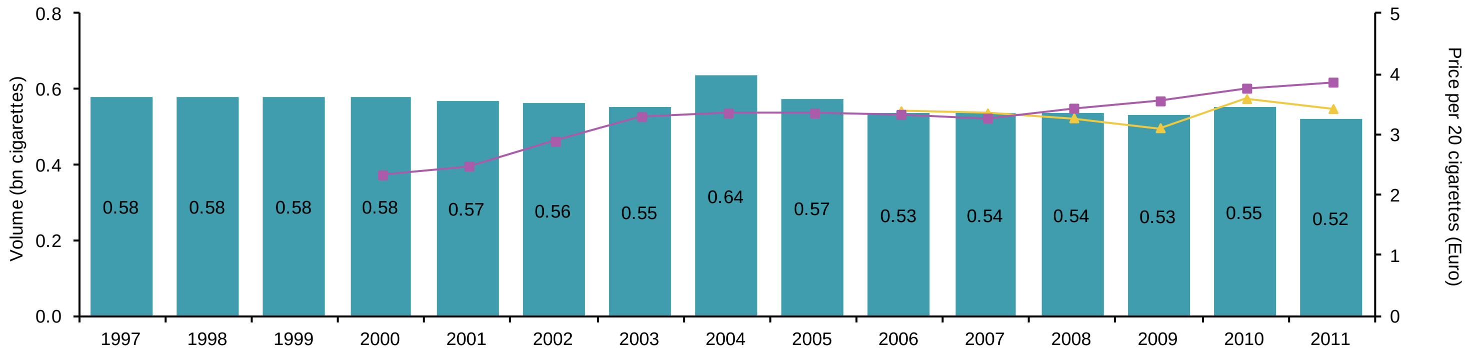
(2) Synovate/Ipsos ND(L) Research 2006

(3) National Statistics Office of Malta, Outbound Tourism: December 2010, accessed March 2012

# Historic sales and pricing trends

**Legal domestic cigarette sales declined by 5.4% in 2011, whilst the average pack price increased by 2.7%.**

## Historic cigarette prices and legal domestic sales 1997-2011[(1)(2)]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Legal domestic sales* | *-0.4%* | *0.1%* | *-2.0%* | *-0.9%* | *-5.4%* |
| *Weighted average pack price* | *n/a* | *7.9%* | *1.5%* | *4.3%* | *2.7%* |
| *Consumption* | *n/a* | *n/a* | *-2.8%*[(a)] | *4.9%* | *-4.6%* |

Note (a) CAGR is from 2006-2009

Sources: (1) PMI sales and estimates by local distributor

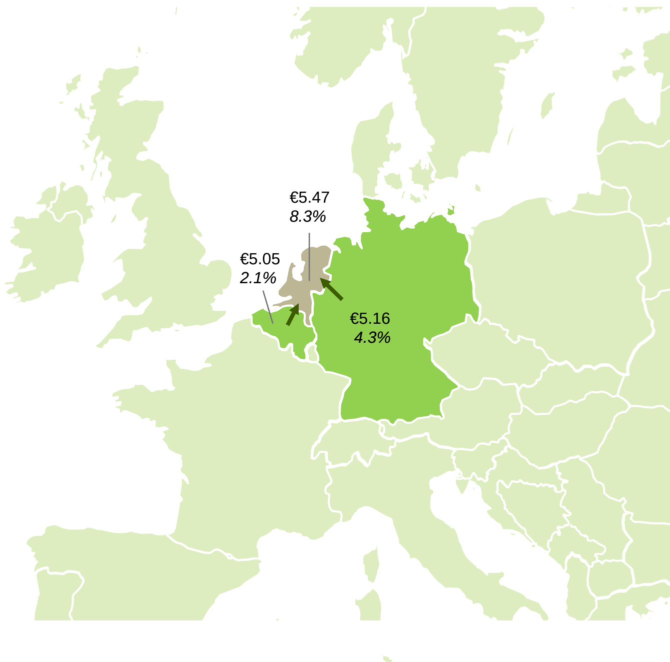
(2) PMI Management and EU Tax Tables

# Contents – country detail

# Market overview

**The share of cigarette consumption in the Netherlands accounted for by counterfeit and contraband declined to 10.2% in 2011.**

## Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows(1)(3)(a)(b)(c)

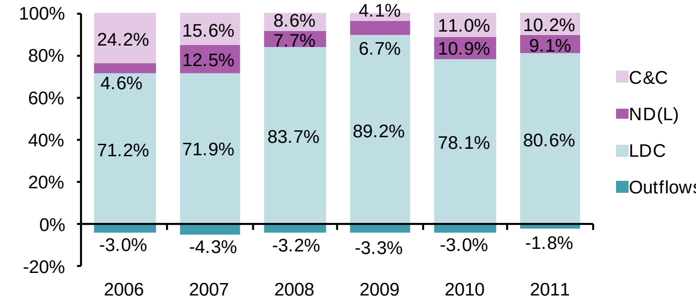



Key:
- The Netherlands
- Major source countries

Notes:
(a) Map shows flows over 1.5% of consumption. Arrow size indicates relative cigarette flow volume. Countries which are both source and destination countries are coded according to the larger flow
(b) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011.

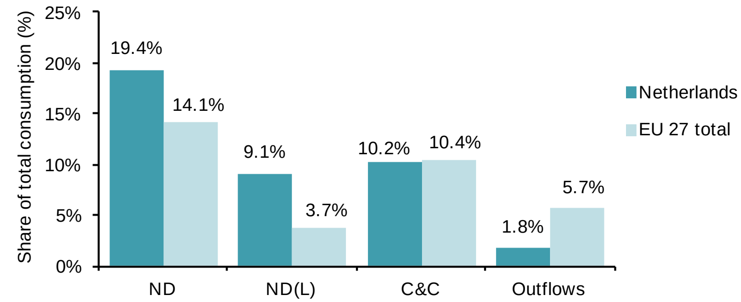
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Synovate/Ipsos ND(L) research, 2006-2011 (Ipsos acquired Synovate in 2011)
(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

## Share of Netherlands consumption by type 2006-2011(1)(2)




| Volume (bn cigarettes) | 19.0 | 19.1 | 16.8 | 14.5 | 16.2 | 15.4 |
|---|---|---|---|---|---|---|

## Comparison of EU and the Netherlands consumption by type 2011(1)(2)



# Total cigarette consumption

**Consumption of non-domestic cigarettes declined to 2.98 billion cigarettes in 2011.**

**Total Netherlands cigarette consumption** (1)(2)

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 14.11 | 14.51 | 14.62 | 13.39 | 13.16 | 12.71 |
| Outflows | -0.57 | -0.82 | -0.53 | -0.48 | -0.49 | -0.27 |
| Legal domestic consumption (LDC) | 13.54 | 13.69 | 14.09 | 12.91 | 12.67 | 12.44 |
| Non-domestic legal (ND(L)) | 0.87 | 2.38 | 1.30 | 0.97 | 1.77 | 1.41 |
| Counterfeit and contraband (C&C) | 4.59 | 2.97 | 1.45 | 0.60 | 1.78 | 1.58 |
| Total non-domestic | 5.46 | 5.36 | 2.75 | 1.56 | 3.55 | 2.98 |
| **Total cigarette consumption** | **19.01** | **19.05** | **16.84** | **14.47** | **16.23** | **15.42** |

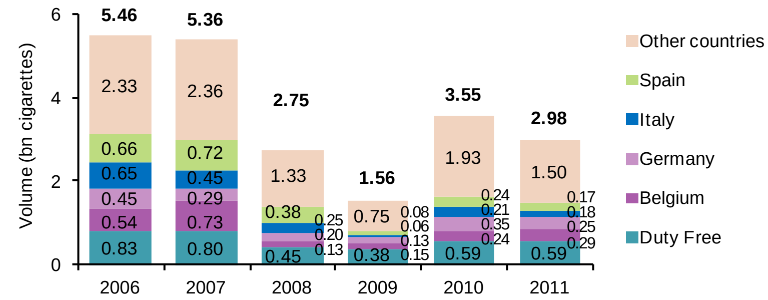
**Netherlands Other Tobacco Product market** (3)(a)(b)

| Billion cigarette equivalent | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| OTP (LDS) | 14.53 | 14.47 | 13.79 | 12.85 | 12.11 | 12.24 |

**Outflows from Netherlands** (1)(2)

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| France | 0.14 | 0.26 | 0.08 | 0.14 | 0.09 | 0.08 |
| Other EU | 0.43 | 0.56 | 0.45 | 0.34 | 0.40 | 0.19 |
| **Total cigarette outflows** | **0.57** | **0.82** | **0.53** | **0.48** | **0.49** | **0.27** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011** (1)(2)




Notes: (a) Other Tobacco Products (OTP) include RYO (Roll Your Own) and MYO (Make Your Own) tobacco. Pipe tobacco, Cigarillos and Cigars are not included. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams

(b) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

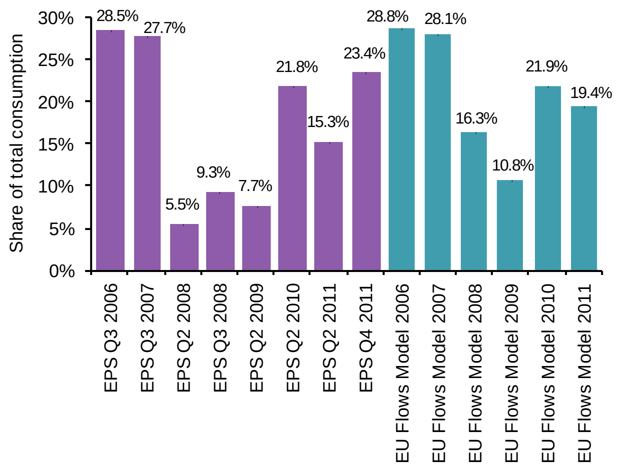
(2) Synovate/Ipsos ND(L) research, 2006-2011

(3) OTP volumes are based on PMI estimates

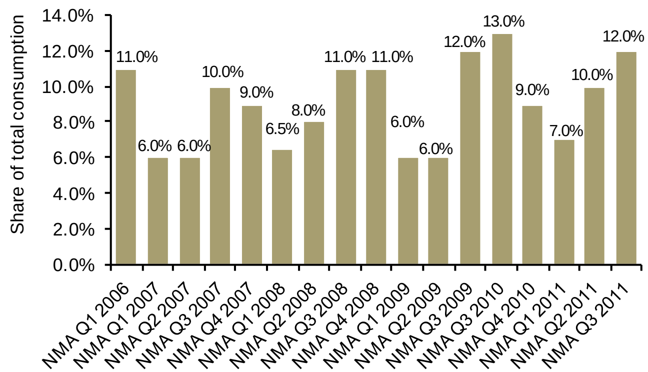
# Comparison of external sources for non-domestic estimates

**The EU Flows Model estimate for non-domestic consumption in 2011 is based on the arithmetic average result of the Q2 and Q4 2011 Empty Pack Surveys.**

## Non-domestic market estimates(1)(2)




## Other non-domestic market estimates(3)




**The EU Flows Model estimate for non-domestic consumption in 2011 is based on the results of the Empty Pack Surveys undertaken in the second and fourth quarters of 2011.**

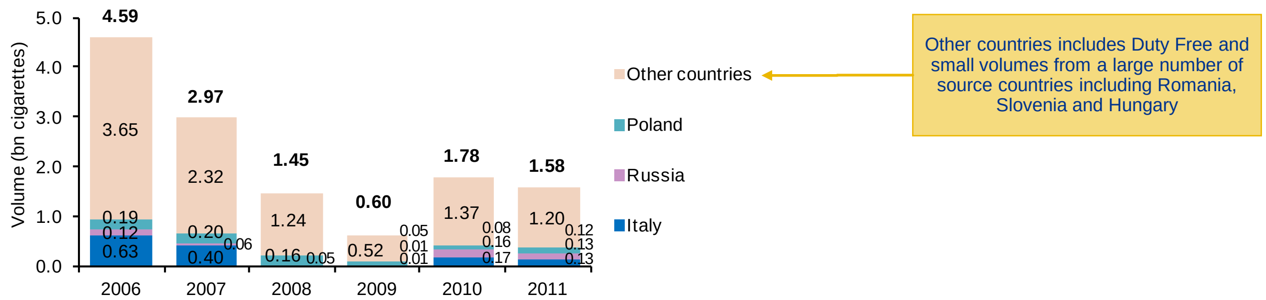
- The average of the two Empty Pack Surveys conducted during 2011 indicated a decline in non-domestic incidence in the Netherlands.
- Other non-domestic market estimates are based on results from the survey conducted by the Dutch Tobacco Manufactures association.
  - The results of the surveys are based on questionnaires completed by participants and analysis of their returned empty packs.

Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys
(3) Determine Market Share of International Tobacco Packages Cigarettes and RYO', TrendBox on behalf of Vereniging Nederlandse Kerftabakindustrie (VNK) and Stichting Sigarettenindustrie, December 2011

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows declined to 1.58 billion cigarettes in 2011.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)]



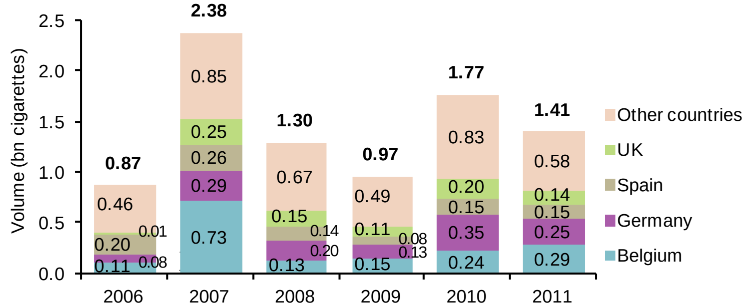

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **24%** | **16%** | **9%** | **4%** | **11%** | **10%** |
| **C&C share of ND:** | **84%** | **56%** | **53%** | **38%** | **50%** | **53%** |

Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research, 2006-2010
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

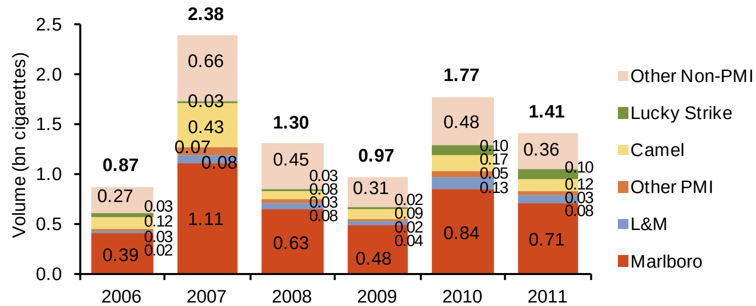
**Non-domestic (legal) inflows declined to 1.4 billion cigarettes in 2011.**

## Non-domestic (legal) by origin 2006-2011(1)(2)(3)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | 5% | 13% | 8% | 7% | 11% | 9% |
| **ND(L) share of non-domestic:** | 16% | 44% | 47% | 62% | 50% | 47% |

## Non-domestic (legal) by brand 2006-2011(1)(2)(3)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | 52% | 53% | 57% | 56% | 57% | 58% |

**ND(L) analysis**

| | Population 19+ (1) | | Propensity to travel (2) | | Propensity to purchase | | Ave. no. of trips (3) | | Ave. purchases (cigarettes) (4) | | Total ND(L) (cigarettes) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | 12.9m | x | 67% | x | 32% | x | 3.2 | x | 162 | = | 1.41 |
| EU rank 2011 | 8 | | 5 | | 8 | | 11 | | 11 | | 4 |

**ND(L) analysis: 2008-2011**

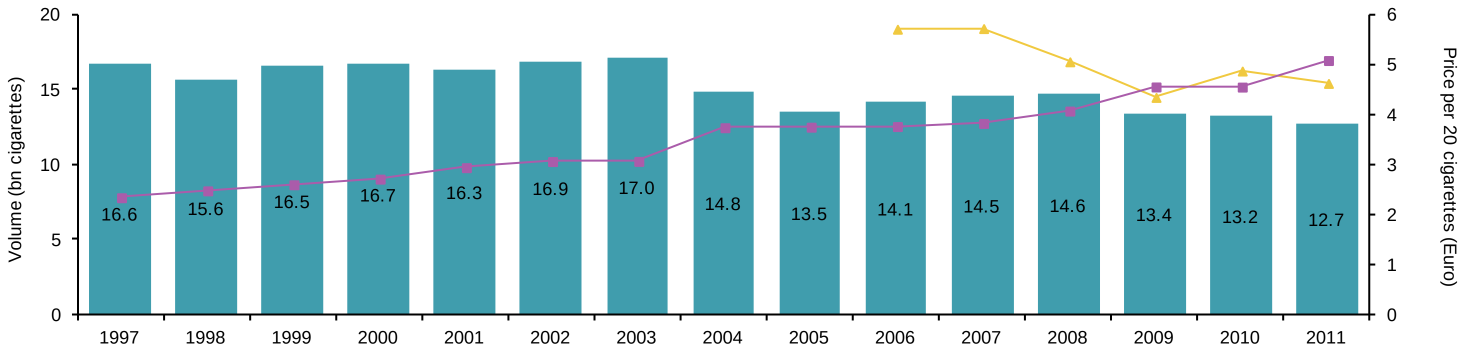
| | | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 19.1% | 19.7% | 21.3% | 21.3% |
| Average annual cigarettes purchased | 3 x 4 | 327 | 226 | 263 | 512 |

Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research, 2006-2010
(3) Interviews with PMI Local Management

# Historic sales and pricing trends

**Legal domestic cigarette sales declined by 3.5% in 2011, whilst the average pack price increased by 11.7%.**

## Historic cigarette prices and legal domestic sales 1997-2011[(1)(2)]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarette legal domestic sales* | *-0.5.%* | *-4.5%* | *0.3%* | *-2.6%* | *-3.5%* |
| *Weighted average cigarette pack price* | *5.9%* | *6.3%* | *5.0%* | *5.6%* | *11.7%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *-8.7%[(a)]* | *3.2%* | *-5.1%* |
| *OTP legal domestic sales[(3)(b)]* | *n/a* | *n/a* | *-12.8%* | *-4.7%* | *1.1%* |

Note: (a) Consumption CAGR is from 2006 to 2010
(b) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams

Sources: (1) Tax stamp data supplied by PMI is used for historic data; In Market Sales data is used for 2007 – 2011.
(2) Prices are based on PMI Management and EU Tax Tables
(3) OTP volumes are based on PMI estimates

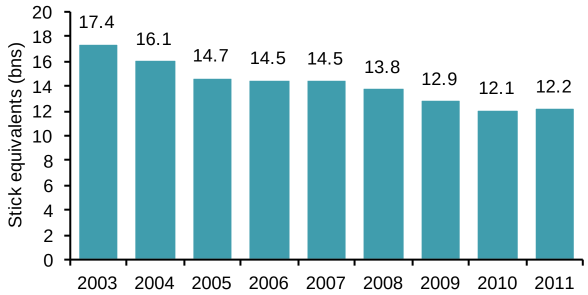
### Legal domestic cigarette sales volumes have declined since 2008

- Sales volumes of Other Tobacco Products also declined between 2008 and 2010, however sales increased by 1.1% between 2010 and 2011 to 12.7 billion stick equivalents.

# OTP market size and growth

**Sales of smoking tobacco increased by 1.1% to 12.2 billion cigarette equivalents in 2011.**

## Smoking tobacco sales in billion stick equivalents 2003-2011[(1)(a)(b)]




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes)** | 17.0 | 14.8 | 13.5 | 14.1 | 14.5 | 14.6 | 13.4 | 13.2 | 12.7 |

| **CAGR (%)** | **2003-2007** | **2007-2011** | **2010-2011** |
|---|---|---|---|
| *Smoking tobacco* | *-4.5%* | *-4.1%* | *1.1%* |
| *Manufactured cigarettes* | *-3.9%* | *-3.3%* | *-3.5%* |

Notes: (a) Smoking tobacco volumes have been calculated at one cigarette per 0.75 grams
(b) Cigars, cigarillos and smokeless tobacco are not included in this analysis

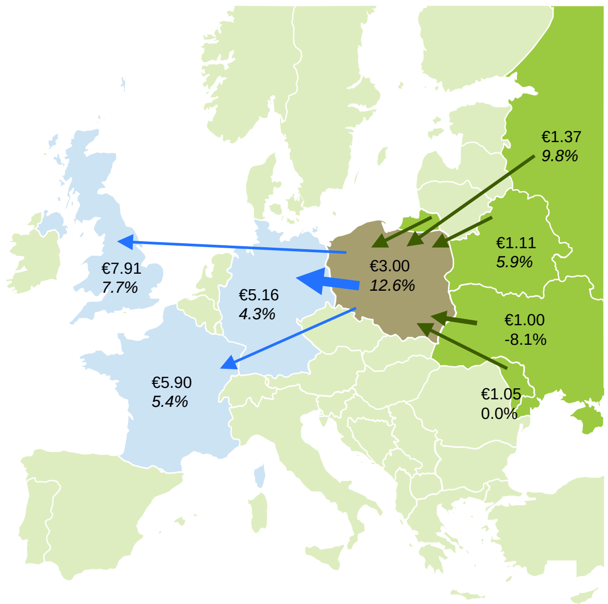
Source: (1) Smoking tobacco volumes based on IMS and shipment data provided by PMI

# Contents – country detail

# Market overview

**The share of cigarette consumption in Poland accounted for by counterfeit and contraband increased to 12.9% in 2011.**

## Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows[1][3][a][b][c][d][e]

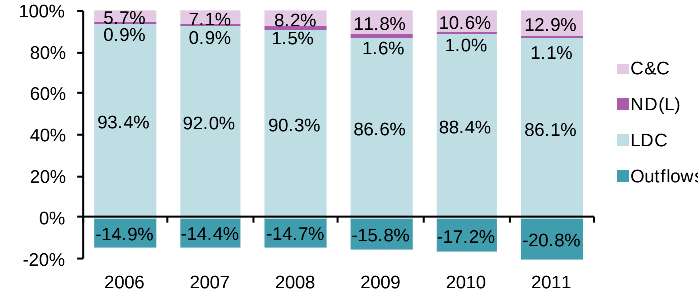



Key:
- Poland
- Major source countries
- Major destination countries

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) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
- (c) Relative cigarette prices in Poland, Russia, Belarus, Moldova, Ukraine and the UK are subject to fluctuations as a result of exchange rate changes of their respective currencies versus the Euro
- (d) Price in Belarus refers to the Kent brand, which is an equivalent premium category brand to Marlboro (which is not sold in Belarus).
- (e) Arrow size indicates relative cigarette flow volume

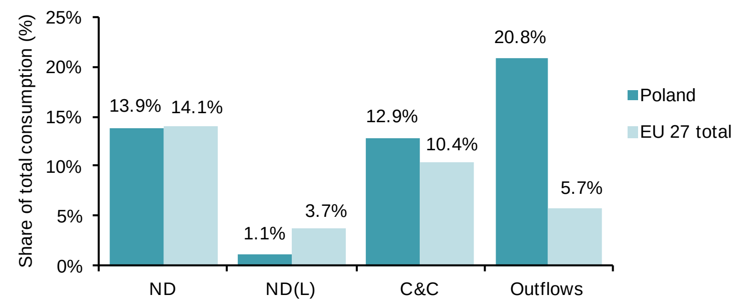
Sources:
- (1) KPMG EU Flows Model and interviews with PMI Local Management
- (2) AC Nielsen research 2006, 2007, 2008, 2009; Synovate/Ipsos ND(L) research in 2010 and 2011 (Ipsos acquired Synovate in 2011)
- (3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

## Share of Poland consumption by type 2006-2011[1][2]




| | | | | | | |
|---|---|---|---|---|---|---|
| **Volume (bn cigarettes)** | **66.9** | **65.7** | **60.1** | **59.7** | **54.3** | **52.0** |

## Comparison of EU and Poland consumption by type 2011[1][2]



# Total cigarette consumption

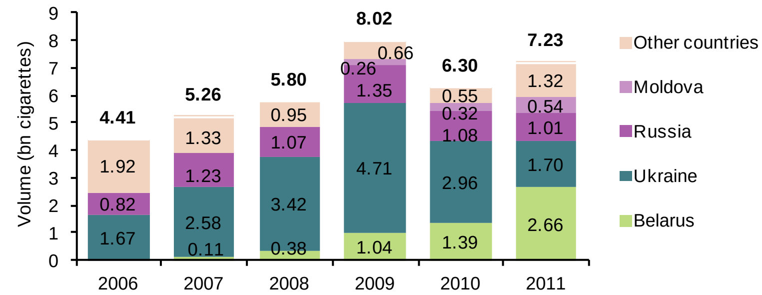
**The consumption of non-domestic product increased to 7.23 billion cigarettes in 2011, driven largely by rising inflows from Belarus.**

| Total Poland cigarette consumption[1][2] | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarettes** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| Legal domestic sales (LDS) | 72.44 | 69.91 | 63.14 | 61.12 | 57.32 | 55.55 |
| Outflows | -9.94 | -9.47 | -8.81 | -9.43 | -9.35 | -10.80 |
| Legal domestic consumption (LDC) | 62.50 | 60.44 | 54.32 | 51.68 | 47.97 | 44.75 |
| Non-domestic legal (ND(L)) | 0.61 | 0.57 | 0.89 | 0.94 | 0.53 | 0.55 |
| Counterfeit and contraband (C&C) | 3.80 | 4.69 | 4.92 | 7.07 | 5.77 | 6.68 |
| Total non-domestic | 4.41 | 5.26 | 5.80 | 8.02 | 6.30 | 7.23 |
| **Total cigarette consumption** | **66.92** | **65.70** | **60.13** | **59.70** | **54.27** | **51.97** |

| Poland Other Tobacco Product market[3][a][b] | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarette equivalent** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| OTP (LDS) | 4.69 | 6.32 | 9.87 | 8.77 | 5.62 | 5.53 |

| Cigarette outflows from Poland[1] | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarettes** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| Germany | 6.53 | 6.85 | 6.32 | 7.54 | 7.49 | 8.64 |
| UK | 1.40 | 1.02 | 0.93 | 1.01 | 0.86 | 0.96 |
| France | 0.41 | 0.32 | 0.41 | 0.28 | 0.30 | 0.55 |
| Other EU | 1.60 | 1.27 | 1.16 | 0.61 | 0.69 | 0.66 |
| **Total cigarette outflows** | **9.94** | **9.47** | **8.81** | **9.43** | **9.35** | **10.80** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011**[1][2]




Notes: (a) Other Tobacco Products (OTP) include fine cut and pipe tobacco. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams

(b) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

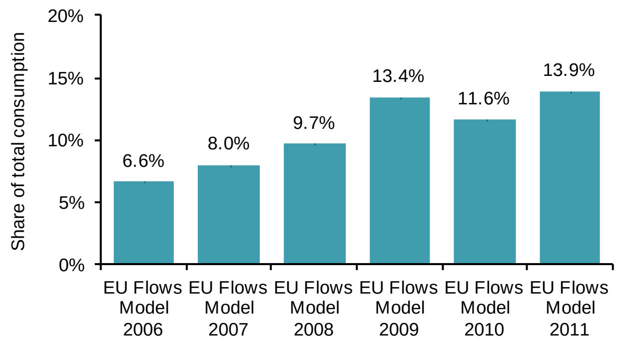
(2) AC Nielsen research 2006, 2007, 2008, 2009; Synovate/Ipsos ND(L) research 2010 and 2011

(3) OTP volumes supplied by PMI based on information supplied by PMI Poland, AC Nielsen retail audit, and PMI estimates of total market size

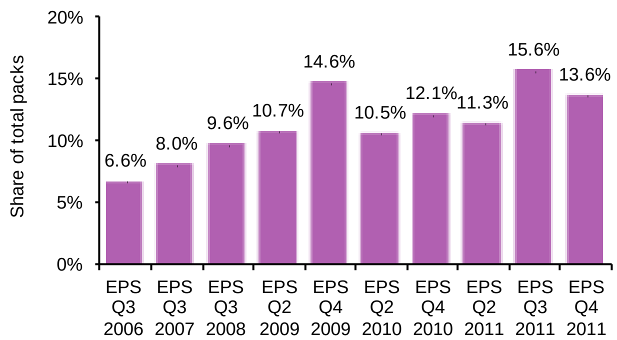
# Comparison of external sources for non-domestic estimates

**The EU Flows Model results suggest an increase in non-domestic incidence to 13.9% in 2011.**

## EU Flows Model non-domestic market estimates[1]




## EPS and other non-domestic market estimates[2][3]




Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys 2006-2011
(3) Almares Research, November 2010

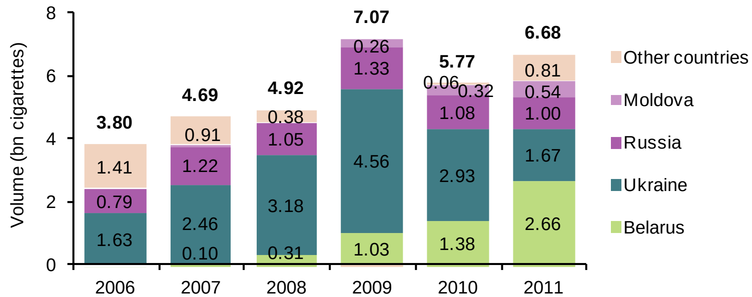
**The 2011 EU Flows Model is based on the weighted results of the three Empty Pack Surveys conducted in 2011**

- To reflect the timing of the EPS surveys and the price increases in 2011, the Q2 wave was weighted to represent the first five months of the year. The Q3 and Q4 waves were weighted to represent four and three months respectively.
- In 2010 the two EPS waves were weighted equally.
  - 2010 results were calculated by averaging the results from the two Empty Pack Surveys conducted in 2010.

