

# **Project Star 2010 Results**

22 August 2011



# Project Star 2010 **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 24 May 2011. 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 31 August 2010 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 24 May 2011. The Report has been revised to remove commercially sensitive information
- Our work has been ongoing since 1 November 2005. Our fieldwork for 2010 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.
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# **Glossary of terms**

Cigarette industry		Project Star	
Bootlegging	Also called small-scale smuggling, bootlegging is the purchase of tobacco products	CAGR	Compound Annual Growth Rate
	in one country for illegal consumption or resale in another country without paying the applicable taxes or duties	C&C	Counterfeit and Contraband
Cigarette	Any factory-made product that contains tobacco and is intended to be burned or heated under ordinary conditions of use	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
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-	Consumption gap	The difference between total consumption and legal domestic consumption
	sold (for financial profit) in a higher priced market. There are generally two types of contraband: bootlegging and wholesale smuggling/organised crime	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
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		tax stamp is not shown, on the health warning and packaging characteristics
	Counterfeit is not included within the definition of Contraband. Illicit flows of Philip Morris brands are split into their separate Counterfeit and Contraband	EU	European Union
	components. Illicit volumes of other manufacturer brands are reported as combined Counterfeit and Contraband flows	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
Duty Free	Purchases made outside the EU that have no state, local or provincial taxes,		market by country of origin (the model only specifies flows to EU countries)
	federal import duties or any other type of taxation added to the cost of the item purchased. Subject to purchase volume restrictions	ducts ing C&C Compound Annual Growth Rate  C&C Counterfeit and Contraband  Or Consumption Actual total consumption of cigarettes in illicit products as well as those purchase smoked in market  Sere- Dies of Country of origin Country from which the packs collected This is determined by either the tax start tax stamp is not shown, on the health with characteristics  hillip EU European Union  EU Flows Model The primary methodology for measuring model details the volume of inflows and market by country of origin (the model of inflows/Outflows)  Inflows/Outflows Inflows of non-domestic product into a market  LDS Sales of genuine domestic product through based on In Market Sales (IMS) data  LDC Legal Domestic Consumption is defined outflows  ND Non-Domestic product — product that with market in which it is consumed  ND(L) Non-Domestic (Legal) — product that with market in which it is consumed  ND(L) Non-Domestic (Legal) — product that is consumers, such as during a cross-bord specific market labelling or Duty Free labeling or Duty Free labeling or Duty Free labeling or Duty Free labeling Office)	Inflows of non-domestic product into a market/outflows of product from a market
MPPC	Most popular price category	LDS	Sales of genuine domestic product through legitimate, domestic channels
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)	LDC	Legal Domestic Consumption is defined as legal domestic sales net of outflows
RYO/MYO	Roll-your-own/Make-your-own - loose tobacco for the purpose of hand rolling / loose tobacco for the purpose of tubing	ND	Non-Domestic product – product that was not originally intended for the market in which it is consumed
Smoking prevalence	The percentage of smokers in the total adult population	ND(L)	Non-Domestic (Legal) – product that is brought into the market legally by consumers, such as during a cross-border trip
Smoking incidence	The number of cigarettes consumed per day on average by the adult population	Unspecified	Unspecified market variants refers to cigarette packs which do not bear
Tobacco taxes	The sum of all types of taxes levied on tobacco products. There are two basic methods of tobacco taxation: <i>Normal or specific taxes</i> are based on a set amount		specific market labelling or Duty Free labelling
	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	OLAF	Office Européen de Lutte Anti-Fraude (European Commission Anti-Fraud Office)
	determined value, usually the retail selling price or a wholesale price and includes any value added tax	PMI	Philip Morris International



# **Glossary of terms**

#### PMI data sources

EPS Empty Pack Survey

GCST Global Consumer Tracking Survey

IMS In Market Sales (the primary source of legal domestic sales volumes)

Market research

CAPI Computer-aided personal interviewing

CATI Computer-aided telephone interviewing

Measurements

Bn Billion

*Mn* Million



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#### Project overview and timing

#### **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 overview and timing

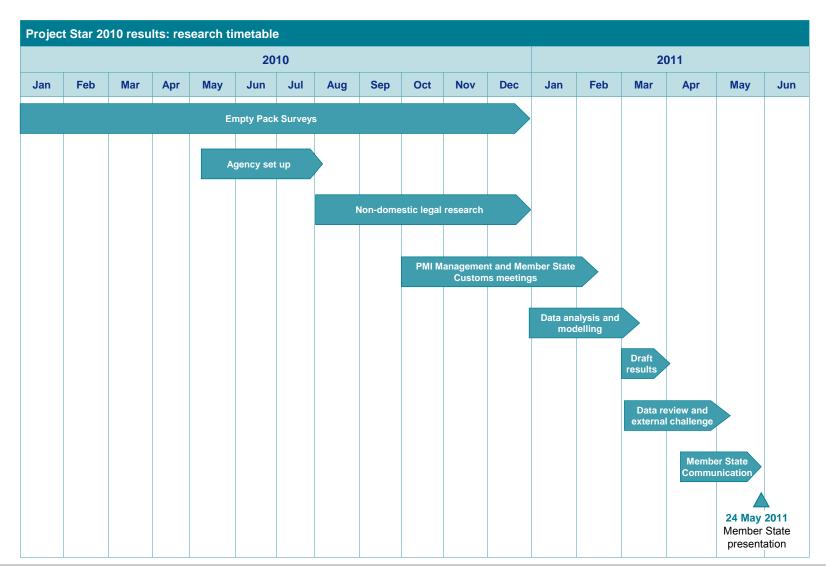
## **Project timing**

Fieldwork was completed in February 2011 when full year legal domestic sales data became available.

Data analysis and modelling was undertaken during the first quarter of 2011.

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

Full 2010 results have now been finalised and are contained in this report.





#### Project overview and timing

#### Design and development of the methodology

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

#### **Methodology design steps**

#### Information assessment

#### Review available internal

- information in pilot markets

  Assess quality of information
- Identify gaps in data availability and coverage

#### Methodology design

- Develop preliminary approach to C&C measurement
- PMI and OLAF approval to test methodology in three-market pilot process

#### Pilot and refine

- Test methodology in three pilot markets (Finland, Germany and Poland) during 2006
- Evaluate results and refine methodology

#### **Implement**

- Roll out approach to remaining 25
   EU markets for 2006
- Addition of Romania and Bulgaria in 2007
- Scope to add further Accession States in future years where appropriate

#### Methodology design principles

Consistent

# 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

#### Corroborated

 We will seek to corroborate key sources and overall methodology results to limit excessive reliance on individual sources

#### **Fact-based**

Our approach and conclusions need to be data-driven and impartial

#### **Pragmatic**

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

#### Flexible

- 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
- This flexibility includes:
- modifying and improving our approach through the pilot phase and beyond
- customising our approach where necessary to cater for specific market differences



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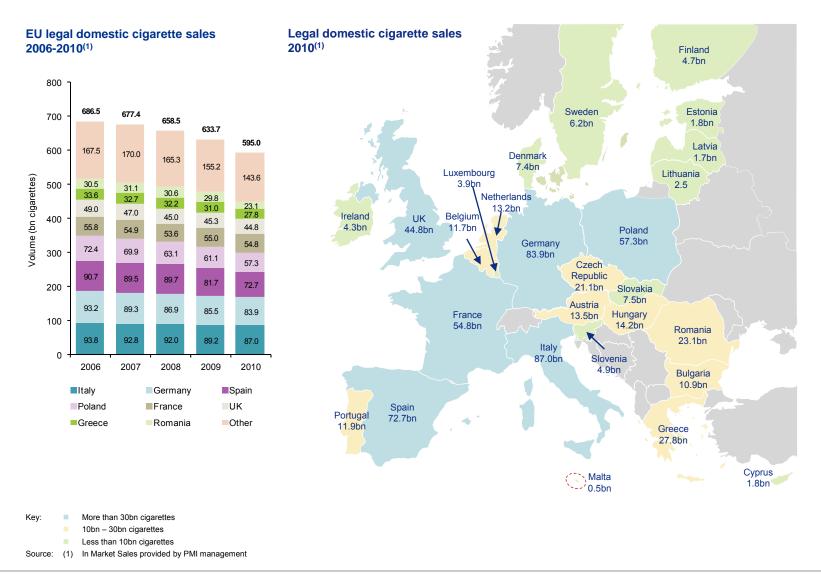
## **Overview**

595 billion cigarettes were	The eight largest EU markets accounted for 76% of total cigarette sales
sold legally in the EU in 2010	■ Of these, Italy and Germany each accounted for more than 80 billion cigarettes of legal domestic sales in 2010
Increasing prices and	The pricing and legislative environment for cigarettes has tightened across the EU in recent years
smoking restrictions have contributed to a decline in	Over the past three years, prices have increased substantially across the EU-27, especially in the 2004 and 2007 Accession States
cigarette consumption	<ul> <li>Increased prices in many of the 2004 and 2007 Accession States have been driven by pressure to comply with EU minimum taxes of €64 pe</li> <li>1000 cigarettes by January 2012 and minimum tax of €75 per 1000 cigarettes by January 2014</li> </ul>
	<ul> <li>An increasing amount of legislation has been introduced, limiting smoking in public places and preventing manufacturers from advertising their products in a growing number of media formats</li> </ul>
	As a result of these changes and other social trends, the majority of the EU-27 have experienced a decline in cigarette consumption
	24 of the 27 EU countries have encountered declining consumption over the past year, with total EU consumption declining by 5.3% over the period
Cigarette sales have	The annual rate of decline of EU legal domestic sales accelerated in 2010
declined on a European level, partly driven by	■ EU cigarette sales declined by 6.1% in 2010, compared to a 3.8% decline in 2009
declining consumption	- This follows a longer term trend of decreasing sales; EU legal domestic sales declined at an annual rate of 3.5% between 2006 and 2010
	■ 2004 and 2007 Accession States experienced a higher rate of legal sales decline than the EU-15 countries.
	■ Malta, Cyprus and Austria were the only countries experiencing growth in legal domestic sales in 2010 compared to the previous year
	The increase in sales in Cyprus and Austria corresponded to a decline in non-domestic incidence
However, differences in	The relationship between changes in consumption and changes in sales differs substantially between Member States
sales and consumption trends between countries	Although the majority of markets have experienced a decline in consumption, legal sales trends have differed markedly between Member States
highlight the existence of price-driven cross-border	<ul> <li>Markets such as Lithuania, Bulgaria, Romania and Latvia have experienced more rapid sales declines than can be explained by decreases in consumption alone</li> </ul>
trade	These differences suggest a significant and fluctuating cross-border trade in manufactured cigarettes
	■ In markets where sales have declined more rapidly than consumption there has been growing penetration of non-domestic cigarettes



## Legal domestic sales by country

The eight largest markets accounted for 76% of total EU legal cigarette sales in 2010.

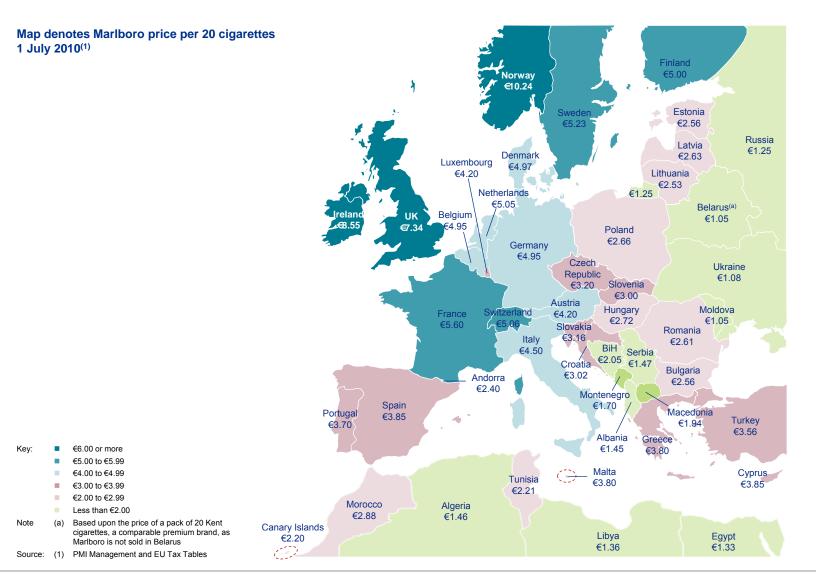




#### **Price comparison**

Despite ongoing moves to align cigarette prices and taxes, retail prices vary widely across the EU, while prices in bordering non-EU countries such as Ukraine, Russia, Belarus and Serbia remain below EU levels.

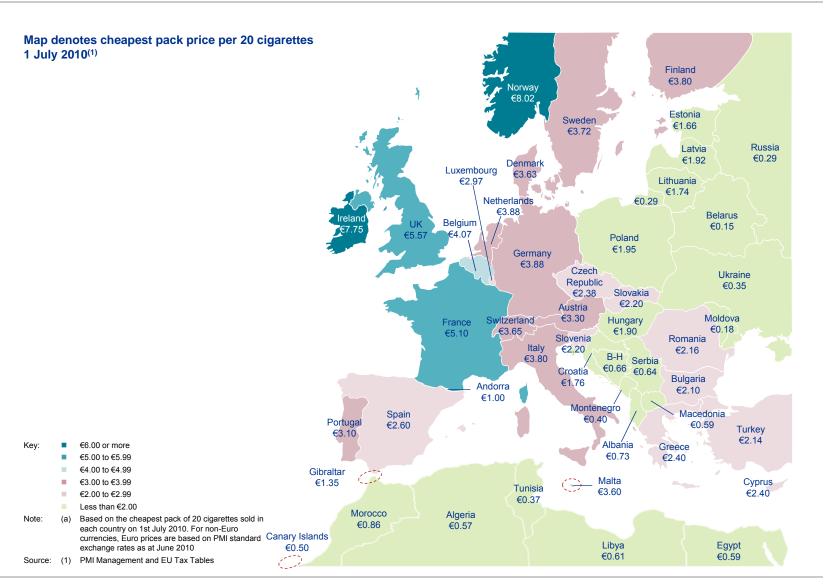
Across the EU, the price of a pack of Marlboro ranges from €2.53 in Lithuania to €8.55 in Ireland.





## **Price comparison**

Price differentials are highlighted when considering the lowest legally sold brand in each country.





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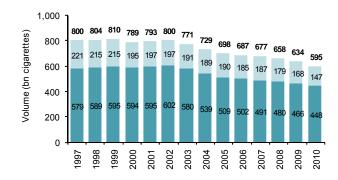
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# **Legal sales trends**

The annual rate of decline of EU legal domestic sales accelerated to 6.1% in 2009.

2004 and 2007 Accession States experienced a higher rate of legal sales decline compared to the EU-15 countries. Historic legal domestic cigarette sales for EU-27 1997-2010<sup>(1)(a)</sup>



CAGR (%)	1997-2006	2006-2007	2007-2008	2008-2009	2009-2010
2004 and 2007 accession countries	-1.9%	1.0%	-4.3%	-6.1%	-12.3%
■ EU-15	-1.6%	-2.2%	-2.2%	-2.9%	-3.9%
Total	-1.7%	-1.3%	-2.8%	-3.8%	-6.1%

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

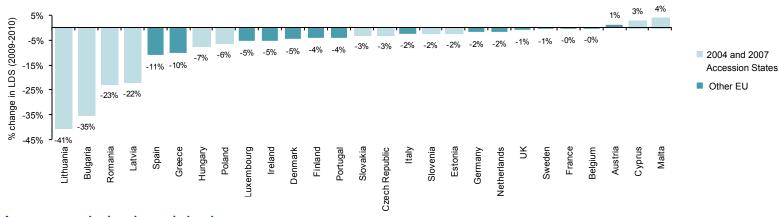


#### Legal sales, price and tax trends

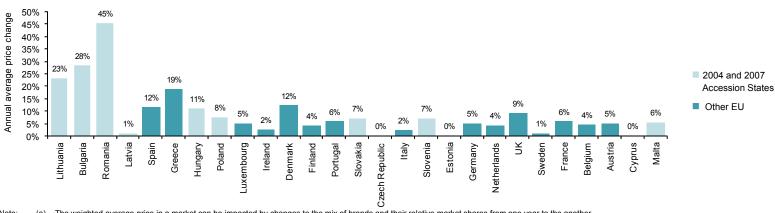
The fall in total EU cigarette sales was driven by a decline in both the EU-15 and the 2004 and 2007 **Accession States.** 

Prices have increased substantially across the EU from 2009 to 2010, particularly in Romania, Bulgaria and Lithuania.

#### Percentage change in legal domestic cigarette sales for EU-27 2009-2010(1)



#### Average annual price change in local currency 2009-2010<sup>(2)(a)</sup>



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

In Market Sales provided by PMI

PMI Management and EU Tax Tables

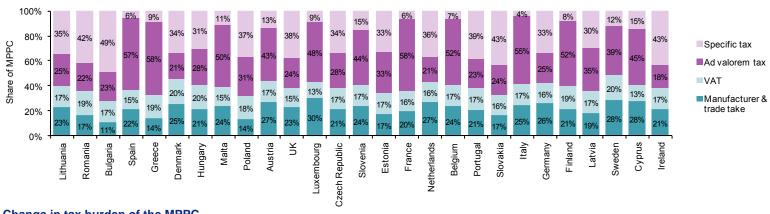


#### Tax breakdown

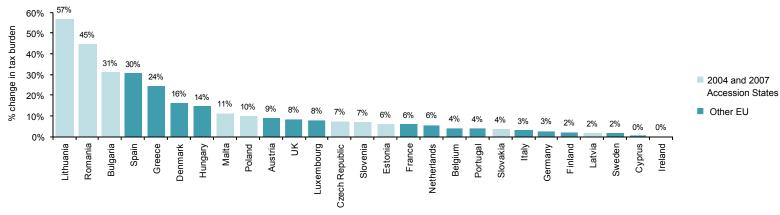
Taxes form a large proportion of the price of cigarettes, though the nature of taxation varies across countries.

The 2004 and 2007
Accession States typically
experience the highest
growth in tax burden in 2010.

# Pack price breakdown of the MPPC July 2010<sup>(1)(a)</sup>



# Change in tax burden of the MPPC 2010<sup>(1)(a)(b)</sup>



Notes: (a) MPPC is the Most Popular Price Category

(b) Change in tax burden of MPPC prices in local currencies at 1st January 2009 and 1st January 2010 and therefore may include some distortion from currency fluctuations

Source: (1) European Commission, 'Excise duty Tables, Part III - Manufactured Tobacco', available online from: http://ec.europa.eu.taxation\_customs/index\_en.htm

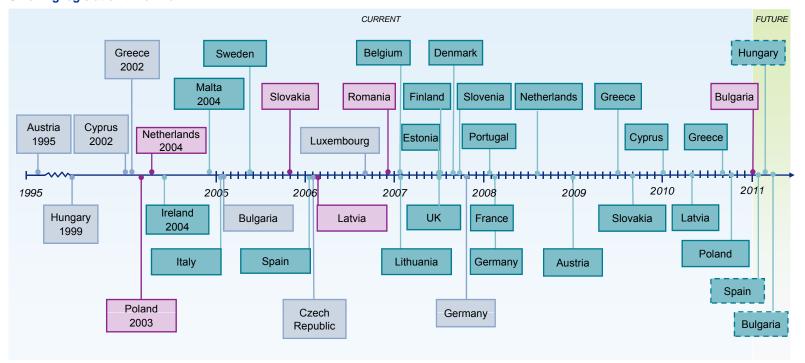


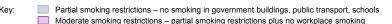
#### **Smoking restrictions**

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

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

#### Smoking legislation time-line(1)(2)(3)(4)(5)(6)(7)(8)(9)(a)





Extensive smoking restrictions – moderate smoking restrictions plus limited or no smoking in restaurants, cafes and bars

Denotes future smoking restrictions

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

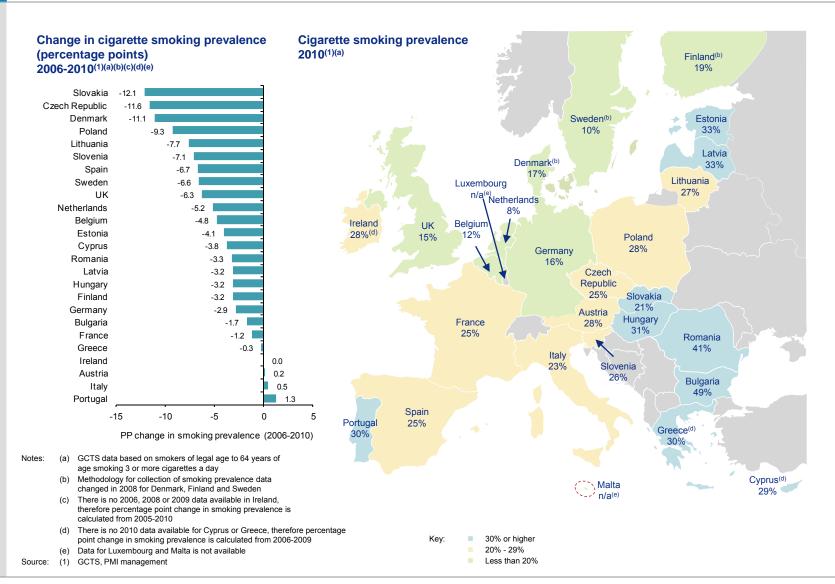
Sources: (1) Press articles; "European Trends towards non-smoking provisions", European Network for Smoking Prevention, December 2007'; and European Public Health Alliance website

- (2) 'Slovak MPs approve partial smoking ban in restaurants', Agence France Presse, 17 February 2009
- (3) 'Complete restaurant smoking ban tabled in Slovak parliament', The Slovak Spectator, 19 June 2009
- (4) 'Bulgaria does U-turn on planned smoking ban', Yahoo!News, 28 April 2009
- (5) 'Cyprus greets New Year with one last puff inside', Agence France Presse, 31 December 2009
- (6) 'Heavy-smoking Greece tries to kick the habit with ban', Reuters, 01 July 2009
- (7) 'Finland aims to stub out smoking habit', BBC Online, 15 January 2010
- (8) 'Restrictions on smoking in public areas in Bulgaria begin in January 2011', The Sofia Echo, 20 December 2010
- (9) 'Bulgaria to introduce complete ban on smoking in small cafes in mid-2011', The Sofia Echo, 19 January 2011