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows reached 6.68 billion cigarettes in 2011, driven primarily by increased inflows from Belarus which reached 2.66 billion cigarettes.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **6%** | **7%** | **8%** | **12%** | **11%** | **13%** |
| **C&C share of ND:** | **86%** | **89%** | **85%** | **88%** | **92%** | **92%** |

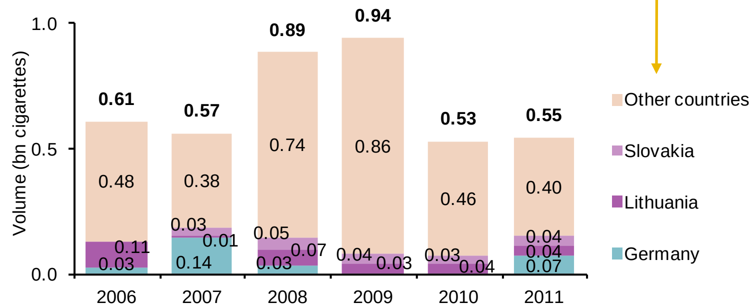
Sources: (1) KPMG EU Flows Model
(2) AC Nielsen research 2006, 2007, 2008, 2009; Synovate/Ipsos ND(L) research 2010 and 2011
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

**Non-domestic (legal) increased slightly in 2011, but remained significantly below 2009 levels,**

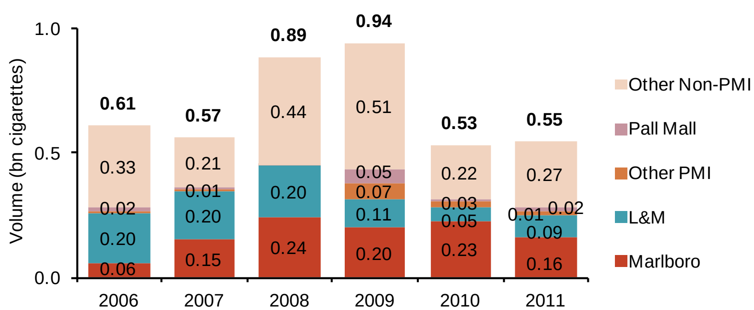
## Non-domestic (legal) by origin 2007-2011 (1)(2)(3)

‘Other countries’ includes small volumes from a number of countries including Ukraine, Belgium, Spain, France and Sweden.




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| ND(L) share of consumption: | 1% | 1% | 1% | 2% | 1% | 1% |
| ND(L) share of non-domestic: | 14% | 11% | 15% | 12% | 8% | 8% |

## Non-domestic (legal) by brand 2007-2011 (1)(2)(3)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| PMI share of ND(L) | 43% | 63% | 50% | 40% | 57% | 48% |

## ND(L) analysis

| | (1) Population 19+ | | (2) Propensity to travel | | Propensity to purchase | | (3) Ave. no. of trips | | (4) Ave. purchases (cigarettes) | | Total ND(L) (cigarettes) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | 30.4m | x | 40% | x | 30% | x | 2.6 | x | 58 | = | 0.55 |
| EU rank 2011 | 6 | | 18 | | 12 | | 16 | | 25 | | 10 |

### ND(L) analysis: 2008-2011

| | | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 6.2% | 7.2% | 4.3% | 11.8% |
| Average annual cigarettes purchased | 3 x 4 | 468 | 430 | 402 | 153 |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen research 2006, 2007, 2008, 2009; Synovate/Ipsos ND(L) research 2010 and 2011
(3) Interviews with PMI Local Management

# Historic sales and pricing trends

**Legal domestic cigarette sales declined to 55.6 billion cigarettes in 2011.**

**Historic cigarette prices and legal domestic sales 1997-2011**[1][2]


| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarette legal domestic sales* | *-5.2%* | *-0.2%* | *-4.6%* | *-4.7%* | *-3.1%* |
| *Weighted average cigarette pack price* | *13.7%* | *4.9%* | *13.0%* | *11.8%* | *10.8%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *-3.7%*[(a)] | *-6.7%* | *-4.2%* |
| *OTP legal domestic sales*[(3)(b)(c)] | *n/a* | *n/a* | *23.4%* | *-20.6%* | *-1.7%* |

Note: (a) CAGR from 2006 to 2009
(b) Fine cut tobacco volumes have been calculated at one stick per 0.75 grams for traditional smoking tobacco and one stick per 0.55 grams for volume tobacco
(c) Estimates for volume tobacco in the Polish market are only available for 2010 and 2011. Prior to this all estimates are calculated based on a 0.75 gram per stick assumption.

Sources: (1) In Market Sales supplied by PMI based on inter-company data from Cyber Service (hired by the National Manufacturers' Association)
(2) PMI Management and EU Tax Tables
(3) OTP volumes supplied by PMI based on information supplied by PMI Poland, AC Nielsen retail audit, and PMI estimates of total market size

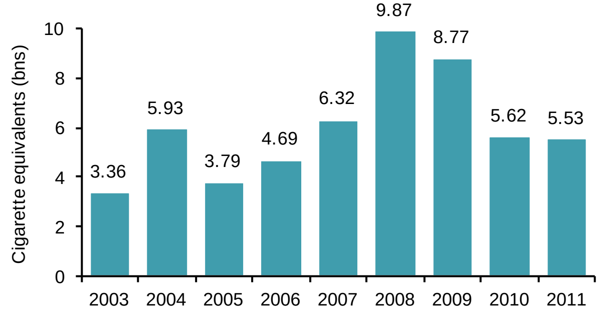
## Legal domestic sales declined by 3.1% in 2011, whilst the average pack price increased by 10.8%

- 2011 was the first full year for the implementation of a smoking ban in designated public areas following its introduction in November 2010.

# OTP market size and growth

**Sales of fine cut tobacco products declined slightly to 5.53 billion cigarette equivalents in 2011.**

**Fine cut tobacco sales in billion cigarette equivalents 2003-2011**[1][a][b]




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes):** | 72.8 | 72.0 | 73.7 | 72.4 | 69.9 | 63.1 | 61.1 | 57.3 | 55.6 |

| CAGR (%) | 2003-2007 | 2007-2011 | 2010-2011 |
|---|---|---|---|
| ■ *Fine cut tobacco* | *17.1%* | *-3.3%* | *-1.7%* |
| *Manufactured cigarettes* | *-1.0%* | *-5.6%* | *-3.1%* |

## Fine cut tobacco appeared to stabilise in 2011 following two years of significant decline

- Between 2003 and 2007 sales had increased to a peak of 9.87 billion cigarette equivalents at an average annual rate of 17.1%.
- Sales declined annually by 24.5% between 2008 and 2010, however the rate of decline slowed in 2011 to 1.7%.

## Recent developments in the Polish market may have slowed the decline in consumption of OTP products

- Expanded (volume) tobacco increased share of the fine cut tobacco market in 2011[2].
  - The volume of expanded tobacco used for each cigarette is less than traditional fine cut products and is estimated at 0.55 grams.
- Additionally, PMI Poland indicated a growing market for 'green tobacco leaf', which is a dried, unprocessed and non-exercisable product, which is self cut by the consumer.

Note: (a) Fine cut tobacco volumes have been calculated at one stick per 0.75 grams for traditional smoking tobacco and one stick per 0.55 grams for volume tobacco

(b) Estimates for volume tobacco in the Polish market are only available for 2010 and 2011. Prior to this all estimates are calculated based on a 0.75 gram per stick assumption.

Source: (1) OTP volumes supplied by PMI based on information supplied by PMI Poland, AC Nielsen retail audit, and PMI estimates of total market size

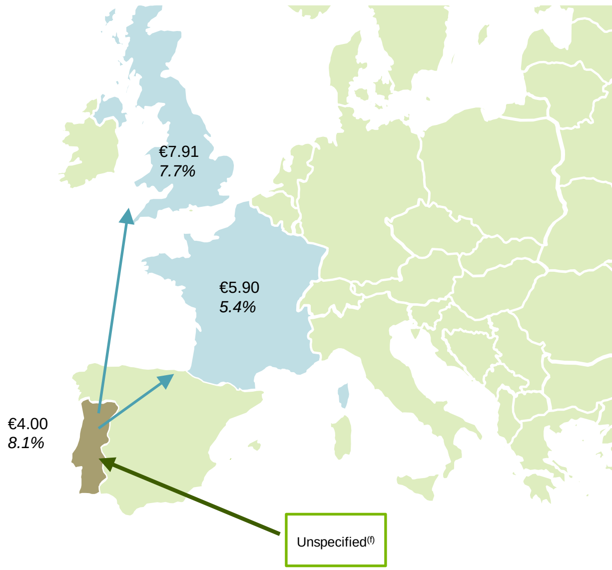
(2) PMI Poland estimates, 2011

# Contents – country detail

# Market overview

**The share of cigarette consumption in Portugal accounted for by counterfeit and contraband increased to 3.0% in 2011.**

## Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows(1)(2)(a)(b)(c)(d)(e)

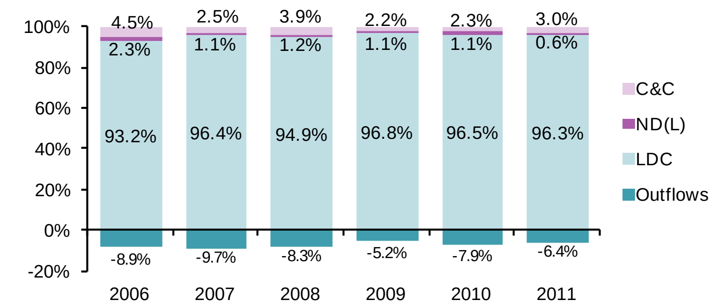



Key:
- Portugal
- Top source variant
- Top two destination countries

Notes:
- (a) Map shows outflows over 1% of consumption, and the primary source of inflows. Countries which are both source and destination countries are coded according to the larger flow
- (b) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
- (c) Relative cigarette prices in the UK are subject to fluctuations as a result of exchange rate changes of the British Pound versus the Euro
- (d) Arrow size indicates relative cigarette flow volume
- (e) A number of price changes took place in Spain between April and October in 2011, the average Marlboro price for the year per IMS data was €4.15
- (f) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". Unspecified market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack

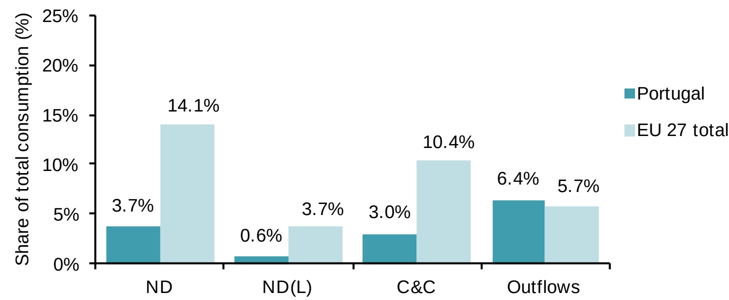
Sources:
- (1) KPMG EU Flows Model and interviews with PMI Local Management
- (2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011
- (3) AC Nielsen ND(L) research 2006, Synovate/Ipsos 2008 and 2009 (Ipsos acquired Synovate in 2011)

## Share of Portugal consumption by type 2006-2011(1)(3)




| Volume (bn cigarettes) | 14.0 | 13.2 | 12.1 | 12.1 | 11.4 | 10.9 |
|---|---|---|---|---|---|---|

## Comparison of EU and Portugal consumption by type 2011(1)(3)



# Total cigarette consumption

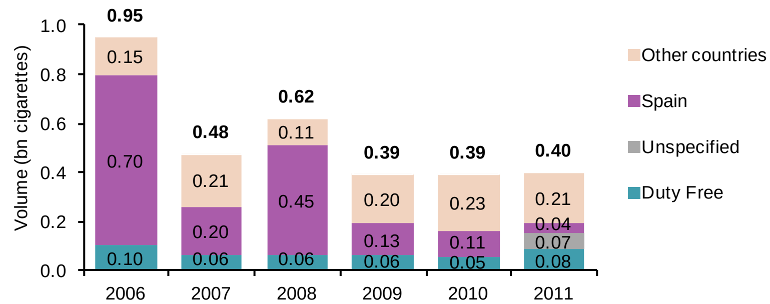
**Consumption of non-domestic cigarettes remained relatively stable at 0.40 billion cigarettes in 2011.**

| Total Portugal cigarette consumption (1)(2) | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarettes** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| Legal domestic sales (LDS) | 14.33 | 14.03 | 12.48 | 12.37 | 11.86 | 11.23 |
| Outflows | -1.24 | -1.28 | -1.00 | -0.63 | -0.89 | -0.70 |
| Legal domestic consumption (LDC) | 13.08 | 12.75 | 11.48 | 11.73 | 10.97 | 10.53 |
| Non-domestic legal (ND(L)) | 0.32 | 0.14 | 0.15 | 0.13 | 0.13 | 0.07 |
| Counterfeit and contraband (C&C) | 0.63 | 0.33 | 0.47 | 0.26 | 0.26 | 0.33 |
| Total non-domestic | 0.95 | 0.48 | 0.62 | 0.39 | 0.39 | 0.40 |
| **Total cigarette consumption** | **14.04** | **13.23** | **12.10** | **12.13** | **11.36** | **10.93** |

| Portugal Other Tobacco Products market (3)(b)(c) | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarette equivalent** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| OTP (LDS) | 0.31 | 0.46 | 0.60 | 0.67 | 0.87 | 1.81 |

| Cigarette outflows from Portugal (1) | | | | | | |
|---|---|---|---|---|---|---|
| **Billion cigarettes** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
| France | 0.56 | 0.48 | 0.47 | 0.27 | 0.51 | 0.41 |
| UK | 0.31 | 0.51 | 0.34 | 0.12 | 0.10 | 0.11 |
| Ireland | 0.02 | 0.01 | 0.03 | 0.03 | 0.04 | 0.05 |
| Other EU | 0.35 | 0.28 | 0.16 | 0.21 | 0.23 | 0.13 |
| **Total cigarette outflows** | **1.24** | **1.28** | **1.00** | **0.63** | **0.89** | **0.70** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011**[1][2][b]



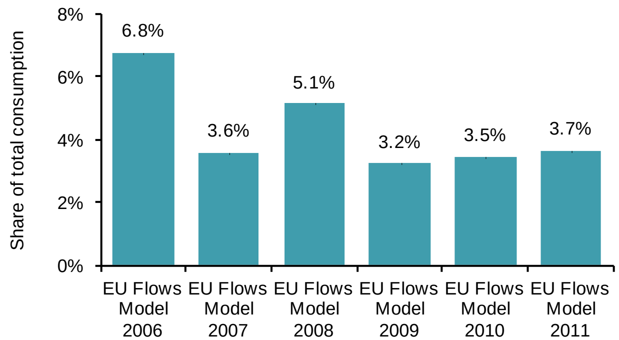

Note: (a) Unspecified market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack
(b) Other Tobacco Products (OTP) include fine cut and pipe tobacco. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams
(c) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, Synovate 2008 and 2009
(3) 2011 OTP volumes are based on IMS data provided by PMI, 2008-2010 OTP data provided by PMI

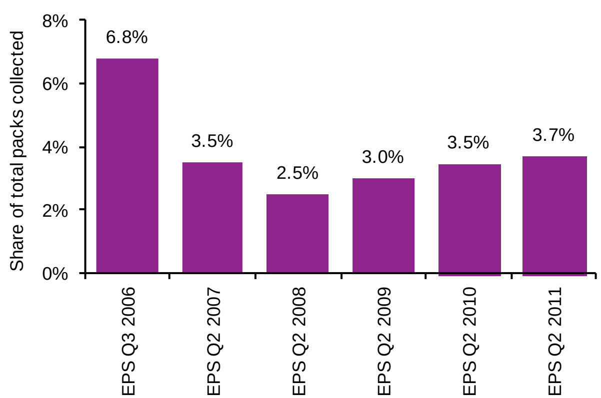
# Comparison of external sources for non-domestic estimates

**The EU Flows Model suggests an increase in non-domestic incidence to 3.7% in 2011.**

**EU Flows non-domestic market estimates**[1]




**EPS – non-domestic market estimates**[2]




Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack surveys 2006-2011

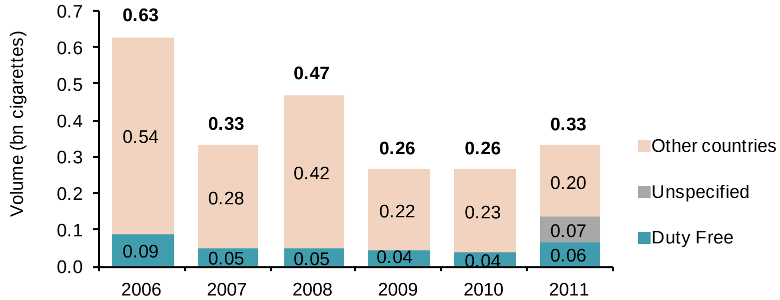
**Non-domestic incidence estimates vary in cities across Portugal, cities in the North have on average a higher non-domestic incidence than those in the South**

- Porto, Braga and Villa Nova De Gaia had the highest levels non-domestic incidence in 2011 at 9.2%, 8.2% and 5.6% respectively.

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows increased to 0.33 billion cigarettes in 2011.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(a)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **4%** | **3%** | **4%** | **2%** | **2%** | **3%** |
| **C&C share of ND:** | **66%** | **70%** | **76%** | **67%** | **67%** | **82%** |

Note: (a) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". 'Unspecified' market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack. Unspecified packs may be counterfeit

Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research 2006, Synovate 2008 and 2009

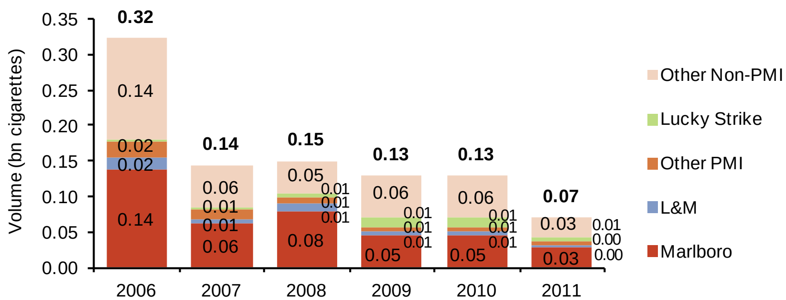
# Non-domestic (legal) breakdown

**Non-domestic (legal) inflows declined to 0.07 billion cigarettes in 2011, in line with the reduction in total inflows from Spain.**

## Non-domestic (legal) by origin 2006-2011(1)(2)


| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **2%** | **1%** | **1%** | **1%** | **1%** | **1%** |
| **ND(L) share of non-domestic:** | **34%** | **30%** | **24%** | **33%** | **33%** | **18%** |

## Non-domestic (legal) by brand 2006-2011(1)(2)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | **55%** | **58%** | **65%** | **45%** | **45%** | **52%** |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, Synovate 2008 and 2009

## ND(L) analysis

| | Population 19+ | | (1) Propensity to travel | | (2) Propensity to purchase | | (3) Ave. no. of trips | | (4) Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **8.5m** | x | **21%** | x | **18%** | x | **3.5** | x | **61** | = | **0.07** |
| EU rank 2011 | **10** | | **26** | | **22** | | **9** | | **22** | | **22** |

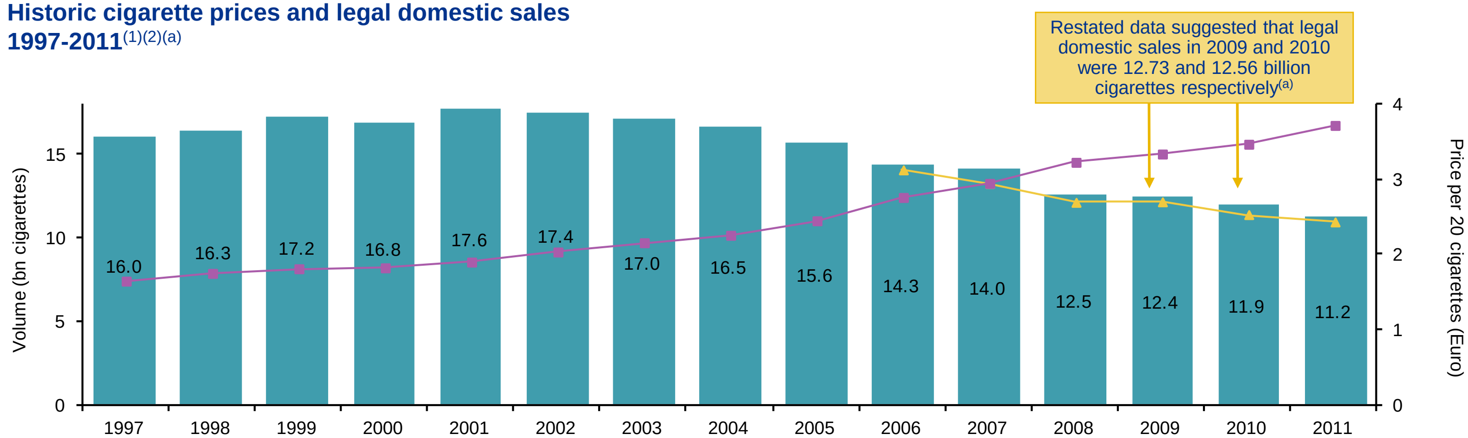
**ND(L) analysis: 2008-2011**

| | | **2008** | **2009** | **2010** | **2011** |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 5.1% | 3.9% | 3.9% | 3.9% |
| Average annual cigarettes purchased | 3 x 4 | 350 | 394 | 394 | 214 |

# Historic sales and pricing trends

**Legal domestic cigarette sales declined to 11.2 billion cigarettes in 2011.**

## Historic cigarette prices and legal domestic sales 1997-2011[1][2][a]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarettes legal domestic sales* | *2.4%* | *-3.0%* | *-5.6%* | *-4.7%* | *-5.4%* |
| *Weighted average cigarette pack price* | *3.6%* | *6.6%* | *8.0%* | *5.6%* | *7.2%* |
| *Manufactured cigarettes consumption* | *n/a* | *n/a* | *-4.8%*[b] | *-5.1%* | *-3.8%* |
| *OTP legal domestic sales*[3][c] | *n/a* | *n/a* | *13.5%* | *64.7%* | *108.7%* |

Notes: (a) Legal domestic sales of cigarettes have been restated for 2009 and 2010, the restated figures suggest total legal domestic sales of 12.73 billion in 2009 and12.56 billion in 2010. For the purposes of the Star report the original estimates have been used in the analysis and have not been restated.
(b) CAGR from 2006 to 2010
(c) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams

Sources: (1) In Market Sales supplied by PMI based on data from Metris-GfK
(2) PMI Management and EU Tax Tables
(3) 2011 OTP volumes are based on IMS data provided by PMI, 2008-2010 OTP data provided by PMI

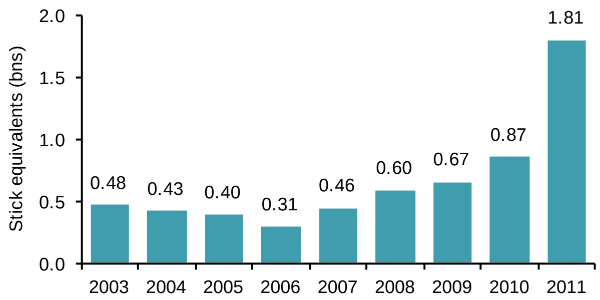
**Legal domestic sales declined by 5.4% in 2011, whilst the average pack price increased by 7.2%**

- Over the same period sales of smoking tobacco more than doubled to 1.8 billion stick equivalents in 2011

# OTP market size and growth

**Sales of smoking tobacco increased significantly to reach 1.8 billion stick equivalents in 2011.**

## Other Tobacco Products sales in billion stick equivalents 2003-2011(1)(a)(b)




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes)** | 17.0 | 16.5 | 15.6 | 14.3 | 14.0 | 12.5 | 12.4 | 11.9 | 11.2 |

| **CAGR (%)** | **2003-2007** | **2007-2011** | **2010-2011** |
|---|---|---|---|
| *Smoking tobacco* | *-1.1%* | *41.0%* | *108.7%* |
| *Manufactured cigarettes* | *-4.7%* | *-5.4%* | *-5.4%* |

Notes: (a) Smoking tobacco volumes have been calculated at one cigarette per 0.75 grams
(b) Smoking tobacco volumes include the categories 'Roll Your Own' (RYO) and 'Make Your Own' (MYO). Sales of Cigarillos have not been included.