## **Smoking prevalence**

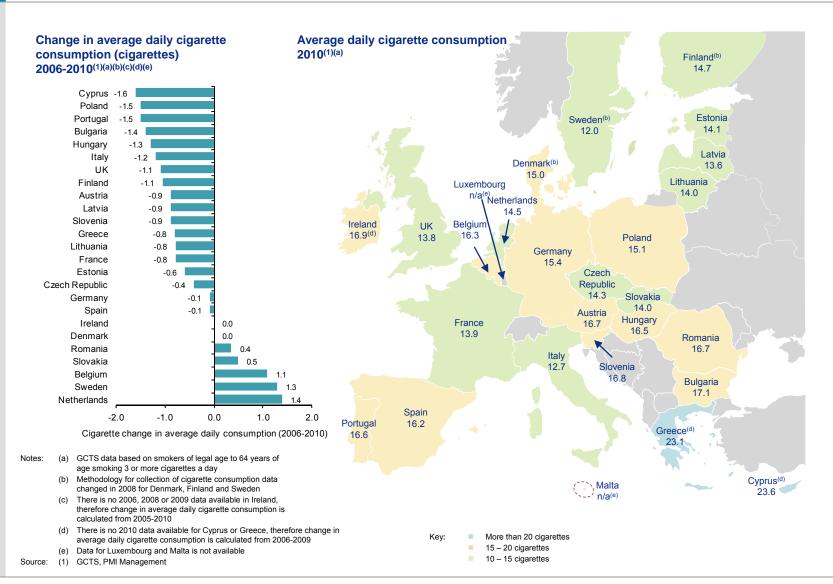
Smoking prevalence has declined across the majority of the EU Member States since 2006.





## Average daily cigarette consumption

Average daily consumption of cigarettes has also been declining in the majority of Member States since 2006.





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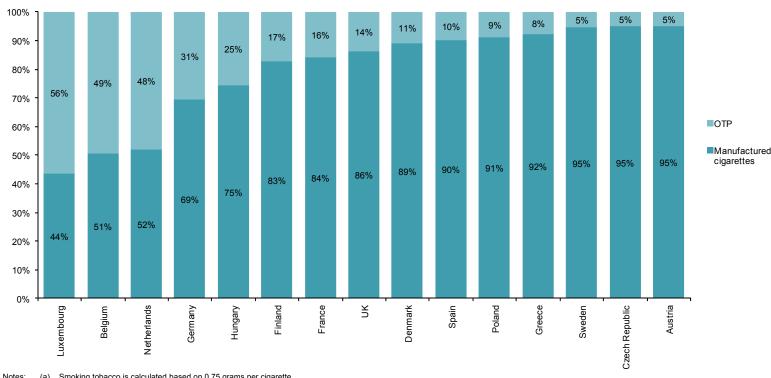


#### OTP sector analysis

#### **Comparison of Other Tobacco Products with manufactured cigarette sales**

Of the 18 largest EU markets for Other Tobacco Products ("OTP"), the Benelux countries have the largest share of OTP sales relative to the overall tobacco market.

#### EU tobacco sales by category 2010(1)(a)(b)



(a) Smoking tobacco is calculated based on 0.75 grams per cigarette

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

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

#### Smoking tobacco accounts for at least 48% of total tobacco sold in Luxembourg, Belgium and the Netherlands

- Other countries where smoking tobacco accounts for a substantial proportion of total tobacco sales include Germany, Hungary, Finland and
- 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.

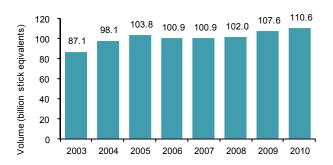


#### OTP sector analysis

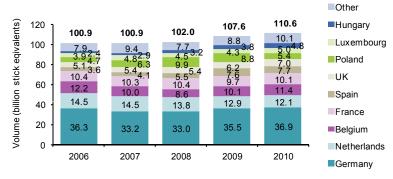
#### **EU Other Tobacco Products market size**

For the 18 largest EU Other Tobacco Products markets, smoking tobacco sales were estimated at over 110.6 billion stick equivalents in 2010, an increase of 2.9% compared to 2009.

# EU legal domestic sales of smoking tobacco 2003-2010<sup>(1)(a)(b)(c)</sup>



# EU leading markets for smoking tobacco by volume, 2006-2010<sup>(1)(a)(b)(c)</sup>



# The growth in sales of smoking tobacco observed in 2008 and 2009 has continued in 2010

- Smoking tobacco sales increased by 2.9% in 2010, whilst manufactured cigarette sales across the EU-27 Member States declined by 6.1% during the same period:
  - This followed growth of 5.4% in 2009 and 1.1% in 2008, representing a reverse in the trend observed from 2005 to 2007 where smoking tobacco declined at an annual rate of 1.4%.
- 2009 and 2010 OTP sales volume data for Bulgaria, Cyprus, Estonia, Latvia, Lithuania, Malta, Romania, Slovakia and Slovenia was not available:
  - OTP share of total tobacco sales in these countries was less than 5% in 2008.

# The five largest markets for smoking tobacco sales in the EU account for over 70% of overall sales

- Germany and the Benelux countries have the highest sales of smoking tobacco in Europe relative to total tobacco consumption:
  - Legal sales in these countries increased by 4.3% in 2010.
- France, UK and Spain also have significant sales of smoking tobacco and each of these countries experienced an increase in legal sales from 2009 to 2010:
  - Hungary also saw a significant increase in OTP, with annual legal sales growth for smoking tobacco of 28.5%.
  - Poland saw the largest annual decline in smoking tobacco sales, with a decline of 38.8% in 2010.

Notes: (a) Smoking tobacco calculated based on 0.75 grams per stick

- (b) Smoking tobacco includes pipe tobacco and 'roll your own', 'make your own' and 'portions' fine cut variants
- (c) Robust 2009 and 2010 OTP sales data was not available for Bulgaria, Cyprus, Estonia, Latvia, Lithuania, Malta, Romania, Slovakia, and Slovenia

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



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# **Consumption overview: summary**

Total cigarette consumption in the EU declined at an accelerated rate of 5.3% in 2010 to 649 billion cigarettes	Legal Domestic Consumption declined by 6.3% in 2010 to 561 billion cigarettes. Differences between changes in Legal Domestic Sales and Legal Domestic Consumption reflect outflows to other EU and non-EU countries  Legal domestic sales of cigarettes in the EU declined by 6.1% to 595 billion cigarettes over the same period  Legal domestic consumption accounted for 86.5% of consumption in 2010
The volume of non-domestic flows reached 87.9 billion cigarettes in 2010 for the 27 Member States	Non-domestic cigarettes accounted for 13.5% of EU consumption in 2010, compared to 12.6% in 2009  Total non-domestic flows to the EU in 2010 surpassed the volume of legal domestic sales in Italy, which is the largest single market in the EU  Germany, which represents the largest market for non-domestic inflows, experienced a 0.2 billion increase to 21.5 billion cigarettes in 2010  The Netherlands and Bulgaria experienced the largest growth in non-domestic inflows  Non-domestic inflows to the Netherlands increased by 2.0 billion cigarettes to 3.6 billion in 2010, but remain below 2006-2008 levels  Non-domestic inflows to Bulgaria grew by 1.4 billion cigarettes to 4.9 billion in 2010  The UK and Poland experienced the largest declines in non-domestic inflows  Non-domestic inflows to the UK declined by 2.1 billion cigarettes to 6.7 billion in 2010  Non-domestic inflows to Poland declined by 1.7 billion cigarettes to 6.3 billion in 2010
Non-domestic (legal) volumes accounted for 23.7 billion cigarettes in 2010	Total non-domestic (legal) accounted for 3.7% of total consumption in 2010, broadly consistent with 2009  This represents a decline from 2008 when ND(L) represented 4.1% of total consumption respectively  Germany and France remained the largest destination markets for non-domestic (legal) cigarettes in 2010

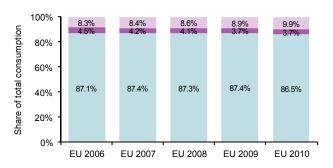
## **EU Consumption by type**

Counterfeit and contraband share of cigarette consumption increased to 9.9% in 2010, equivalent to 64 billion cigarettes.

ND(L) share of consumption declined to 3.7% in 2010.

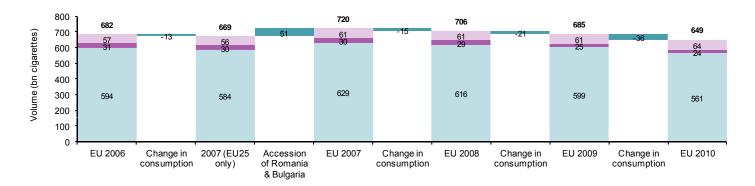
The annual rate of decline in total consumption accelerated in 2010 to 5.3%.

# EU consumption by type 2006-2010



% change	2006-2007 (a)	2007-2008	2008-2009	2009-2010
C&C	-1.1%	-0.1%	1.0%	5.2%
Non-domestic (legal)	-4.7%	-4.6%	-13.6%	-5.8%
Legal domestic consumption	-1.8%	-2.1%	-2.8%	-6.3%
Total consumption	-1.9%	-2.0%	-2.9%	-5.3%

# EU consumption by type 2006-2010

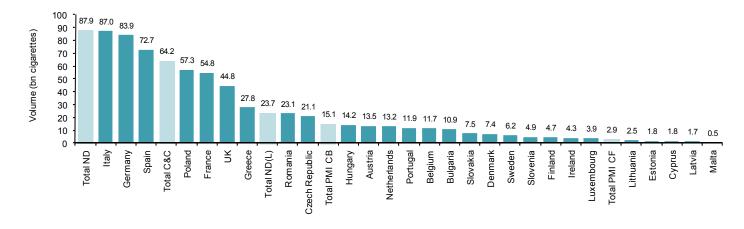


Note: (a) Percentage change 2006-2007 is for EU-25 only

## **Legal sales trends**

Total non-domestic flows to the EU of 87.9 billion cigarettes in 2010 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 2010





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# Non-domestic (legal) overview

Non-domestic (legal)	Total non-domestic (legal) accounted for 3.7% of total consumption in 2009
volumes accounted for 23.7 billion cigarettes in 2010	■ This represented a decline from 2008 when ND(L) represented 4.1% of total consumption respectively, and is broadly consistent with 2009
	Declining non-domestic (legal) volumes in the UK, Spain and Italy were partially offset by increases in France, the Netherlands and Germany in 2010
	■ The UK, Spain and Italy accounted for 3.7 billion cigarettes of EU non-domestic (legal) volumes in 2010, down from 5.2 billion cigarettes in 2009
	<ul> <li>France, the Netherlands and Germany accounted for 14.4 billion cigarettes of EU non-domestic (legal) volumes in 2010, up from 12.9 billion cigarettes the previous year</li> </ul>
Non-domestic (legal)	Germany and France accounted for approximately 54% of EU ND(L) consumption in 2010
inflows as a proportion of total consumption are	■ The Netherlands, the UK, Spain, Austria and Italy were the only other Member States that accounted for over 5% of the EU total ND(L)
typically higher in western	The Netherlands and Ireland had the highest non-domestic (legal) share of consumption in 2010 at 10.9% and 10.2%, respectively
Member States	<ul> <li>Germany, Austria, Luxembourg, France, Finland and Belgium were the only other Member States where ND(L) share of consumption accounted for more than 5% in 2010</li> </ul>
Flows from EU source countries account for the	Non-domestic (legal) flows between the EU-27 Member States accounted for 75.2% of total ND(L) inflows in 2010, compared to 73.4% in 2009
large majority of non- domestic (legal) consumption	Spain was the largest single source of non-domestic (legal) inflows, representing 11.8% of total EU ND(L) flows in 2010 compared to 11.4% in 2009
Overall PMI share of non-	Non-domestic (legal) volumes of PMI brands declined from 39% of the EU total in 2009, to 37% in 2010
domestic (legal) flows declined to 37% in 2010	■ Marlboro share of total non-domestic (legal) declined to 25% in 2010, down from 26% in the previous year
400mm64 to 57 70 m 20 to	■ L&M share of total non-domestic (legal) declined to 4% in 2010, down from 5% in 2009

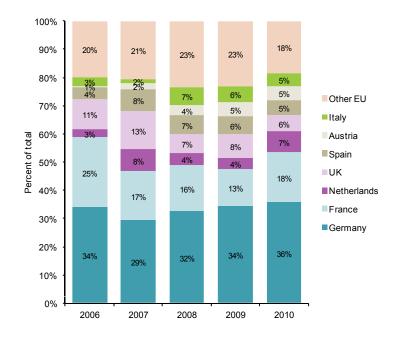


## Non-domestic (legal) inflows by destination country

Non-domestic (legal) flows to the EU-27 Member States declined to 23.7 billion in 2010 compared to 25.0 billion cigarettes in 2009.

Germany and France remained the largest destination markets for nondomestic (legal) cigarettes in 2010.

# Non-domestic (legal) inflows by destination 2006-2010



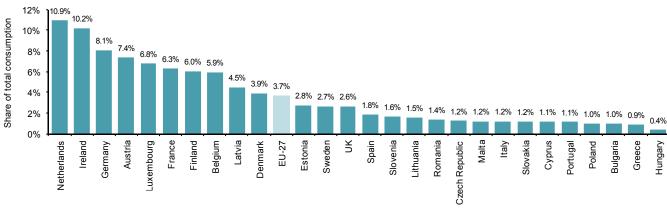
ND(L) share of consumption	4.5%	4.2%	4.1%	3.7%	3.7%
ND(L) share of non-domestic	35.3%	33.4%	32.4%	29.1%	27.0%

Non-domestic (legal) volume by destination <sup>(1)</sup>							
Destination	2006	2007	2008	2009	2010		
Germany	10.6	8.9	9.4	8.6	8.4		
France	7.7	5.3	4.7	3.3	4.2		
Netherlands	0.9	2.4	1.3	1.0	1.8		
UK	3.4	4.1	1.9	2.1	1.3		
Spain	1.2	2.4	1.9	1.6	1.3		
Austria	0.2	0.6	1.0	1.3	1.2		
Italy	1.0	0.5	1.9	1.5	1.1		
Belgium	0.9	0.8	1.0	0.7	0.7		
Ireland	1.0	0.8	0.5	0.6	0.6		
Poland	0.6	0.6	0.9	0.9	0.5		
Romania	n/a	0.7	0.8	0.4	0.4		
Finland	0.7	0.4	0.4	0.6	0.4		
Denmark	0.4	0.4	0.3	0.2	0.3		
Greece	0.3	0.5	0.6	0.6	0.3		
Czech Republic	0.1	0.1	0.1	0.2	0.2		
Sweden	0.7	0.7	0.5	0.2	0.2		
Bulgaria	n/a	0.1	0.2	0.2	0.2		
Portugal	0.3	0.1	0.2	0.1	0.1		
Latvia	0.3	0.2	0.2	0.1	0.1		
Slovakia	0.3	0.1	0.2	0.1	0.1		
Luxembourg	0.1	0.1	0.1	0.1	0.1		
Slovenia	0.1	0.0	0.1	0.1	0.1		
Lithuania	0.1	0.1	0.2	0.1	0.1		
Estonia	0.1	0.1	0.0	0.1	0.1		
Hungary	0.1	0.3	0.2	0.2	0.1		
Cyprus	0.1	0.1	0.1	0.1	0.0		
Malta	0.0	0.0	0.0	0.0	0.0		
Total	31.0	30.3	29.0	25.0	23.7		

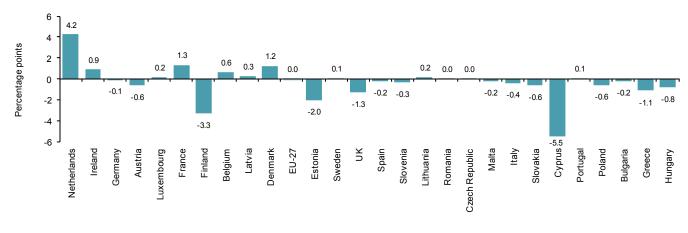
## Non-domestic (legal) share of consumption

The Netherlands and Ireland had the highest non-domestic (legal) shares of consumption at over 10% in 2010.

# Non-domestic (legal) share of consumption by country $2010^{(1)}$



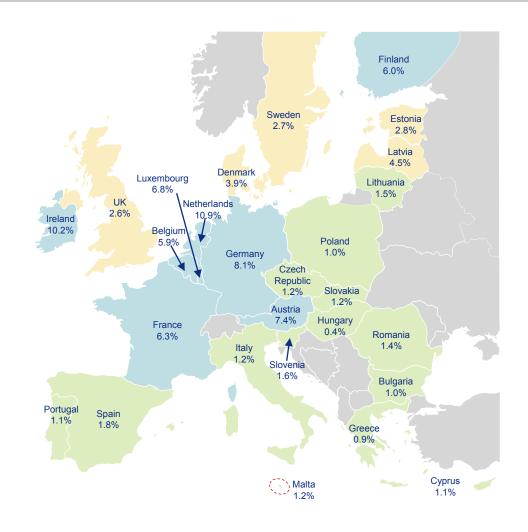
# Percentage point change in non-domestic (legal) share of consumption by country 2009-2010<sup>(1)</sup>





# 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  $2010^{(1)}$ 



Key: Higher than 5.0% 2.0% to 5.0%

Less than 2.0%



# 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 2010<sup>(1)</sup>



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

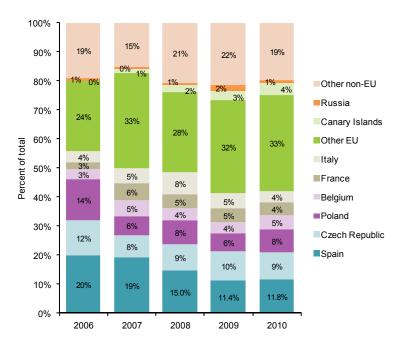
Marlboro L&M



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

ND(L) flows between the EU-27 Member States accounted for 75.2% of total ND(L) inflows in 2010, compared to 73.4% in 2009.

# Non-domestic (legal) flows by country of origin 2006-2010<sup>(1)(a)</sup>



ND(L) inflows by country of origin <sup>(1)</sup>							
Source	2006	2007	2008	2009	2010		
Spain	20.2%	19.3%	15.0%	11.4%	11.8%		
Czech Republic	11.8%	7.8%	8.8%	10.1%	9.4%		
Poland	14.3%	6.5%	8.3%	6.1%	7.7%		
Belgium	3.4%	5.4%	4.1%	4.0%	4.9%		
France	2.6%	5.9%	4.8%	4.5%	4.4%		
Italy	3.5%	5.3%	7.8%	5.2%	4.0%		
Luxembourg	5.0%	4.6%	2.2%	2.3%	3.9%		
Germany	3.2%	4.5%	2.7%	3.2%	3.9%		
Greece	3.0%	3.4%	2.6%	3.9%	3.5%		
Netherlands	1.8%	2.1%	1.7%	2.2%	3.4%		
UK	1.3%	3.8%	2.9%	3.5%	3.0%		
Slovenia	0.3%	1.0%	1.8%	2.4%	2.5%		
Portugal	2.3%	2.1%	2.0%	2.9%	2.0%		
Hungary	0.4%	1.2%	1.5%	2.0%	1.9%		
Austria	0.8%	2.1%	1.6%	1.8%	1.3%		
Other EU27	5.9%	7.8%	8.7%	8.0%	7.5%		
Total EU27 Member States	79.9%	82.8%	76.4%	73.4%	75.2%		
Canary Islands	0.0%	1.5%	2.2%	3.2%	4.2%		
Russia	1.3%	0.5%	0.9%	1.9%	1.1%		
Andorra	0.2%	0.4%	0.1%	1.7%	1.7%		
Turkey	1.0%	0.7%	0.4%	0.4%	0.4%		
Egypt	0.0%	0.3%	0.4%	0.3%	0.3%		
Other non-EU	17.7%	13.8%	19.7%	19.1%	17.1%		
Total non-EU	20.1%	17.2%	23.6%	26.6%	24.8%		
Total	100%	100%	100%	100%	100%		

Note:

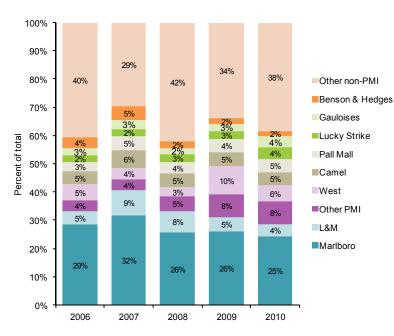
(a) ND(L) by origin shares are based on country of purchase rather than variant purchased. As a result, these shares include purchases of Duty Free variants made when travelling outside the EU



# Non-domestic (legal) flows by brand

Overall PMI share of nondomestic (legal) flows declined from 39.4% in 2009 to 36.9% in 2010.