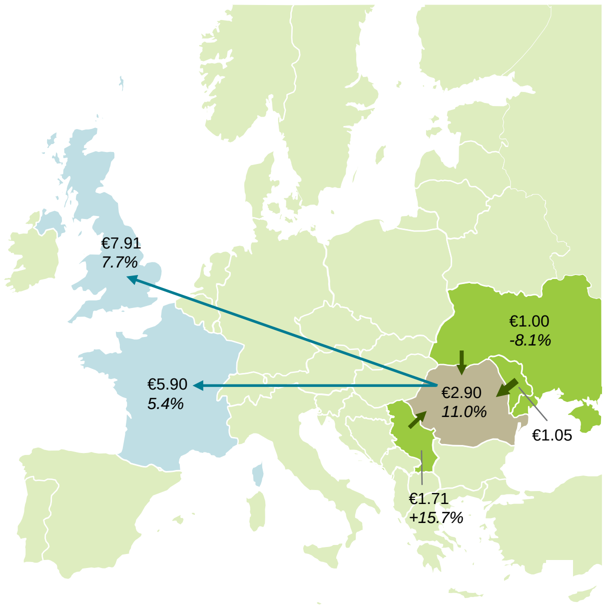
Source: (1) 2011 OTP volumes are based on IMS data provided by PMI, 2008-2010 OTP data provided by PMI

# Contents – country detail

# Market overview

**The share of cigarette consumption in Romania accounted for by counterfeit and contraband declined from 19.2% of total cigarette consumption in 2010, to 11.1% in 2011.**

## Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows[(1)(3)(a)(b)(c)]

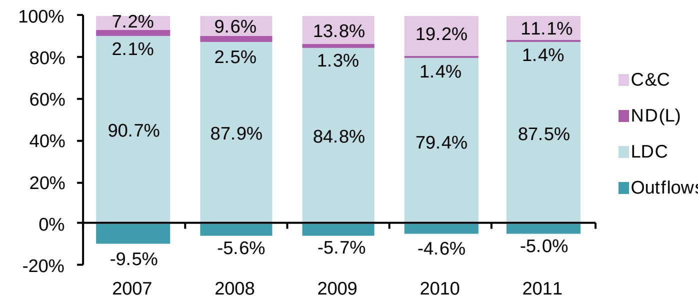



Key:
- Romania
- Major source countries
- Major destination countries

Notes:
(a) Map shows flows over 1% of consumption. Arrow size indicates relative cigarette flow volume. Countries which are both source and destination countries are coded according to the larger flow
(b) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) Relative cigarette prices in the UK, Serbia, Moldova and Ukraine are subject to fluctuations as result of exchange rate changes of their respective currencies versus the Euro

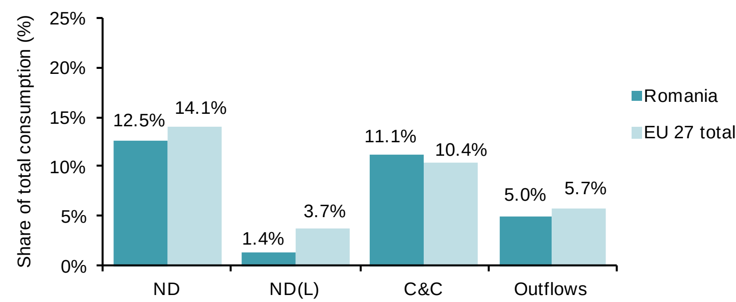
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) AC Nielsen ND(L) research 2007, 2008, Synovate ND(L) research 2010, 2011
(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

## Share of Romania consumption by type 2007-2011[(1)(2)]




| | | | | | |
|---|---|---|---|---|---|
| **Volume (bn cigarettes)** | **31.1** | **32.7** | **32.9** | **27.5** | **27.7** |

## Comparison of EU and Romania consumption by type 2011[(1)(2)]



# Total non-domestic consumption

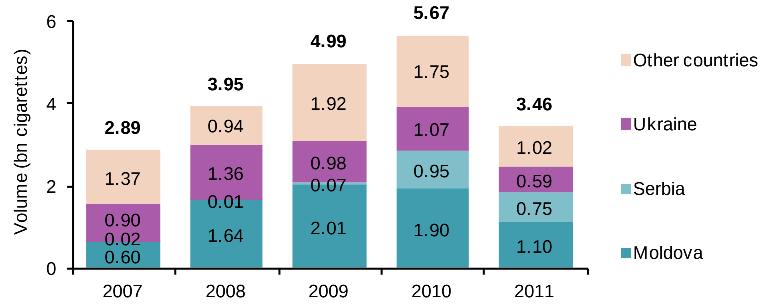
**Consumption of non-domestic cigarettes declined to 3.46 billion in 2011.**

**This decline was driven by lower inflows from Moldova, Serbia and Ukraine.**

**Total Romania consumption** (1)(2)

| Billion cigarettes | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 31.15 | 30.57 | 29.81 | 23.10 | 25.58 |
| Outflows | -2.94 | -1.83 | -1.89 | -1.26 | -1.37 |
| Legal domestic consumption (LDC) | 28.21 | 28.75 | 27.92 | 21.84 | 24.21 |
| Non-domestic legal (ND(L)) | 0.66 | 0.82 | 0.44 | 0.38 | 0.38 |
| Counterfeit and contraband (C&C) | 2.22 | 3.13 | 4.55 | 5.30 | 3.08 |
| Total non-domestic | 2.89 | 3.95 | 4.99 | 5.67 | 3.46 |
| **Total consumption** | **31.10** | **32.70** | **32.91** | **27.52** | **27.67** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2007-2011** (1)(2)




**Outflows from Romania** (1)

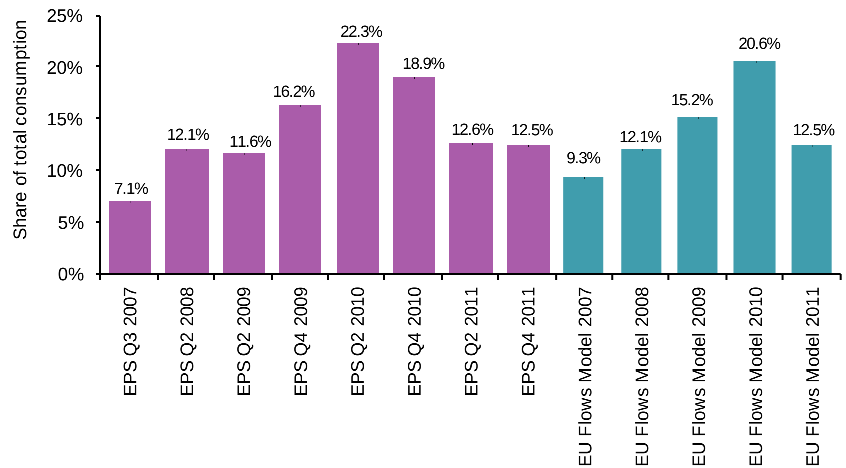
| Billion cigarettes | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| France | 1.30 | 0.61 | 0.62 | 0.32 | 0.56 |
| UK | 0.14 | 0.25 | 0.30 | 0.37 | 0.32 |
| Italy | 0.68 | 0.29 | 0.51 | 0.18 | 0.12 |
| Other EU | 0.82 | 0.68 | 0.47 | 0.38 | 0.37 |
| **Total outflows** | **2.94** | **1.83** | **1.89** | **1.26** | **1.37** |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2007, 2008, Synovate ND(L) research 2010

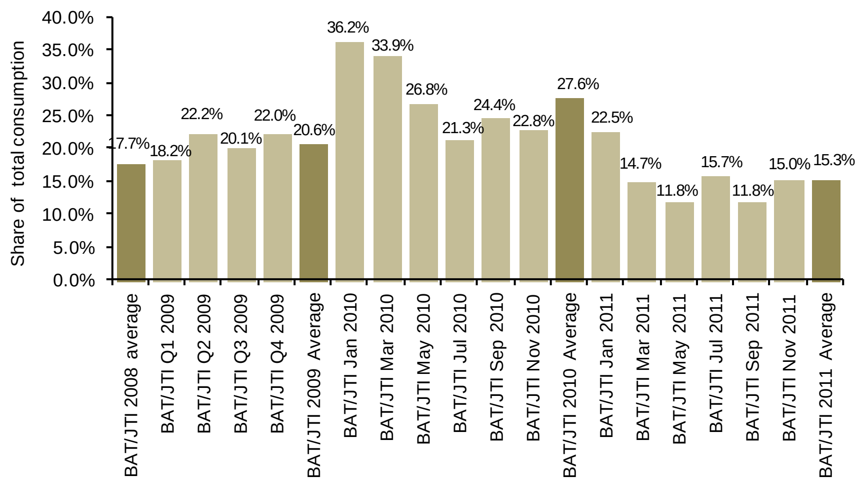
# Comparison of external sources for non-domestic estimates

**The 2011 non-domestic incidence in Romania of 12.5% is based on an equal weighting of the two Empty Pack Surveys conducted in 2011.**

## Non-domestic market estimates(1)(2)




## Other non-domestic market estimates(3)




**The 2011 EU Flows Model results are directionally consistent with other estimates for non-domestic consumption**

- Both the EU Flows Model and the BAT/JTI estimates suggest a significant decline in non-domestic incidence in 2011.
  - The average non-domestic incidence per BAT/JTI estimates declined to 15.3% in 2011.

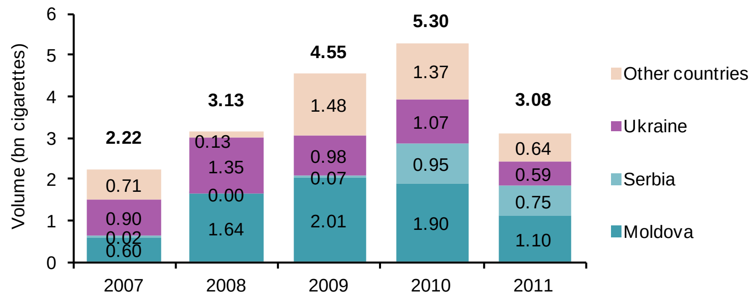
Sources: (1) KPMG EU Flows Model 2007 - 2011
(2) PMI Empty Pack Surveys 2007 - 2011
(3) Novel Research, Project DNP for BAT and JTI, 2008 – 2011 provided by PMI Romania

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows declined to 3.08 billion cigarettes in 2011.**

**Despite this overall fall, the C&C volumes of Fast and Jin Ling increased during the year.**

## Counterfeit and contraband by origin 2006 -2011[1][2]



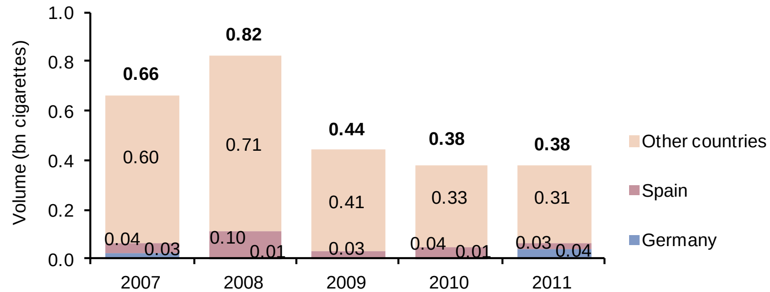

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| **C&C share of consumption:** | **7%** | **10%** | **14%** | **19%** | **11%** |
| **C&C share of ND:** | **77%** | **79%** | **91%** | **93%** | **89%** |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2007, 2008, Synovate ND(L) research 2010

# Non-domestic (legal) breakdown

**Non-domestic (legal) volumes remained stable at 0.38 billion cigarettes in 2011.**

### Non-domestic (legal) by origin 2007-2011(1)(2)

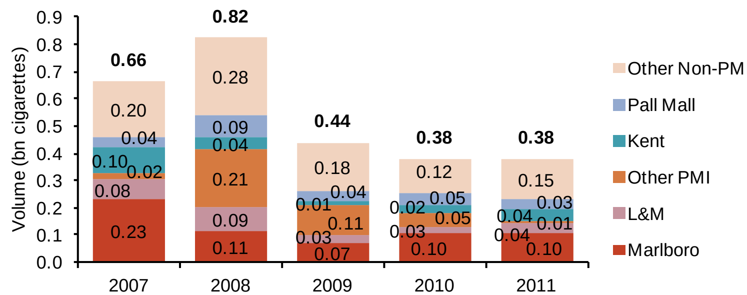



| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **2%** | **3%** | **1%** | **1%** | **1%** |
| **ND(L) share of non-domestic:** | **23%** | **21%** | **9%** | **7%** | **11%** |

### ND(L) analysis

| | 1 Population 19+ | | 2 Propensity to travel | | 3 Propensity to purchase | | 4 Ave. no. of trips | | Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **17.5m** | **x** | **19%** | **x** | **26%** | **x** | **1.8** | **x** | **246** | **=** | **0.38** |
| EU rank 2011 | **7** | | **27** | | **14** | | **22** | | **6** | | **12** |

### Non-domestic (legal) by brand 2007-2011(1)(2)



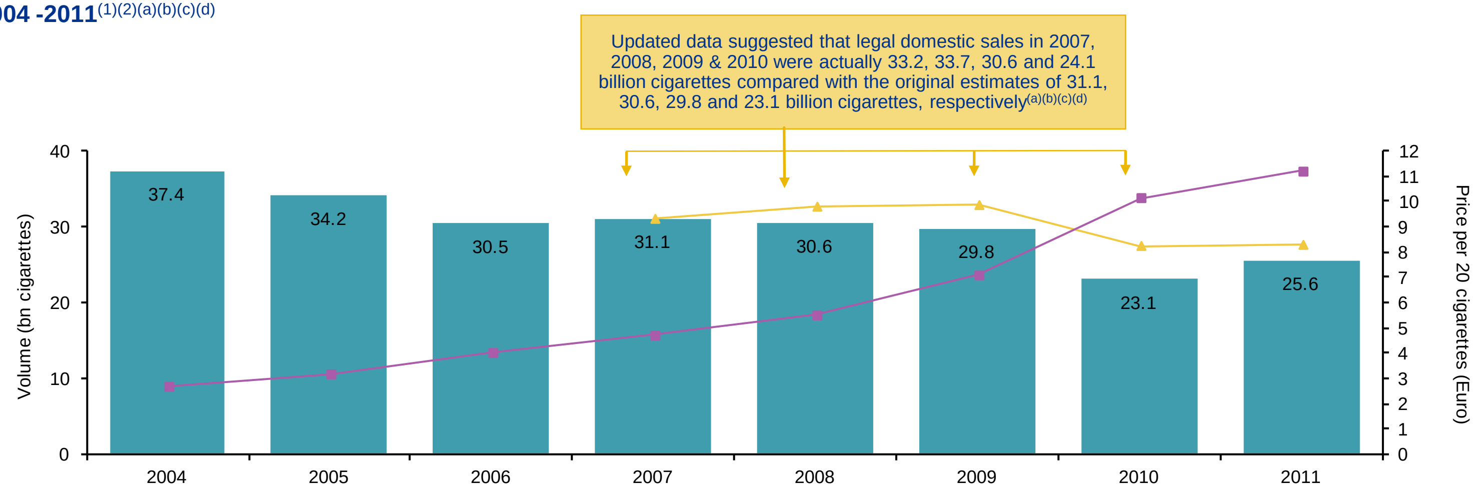

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| **PMI share of ND(L)** | **49%** | **50%** | **48%** | **48%** | **40%** |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2007, 2008, Synovate ND(L) research 2010

# Historic sales and pricing trends

**Legal domestic cigarette sales increased by 10.7% in 2011, despite the average pack price rising by 10.3%.**

## Historic cigarette prices and legal domestic sales 2004 -2011[(1)(2)(a)(b)(c)(d)]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Legal domestic sales* | *0.0%* | *-2.2%* | *-3.4%* | *-7.4%* | *10.7%* |
| *Weighted average pack price* | *n/a* | *n/a* | *22.3%* | *25.7%* | *10.3%* |
| *Consumption* | *n/a* | *n/a* | *2.9%[(e)]* | *-8.4%* | *0.6%* |

Notes:
(a) Project Star 2007 results use 31.1 billion cigarettes as estimated legal domestic sales (LDS) in Romania during 2007. However, PMI internal estimates suggest that LDS in 2007 was actually 33.2 billion cigarettes
(b) Project Star 2008 results use 30.6 billion cigarettes as estimated legal domestic sales (LDS) in Romania during 2008. However, PMI internal estimates suggest that LDS in 2008 was actually 33.7 billion cigarettes
(c) Project Star 2009 results use 29.8 billion cigarettes as estimated legal domestic sales (LDS) in Romania during 2009. However, PMI internal estimates suggest that LDS in 2009 was actually 30.6 billion cigarettes
(d) AC Nielsen estimates the 2010 legal sales to be 24.1 billion cigarettes. However, this report uses legal sales of 23.1 billion cigarettes provided by PMI Romania, which is based on actual Q1-Q3 sales data and an estimate for Q4
(e) CAGR 2007-2009

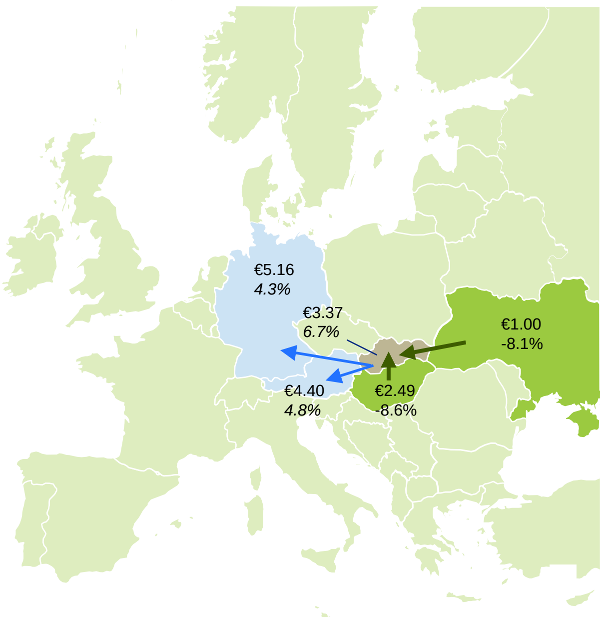
Sources:
(1) In Market Sales supplied by PMI based on actual volumes for PMI and AC Nielsen and EU estimates for competition is used for historic data; Industry Data Exchange (IMS of major players) provided by PMI Romania and AC Nielsen is used for 2010 and 2011
(2) PMI Management and EU Tax Tables

# Contents – country detail

# Market overview

**The share of cigarette consumption in Slovakia accounted for by counterfeit and contraband declined to 0.7% in 2011 and remains significantly below overall EU levels.**

## Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows[1][3][a][b][c]

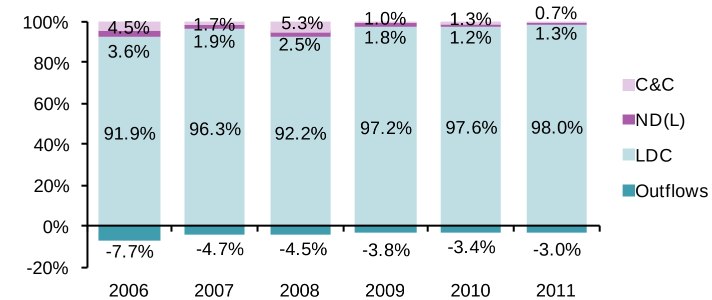



Key: Slovakia
Major source countries

Notes:
(a) Map shows flows over 0.5% of consumption. Countries which are both source and destination countries are coded according to the larger flow
(b) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) Relative cigarette prices in Ukraine and Hungary are subject to fluctuations as result of exchange rate changes versus the Euro

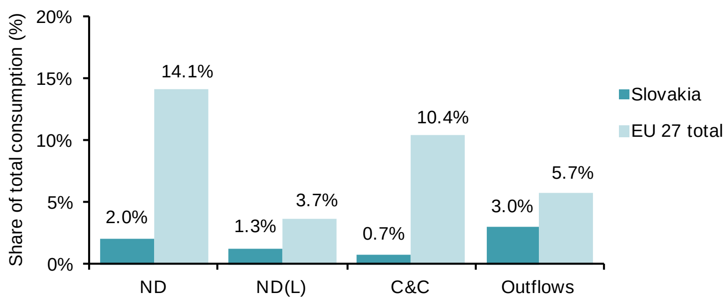
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) AC Nielsen ND(L) research 2006, 2007 and 2010
(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

## Share of Slovakia consumption by type 2006-2011[1][2]




| Volume (bn cigarettes) | 7.0 | 7.7 | 8.3 | 7.6 | 7.4 | 7.3 |
|---|---|---|---|---|---|---|

## Comparison of EU and Slovakia consumption by type 2011[1][2]



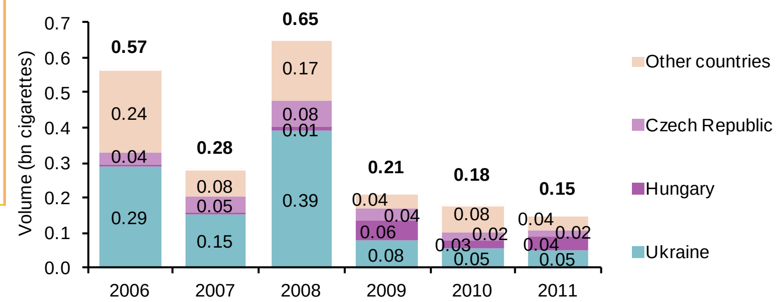
# Total cigarette consumption

**Non-domestic consumption declined to 0.15 billion cigarettes in 2011.**

**Total Slovakia consumption** (1)(2)

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 7.01 | 7.74 | 8.03 | 7.69 | 7.48 | 7.36 |
| Outflows | -0.54 | -0.36 | -0.37 | -0.29 | -0.25 | -0.22 |
| Legal domestic consumption (LDC) | 6.47 | 7.38 | 7.66 | 7.40 | 7.23 | 7.15 |
| Non-domestic legal (ND(L)) | 0.25 | 0.15 | 0.21 | 0.14 | 0.09 | 0.10 |
| Counterfeit and contraband (C&C) | 0.32 | 0.13 | 0.44 | 0.07 | 0.09 | 0.05 |
| Total non-domestic | 0.57 | 0.28 | 0.65 | 0.21 | 0.18 | 0.15 |
| **Total consumption** | **7.04** | **7.66** | **8.31** | **7.62** | **7.41** | **7.30** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011**(1)(2)




**Outflows from Slovakia** (1)

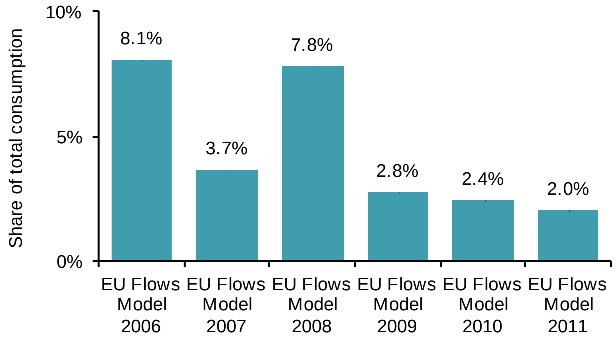
| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Germany | 0.07 | 0.06 | 0.04 | 0.04 | 0.04 | 0.04 |
| Austria | 0.08 | 0.06 | 0.06 | 0.04 | 0.03 | 0.04 |
| Hungary | 0.06 | 0.03 | 0.04 | 0.03 | 0.01 | 0.03 |
| Other EU | 0.34 | 0.20 | 0.23 | 0.17 | 0.16 | 0.11 |
| **Total outflows** | **0.54** | **0.36** | **0.37** | **0.29** | **0.25** | **0.22** |

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management
(2) AC Nielsen ND(L) research 2006, 2007 and 2010

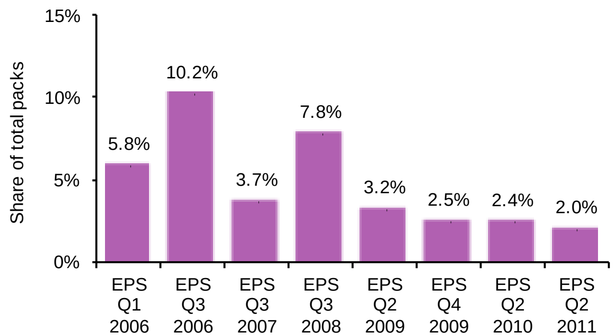
# Comparison of external sources for non-domestic estimates

**The 2011 EU Flows Model results for Slovakia suggest a slight decline in non-domestic incidence in 2011.**

## EU Flows Model non-domestic market estimates(1)




## EPS non-domestic market estimates(2)




Sources: (1) KPMG EU Flows Model
(2) Empty Pack Surveys 2006-2011

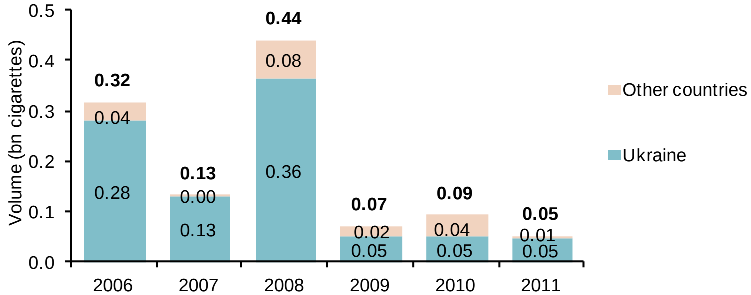
**The EU Flows Model estimate for non-domestic consumption uses the results of the PMI Empty Pack survey conducted in the second quarter of 2011.**

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows declined slightly to 0.05 billion cigarettes in 2011.**

**Ukraine remains the largest source of illicit cigarettes.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)]



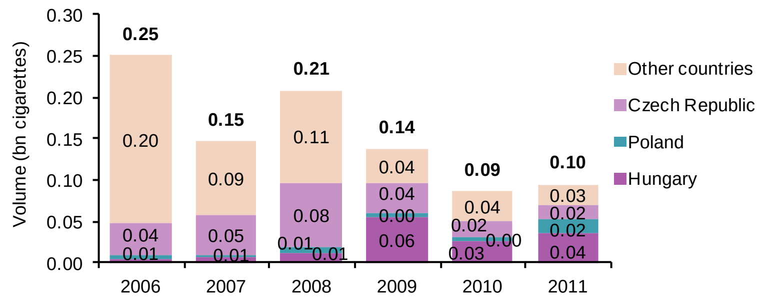

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **5%** | **2%** | **5%** | **1%** | **1%** | **1%** |
| **C&C share of ND:** | **56%** | **48%** | **68%** | **34%** | **52%** | **36%** |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, 2007 and 2010
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

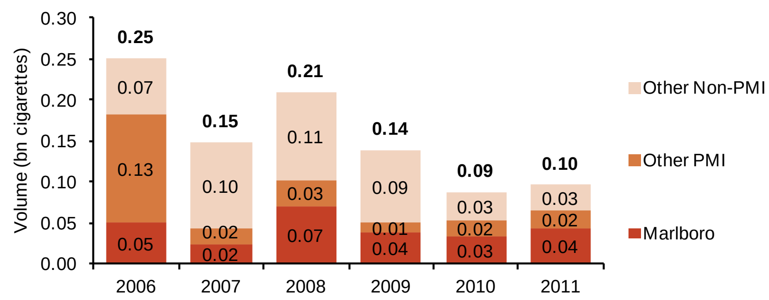
**Non-domestic (legal) inflows increased slightly to 0.10 billion cigarettes in 2011.**

## Non-domestic (legal) by origin 2006-2011[(1)(2)(3)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **4%** | **2%** | **3%** | **2%** | **1%** | **1%** |
| **ND(L) share of non-domestic:** | **44%** | **52%** | **32%** | **66%** | **48%** | **64%** |

## Non-domestic (legal) by brand 2006-2011[(1)(2)(3)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | **73%** | **29%** | **49%** | **36%** | **61%** | **68%** |

## ND(L) analysis

| | 1 | | 2 | | 3 | | 4 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Population 19+ | | Propensity to travel | Propensity to purchase | | Ave. no. of trips | | Ave. purchases (cigarettes) | **Total ND(L) (cigarettes)** |
| Values 2011 | **4.3m** | x | **68%** | x **15%** | x | **3.7** | x | **59** = | **0.10** |
| EU rank 2011 | **17** | | **3** | **24** | | **7** | | **24** | **18** |

**ND(L) analysis: 2008-2011**

| | | **2008** | **2009** | **2010** | **2011** |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 6.2% | 6.2% | 9.9% | 9.9% |
| Average annual cigarettes purchased | 3 x 4 | 795 | 526 | 202 | 222 |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, 2007 and 2010
(3) Interviews with PMI Local Management

# Historic sales and pricing trends

**Legal domestic cigarette sales declined to 7.4 billion cigarettes in 2011.**

## Historic cigarette prices and legal domestic sales 1997-2011(1)(2)


| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Legal domestic sales* | *-3.0%* | *-4.2%* | *1.9%* | *-2.2%* | *-1.5%* |
| *Weighted average pack price* | *n/a* | *16.8%* | *13.0%* | *6.3%* | *5.2%* |
| *Consumption* | *n/a* | *n/a* | *2.6%(a)* | *-2.1%* | *-1.5%* |

Note: (a) CAGR from 2006-2011

Sources: (1) PMI sales and estimates based on Nielsen data

(2) PMI Management and EU Tax Tables

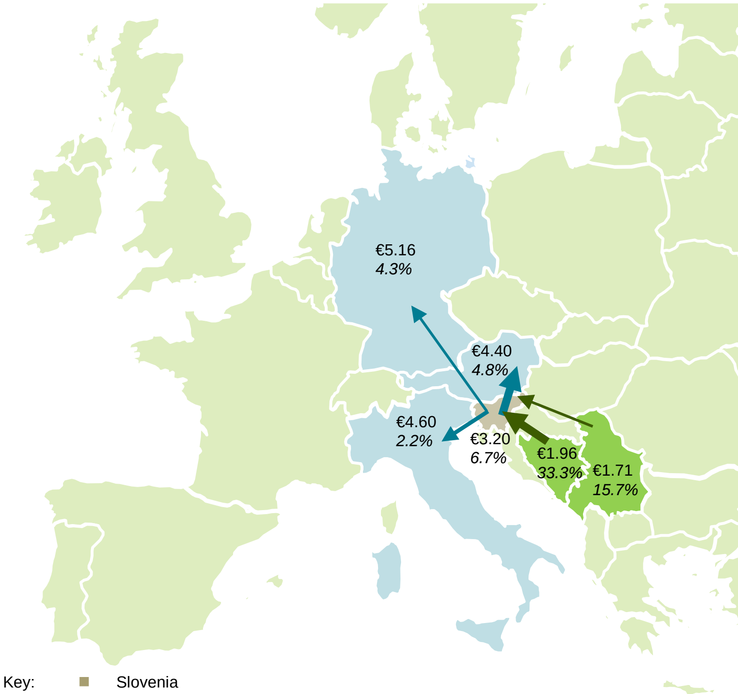
**Legal domestic sales declined by 1.5% in 2011, whilst the average pack price increased by 5.2%**

# Contents – country detail

# Market overview

**The share of cigarette consumption in Slovenia accounted for by counterfeit and contraband increased to 6.3% in 2011.**

## Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows[(1)(3)(a)(b)(c)(d)]

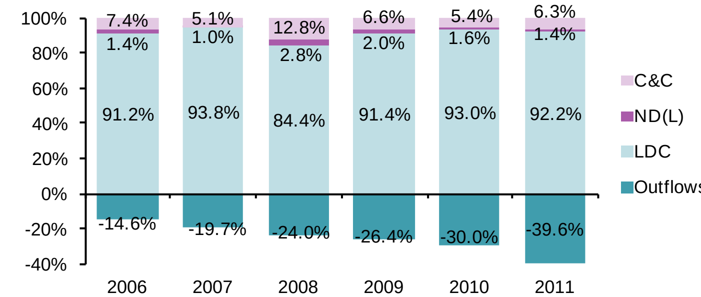



Key:
- Slovenia
- Top two source countries
- Top three destination countries

Notes:
(a) Map shows flows over 0.5% of consumption. Countries which are both source and destination countries are coded according to the larger flow
(b) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) Relative cigarette prices in Bosnia and Herzegovina and Serbia are subject to fluctuations as result of exchange rate changes of their respective currencies versus the Euro
(d) Arrow size indicates relative cigarette flow volume

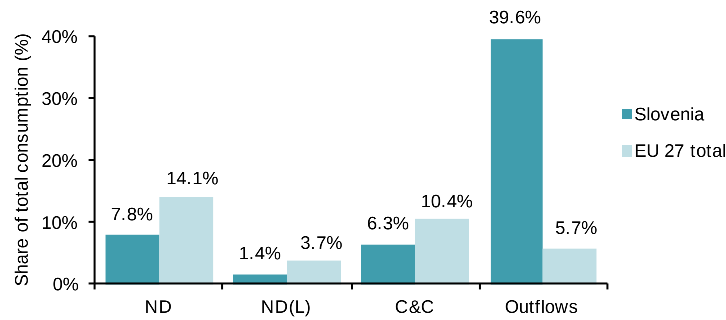
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) AC Nielsen ND(L) research, 2006-2010
(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011

## Share of Slovenia consumption by type 2006-2011[(1)(2)]




| Volume (bn cigarettes) | 4.3 | 4.2 | 4.7 | 4.2 | 4.0 | 3.7 |
|---|---|---|---|---|---|---|

## Comparison of EU and Slovenia consumption by type 2011[(1)(2)]



# Total cigarette consumption

**Consumption of non-domestic cigarettes increased slightly to 0.29 billion cigarettes in 2011.**

**Outflows increased to 1.45 billion cigarettes in 2011 driven by increases to Austria and Italy.**

## Total Slovenia consumption [(1)(2)]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 4.52 | 4.78 | 5.11 | 4.98 | 4.87 | 4.84 |
| Outflows | -0.62 | -0.83 | -1.13 | -1.11 | -1.19 | -1.45 |
| Legal domestic consumption (LDC) | 3.90 | 3.95 | 3.98 | 3.86 | 3.68 | 3.39 |
| Non-domestic legal (ND(L)) | 0.06 | 0.04 | 0.13 | 0.08 | 0.06 | 0.05 |
| Counterfeit and contraband (C&C) | 0.32 | 0.22 | 0.60 | 0.28 | 0.21 | 0.23 |
| Total non-domestic | 0.38 | 0.26 | 0.74 | 0.36 | 0.28 | 0.29 |
| **Total consumption** | **4.27** | **4.21** | **4.72** | **4.23** | **3.96** | **3.67** |

## Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011 [(1)(2)]


## Outflows from Slovenia [(1)(a)]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Austria | 0.23 | 0.53 | 0.73 | 0.79 | 0.85 | 1.04 |
| Italy | 0.25 | 0.14 | 0.19 | 0.13 | 0.09 | 0.21 |
| Germany | 0.06 | 0.07 | 0.10 | 0.14 | 0.16 | 0.13 |
| Other EU | 0.08 | 0.08 | 0.11 | 0.05 | 0.09 | 0.07 |
| **Total outflows** | **0.62** | **0.83** | **1.13** | **1.11** | **1.19** | **1.45** |

Note: (a) An adjustment has been performed to the Austrian EPS survey data in 2011 which limits the increase in outflows of Slovenian variant cigarettes into the Austrian market. This adjustment caps the increase outflows from Slovenia to Austria to 23%, in line with the increase in Austrian tourists to Slovenia in December 2011 (data extracted from the Slovenian statistical bureau).

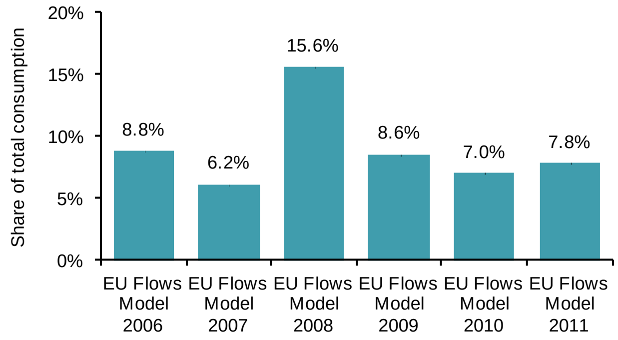
Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

(2) AC Nielsen ND(L) research, 2006-2010

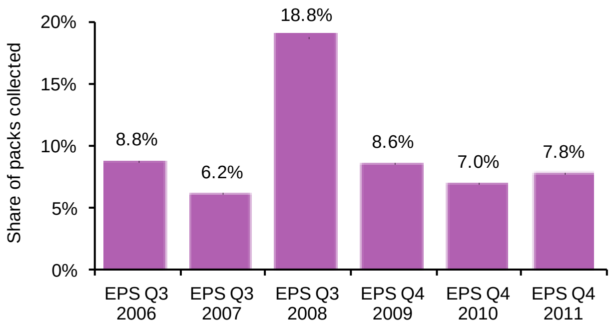
# Comparison of external sources for non-domestic estimates

**The EU flows model indicates an increase in non-domestic consumption to 7.8% in 2011.**

## Non-domestic market estimates[1]




## Other non-domestic market estimates[2]



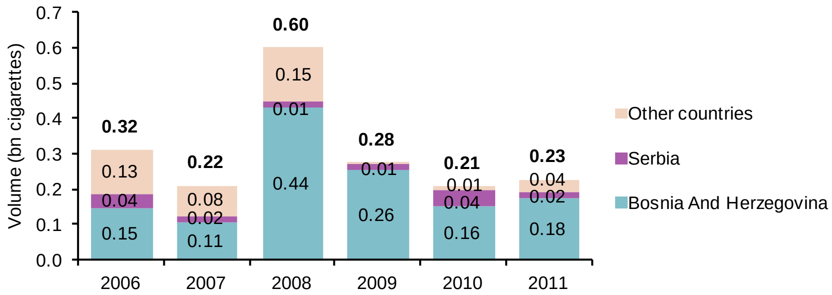

Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys 2006-2011

**The EU Flows Model estimate for non-domestic consumption uses the results of the PMI Empty Pack survey conducted in the fourth quarter of 2011.**

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows increased to 0.23 billion cigarettes in 2011.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)]



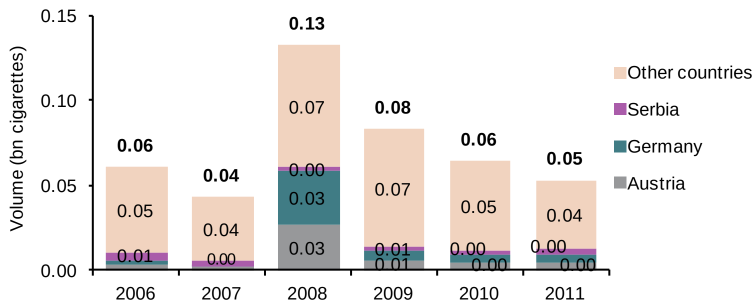

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **7%** | **5%** | **13%** | **7%** | **5%** | **6%** |
| **C&C share of ND:** | **84%** | **83%** | **82%** | **77%** | **77%** | **81%** |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research, 2006-2010
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

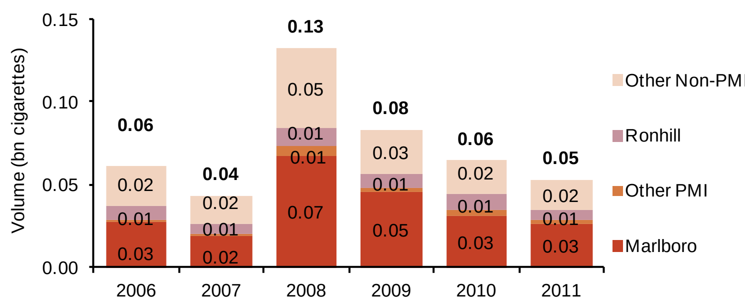
**Non-domestic (legal) inflows declined to 0.05 billion cigarettes from 2010 to 2011.**

## Non-domestic (legal) by origin 2006-2011[(1)(2)(3)(a)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **1%** | **1%** | **3%** | **2%** | **2%** | **1%** |
| **ND(L) share of non-domestic:** | **16%** | **17%** | **18%** | **23%** | **23%** | **19%** |

## Non-domestic (legal) by brand 2006-2011[(1)(2)(3)(a)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | **48%** | **48%** | **55%** | **58%** | **53%** | **54%** |

## ND(L) analysis

| | Population 19+ (1) | | Propensity to travel (2) | | Propensity to purchase (3) | | Ave. no. of trips (4) | | Ave. purchases (cigarettes) | | Total ND(L) (cigarettes) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | 1.7m | x | 68% | x | 23% | x | 2.7 | x | 76 | = | 0.05 |
| EU rank 2011 | 23 | | 4 | | 18 | | 14 | | 19 | | 23 |

### ND(L) analysis: 2008-2011

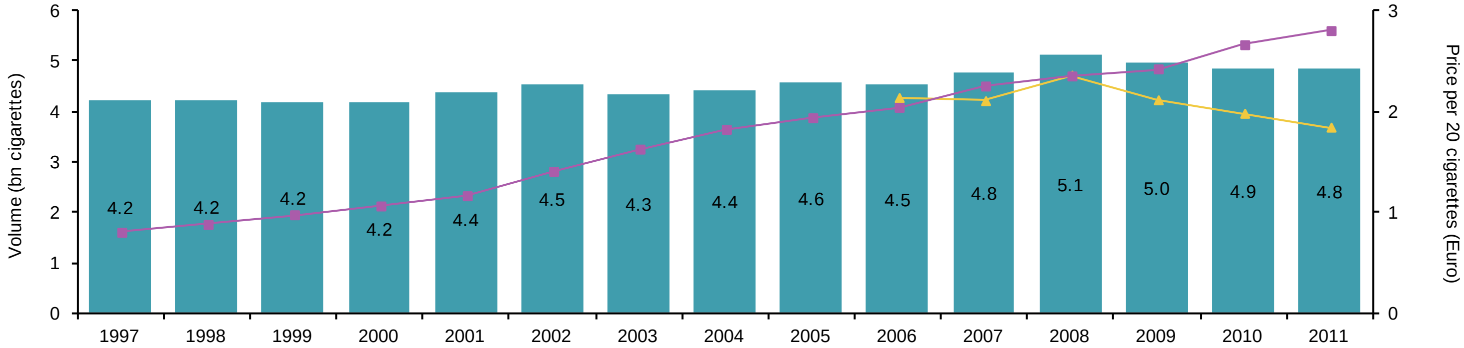
| | | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 16.1% | 13.4% | 15.6% | 15.6% |
| Average annual cigarettes purchased | 3 x 4 | 287 | 382 | 251 | 207 |

Note: (a) ND(L) estimates are based on AC Nielsen research conducted in 2010.
Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research, 2006-2010
(3) Interviews with PMI Local Management

# Historic sales and pricing trends

**Legal domestic cigarette sales declined to 4.8 billion cigarettes in 2011.**

## Historic cigarette prices and legal domestic sales 1997-2011[(1)(2)]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Legal domestic sales* | *0.9%* | *1.1%* | *2.2%* | *-1.4%* | *-0.6%* |
| *Weighted average pack price* | *9.8%* | *13.6%* | *5.7%* | *7.6%* | *5.3%* |
| *Consumption* | *n/a* | *n/a* | *-0.4%[(a)]* | *-6.6%* | *-7.2%* |

Note: (a) CAGR from 2006 to 2009

Sources: (1) In Market Sales supplied by PMI based on data from local distributor
(2) PMI Management and EU Tax Tables
(3) Tobacco News, "The price of cigarettes in Slovenia will go up on Saturday", October 2011.

### Legal domestic sales declined by 0.6% in 2011, whilst the average pack price increased by 5.3%

- The Slovenian government introduced increases to excise duties on tobacco in October 2011[(3)]

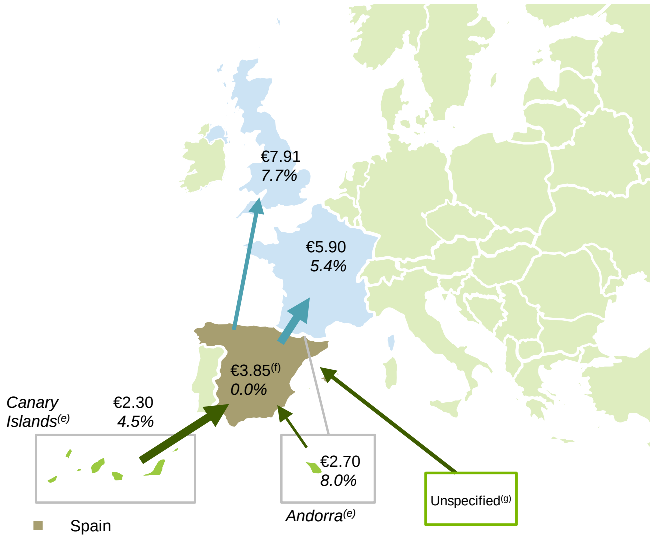
# Contents – country detail

# Market overview

**The share of cigarette consumption in Spain accounted for by counterfeit and contraband increased to 7.2% in 2011.**

**This represents a significant increase from the 2010 level of 2.5%.**

## Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows(1)(2)(a)(b)(c)(d)

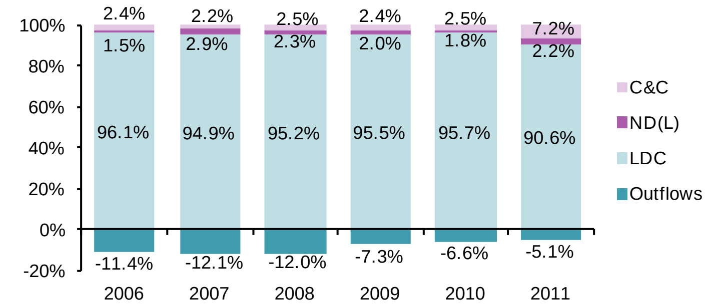



Key:
- Spain
- Top source countries
- Top destination countries

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) Based on a pack of 20 Marlboro King Size as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) Relative cigarette prices in the UK are subject to fluctuations as result of exchange rate changes of the British pound respectively versus the Euro
(d) Arrow size indicates relative cigarette flow volume
(e) Canary Islands and Andorra are not shown to scale
(f) A number of price changes took place in Spain between April and October in 2011, the average Marlboro price for the year per IMS data is €4.15
(g) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". Unspecified market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack

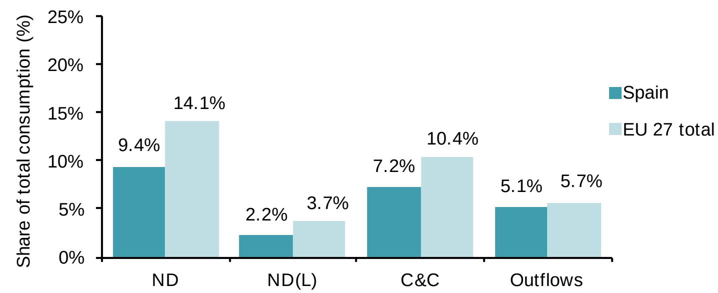
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011
(3) Synovate/Ipsos ND(L) research 2006 - 2008, 2010 and 2011 (Ipsos acquired Synovate in 2011)

## Share of Spain consumption by type 2006-2011(1)(3)




| Volume (bn cigarettes) | 84.4 | 83.7 | 83.7 | 79.5 | 71.1 | 64.3 |
|---|---|---|---|---|---|---|

## Comparison of EU and Spain consumption by type 2011(1)(3)



# Spain
# Total cigarette consumption

**Cigarette consumption declined to 64 billion cigarettes in 2011, compared to 71 billion in the previous year.**

**Non-domestic inflows increased to over 6 billion in 2011, driven by growth in Canary Islands, Unspecified and Andorra market variants.**

**Total Spain cigarette consumption**[1][2]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 90.69 | 89.51 | 89.74 | 81.67 | 72.70 | 61.52 |
| Outflows | -9.61 | -10.10 | -10.04 | -5.76 | -4.68 | -3.30 |
| Legal domestic consumption (LDC) | 81.08 | 79.41 | 79.70 | 75.91 | 68.01 | 58.21 |
| Non-domestic legal (ND(L)) | 1.23 | 2.43 | 1.91 | 1.60 | 1.30 | 1.41 |
| Counterfeit and contraband (C&C) | 2.06 | 1.85 | 2.13 | 1.94 | 1.76 | 4.64 |
| Total non-domestic | 3.29 | 4.28 | 4.03 | 3.54 | 3.06 | 6.05 |
| **Total cigarette consumption** | **84.37** | **83.69** | **83.73** | **79.45** | **71.07** | **64.27** |

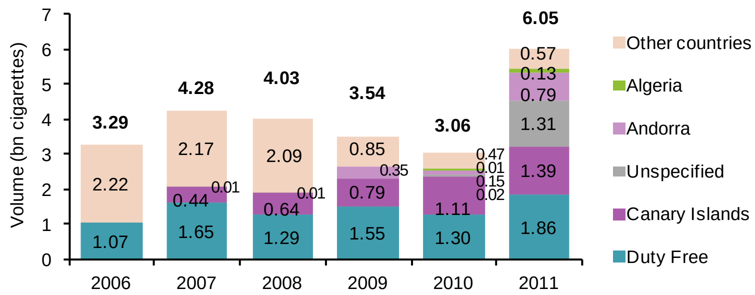
**Spain Other Tobacco Product market**[3][b][c]

| Billion cigarette equivalent | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| OTP (LDS) | 3.57 | 4.08 | 5.50 | 7.57 | 7.74 | 8.73 |

**Cigarette outflows from Spain**[1][2]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| France | 3.42 | 3.25 | 4.38 | 2.40 | 2.08 | 1.57 |
| UK | 4.07 | 4.22 | 3.17 | 1.91 | 1.15 | 0.81 |
| Germany | 1.10 | 0.92 | 0.73 | 0.52 | 0.44 | 0.35 |
| Other EU | 1.03 | 1.23 | 1.26 | 0.57 | 0.75 | 0.42 |
| **Total cigarette outflows** | **9.61** | **10.10** | **10.04** | **5.76** | **4.68** | **3.30** |

**Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011**[1][2][a]



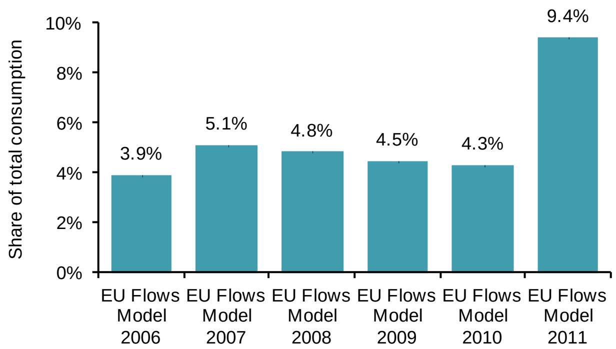

Note: (a) Unspecified market variants are defined as those packs which do not have a market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack
(b) Other Tobacco Products (OTP) include fine cut and pipe tobacco. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams
(b) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Synovate/Ipsos ND(L) research 2006, 2007, 2008, 2010 and 2011
(3) OTP volumes are based on IMS data provided by PMI

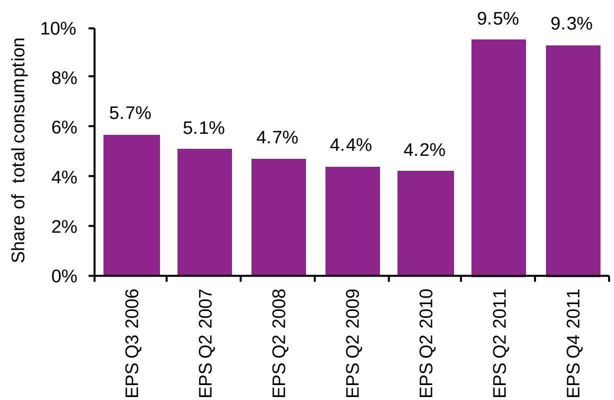
# Comparison of external sources for non-domestic estimates

**The EU Flows Model estimate for non-domestic consumption in 2011 is based on the results of the Empty Pack Surveys conducted in Q2 and Q4 2011.**

### EU Flows Model non-domestic market estimates(1)




### EPS non-domestic market estimates(2)




Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys 2006-2011

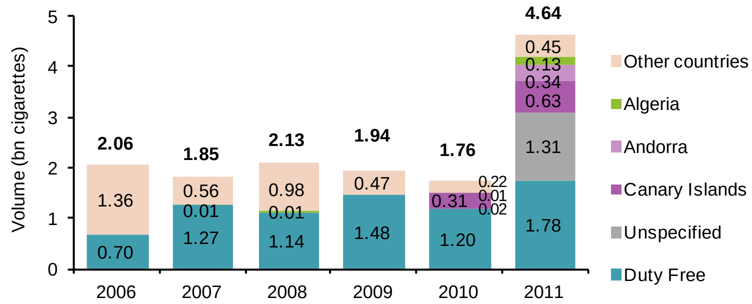
**The EU Flows Model shows that non-domestic incidence in Spain increased significantly to represent 9.4% of consumption in 2011**

- Non-domestic incidence of 9.4% per the EU Flows model in 2011 uses the average of the two Empty Pack Surveys conducted in the year.

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows increased to 4.64 billion cigarettes in 2011, driven by significant increases in Unspecified, Canary Islands and Andorra inflows.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(a)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **2%** | **2%** | **3%** | **2%** | **2%** | **7%** |
| **C&C share of ND:** | **63%** | **43%** | **53%** | **55%** | **57%** | **77%** |

## Unspecified counterfeit and contraband inflows increased to 1.3 billion cigarettes in 2011

- The increase in Unspecified inflows was driven primarily from brands including Ducal, Austin and American Legend.