# Non-domestic (legal) flows by brand 2006-2010<sup>(1)</sup>



Non-domestic inflows by brand <sup>(1)</sup>								
Source	2006	2007	2008	2009	2010			
Marlboro	28.7%	32.0%	25.8%	26.4%	24.7%			
L&M	4.7%	8.7%	7.7%	4.9%	4.2%			
Next	0.3%	0.2%	0.8%	2.3%	0.4%			
Chesterfield	1.2%	1.1%	0.7%	1.8%	2.0%			
Philip Morris	1.0%	1.0%	1.0%	1.2%	1.9%			
Parliament	0.1%	0.2%	0.2%	0.4%	0.1%			
Other PMI	1.4%	1.5%	2.6%	2.4%	3.7%			
PMI total	37.3%	44.7%	38.7%	39.4%	36.9%			
West	5.5%	4.1%	3.0%	9.7%	5.7%			
Camel	4.7%	6.2%	5.0%	5.3%	4.7%			
Pall Mall	3.4%	5.1%	3.9%	4.4%	4.6%			
Lucky Strike	2.3%	2.3%	2.9%	2.8%	4.0%			
Gauloises	2.6%	3.3%	2.1%	2.7%	3.9%			
Benson & Hedges	4.0%	4.8%	2.3%	1.9%	2.1%			
John Player Special	1.6%	2.4%	1.2%	1.5%	2.0%			
Davidoff	0.9%	0.7%	1.2%	1.2%	1.0%			
Prince	0.6%	1.6%	1.1%	1.1%	0.9%			
Silk Cut	1.2%	1.2%	0.7%	1.1%	0.8%			
Ducados	0.0%	0.5%	0.4%	1.1%	0.2%			
Winston	1.1%	1.0%	1.0%	1.0%	2.4%			
Lambert & Butler	0.0%	0.0%	0.8%	0.9%	0.3%			
Dunhill	1.4%	0.7%	1.7%	0.7%	0.8%			
Rothmans	1.1%	0.6%	0.4%	0.6%	0.6%			
Other non-PMI	32.5%	20.8%	33.4%	24.7%	29.0%			
Non-PMI	62.7%	55.3%	61.3%	60.6%	63.1%			
Total	100.0%	100.0%	100.0%	100.0%	100.0%			



### Project Star 2010

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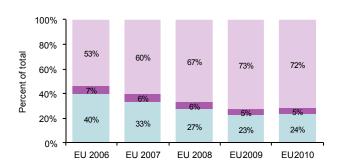
## **C&C** inflows and country comparison overview

Total EU C&C volumes amounted to 64.2 billion cigarettes in 2010,	Total C&C volumes accounted for 9.9% of total consumption in 2010 compared to 8.9% in 2009  Germany and France were the two largest destination countries for C&C inflows and accounted for over a third of EU C&C inflows  Declining C&C volumes in Poland and the UK were offset by increases in Romania, Bulgaria and Italy in 2010
Non-EU countries accounted for 60.8% of C&C flows to the EU in 2010, up from 56.1% in 2009	Ukraine, Poland and Russia remain the major sources of counterfeit and contraband although flows from Belarus, Czech Republic and other non-EU countries have also grown in 2010  Poland accounts for the largest share of intra-EU counterfeit and contraband flows by source country at 11.7% in 2010 compared to 13.0% in 2009  Despite a decline in volume terms, Ukraine and Russia remain the largest non-EU source countries for counterfeit and contraband product.
The share of illicit cigarette consumption in the Eastern border and Mediterranean countries has increased since 2008	The share of illicit cigarette consumption in the Eastern border and Mediterranean countries has increased since 2008  The share of illicit cigarette consumption in the Western and Central EU markets was stable at an aggregate level in 2010  In Eastern border countries the share of illicit cigarettes increased rapidly from 8.7% in 2007 to 15.4% in 2010  Counterfeit and contraband as a share of consumption in Mediterranean countries is low but has been increasing steadily since 2008  The majority of contraband flows to Eastern border and Mediterranean countries originated from outside the EU  Inflows from non-EU countries to Eastern border and Mediterranean countries accounted for 85% and 71% of counterfeit and contraband inflows respectively.  This contrasts with the Western and Central Member States, where Non-EU inflows accounted for 44% of contraband inflows

### **C&C** volumes by category

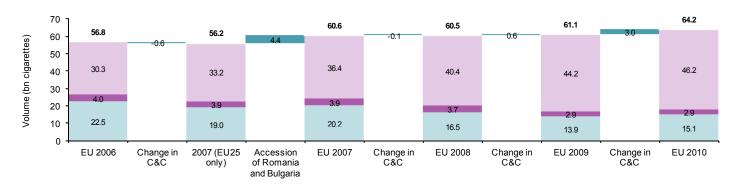
Counterfeit and contraband inflows increased by 3.1 billion cigarettes to 64.2 billion in 2010

## C&C cigarette volumes by category 2006-2010<sup>(1)</sup>



CAGR (%)	2006-2007 <sup>(a)</sup>	2007-2008	2008-2009	2009-2010
Non-PMI C&C	9.8%	10.7%	9.6%	4.3%
■ PMI counterfeit	-2.4%	-7.0%	-19.4%	-1.1%
PMI contraband	-15.4%	-18.3%	-15.6%	8.2%
Total C&C	-1.1%	-0.1%	1.0%	5.0%

## C&C cigarette volumes by category 2006-2010<sup>(1)</sup>



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

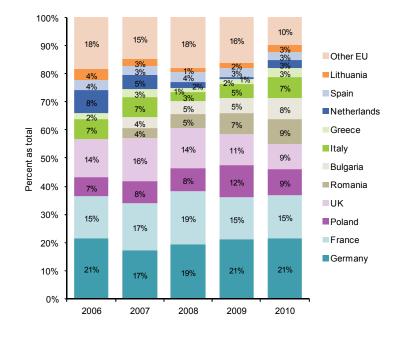


### **C&C** volumes by destination country

Germany, France, Poland and the UK together accounted for over half of total EU C&C consumption.

Declining C&C volumes in Poland and the UK in 2010 were offset by increases in Romania, Bulgaria and Italy.

## C&C volumes by destination country 2006-2010<sup>(1)(a)</sup>



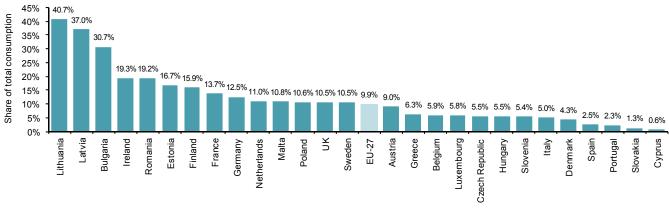
C&C share of consumption	8.3%	8.4%	8.6%	8.9%	9.9%
C&C share of non-domestic	64.7%	66.6%	67.6%	70.9%	73.0%

C&C volume by des	stination <sup>(1)</sup>				
Destination	2006	2007	2008	2009	2010
Germany	12.1	10.4	11.5	12.7	13.1
France	8.5	10.0	11.5	9.2	9.3
Poland	3.8	4.7	4.9	7.1	5.8
UK	7.8	9.4	8.6	6.7	5.4
Romania	n/a	2.2	3.1	4.6	5.3
Bulgaria	n/a	2.2	2.7	3.3	4.8
Italy	4.0	4.3	2.0	3.0	4.5
Greece	1.2	1.9	0.7	1.0	1.8
Netherlands	4.6	3.0	1.5	0.6	1.8
Spain	2.1	1.8	2.1	1.9	1.8
Lithuania	2.3	1.6	0.9	1.1	1.6
Austria	1.7	2.0	1.5	1.3	1.4
Ireland	0.7	1.2	1.6	1.4	1.2
Latvia	0.3	0.2	0.2	0.8	1.0
Finland	0.6	1.1	1.1	8.0	0.9
Czech Republic	0.1	0.1	1.3	1.1	0.9
Hungary	3.3	1.7	1.4	1.0	0.8
Belgium	0.9	8.0	0.7	1.3	0.7
Sweden	0.9	0.9	0.9	0.7	0.7
Denmark	0.2	0.2	0.5	0.3	0.3
Estonia	0.4	0.2	0.1	0.5	0.3
Portugal	0.6	0.3	0.5	0.3	0.3
Slovenia	0.3	0.2	0.6	0.3	0.2
Slovakia	0.3	0.1	0.4	0.1	0.1
Luxembourg	0.0	0.0	0.0	0.1	0.1
Malta	0.0	0.0	0.0	0.0	0.1
Cyprus	0.0	0.0	0.0	0.0	0.0
Total	56.8	60.6	60.5	61.1	64.2

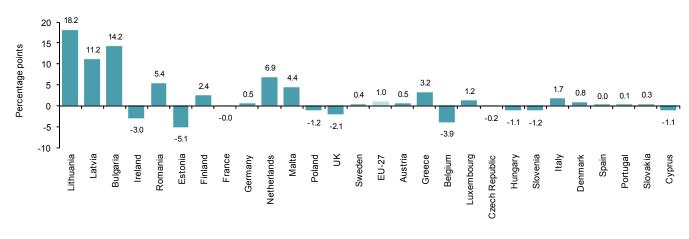
## **C&C** inflows share of total consumption

Lithuania had the highest C&C share of consumption at 40.7% in 2010 and experienced the largest increase in C&C share of total consumption from 2009.

## C&C as a share of consumption by country 2010<sup>(1)</sup>



## Percentage point change in C&C as a share of consumption by country 2009-2010<sup>(1)</sup>

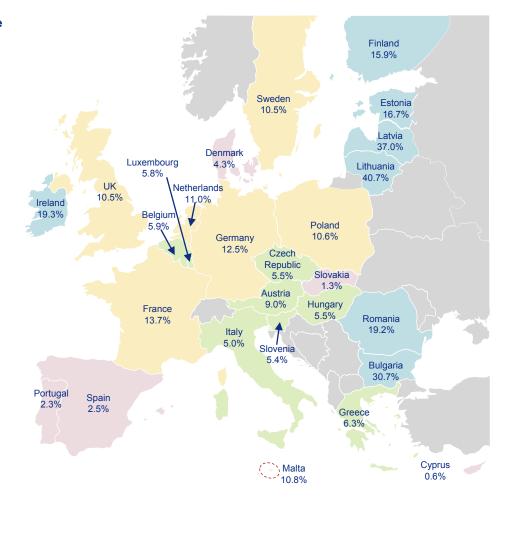




## Counterfeit and contraband share of consumption

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

C&C share of total consumption by Member State 2010<sup>(1)</sup>



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

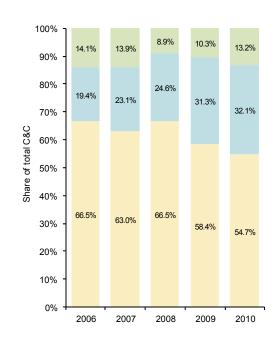
Higher than 15% 10% to 14.9% 5% to 9.9% Less than 4.9%

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### **C&C** inflows by destination regions

The share of illicit cigarette consumption in the Eastern border and Mediterranean countries has increased since 2008.

# Share of total EU C&C inflows by destination regions 2006-2010<sup>(1)</sup>



	2006	2007	2008	2009	2010
C&C (bn cigarettes)	56.8	60.6	60.5	61.1	64.2



- (ey: 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



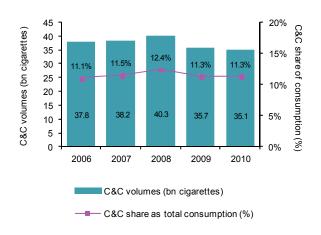
#### **C&C** inflows by destination regions

Counterfeit and contraband share of consumption in the Western and Central EU markets was stable at 11.3% in 2010.

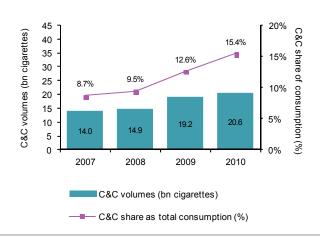
Counterfeit and contraband as a share of consumption in Eastern border countries increased rapidly from 8.7% in 2007 to 15.4% in 2010.

Counterfeit and contraband as a share of consumption in Mediterranean countries increased from 2.9% in 2009 to 4.1% in 2010.