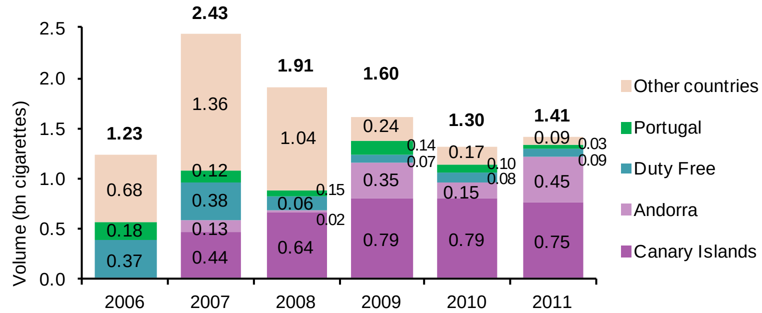
Note: (a) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". 'Unspecified' market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack. Unspecified packs may be counterfeit

Sources: (1) KPMG EU Flows Model
(2) Synovate/Ipsos ND(L) research 2006, 2007, 2008, 2010 and 2011

# Non-domestic (legal) breakdown

**Non-domestic (legal) inflows increased slightly to 1.41 billion cigarettes in 2011.**

## Non-domestic (legal) by origin 2006-2011(1)(2)(a)(b)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **1%** | **3%** | **2%** | **2%** | **2%** | **2%** |
| **ND(L) share of non-domestic:** | **37%** | **57%** | **47%** | **45%** | **43%** | **23%** |

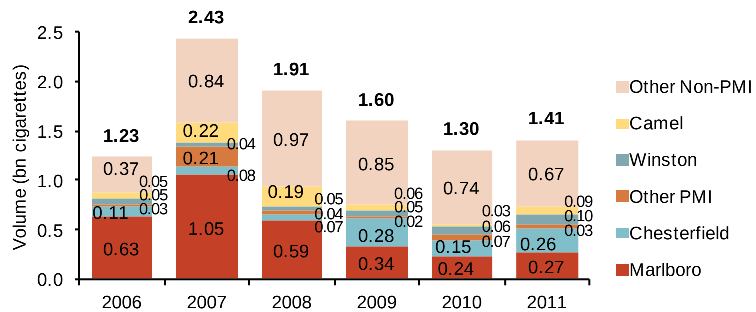
## ND(L) analysis(a)(b)

| | 1 Population 19+ | | 2 Propensity to travel | | Propensity to purchase | | 3 Ave. no. of trips | | 4 Ave. purchases (cigarettes) | | Total ND(L) (cigarettes) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | 37.3 | x | 27% | x | 19% | x | 2.7 | x | 127 | = | 0.65(b) |
| EU rank 2011 | 5 | | 24 | | 21 | | 15 | | 12 | | 8 |

**ND(L) analysis: 2008-2011**

| | | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 4.0% | 4.0% | 5.4% | 5.1% |
| Average annual cigarettes purchased | 3 x 4 | 181 | 181 | 229 | 344 |

## Non-domestic (legal) by brand 2006-2011(1)(2)(a)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of ND(L)** | **62%** | **55%** | **36%** | **40%** | **35%** | **39%** |

**The non-domestic (legal) research has been adjusted to reflect the Canary Islands as an independent destination to the Spanish mainland**.

- The scale of ND(L) from the Canary Islands has been calculated by adjusting prior year ND(L) volumes for changes to tourism trends between Spain and the Canary Islands.

Note: (a) In 2007 Project Star results, Canary Islands and Andorra variant cigarettes were classified as Spanish legal domestic. From 2007 onwards, Canary Islands and Andorra variant cigarettes are classified as non-domestic

(b) ND(L) analysis from Synovate/Ipsos excludes adjustments from inbound tourism flows. Total ND(L) including these inbound tourism flows is 1.41 billion cigarettes.

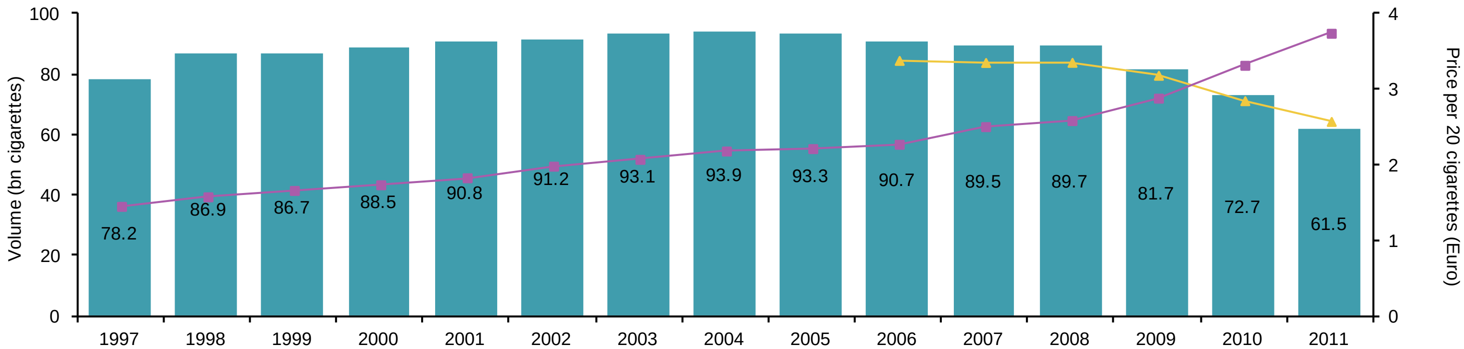
Sources: (1) KPMG EU Flows Model

(2) Synovate/Ipsos ND(L) research 2006, 2007, 2008, 2010 and 2011

# Historic sales and pricing trends

**Legal domestic sales declined to 61.5 billion cigarettes in 2011, having dropped from a level of 89.7 billion in 2008.**

## Historic cigarette prices and legal domestic sales 1997-2011[(1)(2)(a)]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarette legal domestic sales* | *3.8%* | *0.7%* | *-3.3%* | *-13.2%* | *-15.4%* |
| *Average cigarette pack price* | *6.0%* | *4.9%* | *6.8%* | *13.9%* | *12.8%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *-2.0%[(b)]* | *-10.1%* | *-9.6%* |
| *OTP legal domestic sales[(3)(c)]* | *n/a* | *n/a* | *18.6%* | *7.4%* | *12.9%* |

Notes: (a) IMS indicated legal domestic sales of 90.6 billion cigarettes in 2008. However, Project Star 2008 results used legal domestic sales of 89.7 billion cigarettes to reflect an adjustment of 0.9 billion cigarettes to account for additional inventories held in 2008. In 2009 and 2010 the Project Star results use the respective unadjusted IMS legal domestic sales figures. The effect of additional inventories at the end of 2008 has been offset by additional inventories held both at the end of 2009 and 2010. In 2011 Project Star results uses an adjusted IMS legal domestic sales figure as the 0.9 billion adjustment from 2008 has been unwound. The adjustment has been made, in contrast to preceding years, as there did not appear to be additional inventories held at the end of 2011

(b) CAGR is from 2006 to 2009

(c) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams

Sources: (1) In Market Sales supplied by PMI based on data from Logista and Comisionado de Tabacos

(2) PMI Management and EU Tax Tables

(3) OTP volumes are based on IMS data provided by PMI

## Legal domestic sales declined by 15.4% in 2011, whilst the average pack price increased by 12.8%

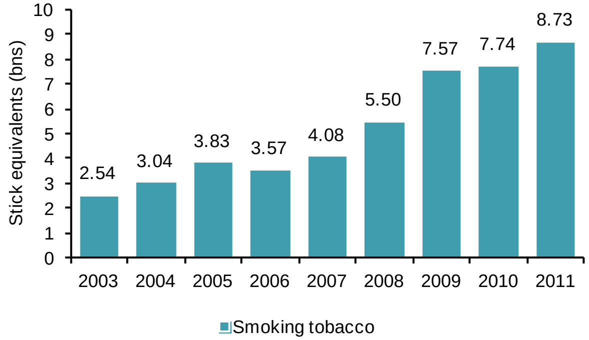
- Excise duty on manufactured cigarettes was increased by around €0.40 a pack in December 2011
- A number of price changes took place in Spain during the summer of 2011
  - Overall the weighted average price of a pack of cigarettes increased by 42 euro cents to €3.73 compared to €3.31 in 2010
- Sales of smoking tobacco increased by 12.9% to 8.73 billion cigarette equivalents in 2011
  - PMI management have observed that some smokers of manufactured cigarettes have started to smoke other tobacco products

Spain

# OTP market size and growth

**Sales of smoking tobacco increased by 12.9% to 8.73 billion cigarette equivalents in 2011.**

## Other tobacco product sales in billion stick equivalents 2003-2011 (1)(a)(b)(c)(d)




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes)** | 93.1 | 93.9 | 93.3 | 90.7 | 89.5 | 89.7 | 81.7 | 71.1 | 64.2 |

| CAGR (%) | 2003-2007 | 2007-2011 | 2010-2011 |
|---|---|---|---|
| *Smoking tobacco* | *12.5%* | *21.0%* | *12.9%* |
| *Manufactured cigarettes* | *-1.0%* | *-9.0%* | *-15.4%* |

Notes: (a) Smoking tobacco volumes have been calculated at one cigarette per 0.75 grams

(b) In 2008 fine cut tobacco is represented by 'Roll Your Own' (RYO) tobacco only, whereas in 2003, 2007 and 2009 to 2011 fine cut tobacco is represented by RYO and 'Make Your Own' (MYO) tobacco. Sales of Cigarillos/Cigars have not been included.

(c) IMS indicated legal domestic sales of 90.6 billion cigarettes in 2008. However, Project Star 2008 results used legal domestic sales of 89.7 billion cigarettes to reflect an adjustment of 0.9 billion cigarettes to account for additional inventories held in 2008. In 2009 and 2010 the Project Star results use the respective unadjusted IMS legal domestic sales figures. The effect of additional inventories at the end of 2008 has been offset by additional inventories held both at the end of 2009 and 2010

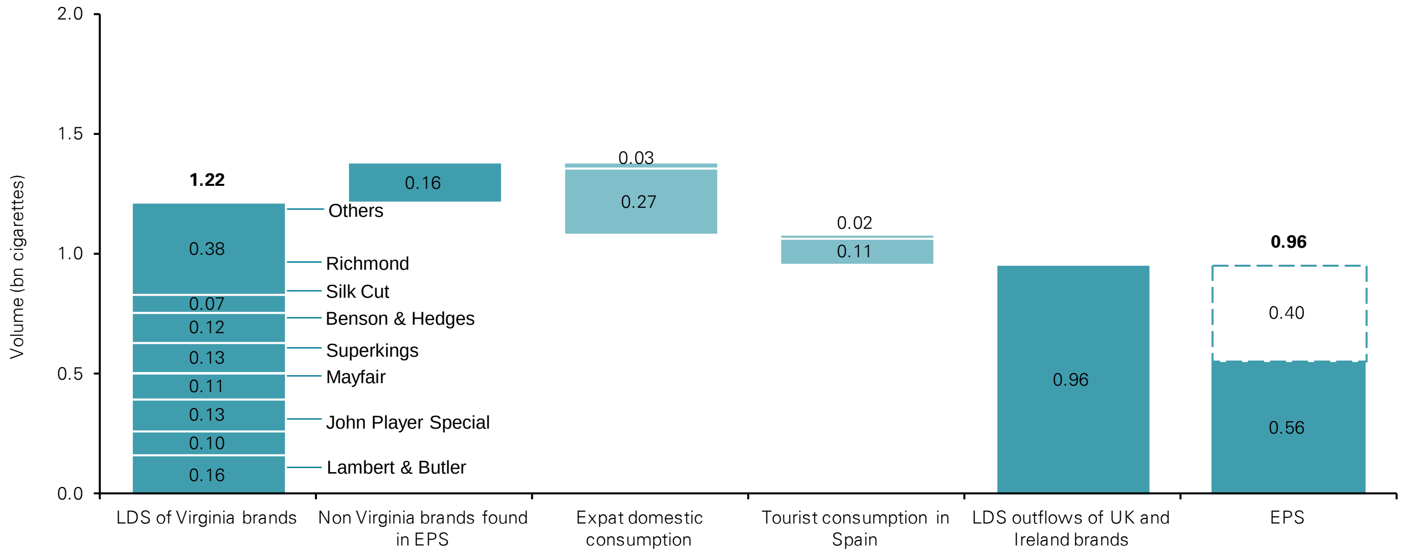
(d) In 2011 Project Star results uses an adjusted IMS legal domestic sales figure as the 0.9 billion adjustment from 2008 has been unwound. The adjustment has been made, in contrast to preceding years, as there did not appear to be additional inventories held at the end of 2011

Source: (1) OTP volumes are based on IMS data provided by PMI

# Country outflow refinements: Spain to the UK and the Republic of Ireland

**Adjustments have been made to outflows from Spain to the UK and Republic of Ireland.**

**Cigarette flows from Spain to the UK and Republic of Ireland[(1)(2)(3)(4)(5)]**




**In 2011, adjustments have been made to outflows from Spain to the UK and Ireland in line with prior years**

- External data suggests the outflows from Spain to the UK and Ireland are understated by Empty Pack Surveys
- The EPS shortfall was estimated at 0.4 billion cigarettes in 2011, compared with estimates of 0.7 billion, 1.3 billion, 2.3 billion and 2.6 billion in 2010, 2009, 2008 and 2007 respectively
- Outflows to the UK and Ireland have therefore been adjusted upwards by 0.34 billion and 0.06 billion cigarettes respectively to reflect sales of UK and Ireland cigarette brands in Spain net of;
  - Estimated consumption by permanent UK and Irish expatriate residents in Spain and,
  - Tourist consumption whilst in Spain

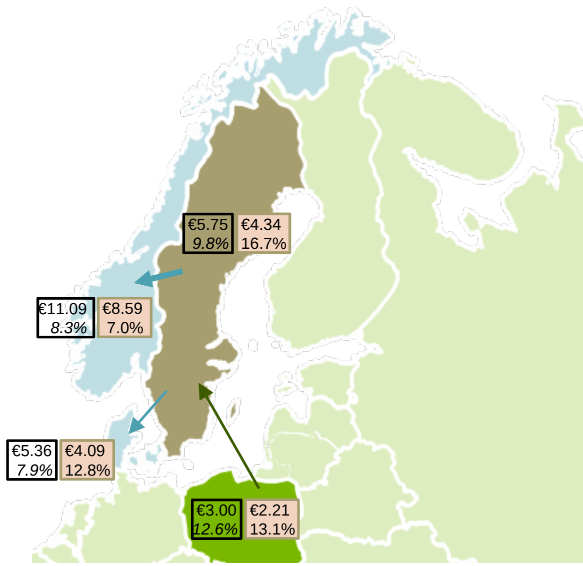
Sources:
(1) In Market Sales supplied by PMI based on data from Logista and Comisionado de Tabacos
(2) UK and Ireland EPS 2011
(3) Adjusted GCTS Ireland (2007) and UK (2010)
(4) Eurostat, 2011
(5) Spanish Institute for Tourist Studies

# Contents – country detail

# Market overview

**The share of cigarette consumption in Sweden accounted for by counterfeit and contraband declined to 9.2% in 2011.**

### Marlboro and cheapest brand 2011 price comparison in Euros, percentage change from 2010 and major flows[(1)(2)(a)(b)(c)(d)]

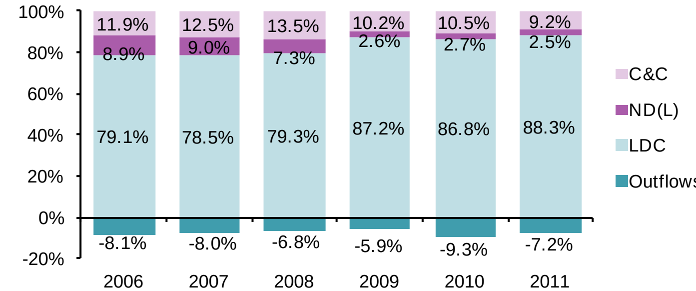



Key:
- Sweden
- Major source country
- Major destination countries
- 2011 pack of 20 Marlboro KS price in Euros and percentage change from 2010
- 2011 pack of 20 cheapest available brand price in Euros and percentage change from 2010

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) Based on pack price of 20 Marlboro King Size and pack price of 20 of the cheapest brand available as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) Relative cigarette prices in Denmark, Sweden, Norway and Poland are subject to fluctuations as a result of exchange rate changes of their respective currencies versus the Euro
(d) Arrow size indicates relative cigarette flow volume

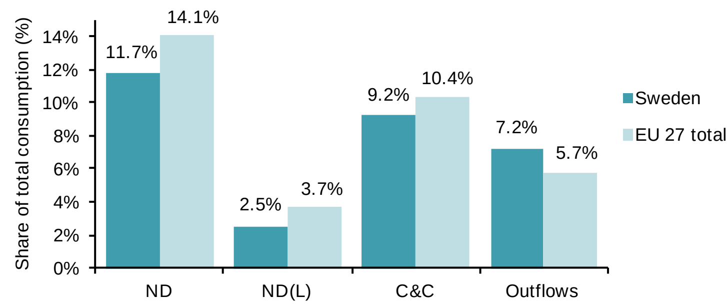
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011
(3) AC Nielsen ND(L) research 2006-2008, Synovate/Ipsos ND(L) research 2010-2011(Ipsos acquired Synovate in 2011)

### Share of Sweden consumption by type 2006-2011[(1)(3)]




| Volume (bn cigarettes) | 7.9 | 7.3 | 7.0 | 6.7 | 6.4 | 6.6 |
|---|---|---|---|---|---|---|

### Comparison of EU and Sweden consumption by type 2011[(1)(3)]



Sweden

# Total cigarette consumption

**Consumption of non-domestic cigarettes declined to 0.78 billion cigarettes in 2011.**

## Total Sweden cigarette consumption [1][2]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 6.93 | 6.33 | 6.00 | 6.22 | 6.18 | 6.33 |
| Outflows | -0.64 | -0.58 | -0.47 | -0.39 | -0.60 | -0.48 |
| Legal domestic consumption (LDC) | 6.29 | 5.74 | 5.52 | 5.83 | 5.58 | 5.85 |
| Non-domestic legal (ND(L)) | 0.71 | 0.66 | 0.51 | 0.17 | 0.17 | 0.17 |
| Counterfeit and contraband (C&C) | 0.95 | 0.92 | 0.94 | 0.68 | 0.68 | 0.61 |
| Total non-domestic | 1.66 | 1.58 | 1.44 | 0.85 | 0.85 | 0.78 |
| **Total cigarette consumption** | **7.95** | **7.32** | **6.97** | **6.68** | **6.43** | **6.63** |

## Sweden Other Tobacco Product market [3][b][c]

| Billion cigarette equivalent | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| OTP (LDS) | 1.05 | 0.81 | 0.33 | 0.39 | 0.38 | 0.38 |

## Cigarette outflows from Sweden [1]

| Billion cigarettes | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Norway | 0.50 | 0.37 | 0.31 | 0.23 | 0.30 | 0.32 |
| Denmark | 0.10 | 0.10 | 0.10 | 0.05 | 0.17 | 0.11 |
| Other EU | 0.04 | 0.12 | 0.06 | 0.11 | 0.13 | 0.05 |
| **Total cigarette outflows** | **0.64** | **0.58** | **0.47** | **0.39** | **0.60** | **0.48** |

Note: (a) Domestic whites are packs of Swedish market variant, but those that are priced below the minimum tax yield. These products are treated as having not been legally sold in Sweden and have therefore been reclassified as non-domestic

(b) Other Tobacco Products (OTP) include fine cut and pipe tobacco. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams

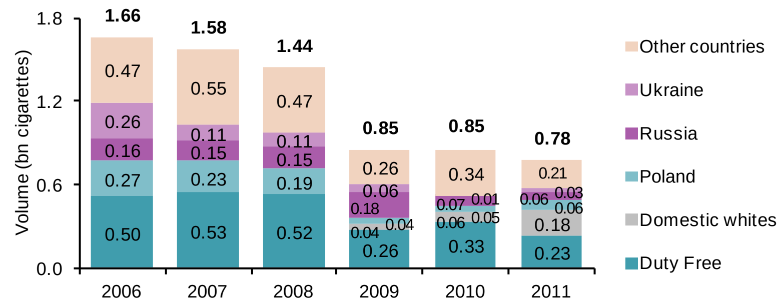
(c) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

(2) AC Nielsen ND(L) research 2006-2008, Synovate/Ipsos ND(L) research 2010-2011

(3) Until 2007, OTP volumes supplied by PMI based on PM Scandinavia, Swedish Match Distribution and tax authorities. 2008 and 2009 volumes based on estimates supplied by PMI. 2010 and 2011 volumes supplied by PMI based on PM Scandinavia, Swedish Match Distribution and tax authorities

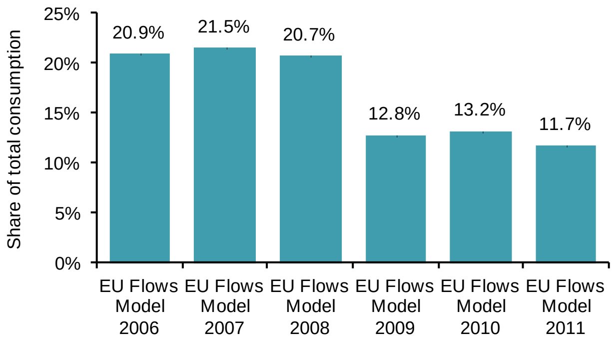
## Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011[1][2][a]



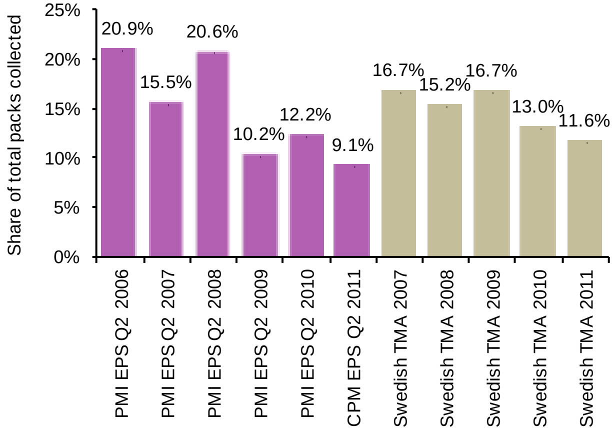
# Comparison of external sources for non-domestic estimates

**The EU Flows Model estimate for non-domestic consumption in 2011 is based on the results of the Empty Pack survey conducted in Q2 2011.**

## EU Flows Model non-domestic market estimates(1)




## EPS and other non-domestic market estimates(2)(3)




Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys 2006-2010, CPM/TMA Empty Pack Survey 2011
(3) 'The non-duty paid market for cigarettes in Sweden', AB Handelns Utredningsintitut 2011

**The Empty Pack Survey results for 2009, 2010 and 2011 were adjusted to reclassify the status of Domestic Whites; those packs priced below the minimum tax yield**

- These products are treated as having not been legally sold in Sweden and have been reclassified as non-domestic;
  - This adjustment resulted in an increase in non-domestic inflows of 0.18 billion cigarettes in 2011, compared to an increase of 0.06 billion cigarettes in 2010.

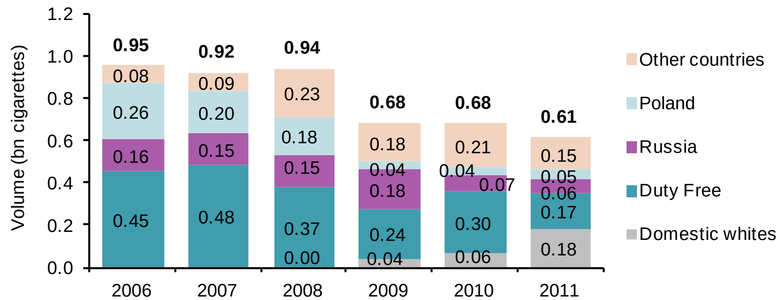
**The Swedish Tobacco Manufacturers Association (TMA) indicates a similar level of non-domestic consumption to the EU Flows Model in 2011**

- In 2009, 2010 and 2011 TMA estimates also include packs priced below the minimum tax yield in the non-domestic estimate.

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows declined to a level of 0.61 billion cigarettes in 2011.**

## Counterfeit and contraband by origin 2006-2011[(1)(2)(3)(a)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **12%** | **13%** | **13%** | **10%** | **11%** | **9%** |
| **C&C share of ND:** | **57%** | **58%** | **65%** | **80%** | **80%** | **78%** |

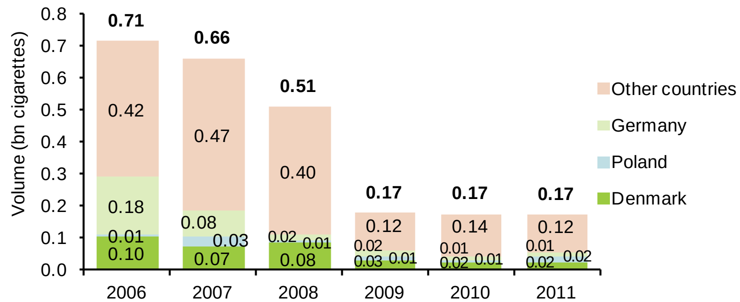
Note: (a) Domestic whites are packs of Swedish market variant, but those that are priced below the minimum tax yield. These products are treated as having not been legally sold in Sweden and have therefore been reclassified as non-domestic

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2007-2008, Synovate/Ipsos ND(L) research 2010-2011
(3) Interviews with and data supplied by PMI Local Management

# Non-domestic (legal) breakdown

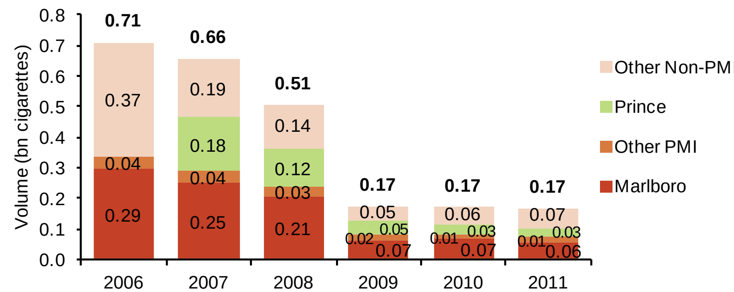
**Non-domestic (legal) inflows remained stable at 0.17 billion cigarettes in 2011.**

## Non-domestic (legal) by origin 2006-2011(1)(2)(3)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **9%** | **9%** | **7%** | **3%** | **3%** | **3%** |
| **ND(L) share of non-domestic:** | **43%** | **42%** | **35%** | **20%** | **20%** | **22%** |

## Non-domestic (legal) by brand 2006-2011(1)(2)(3)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of total** | **48%** | **44%** | **47%** | **46%** | **47%** | **43%** |

## ND(L) analysis

| | 1 Population 19+ | | 2 Propensity to travel | | Propensity to purchase | | 3 Ave. no. of trips | | 4 Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **7.1** | x | **65%** | x | **21%** | x | **1.6** | x | **104** | = | **0.17** |
| EU rank 2011 | **14** | | **7** | | **20** | | **25** | | **16** | | **16** |

**ND(L) analysis: 2008-2011**

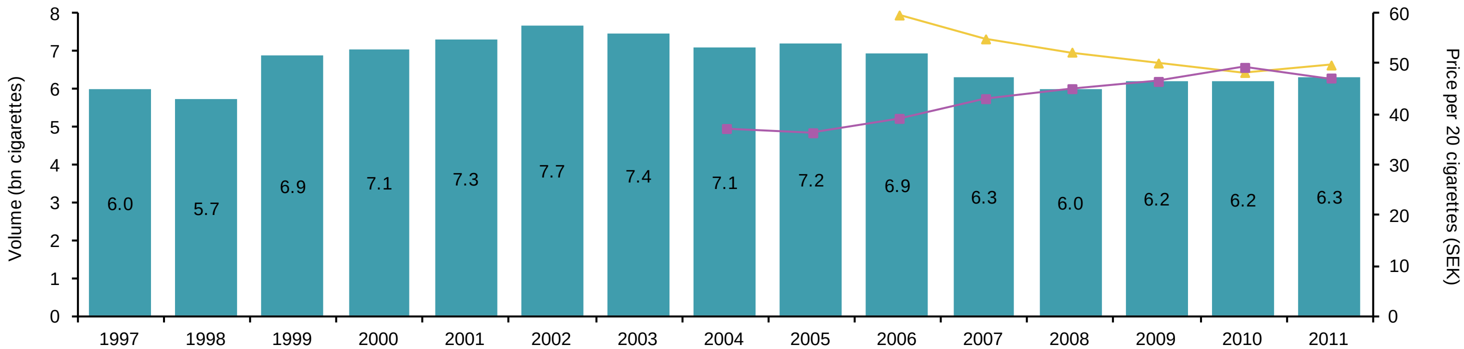
| | | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Propensity to travel and purchase cigarettes | 1 x 2 | 16.2% | 13.8% | 11.9% | 13.9% |
| Average annual cigarettes purchased | 3 x 4 | 427 | 177 | 205 | 171 |

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2007-2008, Synovate/Ipsos ND(L) research 2010-2011
(3) Interviews with and data supplied by PMI Local Management

# Historic sales and pricing trends

**Legal domestic cigarette sales increased to 6.3 billion in 2011.**

## Historic cigarette prices and legal domestic sales 1997-2011[1][2]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarette legal domestic sales* | *5.1%* | *-0.3%* | *-3.6%* | *0.9%* | *2.4%* |
| *Weighted average cigarette pack price* | *n/a* | *n/a* | *6.4%* | *0.7%* | *-4.3%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *-5.6%[(a)]* | *-0.4%* | *3.0%* |
| *OTP legal domestic sales[(3)(b)]* | *n/a* | *n/a* | *-26.7%* | *-1.2%* | *-1.2%* |

Note: (a) CAGR from 2006 to 2009
(b) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams

Sources: (1) In Market Sales supplied by PMI based on data from Swedish Match Distribution
(2) PMI Management and EU Tax Tables
(3) Until 2007, OTP volumes supplied by PMI based on PM Scandinavia, Swedish Match Distribution and tax authorities. 2008 and 2009 volumes based on estimates supplied by PMI. 2010 and 2011 volumes supplied by PMI based on PM Scandinavia, Swedish Match Distribution and tax authorities

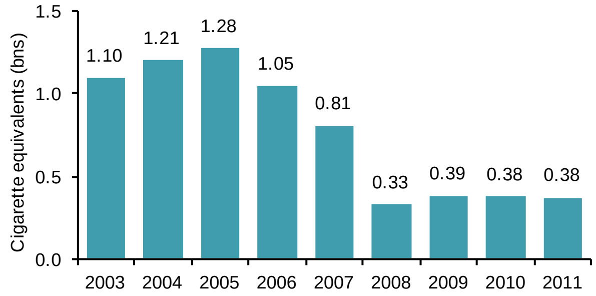
## Legal domestic sales increased by 2.4% in 2011, whilst the weighted average pack price declined by 4.3%

- The price decline for the weighted average pack price reflected a higher proportion of 'Low' priced cigarettes being sold in 2011.
  - The market share of the 'Low' price category rose from 40.5% to 41.2% in 2011

# OTP market size and growth

**Sales of smoking tobacco products remained broadly stable at 0.38 billion cigarette equivalents in 2011.**

## Smoking tobacco sales in billion cigarette equivalents 2003-2011[(1)(a)(b)]




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes):** | 7.4 | 7.1 | 7.2 | 6.9 | 6.3 | 6.0 | 6.2 | 6.2 | 6.3 |

| **CAGR (%)** | **2003-2007** | **2007-2011** | **2010-2011** |
|---|---|---|---|
| *Smoking tobacco* | *-7.3%* | *-17.3%* | *-1.2%* |
| *Manufactured cigarettes* | *-4.0%* | *0.0%* | *2.4%* |

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

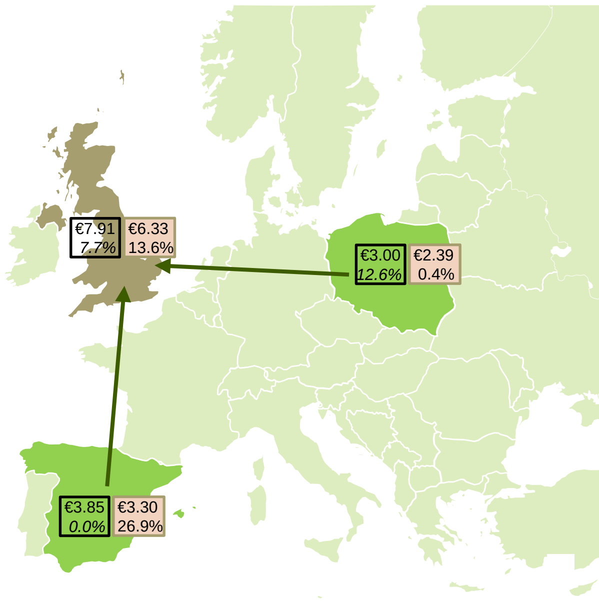
Source: (1) Until 2007, OTP volumes supplied by PMI based on PM Scandinavia, Swedish Match Distribution and tax authorities. 2008 and 2009 volumes based on estimates supplied by PMI. 2010 and 2011 volumes supplied by PMI based on PM Scandinavia, Swedish Match Distribution and tax authorities

# Contents – country detail

# Market overview

**The share of cigarette consumption in the United Kingdom accounted for by counterfeit and contraband declined to 10.1% in 2011**

### Marlboro 2011 price comparison in Euros, percentage change from 2010 and major flows[1][2][a][b][c][d][e]

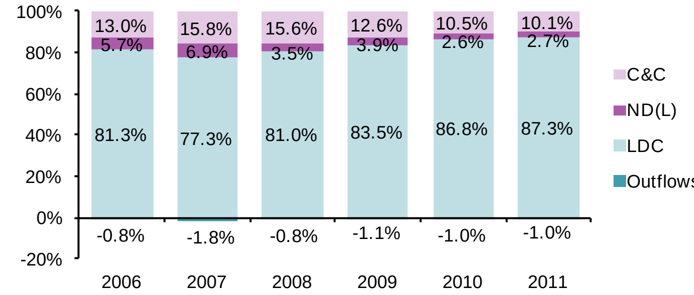



Key:
- United Kingdom
- Top two source countries
- 2011 pack of 20 Marlboro KS price in Euros and percentage change from 2010
- 2011 pack of 20 cheapest available brand price in Euros and percentage change from 2010

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) Based on pack price of 20 Marlboro King Size and pack price of 20 of the cheapest brand available as at July 1st 2010 and 2011. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2010 and June 2011
(c) A number of price changes took place in Spain between April and October in 2011 the average Marlboro price for 2011 per IMS data was €4.15.
(d) Relative cigarette prices in Poland and the United Kingdom are subject to fluctuations as result of exchange rate changes of their respective currencies versus the Euro
(e) Arrow size indicates relative cigarette flow volume

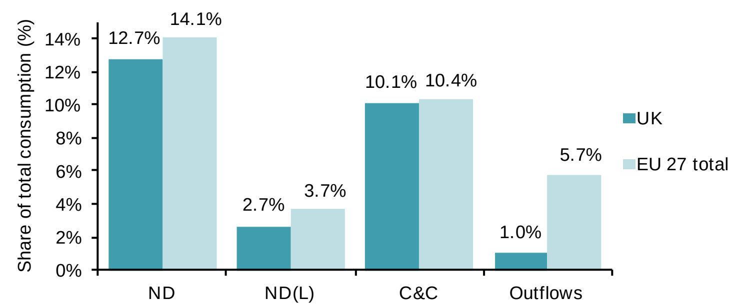
Sources:
(1) KPMG EU Flows Model and interviews with PMI Local Management
(2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2010 and June 2011
(3) AC Nielsen ND(L) research 2006, 2008-2011

### Share of United Kingdom consumption by type 2006-2011[1][3]




| Volume (bn cigarettes) | 59.7 | 59.4 | 55.0 | 53.5 | 51.1 | 49.7 |
|---|---|---|---|---|---|---|

### Comparison of EU and UK consumption by type 2011[1][3]



# Total cigarette consumption

**Consumption of non-domestic cigarettes declined to 6.33 billion cigarettes in 2011.**

## Total UK cigarette consumption(1)(2)

| **Billion cigarettes** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
|---|---|---|---|---|---|---|
| Legal domestic sales (LDS) | 49.01 | 46.99 | 44.97 | 45.27 | 44.85 | 43.89 |
| Outflows | -0.48 | -1.05 | -0.47 | -0.57 | -0.50 | -0.49 |
| Legal domestic consumption (LDC) | 48.53 | 45.94 | 44.50 | 44.70 | 44.35 | 43.40 |
| Non-domestic legal (ND(L)) | 3.37 | 4.08 | 1.91 | 2.10 | 1.35 | 1.32 |
| Counterfeit and contraband (C&C) | 7.77 | 9.39 | 8.55 | 6.75 | 5.38 | 5.01 |
| Total non-domestic | 11.14 | 13.47 | 10.46 | 8.85 | 6.73 | 6.33 |
| **Total cigarette consumption** | **59.67** | **59.41** | **54.96** | **53.54** | **51.08** | **49.74** |

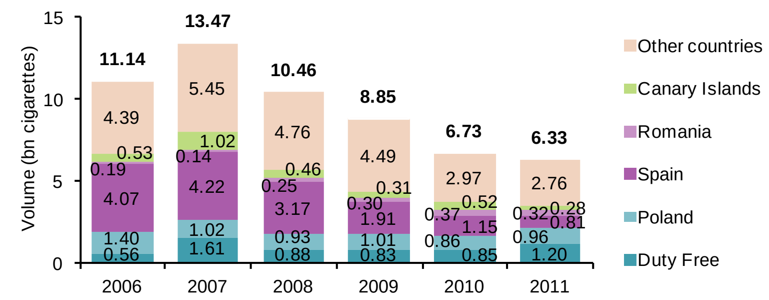
## UK Other Tobacco Product market(3)(a)(b)

| **Billion cigarette equivalent** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
|---|---|---|---|---|---|---|
| OTP (LDS) | 5.06 | 5.43 | 5.43 | 6.15 | 7.18 | 7.61 |

## Cigarette outflows from UK(1)

| **Billion cigarettes** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** |
|---|---|---|---|---|---|---|
| Ireland | 0.03 | 0.14 | 0.19 | 0.35 | 0.20 | 0.24 |
| Netherlands | 0.20 | 0.25 | 0.15 | 0.11 | 0.20 | 0.14 |
| Other EU | 0.25 | 0.65 | 0.12 | 0.11 | 0.10 | 0.11 |
| **Total cigarette outflows** | **0.48** | **1.05** | **0.47** | **0.57** | **0.50** | **0.49** |

## Total non-domestic inflows (ND(L) and C&C) by origin 2006-2011(1)(2)




Notes: (a) Other Tobacco Products (OTP) include fine cut and pipe tobacco. OTP volumes are shown on an equivalent sticks basis and have been calculated at one cigarette per 0.75 grams

(b) Consumption of OTP will differ from the legal domestic sales measure due to inflows and outflows of product from/to other countries. Measurement of these flows is outside of the scope of Project Star.

Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

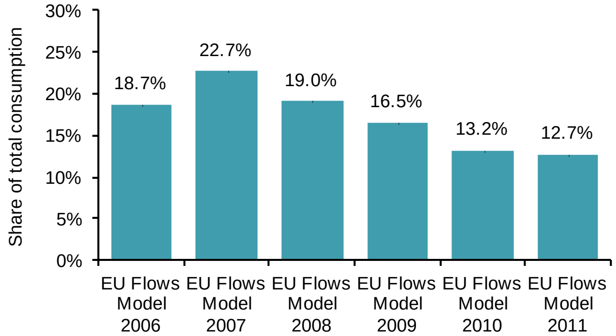
(2) AC Nielsen ND(L) research 2006, 2008-2011

(3) OTP volumes up to 2009 supplied by HM Revenue and Customs. Volumes for 2011 based on ITL estimates and sales to trade data. 2011 CAGR rates use ITL data for 2011 and HMRC data for 2007

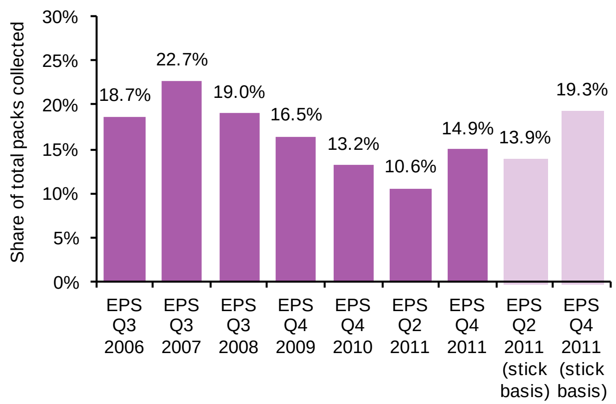
# Comparison of external sources for non-domestic estimates (1/2)

**The EU Flows Model estimate for non-domestic consumption in 2011 is calculated using the Empty Pack Survey results from the second and fourth quarters of 2011.**

### EU Flows Model non-domestic market estimates(1)




### EPS market estimates(2)




Sources: (1) KPMG EU Flows Model
(2) PMI Empty Pack Surveys 2006-2011

**The 2011 non-domestic incidence in the UK of 12.7% is calculated using the average of the two Empty Packs Surveys conducted in 2011**

- The first EPS took place during May and June, and the second during October and November.

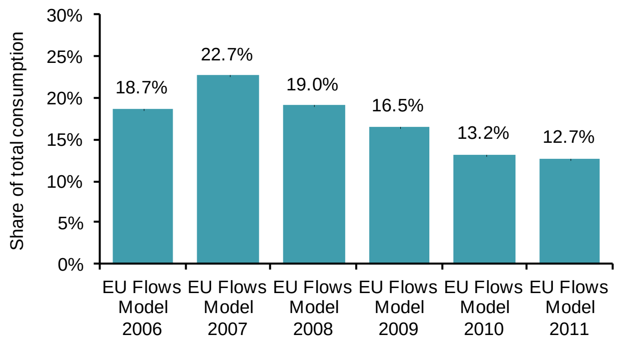
**For reasons of consistency of treatment across the EU, Project Star calculates non-domestic incidence based on the share of packs collected by source market**

- Using a stick based approach, which allocates a weighting to each pack to reflect the number of cigarettes, the non-domestic incidence for the UK would be 16.6% in 2011, a difference of 3.9 percentage points from the pack based measure used in this report;
  - This difference reflects that a significant proportion of domestic packs collected were packets of 10 cigarettes, whilst nearly all non-domestic packs were packets of 20 cigarettes.
  - The difference between the pack and stick based approach has been consistent for the period for which data is available.
- It is not currently possible to measure non-domestic incidence using the stick based methodology in all EU Member States.

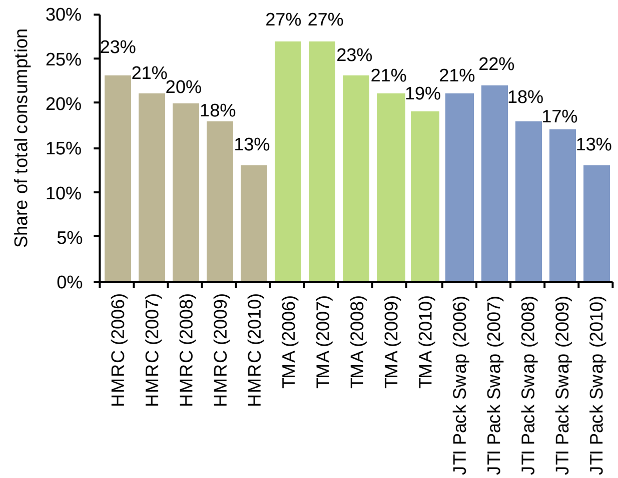
# Comparison of external sources for non-domestic estimates (2/2)

**The trend in the EU Flows Model results is in line with the estimates of HMRC, UK Tobacco Manufactures Association and the JTI pack swap survey.**

**EU Flows Model non-domestic market estimates[(1)]**




**Other non-domestic market estimates[(2)(3)(4)(a)]**




**The HMRC estimates of non-domestic incidence between 2007 and 2010 are broadly in line with EU Flows Model estimates,**

- Updated HMRC estimates for 2011 are not currently available.

**The UK Tobacco Manufactures Association (TMA) has historically estimated a much higher level of non-domestic incidence compared to the EU Flows Model, but the estimates share a directionally consistent trend**

- 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, as well as empty pack collection samples. These empty pack collections are carried out in various locations including sports events[(5)].

Note (a) HMRC non-domestic incidence estimates. Estimates for 2008 and 2009 have been restated in 2011

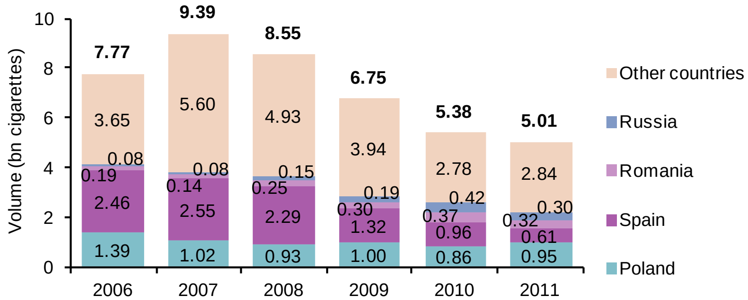
Sources: (1) KPMG EU Flows Model
(2) HMRC estimates of illicit market share for cigarettes in the UK. Estimates are based on the mid point of a range. 'Measuring Tax Gaps 2011', 21st September 2011
(3) Estimates of non-UK Duty paid cigarette consumption, Tobacco Manufacturer's association, 2007-2010
(4) JTI Pack Swap Survey. 'Sizing the non-duty paid market', UK TMA, March 2011
(5) Discussion with Ian Howell, TMA, 9th December 2008

# Counterfeit and contraband breakdown

**Counterfeit and contraband inflows declined to 5.01 billion cigarettes in 2011.**

**Poland, Spain, Romania and Russia are the major sources of illicit cigarettes in the UK.**

**Counterfeit and contraband by origin 2006-2011**[(1)(2)(3)]




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **C&C share of consumption:** | **13%** | **16%** | **16%** | **13%** | **11%** | **10%** |
| **C&C share of ND:** | **70%** | **70%** | **82%** | **76%** | **80%** | **79%** |

**Of the 'Other countries', Unspecified market variants accounted for approximately 0.25 billion of C&C inflows in 2011**[(a)]

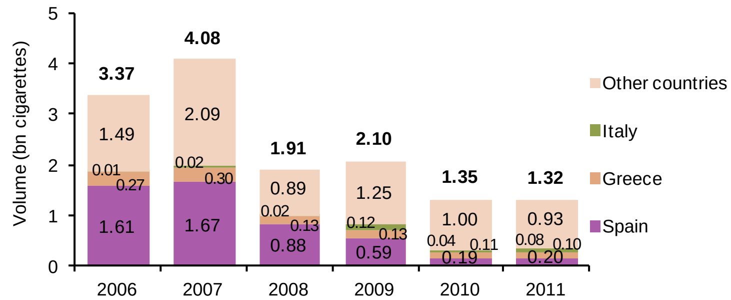
Note: (a) Since 2009, packs which had no clear indication of origin were classified as "Unspecified". 'Unspecified' market variants are defined as those packs which do not bear any market-specific health warning or tax stamp, or mention of 'Duty Free' on the pack. Unspecified packs may be counterfeit

Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, 2008-2011
(3) Interviews with PMI Local Management

# Non-domestic (legal) breakdown

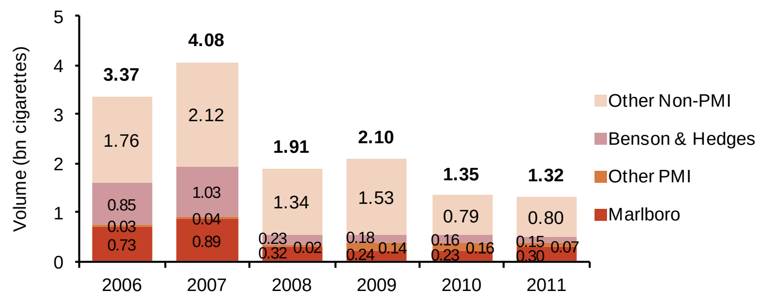
**Non-domestic (legal) inflows remained broadly stable at 1.32 billion cigarettes in 2011.**

## Non-domestic (legal) by origin 2006-2011(1)(2)(3)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **ND(L) share of consumption:** | **6%** | **7%** | **3%** | **4%** | **3%** | **3%** |
| **ND(L) share of non-domestic:** | **30%** | **30%** | **18%** | **24%** | **20%** | **21%** |

## Non-domestic (legal) by brand 2006-2011(1)(2)(3)




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| **PMI share of total** | **23%** | **23%** | **17%** | **18%** | **29%** | **28%** |

## ND(L) analysis

| | (1) Population 19+ | | (2) Propensity to travel | | Propensity to purchase | | (3) Ave. no. of trips | | (4) Ave. purchases (cigarettes) | | **Total ND(L) (cigarettes)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Values 2011 | **48.3** | x | **54%** | x | **15%** | x | **1.3** | x | **265** | = | **1.32** |
| EU rank 2011 | **3** | | **12** | | **23** | | **27** | | **4** | | **5** |

**ND(L) analysis: 2008-2011**

| | **2008** | **2009** | **2010** | **2011** |
|---|---|---|---|---|
| Propensity to travel and purchase cigarettes 1 x 2 | 5.7% | 12.1% | 9.7% | 8.1% |
| Average annual cigarettes purchased 3 x 4 | 711 | 363 | 287 | 339 |

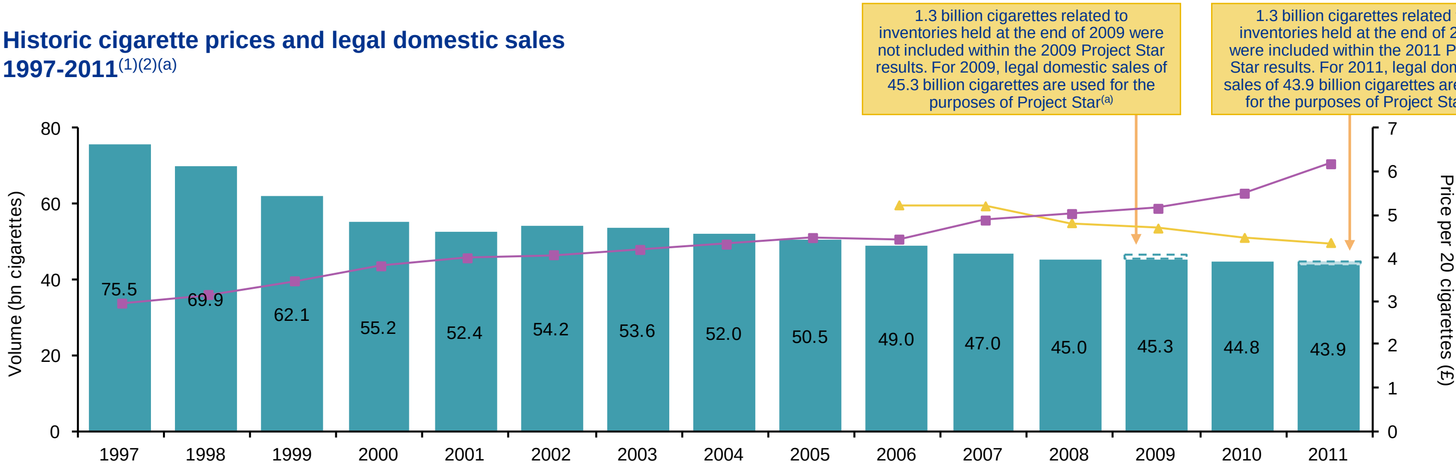
Sources: (1) KPMG EU Flows Model
(2) AC Nielsen ND(L) research 2006, 2008-2011
(3) Interviews with PMI Local Management

# Historic sales and pricing trends

**Legal domestic cigarette sales declined to 43.9 billion in 2011.**

**Legal domestic sales declined by 2.1% in 2011, whilst the average pack price increased by 12.4%**

## Historic cigarette prices and legal domestic sales 1997-2011[(1)(2)(a)]




| CAGR (%) | 1997-2001 | 2001-2005 | 2005-2009 | 2009-2011 | 2010-2011 |
|---|---|---|---|---|---|
| *Manufactured cigarette legal domestic sales* | *-8.8%* | *-0.9%* | *-2.7%* | *-1.5%* | *-2.1%* |
| *Weighted average cigarette pack price* | *7.9%* | *2.8%* | *3.6%* | *9.6%* | *12.4%* |
| *Manufactured cigarette consumption* | *n/a* | *n/a* | *-3.5%[(b)]* | *-3.6%* | *-2.6%* |
| *OTP legal domestic sales[(3)(c)]* | *n/a* | *n/a* | *6.9%* | *11.3%* | *6.0%* |

Notes: (a) Project Star 2009 results use legal domestic sales of 45.3 billion, reflecting a downward adjustment of 1.3 billion from IMS due to an increase in inventories held in December 2009, prior to the January 2010 VAT increase. The increased inventories from 2009 of 1.3 billion were carried forward and included within legal domestic sales in 2010. An equal downward adjustment of 1.3 billion was made in 2010 to account for an increase in inventories held in December 2010, prior to the January 2011 VAT increase. As a result, Project Star 2010 results use IMS legal domestic sales of 44.8 billion. The increased inventories from 2010 of 1.3 billion were carried forward and included within legal domestic sales in 2011. Project Star 2011 results therefore use legal domestic sales of 43.9 billion.
(b) CAGR from 2006 to 2009
(c) Growth in billion cigarette equivalents with volumes calculated at one cigarette per 0.75 grams

Sources: (1) In Market Sales supplied by PMI based on ITL's estimate of Total market volumes
(2) PMI Management and EU Tax Tables
(3) OTP volumes up to 2009 supplied by HM Revenue and Customs. Volumes for 2011 based on ITL estimates. 2011 CAGR rates use ITL data for 2011 and HMRC data for 2007

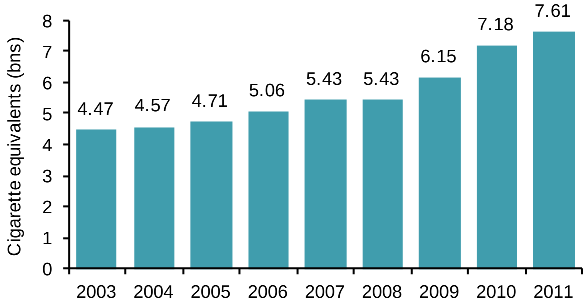
## In March 2011, the structure of excise duty on manufactured cigarettes was changed

- The specific excise per thousand cigarettes increased from £119.03 to £154.95 per thousand cigarettes. This had the effect of adding around £0.33 to the price of a packet of premium cigarettes, and around £0.50 to the price of a packet of economy cigarettes, increasing the weighted average pack price in the year.
- The ad-valorem excise on retail pack price declined from 24% to 16.5%.
- VAT increased from 17.5% to 20% in January 2011.

# OTP market size and growth

**In Market Sales show that sales of fine cut tobacco increased by 6.0% in 2011 to reach 7.61 billion cigarette equivalents.**

**Fine cut tobacco sales in billion cigarette equivalents 2003-2011[(1)(2)(a)]**




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Cigarette sales (bn cigarettes):** | 53.6 | 52.0 | 50.5 | 49.0 | 47.0 | 45.0 | 45.3 | 44.8 | 43.9 |

| CAGR (%) | 2003-2007 | 2007-2011 | 2010-2011 |
|---|---|---|---|
| *Fine cut tobacco* | *5.0%* | *8.8%* | *6.0%* |
| *Manufactured cigarettes* | *-3.2%* | *-1.7%* | *-2.1%* |

**HMRC estimates that non-domestic consumption accounted for 53% of handrollling tobacco smoked in the UK in the year to March 2010[(2)]**

Note: (a) Smoking tobacco volumes have been calculated at one cigarette per 0.75 grams

Sources: (1) OTP volumes up to 2009 supplied by HM Revenue and Customs. Volumes for 2011 based on ITL estimates and sales to trade data. 2011 CAGR rates use ITL data for 2011 and HMRC data for 2007.