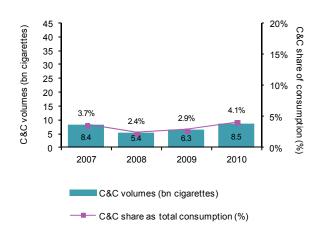
## C&C inflows to Western and Central EU countries 2006-2010<sup>(1)(a)</sup>



## C&C inflows to Eastern border EU countries 2006-2010<sup>(1)(a)(b)</sup>



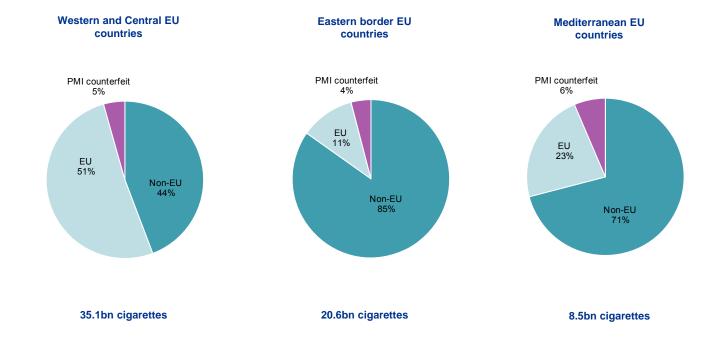
## C&C inflows to Mediterranean EU countries 2006-2010<sup>(1)(a)</sup>





### **C&C** inflows by destination regions

In contrast to Western and Central EU counties, inflows from Non-EU sources accounted for the majority of counterfeit and contraband in the Eastern border and Mediterranean EU countries. Share of C&C inflows by origin 2010<sup>(1)</sup>

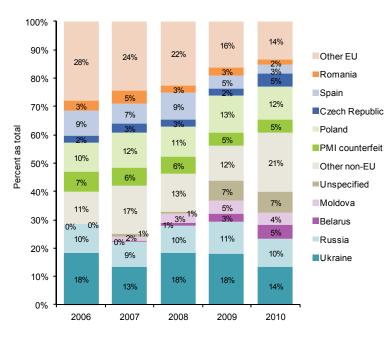




## **C&C** flows by country of origin

The share of counterfeit and contraband accounted for by non-EU countries increased to 60.8% in 2010.

## C&C inflows by country of origin 2006-2010<sup>(1)(a)</sup>



C&C inflows by country of	origin <sup>(1)</sup>				
Source	2006	2007	2008	2009	2010
Poland	10.3%	12.4%	10.6%	13.0%	11.7%
Czech Republic	2.5%	3.0%	2.5%	2.4%	4.6%
Spain	8.9%	7.0%	9.4%	4.8%	3.0%
Romania	3.3%	4.7%	2.8%	2.8%	1.7%
Slovenia	1.0%	0.9%	1.0%	0.8%	0.9%
Hungary	0.6%	0.5%	0.6%	0.7%	0.7%
Other EU27	26.5%	23.0%	20.9%	14.6%	12.0%
Total EU27 Member States	53.0%	51.5%	47.8%	39.1%	34.6%
PMI counterfeit	7.1%	6.5%	6.0%	4.8%	4.5%
Ukraine	18.5%	13.4%	18.3%	18.1%	13.6%
Russia	10.0%	8.9%	9.6%	11.3%	9.8%
Belarus	0.0%	0.2%	1.0%	2.7%	5.0%
Moldova	0.0%	1.6%	3.2%	4.7%	4.2%
Unspecified	0.0%	0.3%	0.7%	6.9%	7.4%
Other non-EU	11.4%	17.5%	13.4%	12.5%	20.9%
Total non-EU	39.9%	41.9%	46.2%	56.1%	60.8%
Total	100%	100%	100%	100%	100%

Notes: (a) C&C by origin shares are based on variant purchased

(b) In 2009 and 2010, packs which had no clear indication of origin were classified as 'Unspecified'. Prior to 2009, such packs were classified as Duty Free.



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#### **C&C** inflows and brand comparison overview

The share of counterfeit and contraband accounted for by Jin Ling, Classic and American Legend declined to 10% in 2010, compared to 15% in 2009

## Consumption of Classic, Jin Ling and American Legend declined to account for 6.5 billion cigarettes in 2010 compared to 9.2 billion cigarettes in 2009

- In 2010, 88% of Classic was Ukrainian variant and 78% percent of Jin Ling originated from Russia while over 97% of American Legend was Unspecified market variant.
  - Ukrainian Classic continued to be observed in over half of the EU Member States despite a volume decline to 3.3 billion cigarettes, with Germany, Latvia, Lithuania and Slovakia experiencing reduced inflows.
  - Despite a decline in volume, Jin Ling's penetration increased to sixteen Member States and represented over 1% of packs collected in 51 cities
  - American Legend inflows declined by 1 billion cigarettes between 2009 and 2010 but the brand remained significant in 24 French cities.
- The decline in Classic, Jin Ling and American Legend volumes was partially offset by volume growth in a number of other illicit brands
  - Growing illicit brands such as Raquel, Fest, Fast, Minsk, Tabaccus, Premier, Baron and Palace accounted for 5% of total counterfeit and contraband consumption in 2010, up from 2% in 2009

PMI contraband share of counterfeit and contraband inflows increased to 23.6% in 2010 from 22.8% in 2009

#### PMI contraband volumes increased from 13.9 billion cigarettes in 2009 to 15.2 billion cigarettes in 2010

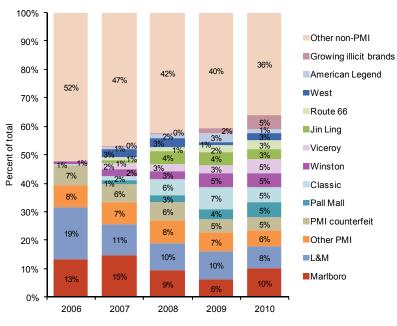
- The increased in total PMI contraband flows was largely driven by a growth in illicit flows of Marlboro
- Marlboro inflows increased from 6.4% of total EU C&C inflows in 2009 to 10.2% in 2010, but remained below 2006 and 2007 levels



## **C&C** flows by brand

Total PMI share of C&C inflows grew to 28.1% in 2010, driven largely by an increase in illicit flows of Marlboro to 10%.

## C&C inflows by brand 2006-2010<sup>(1)(a)</sup>



C&C inflows by brar	nd <sup>(1)</sup>				
Source	2006	2007	2008	2009	2010
Marlboro	13.3%	15.0%	9.5%	6.4%	10.2%
L&M	18.6%	10.9%	9.7%	9.8%	7.8%
Chesterfield	0.6%	0.9%	1.2%	1.8%	1.4%
Next	1.7%	1.5%	1.1%	0.6%	0.9%
Bond Street	0.5%	0.6%	0.4%	0.4%	0.7%
Philip Morris	0.7%	0.8%	1.4%	0.7%	0.6%
PMI counterfeit	7.1%	6.5%	6.0%	4.8%	4.5%
Other PMI	4.2%	3.7%	3.9%	3.0%	1.9%
PMI total	46.6%	39.8%	33.3%	27.6%	28.1%
Pall Mall	0.0%	1.2%	2.7%	3.6%	5.4%
Classic	0.4%	1.6%	5.6%	7.4%	5.2%
Winston	0.9%	2.5%	2.8%	4.9%	4.9%
Viceroy	0.1%	2.0%	2.6%	3.1%	4.9%
Jin Ling	0.0%	1.2%	4.3%	4.5%	3.5%
Route 66	0.0%	0.9%	1.4%	2.3%	3.3%
West	0.0%	2.8%	3.1%	1.2%	2.7%
Ld	0.0%	0.6%	0.9%	1.3%	1.8%
Camel	0.5%	1.6%	2.2%	1.2%	1.7%
More	0.2%	0.8%	1.2%	1.8%	1.6%
American Legend	0.0%	0.7%	1.7%	3.1%	1.4%
Moon	0.0%	0.7%	0.9%	1.1%	1.2%
Lambert & Butler	1.8%	3.2%	1.9%	0.7%	1.2%
Raquel	0.0%	0.4%	0.3%	0.3%	1.1%
Karelia	0.6%	1.3%	1.9%	1.6%	0.9%
Other non-PMI	48.8%	38.7%	33.1%	34.3%	31.0%
Non-PMI	53.4%	60.2%	66.7%	72.4%	71.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Note:

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

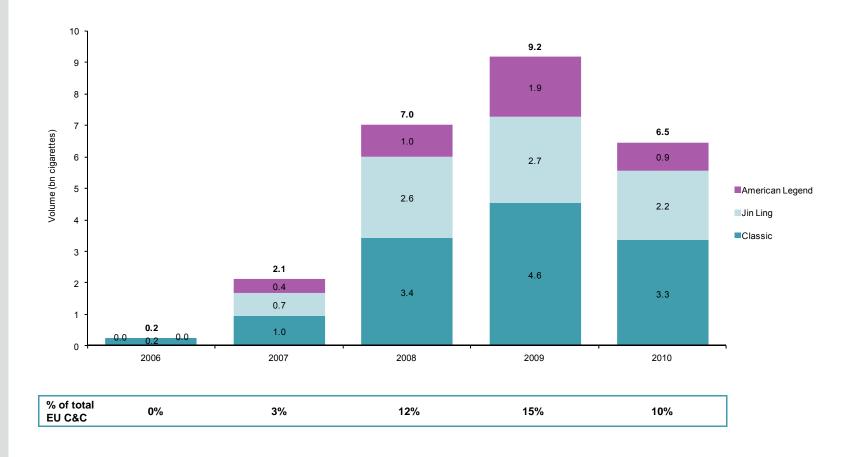


### Consumption of Classic, Jin Ling and American Legend

Having rapidly increased to a peak of 9.2 billion in 2009, consumption of Classic, Jin Ling and American Legend declined to account for 6.5 billion cigarettes in 2010.

In 2010, 88% of Classic packs identified were Ukrainian variant and 78% percent of Jin Ling originated from Russia, while over 97% of American Legend was unspecified market variant.

Consumption of Classic, Jin Ling and American Legend  $2006-2010^{(1)(a)}$ 



#### **Inflows of Classic**

In 2006, Ukrainian variant of Classic was only observed along the EU-Ukraine border.

Classic share of consumption (Ukrainian variant) 2006<sup>(1)</sup>



Key:

- Not observed in significant quantities
- Accounts for 0%-0.49% consumption
- Accounts for 0.5%-0.9% consumption
- Accounts for more than 1.0% consumption
- Local hotspot (over 1.0% packs collected)



#### **Inflows of Classic**

By 2007 Ukrainian Classic was found in France, Germany, Greece and Slovenia.

The number of local hotspots, where Ukrainian Classic packs accounted for more than 1% of packs collected, had increased from seven in 2006 to 17 in 2007.

Classic share of consumption (Ukrainian variant) 2007<sup>(1)</sup>



Key:

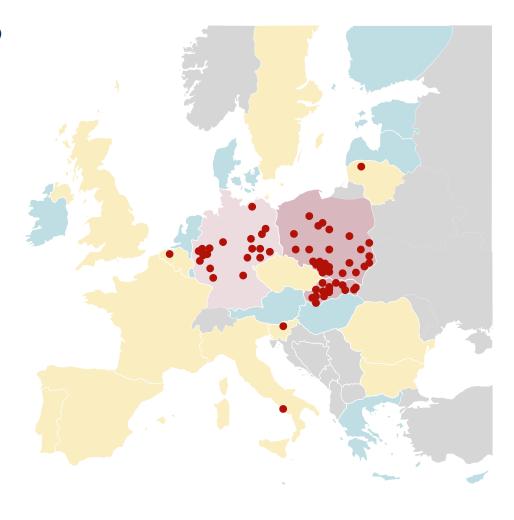
- Not observed in significant quantities
- Accounts for 0%-0.49% consumption
- Accounts for 0.5%-0.9% consumption
- Accounts for more than 1.0% consumption
- Local hotspot (over 1.0% packs collected)



#### **Inflows of Classic**

In 2008 Ukrainian Classic was observed in half of EU Member States with over 60 local hotspots.