(2) HMRC estimates of non-domestic share for hand rolled tobacco in the UK. Estimates are based on the mid point of a range. 'Measuring Tax Gaps 2011', 21st September 2011

# Contents

# Overview

| | |
|---|---|
| **We have developed a methodology for quantifying counterfeit and contraband 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**<br>■ Our approach comprises four steps: initial information assessment, preliminary methodology design, pilot and refinement, and then implementation<br>■ 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**<br>■ The EU Flows model is an iterative data driven model that uses legal domestic sales, Empty Pack Survey results and consumer research to calculate the volume of non-domestic inflows and outflows to and from each EU Member State and to quantify the non-domestic (legal) and counterfeit and contraband cigarettes consumed in each country and the EU as a whole.<br>■ 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<br>■ Empty Pack Survey results provide the most credible indication of the incidence of non-domestic and PMI counterfeit packs by country of origin |
| **Primary market research was used to quantify legal non-domestic cigarette purchases** | **The key objective of the market research programme is to quantify genuine, legal non-domestic tobacco purchases (cross border shopping) in each market**<br>■ ND(L) data for 2011 Project Star results is based upon approximately 162,000 full interviews and over 14,000 gross respondents. This research was updated in 17 Member States during 2011<br>■ Primary research is critical to deliver robust results as no other sources of sufficient detail and accuracy are available for legal cross border shopping<br>**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**<br>■ There are broadly two types of limitations: scope exclusions and source limitations, which are covered in more detail in this section<br>– 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<br>– 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**<br>■ In nearly all instances, overall country results and flows from the EU Flows Model appeared reasonable<br>■ However, in a limited number of instances, specific adjustments were made to country-to-country flows on the basis of sound supporting evidence |

# Design and development of the methodology

**The methodology was designed and tested through several steps, and according to five underlying principles.**

## Methodology design steps

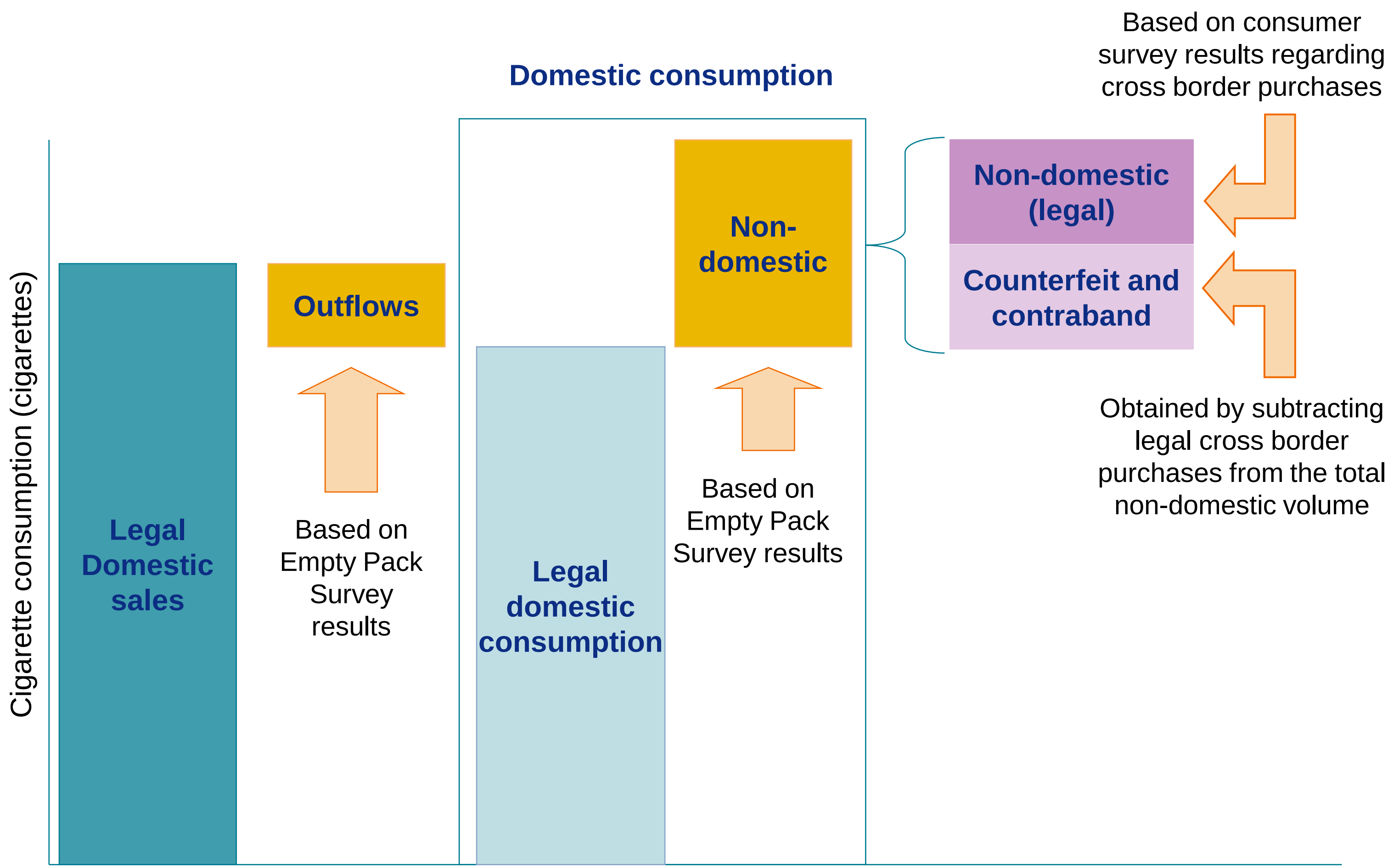
| Information assessment | Methodology design | Pilot and refine | Implement |
|---|---|---|---|
| ▪ Review available internal information in pilot markets<br>▪ Assess quality of information<br>▪ Identify gaps in data availability and coverage | ▪ Develop preliminary approach to C&C measurement<br>▪ PMI and OLAF approval to test methodology in three-market pilot process | ▪ Test methodology in three pilot markets (Finland, Germany and Poland) during 2006<br>▪ Evaluate results and refine methodology | ▪ Roll out approach to remaining 25 EU markets for 2006<br>▪ Addition of Romania and Bulgaria in 2007<br>▪ Scope to add further Accession States in future years where appropriate |

## Methodology design principles

| Consistent | Corroborated | Fact-based | Pragmatic | Flexible |
|---|---|---|---|---|
| ▪ Our approach must be able to be applied in as standardised a manner as possible across markets to ensure all Member States are treated equally and fairly | ▪ We will seek to corroborate key sources and overall methodology results to limit excessive reliance on individual sources | ▪ Our approach and conclusions need to be data-driven and impartial | ▪ Perfect measurement of the C&C trade is not possible. We need to have a practical and feasible approach that will deliver results that are robust, credible and fit for purpose | ▪ We need to be flexible in our approach and thinking in order to identify situations where a rigid methodology would fail to capture the market reliably<br>▪ This flexibility includes:<br>– modifying and improving our approach through the pilot phase and beyond<br>– customising our approach where necessary to cater for specific market differences |

# Overview of Project Star Methodology

**Project Star uses legal domestic sales, Empty Pack Survey results and consumer research to quantify the volume of counterfeit and contraband cigarettes consumed in the EU**

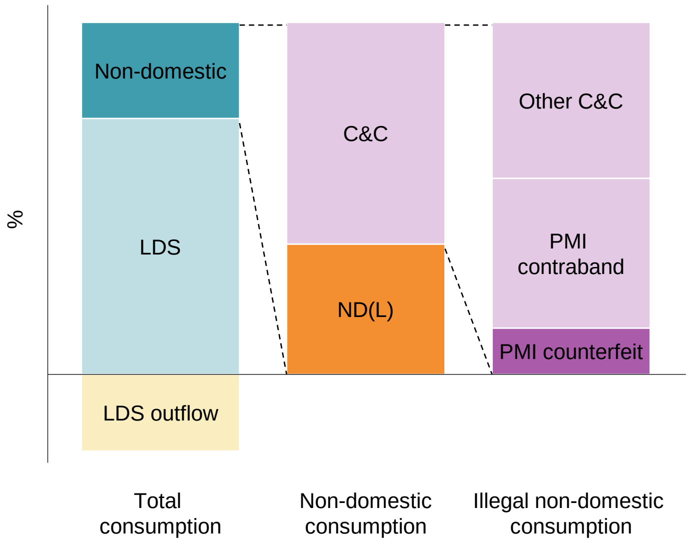



**The Project Star methodology was developed by KPMG and approved by OLAF. It has been deployed on a consistent basis since 2006, enabling comparisons to be made between counterfeit and contraband volumes from year to year**

# Key terms and definitions

**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

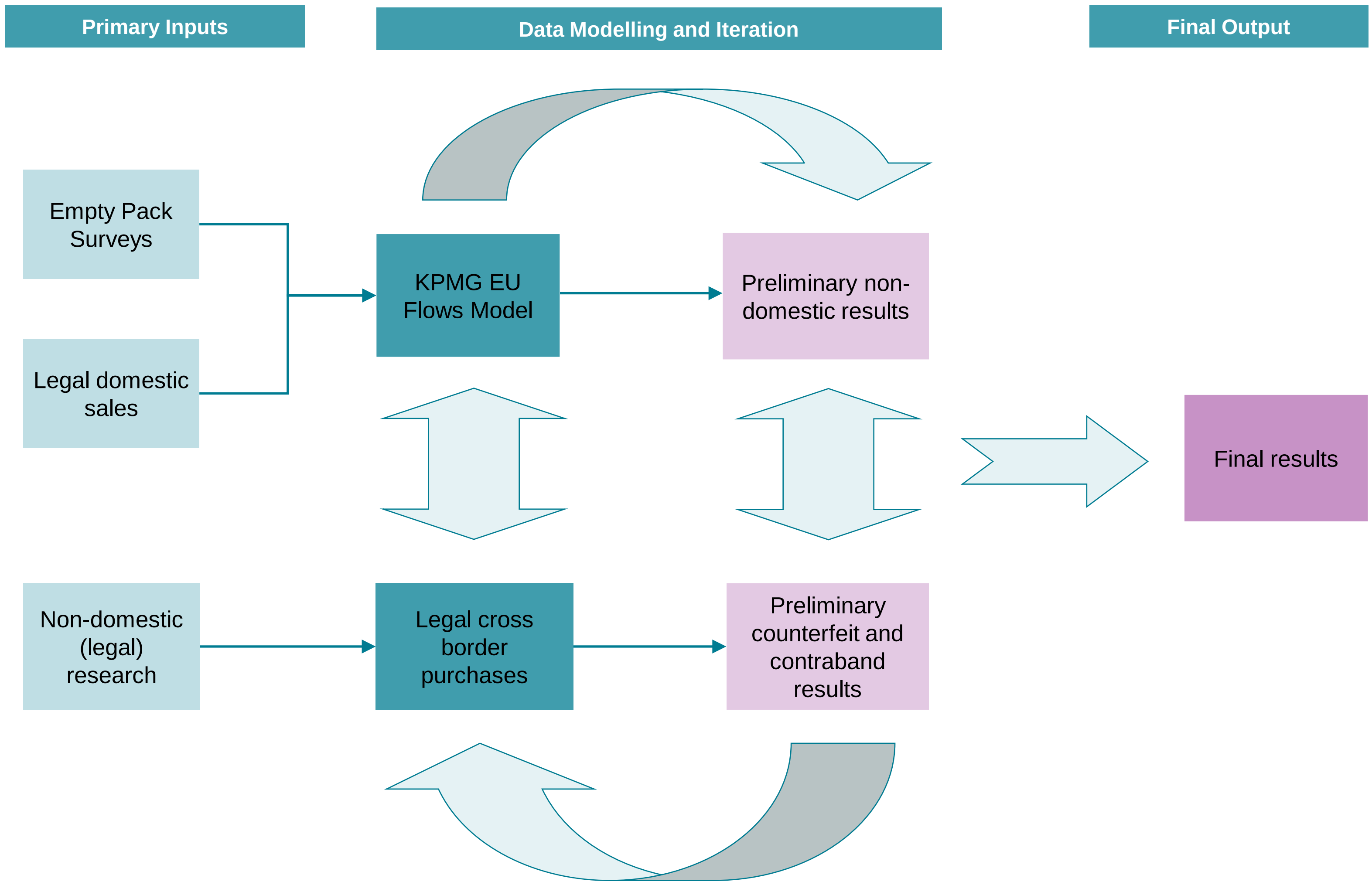
- **Legal domestic sales** are the key starting point for our methodology and are derived in most instances from In Market Sales
  - legal domestic sales are defined as sales of genuine domestic product through legitimate, domestic channels based on In Market Sales (IMS) data
- **Outflows** are defined as purchases of domestic product which are taken out of the country of purchase and consumed elsewhere
  - EPS provides a consistent data 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
  - with the exception of outflows from Sweden to Norway, 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 understood 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 and which exceeds legal border limits or acquired without taxes for export purposes to be 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 PMI Counterfeit is not included within the definition of Contraband. Illicit flows of PMI brands are split into their separate Counterfeit and Contraband components. Illicit volumes of other manufacturer brands are reported as combined Counterfeit and Contraband flows

# 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.**



# Corroboration of results

**We have sought to triangulate our findings against alternative sources wherever possible.**

## Methodology steps and key information sources

| | 1. | 2. | 3. | 4. | 5. | 6. |
|---|---|---|---|---|---|---|
| Calculation step | **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 In Market Sales (IMS) 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 | ▪ Tax stamp receipts<br>▪ Federal statistics | ▪ PMI management estimates<br>▪ Border sales surveys | ▪ Consumption trends based on smoking prevalence and average daily consumption data from GCTS | ▪ PMI Duty Free market estimates<br>▪ External research<br>▪ Expert interview programme | ▪ Expert interview programme<br>▪ Seizure data | ▪ Expert interview programme<br>▪ Seizure data |

Preliminary results are subject to testing and review with local PMI management in each of the 27 EU markets

# Primary information sources and tools – Empty Pack Surveys (1 of 2)

**Empty Pack Surveys provide a highly objective and robust view of the population samples and, notwithstanding some scope constraints, represent the most credible indication of the incidence of non-domestic and counterfeit packs.**

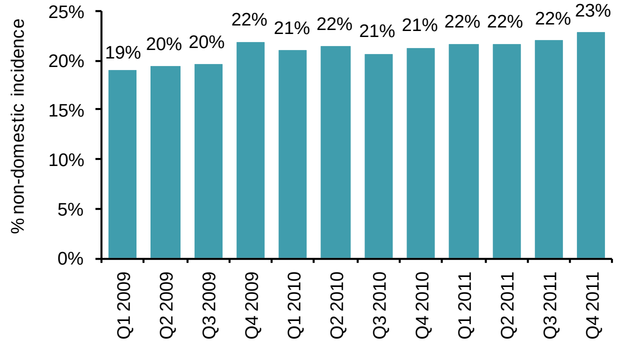
| | |
|---|---|
| **Overview** | **Empty Pack Surveys are a system of collecting discarded empty cigarette packs, the results of which are used to estimate the share of non-domestic and counterfeit packs in each of the markets**<br>■ Results are based on a large sample of packs collected in various cities throughout the countries, although the collection plan differs by country. Accuracy and credibility of results is driven by sound design of the sampling plan<br>■ Results are not subject to respondent behaviour and are therefore less prone to sampling errors than many other alternative methodologies<br>■ Evidence is based on collected packs: no discrepancies or scope for respondent confusion<br>■ Data reflects actual overall non-domestic share and provides good snapshot of brands consumed |
| **Process** | **Empty Pack Surveys measure shares of total consumption and avoid potential errors associated with estimating volumes**<br>■ 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)<br>– in cases where tax stamps are not shown on a packet, health warning and packaging characteristics are used to define the source market<br>■ 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<br>■ Empty Pack Surveys can also be used to extrapolate overall consumption in the market by projecting legal domestic sales net of outflows, using the percentage of non-domestic cigarettes in the market as found through Empty Pack Surveys |
| **Coverage** | **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**<br>■ Large surveys (10,000 packs or more collected): Germany, Poland, Austria, UK, Hungary, Czech, France, Italy, Spain, Romania, Greece, Lithuania, Sweden, Bulgaria, Ireland, Netherlands.<br>■ Medium surveys (5,000 -9,999 packs collected): Belgium, Latvia, Estonia, Denmark, Finland, Slovakia.<br>■ Small surveys (1,000 – 4999 packs collected): Portugal, Slovenia, Malta, Cyprus, Luxembourg. |

# Primary information sources and tools – Empty Pack Surveys (2 of 2)

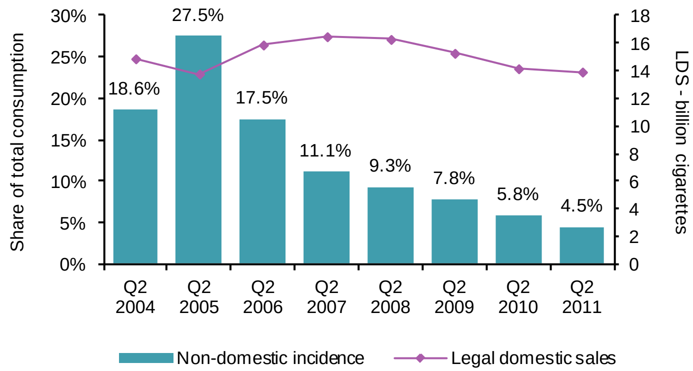
**Empty Pack Surveys can provide a method for monitoring trends in individual markets.**

**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(1)**




**Hungary historical Empty Pack Survey results(2)**




Source: (1) "Yellow Bag" survey, an Empty Pack Survey undertaken by the German Cigarette Industry
(2) GfK Empty Pack Surveys, 2004 to 2011

**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 low level of variance in the trend for 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**

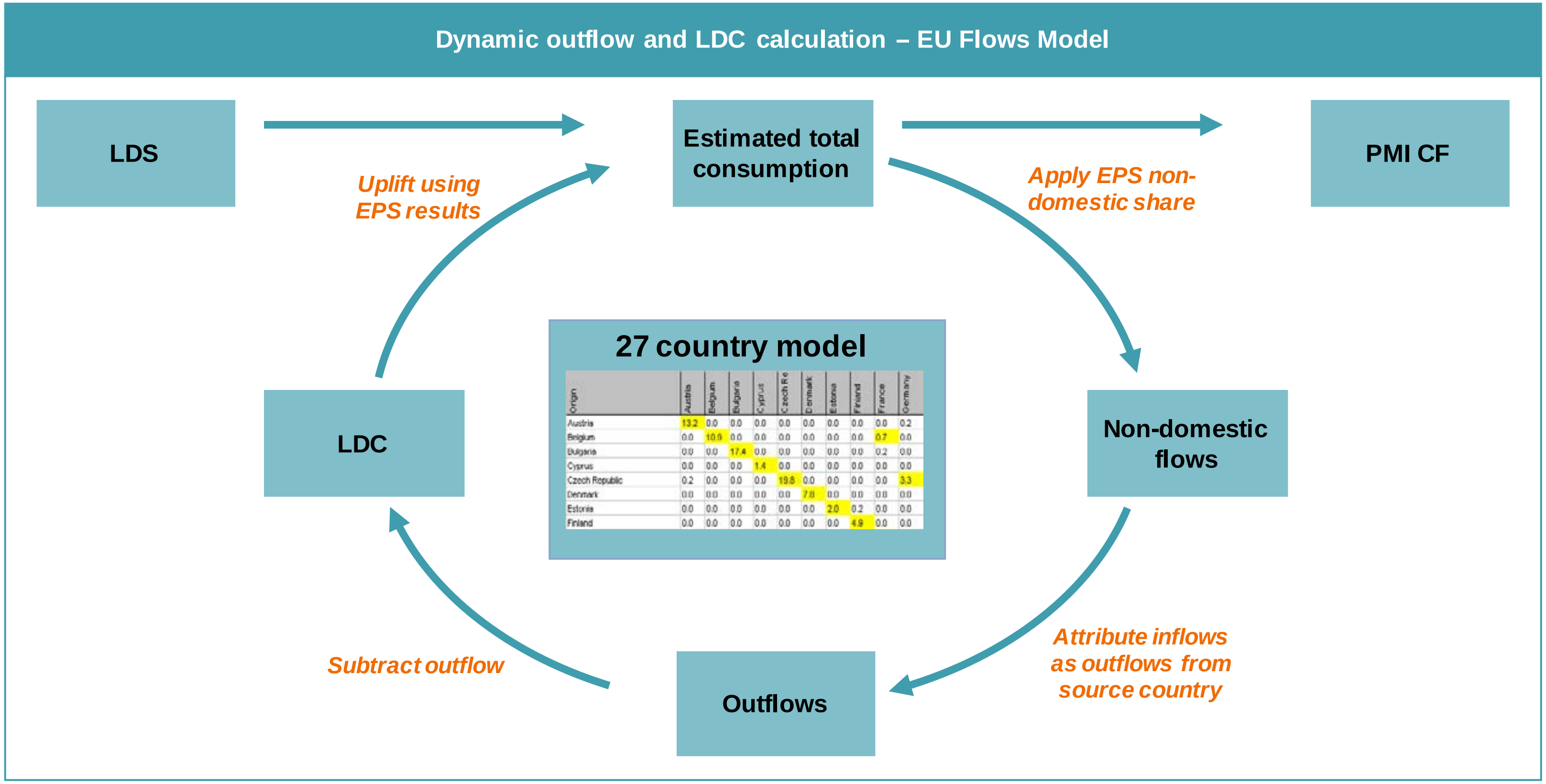
- The increase in non-domestic incidence to 2005 corresponded with an increase in excise taxes of 93.5% between 2002 and 2004:
  - The impact of this tax change was a price increase of 63%.
- In 2006, increased domestic sales and stricter border controls corresponded to a significant decline in non-domestic 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.

**EPS results since 2005 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 four years:
  - For example, in 2008 individuals bringing in more than 40 cigarettes from outside the EU were required to complete a declaration for the cigarettes imported.
- The fall in non-domestic consumption from 2006 to 2011 is also corroborated by trends in legal domestic sales and PMI shipment data.

# Primary information sources and tools – EU Flows Model

**KPMG has 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 – 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 2011 research was updated in 17 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<br>– 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<br>– during 2011 research was updated in 17 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<br>– a fully random sample approach was used to ensure results were as 'certifiable' as possible and could be projected to the total target population<br>■ 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<br>– 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<br>– the target was achieved in all markets except Lithuania in which 499 net contacts were obtained.<br>■ The number of net contacts was increased to 1,000 for France and Germany in 2008, and for the UK in 2009 to improve accuracy of volume estimates |
| **Data collection** | ■ Computer Aided Telephone Interviewing (CATI) was the data collection method in each market<br>■ 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:<br>– respondents were asked to recall all trips abroad in the past year and purchase volumes and brands for each trip<br>– 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<br>– 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<br>– purchases from non-EU destinations were limited to a maximum of 10 packs per trip in line with Duty Free purchase restrictions |

# Primary information sources and tools – non-domestic legal analysis (2 of 2)

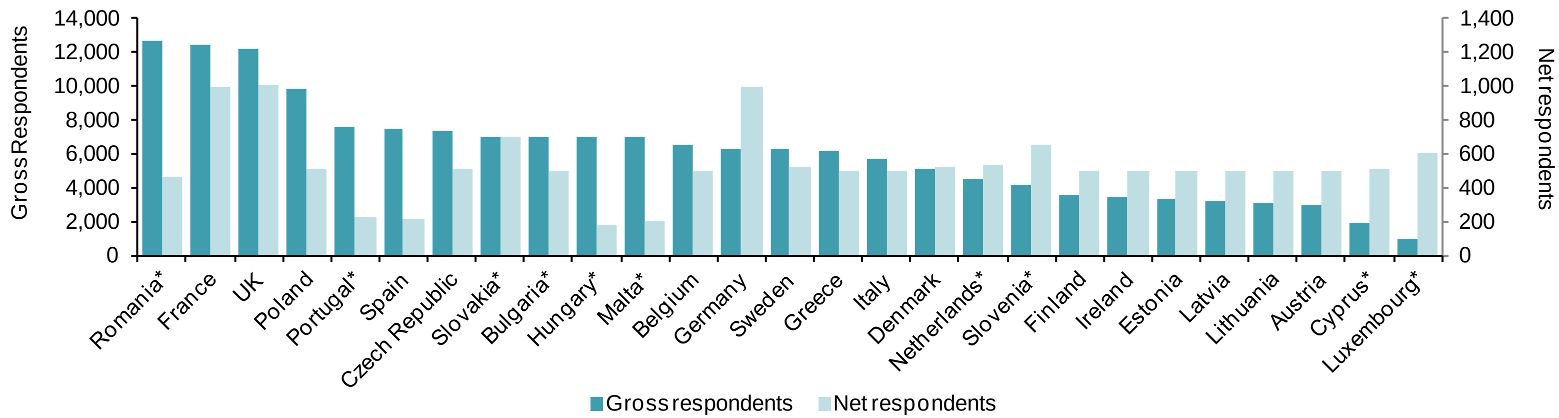
**The project has involved an extensive primary research programme.**

**ND(L) for Project Star results in 2011 is based on over 14,000 full interviews from over 162,000 gross respondents, contacted during the second half of the year.**

**ND(L) data is also adjusted to reflect inbound visitor inflows where applicable.**

**Non-domestic (legal) research: gross and net respondents**

**2011(1)(a)**




**The key objective of the market research programme is to quantify genuine, legal non-domestic purchases of cigarettes in each market**

- The 2011 market research programme incorporated an extensive interview programme across the 17 markets, using recognised market research specialists AC Nielsen and Ipsos/Synovate
  - research for the remaining 10 Member States was conducted during previous years by either AC Nielsen or Ipsos/Synovate
- ND(L) data for countries where research was not carried out during 2011 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 sources such as tourist and border crossing data
- In the EU 27 countries, ND(L) results are based on a total of 162,182 contacted respondents and 13,917 successful interviews with adults (age 19+) who had travelled abroad and purchased manufactured cigarettes 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

Note: (a) * denotes country where ND(L) research was not updated in 2011
Source: (1) AC Nielsen, Ipsos/Synovate

# 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 |
|---|---|---|
| **Description** | Brand share of total non-domestic<br>x<br>Total consumption gap | Non-domestic share of brand<br>x<br>Domestic sales by brand |
| **Key assumption** | ▪ Brand share of non-domestic in the EPS is representative of the national picture<br>– any overstatement of domestic share of premium brands in EPS is not reflected in their non-domestic shares | ▪ Non-domestic share of a brand in the EPS is representative of the national picture: any overstatement of premium brands' domestic and non-domestic share is proportional |
| **Strengths** | ▪ Brand totals tally to overall total of non-domestic<br>▪ Can track flows by brand and country<br>▪ Can calculate non-domestic volumes where no legal sales are present<br>– e.g. Jin Ling in Germany and Priluki in Hungary | ▪ More robust for brands which are overweight in the EPS samples at a non-domestic brand share level |
| **Limitations** | ▪ Some potential to overstate premium brands due to concentration on cities in EPS<br>– e.g. Marlboro and L&M<br>▪ Small IMS share / large EPS share discrepancies<br>– e.g. Marlboro in UK | ▪ Totals by brand will not necessarily match total overall: most effective as an estimate of share of non-domestic for major brands<br>▪ Small IMS share / high EPS non-domestic level discrepancies |