Classic share of consumption (Ukrainian variant)  $2008^{(1)}$ 



Key:

- Not observed in significant quantities
- Accounts for 0%-0.49% consumption
- Accounts for 0.5%-0.9% consumption
- Accounts for more than 1.0% consumption
- Local hotspot (over 1.0% packs collected)

#### **Inflows of Classic**

In 2009 Ukrainian Classic continued to be observed in over half of the EU Member States.

Classic share of consumption (Ukrainian variant) 2009<sup>(1)</sup>



Key:

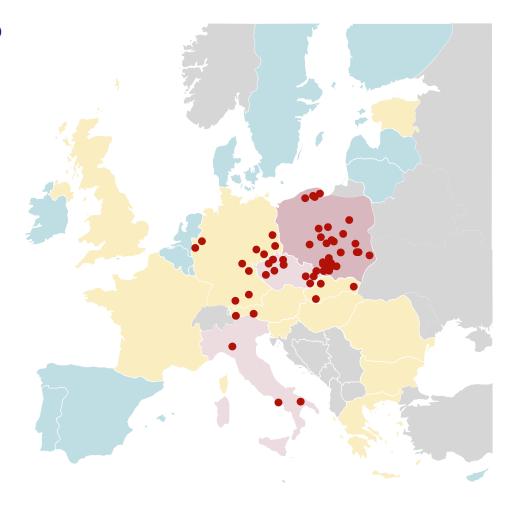
- Not observed in significant quantities
- Accounts for 0%-0.49% consumption
- Accounts for 0.5%-0.9% consumption
- Accounts for more than 1.0% consumption
- Local hotspot (over 1.0% packs collected)



#### **Inflows of Classic**

In 2010, Ukrainian Classic continued to be observed in over half of the EU Member States despite a volume decline to 3.3 billion cigarettes, with Germany, Latvia, Lithuania and Slovakia experiencing reduced inflows.

Classic share of consumption (Ukrainian variant) 2010<sup>(1)</sup>



Key:

- Not observed in significant quantities
- Accounts for 0%-0.49% consumption
- Accounts for 0.5%-0.9% consumption
- Accounts for more than 1.0% consumption
- Local hotspot (over 1.0% packs collected)



## **Inflows of Jin Ling**

In 2006 Jin Ling was only observed along the Poland-Kaliningrad border.

Jin Ling share of consumption 2006<sup>(1)</sup>



Key:

- Not observed in significant quantities
- Accounts for 0%-0.49% consumption
- Accounts for 0.5%-0.9% consumption
- Accounts for more than 1.0% consumption
- Local hotspot (over 1.0% packs collected)

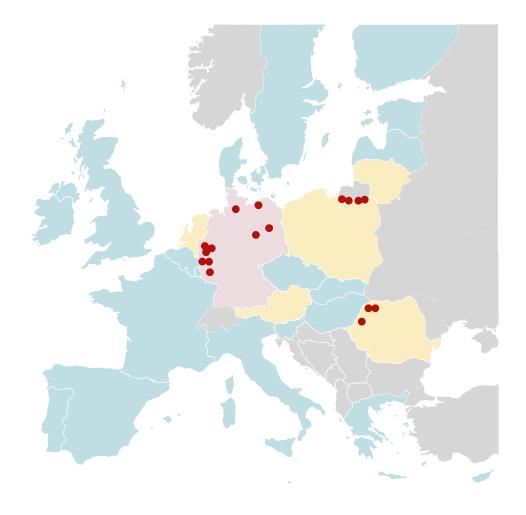


### **Inflows of Jin Ling**

By 2007 Jin Ling had established a presence in Germany and appeared in four other new markets.

The number of local hotspots, where Jin Ling packs accounted for more than 1.0% of packs collected, had increased from four in 2006 to 17 in 2007.

Jin Ling share of consumption 2007<sup>(1)</sup>



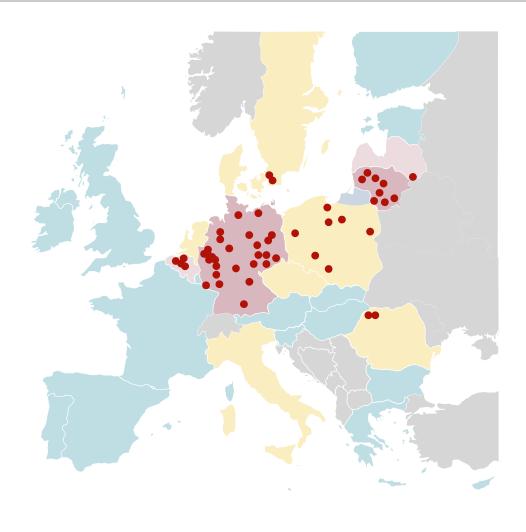
Key:

- Not observed in significant quantities
- Accounts for 0%-0.49% consumption
- Accounts for 0.5%-0.9% consumption
- Accounts for more than 1.0% consumption
- Local hotspot (over 1.0% packs collected)

## **Inflows of Jin Ling**

In 2008, Jin Ling was being found in ten Member States with 50 local hotspots.

Jin Ling share of consumption 2008<sup>(1)</sup>



Key:

- Not observed in significant quantities
- Accounts for 0%-0.49% consumption
- Accounts for 0.5%-0.9% consumption
- Accounts for more than 1.0% consumption
- Local hotspot (over 1.0% packs collected)



## **Inflows of Jin Ling**

In 2009, Jin Ling's penetration increased to 14 of the EU Member States.

Jin Ling share of consumption 2009<sup>(1)</sup>



Key:

- Not observed in significant quantities
- Accounts for 0%-0.49% consumption
- Accounts for 0.5%-0.9% consumption
- Accounts for more than 1.0% consumption
- Local hotspot (over 1.0% packs collected)



## **Inflows of Jin Ling**

In 2010, despite the decline in volume, Jin Ling's penetration increased to 16 Member States and represented over 1% of packs collected in 51 cities. Jin Ling share of consumption 2010<sup>(1)</sup>



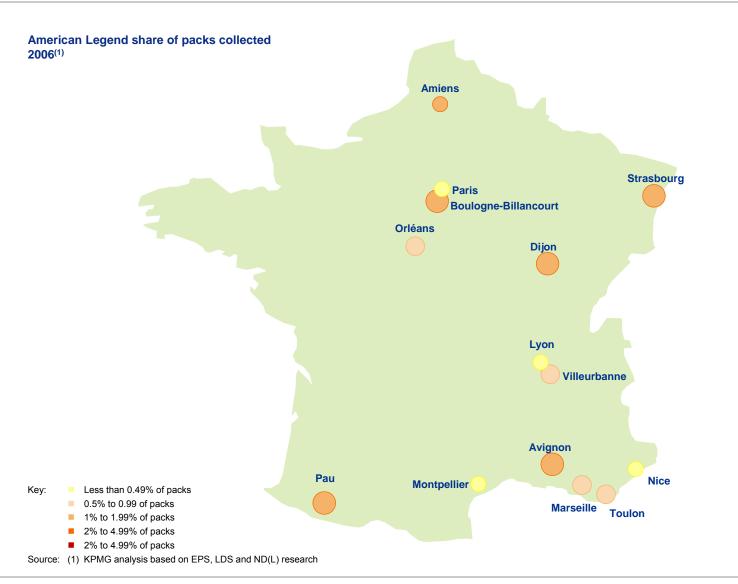
Key:

- Not observed in significant quantities
- Accounts for 0%-0.49% consumption
- Accounts for 0.5%-0.9% consumption
- Accounts for more than 1.0% consumption
- Local hotspot (over 1.0% packs collected)



## **Inflows of American Legend**

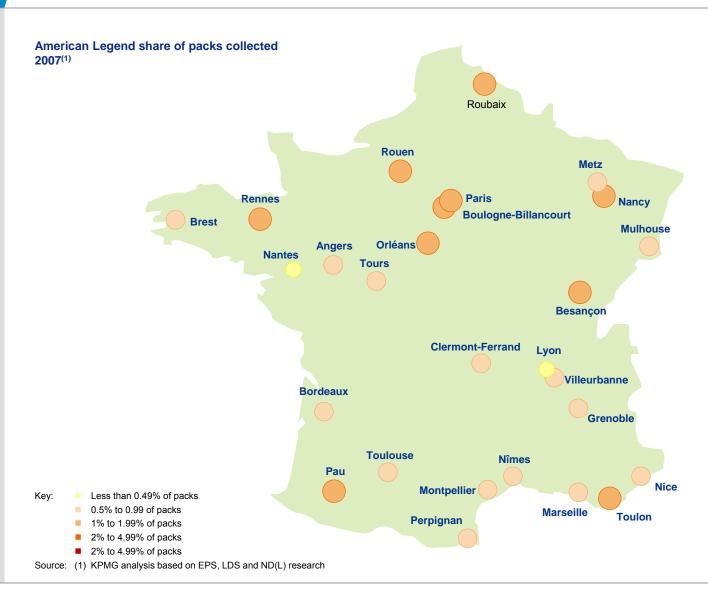
In 2006 American Legend was found in a few locations in France and total consumption was 0.2 billion cigarettes.





### **Inflows of American Legend**

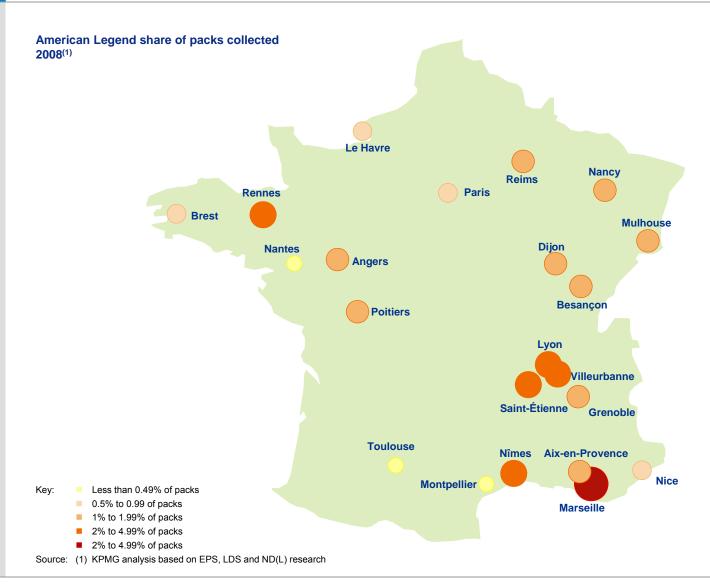
By 2007 the penetration of American Legend had increased significantly and volumes had doubled to 0.4 billion cigarettes.