**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 and Ireland
  - a combination of both approaches was used for Marlboro in Spain and Belgium

# Primary information sources and tools –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
  - Operational Customs and enforcement staff
  - 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

# Contents

# 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 source
- 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

# Scope limitations

**Our methodology has certain specific scope limitations.**

| Limitation | Detail | Impact | Adjustment |
|---|---|---|---|
| **Geographic coverage** | ▪ 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<br>▪ In some instances (e.g. Greek islands), In Market Sales (IMS) data is also insufficient for the purposes of this study | ▪ Spanish results only cover mainland Spain and do not include the Canary Islands, Balearic Islands or Ceuta & Melilla<br>▪ French results cover only mainland France and do not include Corsica<br>▪ Portuguese results only cover mainland Portugal and do not include Madeira or the Azores<br>▪ Greek results only cover mainland Greece and do not include the Greek islands<br>▪ UK results only cover Great Britain and Northern Ireland and do not include the Channel Islands | Not adjusted for |
| **Non-PMI counterfeit** | ▪ Empty Pack Survey results do not identify non-PMI brand counterfeit packs<br>– only the manufacturer / trademark owner can confirm whether their brand pack is genuine | ▪ In some instances, the volume of legal domestic consumption may be overstated where domestic counterfeit variants are identified<br>– this may lead to minimal understatements of C&C volumes for non-PMI brands<br>▪ 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&C | Not adjusted for |
| **OTP** | ▪ Empty Pack Surveys collect cigarette packs only<br>▪ Non-domestic consumption for OTP cannot be measured via Empty Pack Survey results | ▪ Anecdotal reports in a number of countries suggest that non-domestic consumption of OTP may have been growing in recent years. These observations are supported by Customs organisations in some countries including the UK and Ireland | Not adjusted for |
| **Non-EU outflows** | ▪ In order to calculate consumption, we have assumed no outflows of LDS outside the EU, with the exception of Sweden (see country-specific refinements) | ▪ Net outflows besides Sweden are believed to be minimal, supported by both anecdotal evidence and from non-EU EPS surveys (including Switzerland and Turkey)<br>▪ 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<br>▪ Potential minimal overstatement of EU consumption | 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 | Limitation |
|---|---|
| **Empty Pack Surveys** | ▪ 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<br>– depending on the source of packs collected, either homes and workplaces or public spaces (in Germany) are not covered<br>– the sample is more heavily weighted towards populous, urban areas and therefore may not be fully representative of consumption habits in rural regions<br>▪ 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<br>▪ Empty Pack Surveys are only conducted at set periods and results may be influenced by seasonal factors such as tourist inflows<br>– in some instances the timing of an EPS has changed between years. In order to ensure comparability of results, monthly LDS figures, consumption trends and visitor data are all analysed and adjustments made where appropriate<br>▪ 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<br>▪ 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<br>– 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<br>▪ 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<br>▪ 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<br>▪ When allied to other methods of corroboration, such as consumption index modelling, we believe the results are fully fit for purpose |

# 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 |
|---|---|
| **Legal domestic sales** | ■ In Market Sales (IMS) 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 IMS data, we have used either AC Nielsen Retail Audit data or tax stamp data as available<br>– 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<br>■ AC Nielsen Retail Audit data is derived from retail sales information but may exclude particular sales channels or retailers<br>– 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<br>■ Slight timing variances may arise between the date the product was shipped and actual consumption but, following discussions with local management, this is not considered significant and the full year LDS information we have is considered to be a fair and accurate representation in each market |
| **ND(L)** | ■ 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<br>■ 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<br>■ Respondents are asked to recall purchase volumes in packs and we assume 20 cigarettes per pack for our pack to cigarette conversion<br>■ 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<br>■ 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<br>■ 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<br>– 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 |

# Contents

# Country results refinements (1 of 5)

**Where required we have made specific modifications to refine results at a country level.**

| Country | Rationale | Description | Impact |
|---|---|---|---|
| **Austria** | ■ Inflows from Slovenia appeared to be overstated given tourism flows and relative price changes. | ■ Increases in inflows of Slovenian variant packs from the Empty Pack Survey exceeded market expectations, travel trends and price fluctuation analysis.<br>■ The increase in Slovenian inflows have been limited to the increase in travel between Slovenia and Austria. | ■ Total non-domestic inflows of Slovenian variant cigarettes increased by 23% from 2010 to 2011. This resulted in a decline in non domestic inflows from Slovenia of 0.27 billion cigarettes. |
| **Belgium** | ■ Late sampling of the Q4 Empty Pack Survey | ■ 818 packs have been excluded from the Q4 EPS sample for the purpose of the EU Flows model as they were collected in January/February 2012. | ■ The non-domestic incidence excluding packs collected in 2012 was 11.1%, compared to the unadjusted EPS non-domestic incidence of 10.8% |
| | ■ Non-domestic Marlboro brand share appeared to be overstated | ■ An average of brand share methodology one and brand share methodology two has been used which is more in line with ND(L) results and domestic brand share<br>– Non-domestic Marlboro volumes calculated using methodology one were 0.48 billion cigarettes, compared to methodology two volumes of 0.19 billion in 2011. | ■ Average of methodology one and methodology two brand share applied to total non-domestic volume for Marlboro<br>■ Adjustments made to 'Other Non-PMI' to compensate for changes to Marlboro volumes |
| **Cyprus** | ■ The implied decline in outflows to the UK arising from the EPS results did not appear realistic given tourism flows and changes to relative prices. | ■ The outflow from Cyprus to the UK was increased in line with year-on-year trends in tourist arrivals from the UK | ■ Outflows to UK increased from 38 million cigarettes to 205 million cigarettes |

# Country results refinements (2 of 5)

**Where required we have made specific modifications to refine results at a country level.**

| Country | Rationale | Description | Impact |
|---|---|---|---|
| **Finland** | ▪ Implied flows from Russia appeared to be understated given relative pricing and cross border statistics for 2011 | ▪ Cross border travel statistics for 2011 indicated a comparable level of travel to and from Russia compared to 2010, 2009 and 2008<br>– This was corroborated by further travel trend analysis from several different sources<br>▪ Russian inflows uplifted by 0.53 billion cigarettes to 0.79 billion:<br>– This has been estimated by applying the change in both travel and seizure volumes between 2010 and 2011 to the Russian inflow. | ▪ Russian inflows increased by 0.53 billion cigarettes. This resulted in a 0.53 billion increase to counterfeit and contraband levels in Finland |
| **France** | ▪ Non-domestic Marlboro brand share appeared to be overstated | ▪ Brand share methodology two has been used which is more in line with ND(L) results and domestic brand share (methodology one non-domestic Marlboro volumes were 6.53 billion cigarettes compared to methodology two volumes of 3.01 billion in 2011) | ▪ Brand Share methodology two applied to total non-domestic volume for Marlboro<br>▪ Adjustments made to 'Other Non-PMI' to compensate for changes to Marlboro volumes |
| | ▪ Non-domestic L&M appeared to be overstated in the Q4 EPS | ▪ Very high levels of Russian market variant L&M were observed in Paris, Nice and Toulouse in Q4. These quantities were deemed to be unrepresentative of the non-domestic inflow. L&M non-domestic in these cities was reduced in line with the French average level. | ▪ L&M volumes in France were reduced by 0.27bn. Overall non-domestic remained unadjusted |
| | ▪ American Legend was highly concentrated in Marseille in the Q2 EPS | ▪ Non-domestic incidence of American Legend in Marseille increased significantly in the Q2 EPS, however this was considered to be only a short term trend that was highly concentrated in Marseille,<br>– The American Legend incidence in Marseille in the Q2 EPS was considered representative of only three months in the year and has been weighted accordingly. | ▪ Total inflows of American Legend reduced by 0.29 billion |

# Country results refinements (3 of 5)

**Where required we have made specific modifications to refine results at a country level.**

| Country | Rationale | Description | Impact |
|---|---|---|---|
| **Germany inflows** | ▪ The incidence of non-domestic cigarettes in the Gorlitz collection centre appeared unrepresentative of the wider region within the Yellow Bag survey due to its proximity to the Czech and Polish borders | ▪ The Görlitz centre was removed from the analysis, while other centres from the region were reweighted to ensure that the sample remained representative of the national population distribution<br>▪ This is consistent with 2010 treatment of the Gorlitz centre Yellow Bag results | ▪ Total non-domestic inflows and counterfeit and contraband declined by approximately 1.2 billion cigarettes<br>– Czech inflows declined from 5.5% to 5.4% of non domestic flows into Germany<br>– Polish inflows declined from 8.8% to 8.1% of non domestic inflows |
| **Ireland** | ▪ Spanish legal sales of UK and Irish Virginia brands suggest there is a shortfall in outflows to Ireland as measured by the Irish EPS | ▪ Inflows from Spain to Ireland were uplifted by 0.06 billion cigarettes to 0.15 billion:<br>– See Spain country section for detail | ▪ Inflows from Spain increased by 0.06 billion cigarettes<br>▪ Total non-domestic volumes remained unadjusted |
| | ▪ Non-domestic Marlboro brand share appeared to be overstated | ▪ Brand share methodology two has been used which is more in line with ND(L) results and domestic brand share (methodology one non-domestic Marlboro volumes were 0.49 billion cigarettes compared to methodology two volumes of 0.36 billion in 2010) | ▪ Brand Share methodology two applied to total non-domestic volume for Marlboro<br>▪ Adjustments made to 'Other Non-PMI' to compensate for changes to Marlboro volumes |
| **Luxembourg** | ▪ Empty Pack Survey results did not accurately capture outflows | ▪ Outflows of legal domestic sales were not accurately captured in destination market Empty Pack Survey results, leading to an unrealistic implied consumption level | ▪ Net outflow (modelled to outside of the EU) declined slightly from 2.99 billion cigarettes in 2010 to 2.97 billion in 2011 |

# Country results refinements (4 of 5)

**Where required we have made specific modifications to refine results at a country level.**

| Country | Rationale | Description | Impact |
|---|---|---|---|
| **Luxembourg** | ▪ The 2011 EU Flows Model uses the results of NMA Empty Pack Surveys conducted in Luxembourg and Esch-sur-Alzette<br>▪ Sampling in the Q2 and Q4 NMA Empty Pack Surveys was not collected proportionally to the population of the two cities and therefore may not fully reflect the national non-domestic incidence levels | ▪ Empty Pack Survey results have been reweighted to more accurately reflect the relative population of both cities | ▪ Total non-domestic inflows increased by 0.02 billion cigarettes |
| **Malta** | ▪ The implied large decline in outflows to the UK arising from the Empty Pack Survey does not appear realistic given tourism flows and changes to relative prices | ▪ Increased the outflow from Malta to the UK in line with year-on-year increases in arrivals from the UK | ▪ Outflows to UK increased from 8 million cigarettes per the implied Empty Pack Survey level to 37 million cigarettes |
| **Spain** | ▪ Analysis of Spanish legal sales of UK/Irish Virginia brands indicated a shortfall in outflows to the UK and Ireland as measured by the UK and Irish Empty Pack Surveys | ▪ Outflows to the UK and Ireland were increased to reflect actual sales of UK/Irish Virginia brands in Spain net of estimated consumption by UK and Irish nationals resident in Spain and tourist consumption whilst in Spain | ▪ Spanish outflows increased 0.4 billion resulting in a net reduction in consumption and therefore total C&C volume |
| | ▪ Non-domestic Marlboro brand share appeared to be overstated | ▪ An average of brand share methodology one and brand share methodology two has been used which is more in line with ND(L) results and domestic brand share (methodology one non-domestic Marlboro volumes were 0.87 billion cigarettes compared to methodology two volumes of 0.77 billion) | ▪ Average of methodology one and methodology two brand share applied to total non-domestic volume for Marlboro<br>▪ Adjustments made to 'Other Non-PMI' to compensate for changes to Marlboro volumes |

# Country results refinements (5 of 5)

**Where required we have made specific modifications to refine results at a country level.**

| Country | Rationale | Description | Impact |
|---|---|---|---|
| **Sweden** | The Empty Pack Survey was carried out by CPM, who collected 10,002 packs in Q2 2011. However, 741 packs were lost by CPM before they could be analysed by PMI. | The CPM survey is used to inform the overall number of packs, the split by brand and manufacturer, and provides pack detail for non-PMI packs. PMI analysis is used for detail | Total non-domestic inflows and C&C inflows reduced by 0.01 billion cigarettes |
| | The Empty Pack Survey results highlighted the presence of domestic packs being sold the minimum tax yield price:<br>– These brands are not legally distributed for sale in Sweden | Below tax-yield brands were reclassified as illicit product including the following;<br>– ATU, Basic, Blue Jeans, Colts, Elixyr, Extreme, GeosBell, Goal, Jin Ling, Kent, King, Look, Maryland, Matrix, Next, Paramount, Red Eagle, Royal Crown, Tamar, Vegas, Vito and Xtreme | Total non-domestic inflows and C&C inflows uplifted by 0.18 billion cigarettes |
| **UK inflows** | Spanish legal sales of UK Virginia brands suggest there is a shortfall in outflows to the UK as measured by the Empty Pack Survey. | For Spanish flows, see Spain for detail:<br>– Inflows from Spain uplifted by 0.34 billion to 0.81 billion cigarettes. | Inflows from Spain increased by 0.34 billion cigarettes. |
| | Implied inflows from Cyprus appeared to be understated given 2011 tourism statistics. | Inflows from Cyprus increased by 167 million cigarettes to reflect the 2010-2011 trend in UK tourists arriving in Cyprus. | Non-domestic Duty Free volumes reallocated to Spanish, Cyprus and Malta non-domestic. |
| | Implied inflows from Malta appeared to be understated given 2011 tourism statistics. | Inflows from Malta increased by 29 million cigarettes to reflect the 2010-2011 trend in UK tourists arriving in Malta. | Total non-domestic level unchanged. |

# Adjustments to non-domestic (legal) research

**A limited number of significant adjustments to ND(L) results have been made on the basis of corroborating evidence.**

**The net impact of these significant adjustments is a 1.8 billion cigarette reallocation from C&C to ND(L).**

| Nature of significant adjustment | Impact |
|---|---|
| **Corroboration with total non-domestic volumes**<br>▪ Some discrepancies may exist between the ND(L) data and total non-domestic volumes which leads to a negative counterfeit and contraband level | ▪ Germany to Poland: 0.19 billion cigarette reallocation from ND(L) to C&C<br>– ND(L) research overstated flows from Germany. Volumes were capped at the total non-domestic inflow level from Germany |
| **Cross-referencing with tourist and border crossing data**<br>▪ The 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 | ▪ Czech Republic to Germany flow: 1.78 billion cigarette reallocation from C&C to ND(L):<br>– Visitor numbers reported during research programme were understated versus actual data<br>– Flow volume recalculated based on actual visitor numbers<br>▪ Belgium to Germany flow: 0.95 billion cigarette reallocation from ND(L) to C&C:<br>– Visitor numbers reported during the research programme were overstated versus actual data<br>– Flow volume recalculated based on actual visitor numbers<br>▪ Poland to Germany flow: 0.77 billion cigarette reallocation from C&C to ND(L):<br>– Visitor numbers reported during research programme were understated versus actual data<br>– Flow volume recalculated based on actual visitor numbers<br>▪ Canary Islands to Spain flow: 0.75 billion cigarette reallocation from C&C to ND(L)<br>– Non-domestic (legal) research has been adjusted to reflect the Canary Islands as an independent destination to the Spanish mainland<br>– Flow volume calculated by adjusting prior year ND(L) volumes for changes in tourism trends between Spain and the Canary Islands<br>▪ Netherlands to Germany flow: 0.60 billion cigarette reallocation from ND(L) to C&C:<br>– Visitor numbers reported during research programme were overstated versus actual data<br>– Flow volume recalculated based on actual visitor numbers |
| **Review of indicators for specific flows**<br>▪ Results for a small number of flows into various destination countries suggest under/over reporting of pack purchases given the price differentials between the source and destination markets | ▪ Germany to Poland flow: 0.2 billion reallocation from C&C to ND(L):<br>– Average packs per trip considered high at six given the price differential between the two markets and when compared to other markets with similar price differentials<br>– Flow volume was recalculated resulting in a revised two packs per trip assumption |

# Contents

# External data sources (1 of 3)

**Our assessment incorporates analysis from several sources.**

## Other sources

- Andorra Government, Department of Statistics - monthly tourism bulletins 2011, accessed April 2012
- Austrian Chamber of Commerce Empty Pack Survey, 2006 - 2010
- Austria NMA Empty Pack Survey, 2011
- ‘BAT France révèle son étude annuelle’, Revue des Tabacs no 570, December 2009
- Belgium national statistical office, tourism and travel data, accessed February 2012.
- ‘Bulgaria’s Bulgartabac Cons Net Profit Drops 86% in 2011’, See News, 1 March 2012
- Bulgaria Centre for the Study of Democracy, ‘Illicit tobacco: tax policies and the risks of organised crime’, June 2011
- ‘Bulgaria's cigarette sales fell 23% in January-May’, Reuters News, 28 June 2011
- ‘Bulgaria does U-turn on planned smoking ban’, Yahoo! News, 28 April 2009
- ‘Bulgaria’s illicit trade booming’, Tobacco Reporter, 6th August, 2009
- 'Bulgaria Introduces Staggering Cigarette Tax Hike', Novinite, 1st January 2010
- ‘Bulgaria losses BGN 180 M from illegal cigarettes’, Trud Daily, 24th September 2007‘
- Bulgaria’s new cigarette prices come into force', Tobacco News, 29th May 2010
- 'Bulgaria Smokers Face Staggering Cigarette Tax Hike', Novinite, 31st March 2010

## Other sources

- ‘Bulgaria to introduce complete ban on smoking in small cafes in mid-2011’, The Sofia Echo, 19 January 2011
- Central Statistical Office of Poland, tourist data, extracted February 2012
- CIA Factbook, EU-27 Population Estimates, accessed January 2012
- ‘Cigarette Smuggling In Romania Down 2.3 % in March To 33.9% of Market’, Mediafax News Brief Service, 25th April 2010
- ‘Cigarettes: chuté de 5% des ventes’, Le Figaro,10 January 2012
- Challenges.fr - French news articles accessed October – December 2011
- Citypopulation.com, Hungarian urban population data, extracted March 2012
- Czech Statistical Office, tourist data, extracted February 2012.
- Danish Chamber of Commerce estimates – ‘Status over Grænsehandel’ 2007 & 2009
- ‘Determine Market Share of International Tobacco Packages Cigarettes and RYO’, TrendBox on behalf of Vereniging Nederlandse Kerftabakindustrie (VNK) and Stichting Sigarettenindustrie, February 2010 & December 2011
- Economic Highlights’, Rompres, 30th January 2007 (Romania)
- ‘Economic Highlights’, Rompres, 7th February 2007 (Romania)
- ‘Economic Highlights’, Rompres, 27th June 2008 (Romania)
- Empty Pack Survey carried out by Almares Research for Imperial Tobacco in Poland, November 2010

# External data sources (2 of 3)

**Our assessment incorporates analysis from several sources.**

## Other sources

- Empty Pack Surveys carried out by GfK for MDSZ, Hungarian Tobacco Manufacturers' Association, 2006-2011
- Empty Pack Surveys conducted by Ultex for the Czech Republic Tobacco Manufacturers' Association 2009-2011
- Estimation des achats transfrontanliers de cigarettes 2004 - 2007, L'Observatoire français des drogues et des toxicomanies (OFDT), March 2011
- Eures - European Job Mobility Portal, Cross border commuters Luxembourg 2010 – 2011, accessed March 2012
- Euromonitor, 2006 (Netherlands)
- European Commission - Eurobarometer, Survey on Tobacco: Analytical Report, March 2009
- European Commission website, http://ec.europa.eu
- European Union Tax Tables, July 2011
- Eurostat, European unemployment data, extracted March 2012
- Eurostat, Gross Domestic Product, accessed March 2012
- Eurostat, Gross Disposable Income, accessed March 2012
- Eurostat , European population, Accessed March 2012
- France Statistical office, tourism and travel data, accessed February 2012
- GCTS (Global Consumer Tracking Survey) provided by PMI
- 'Germany to raise Taxes on Tobacco, Cut Energy Subsidies Less Than Planned' Boolmberg.com, October 2010.
- Instituto de Estudios Turisticos, Accessed December 2011 (Spain)
- Irish Tobacco Manufacturers Advisory Committee,, accessed May 2012
- 'La justice s'attaque à un réseau grec de trafic de cigarettes', Le Monde, 25 July 2011

## Other sources

- Latvian National Statistics, tourism data, accessed April 2012
- 'Measuring Tax Gaps 2011', HMRC, September 2011
- National Statistical Institute of Bulgaria, Gross Domestic Product, accessed April 2011
- National Statistical Institute of Bulgaria, 2009 Labour Force Survey, accessed April 2011
- National Statistics office of Malta, Outbound Tourism, December 2011, accessed April 2012
- National Statistics Office of Greece, Tourism arrivals by country of residence, January – September 2011, accessed December 2011
- Netherlands national statistic office, tourism and travel data, accessed February 2012.
- Novel Research, Anti Illicit Trade Tracking Study, March 2011, July 2011, January 2012 - provided by PMI Romania
- Novel Research, Project DNP for BAT and JTI, May 2009 (Romania)
- Novel Research, Project DNP for BAT and JTI, March 2010 (Romania)
- 'Number of smokers in Luxembourg at record low', Luxembourg Cancer Foundation quoted in Hello News, 15 February 2012
- OLAF, Seizure data, 2010 & 2011
- 'One Third of Bulgarian Cigarettes Sold Illegally', Novite, 4th August 2009
- 'Origine des paquets de cigarettes et de tabac à rouler fumes en France Étude Epsy ', Revue de Tabacs, September 2008
- PM Bulgaria Total Legal Market Estimate 2011, provided by PMI Bulgaria, 1 March 2012

# External data sources (3 of 3)

**Our assessment incorporates analysis from several sources.**

## Other sources

- RAI Consultants, Market share by brand information in Cyprus, 2010 - 2011
- Republic of Cyprus Statistical Service, Tourism Arrivals January – December 2011, accessed March 2012
- 'Restrictions on smoking in public areas in Bulgaria begin in January 2011', The Sofia Echo, 20 December 2010
- 'Romania cracks down on tobacco smugglers' , Nine O'Clock, 28th June 2008
- 'Romania plans to raise excise duties on fuels, tobacco in 2011', 8 December 2010.
- 'Romanian Central Bank Head: Higher Tobacco Taxes To Fuel Black Market', Mediafax News Brief Service, 4th November 2010
- 'Saisies par les Douanes en 2011:+63% de cocaïne et +42% de contrefaçons', AFP - provided by PM France, 26 January 2012
- 'Serious and Organised Crime Threat Assessment 2010 – 2011', Bulgaria Centre for the Study of Democracy, Bulgaria
- 'Share of Contraband Cigarettes on Bulgarian Market is 15%', Bulgaria News Agency, November 2008
- 'Smuggling to Feed One Third of Romania's 2010 Cigarette Market', SeeNews , 21 October 2010.
- Spanish Institute of Tourist Studies, accessed April 2012
- Spanish National Statistics Institute, Economic and Social statistical indicators. Accessed May 2011
- Statistical Office of the Republic of Slovenia, migration data, accessed March 2012
- Steve Payne, Director JTI Ireland, Tom McGurck Show, 4FM, broadcast on 19th March 2008
- Swedish Statistical Office

## Other sources

- 'Tabac hausse de 6% en 2012', Le Figaro,17 October 2011
- TendensØresund.org , Accessed March 2012 (Denmark)
- The European Commission, Excise Duty Tax Tables (January 2009, July 2009, January 2010, July 2010, January 2011, July 2011) accessed February 2012
- 'The illicit tobacco trade: Annual Review', JTI Ireland, 2009, 2010 and 2011
- 'The non-duty paid market for cigarettes in Sweden', AB Handelns Utredningsintitut 2010, 2011
- Tulli (Finnish Customs), Annual Report 2011, Investigations Report 2010
- UK Tobacco Manufacturers Association
- Yellow Bag Survey, an Empty Pack Survey undertaken by the German Cigarette Industry Association (VDC), 2006-2007, by TFT in 2008 and by leading German cigarette manufacturers in 2009, 2010 and 2011

# Contents

# Scope of work (1 of 2)

1. This study will report on the estimated size and composition of the total cigarette market (including counterfeit and contraband products), as detailed below, for each of the 27 EU Member States.
2. The findings from the reports on the 27 EU Member States will be used to produce a report covering the overall view of the total EU market. We will also comment on counterfeit and contraband cross border flows on a pan-European basis. In addition copies of each country's main findings will be made available to the relevant Member State administration along with a summary of the overall EU trends.
3. In addition to the detailed EU reports, KPMG will also undertake the following activities in support of Project Star:

- Set up and lead three meetings with the key leadership of OLAF in addition the final presentation to the Member States in May 2012;
  - Project Update in early 2012 to agree timetable for key deliverables and identify key issues for OLAF
  - High level results presentation in late March 2012 to highlight key themes and conclusions arising from the provisional results
  - Dry run of final Member State presentation in late April 2012 to review detailed results and agree key messages
  - We will also support further communication of the Project Star results at a European level as appropriate, including the production of a relevant abridged report and/or presentation
- Upon finalisation of the EU results, provide to PMI data tables containing the following information;
  - Summary of EU total non-domestic inflows by source and destination market
  - Detailed analysis of total non-domestic outflows to the EU split by destination market and brand for the following source countries: Ukraine; Russia; Moldova; Belarus; Serbia; Poland; and the Czech Republic
- Conduct one formal meeting with the relevant PMI team for each market (either in person or by conference call) at which KPMG will present provisional Project Star results and discuss any points of feedback and clarification. In addition, we will conduct up to ten kick-off meetings in Member States where data and market complexity suggest that a detailed review of emerging trends would be beneficial.
- Conduct face to face or telephone based meetings with Customs or Finance Ministries from up to ten Member States at which KPMG will present Project Star results.
- Manage and lead three key intervention sessions between the joint PMI and KPMG teams, these being;
  - Project Kick Off (to take place mid to late November 2011) to agree priority markets based on available primary research and highlight potential communication considerations at a country level
  - Headline review of initial results to take place mid to late February 2012 and address key challenges and agree appropriate response in major destination and source markets only
  - Review of detailed provisional EU and country level findings for each of the 27 markets to take place mid to late March 2012

# Scope of work (2 of 2)

4. Information from several independent sources will be used. These sources will include;

- Tobacco industry research and statistics
  - Sales statistics, consumer surveys provided by PMI and/or Tobacco Manufacturers' Associations.
- Empty Pack Surveys will be conducted by third party research companies in a majority of Member States
- 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 non-domestic research
  - Surveys to analyse the flows of non-domestic (legal) sales will be undertaken in a majority of Member States with coverage to be agreed between PMI and KPMG
  - Third party research 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
  - We will undertake structured interview programmes designed to capture and quantify the opinions of relevant expert groups including, among others, customs and law enforcement officials

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.

KPMG

*cutting through complexity™*