## **Inflows of American Legend**

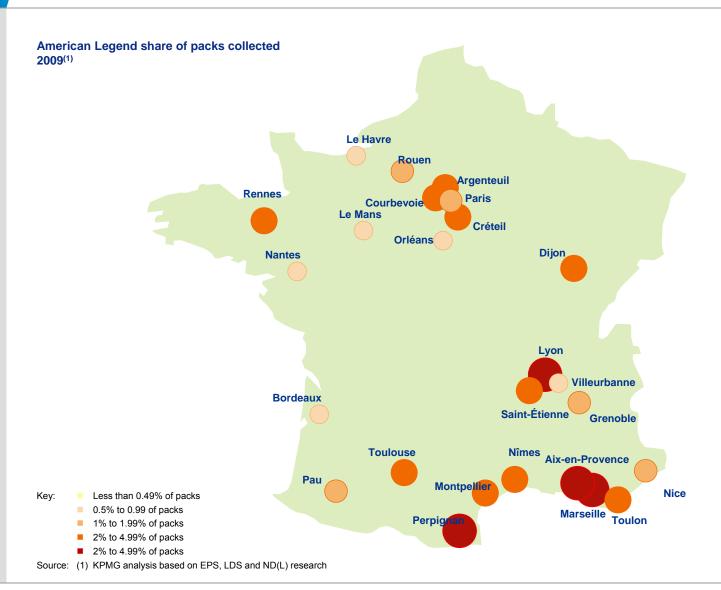
In 2008 consumption of American Legend increased to 1.0 billion cigarettes.





### **Inflows of American Legend**

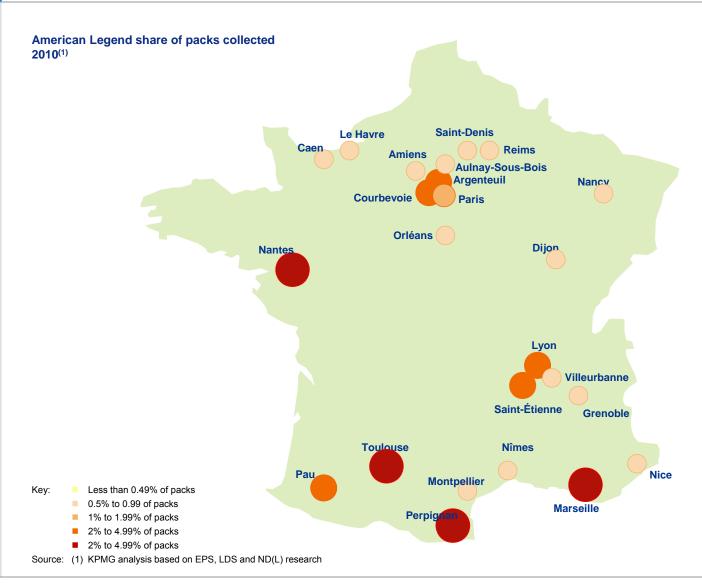
In 2009 American Legend became more established and inflows almost doubled to 1.9 billion cigarettes.





### **Inflows of American Legend**

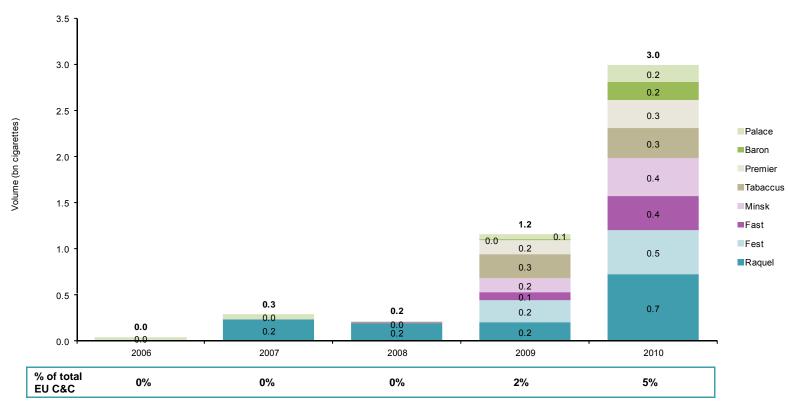
American Legend inflows declined by 1 billion cigarettes between 2009 and 2010 but remained a significant brand in 24 French cities.



### **Consumption of growing illicit brands**

The decline in Classic, Jin Ling and American Legend volumes was partially offset by volume growth in a number of other illicit brands in 2010.

## Consumption of growing illicit brands 2006-2010<sup>(1)(a)(b)(c)(d)(e)(f)</sup>



Notes:

- (a) Raquel brand is manufactured by Explosal Ltd., Raquel Ltd., Quarterhouse and Continental Tobacco
- (b) Fest, Minsk and Premier brands are manufactured by Grodno Tobacco Factory
- (c) Fast brand is manufactured by Monus
- (d) Tabaccus brand is manufactured by Tabaccus International
- (e) Baron brand is manufactured by Seba
- (f) Palace brand is manufactured by JTI, Cita Tabacos de Canarias and unknown manufacturers



### Project Star 2010

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- Project overview and timing
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  - 2010 market overview
  - Smoking trends
  - OTP sector analysis
- 2010 Project Star results
  - Consumption overview
  - Overall non-domestic inflows
    - Non-domestic (legal) inflows
    - C&C inflows and country comparison
    - C&C inflows and brand comparison
  - Seizures
- Appendices



## Seizure data

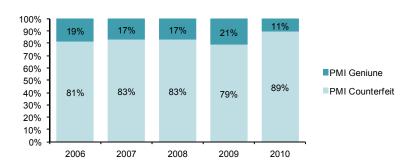
PMI seizure data and Project Star results show similar market variants for counterfeit products in 2010	The proportion of Russian and Ukrainian variant seizures increased in 2010  Russian variant cigarettes accounted for 17% of PMI counterfeit seized in 2010, compared to 5% in 2009  Ukrainian variant cigarettes accounted for 13% of PMI counterfeit seized in 2010, compared to 6% in 2009  Project Star results indicate an increase in the proportion of counterfeit Ukrainian variant cigarettes to 33% of total EU counterfeit consumption in 2010, compared to 21% in 2009
Seizure data is weighted towards counterfeit product	Counterfeit product accounted for 89% of seizure volumes in 2010  Anecdotal evidence suggests that counterfeit is more likely to be transported in large shipments such as containers  Average seizure size for counterfeit product was approximately 527,000 cigarettes in 2010, compared to 40,000 cigarettes for genuine product  In addition, smaller seizures of less than five cases and instances of individuals attempting to exceed import allowances may not be reported  The availability of 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



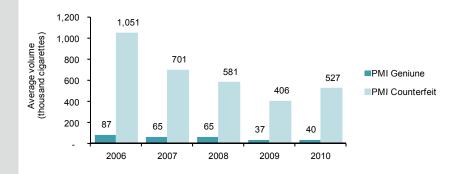
#### Counterfeit share of seizures

Counterfeit products accounted for 89% of PMI seizure volumes in 2010.

# Counterfeit share of cigarette seizures (all EU PMI seizures), 2006-2010<sup>(1)(a)(b)</sup>



# Average number of cigarettes per seizure event (all EU PMI seizures), 2006-2010<sup>(1)(a)(b)</sup>



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

■ The share of counterfeit as a proportion of total seizures has increased by 10 percentage points from 2009 to 2010

# 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 527,000 cigarettes, compared to 40,000 cigarettes of genuine product

#### Seizure data is weighted towards counterfeit product

- Smaller seizure volumes and instances of individuals attempting to exceed import allowances may not be reported
- 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

Notes: (a) Seizures data presented is based on EU-27 countries for 2007-2010, 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 2009 report and seizure data presented for 2006, 2007, 2008 and 2009 are attributable to additional seizure data received after publication of the Project Star 2009 report

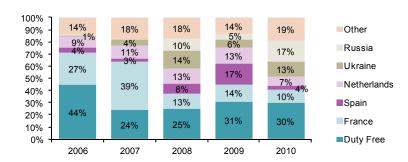
Source: (1) PMI Management, based on notifications received from local law enforcement as supplied to KPMG on 18 May 2011



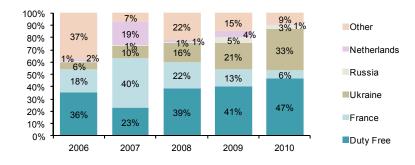
### Seizures of counterfeit cigarettes by variant

Seizures of Russian and Ukrainian variant counterfeit cigarettes increased in 2010.

## Share of PMI counterfeit seizure volumes by pack variant 2006-2010<sup>(1)(a)(b)</sup>



## Share of Project Star PMI counterfeit volumes by pack variant 2006-2010 $^{(2)(b)}$



## The proportion of Russian and Ukrainian variant seizures increased in 2010

- Russian variant cigarettes accounted for 17% of PMI counterfeit seized in 2010, compared to 5% in 2009
- Ukrainian variant cigarettes accounted for 13% of PMI counterfeit seized in 2010, compared to 6% in 2009:
  - Project Star results indicate an increase in the proportion of counterfeit Ukrainian variant cigarettes to 33% of total EU counterfeit consumption in 2010, compared to 21% in 2009

Project Star results indicate a continued increase in the proportion of Duty Free variant counterfeit cigarettes consumed in 2009. However, this trend was not reflected in seizure data

- Duty Free variant cigarettes accounted for 30% of PMI counterfeit seized in 2010, compared to 31% in 2009.
  - Project Star results indicate an increase of six percentage points in the consumption of Duty Free counterfeit between 2009 and 2010.

Note: (a) Seizures data presented is based on EU-27 countries for 2007-2010, 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 2009 report and seizure data presented for 2006, 2007, 2008 and 2009 are attributable to additional seizure data received after publication of the Project Star 2009 report

Source: (1) PMI Management, based on notifications received from local law enforcement as supplied to KPMG on 18 May 2011

(2) KPMG analysis based upon EPS, LDS and ND(L) research



### Project Star 2010

#### **Contents**

- Project overview and timing
- European cigarette market
- 2010 Project Star results
- Appendices
  - Country results
  - Methodology
  - Summary of country flow refinements
  - Sources
  - Scope of work



## Project Star 2010

## **Contents – country detail**

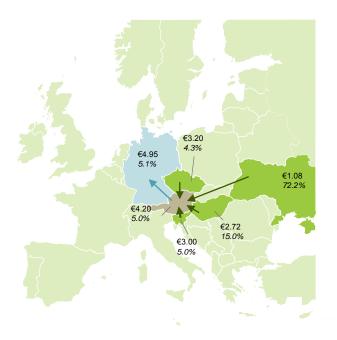
<ul><li>Austria</li></ul>	<ul><li>Latvia</li></ul>
Belgium	<ul><li>Lithuania</li></ul>
<ul><li>Bulgaria</li></ul>	Luxembourg
Cyprus	Malta
■ Czech Republic	Netherlands
Denmark	Poland
Estonia	Portugal
■ Finland	Romania
■ France	Slovakia
Germany	Slovenia
■ Greece	■ Spain
Hungary	Sweden
Ireland	United Kingdom
Italy	



#### **Market overview**

The share of cigarette consumption in Austria accounted for by counterfeit and contraband increased to 9.0% in 2010.

# Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(2)(a)(b)(c)(d)</sup>



# Key: Austria Top four source countries Top destination country

#### Notes: (a)

- 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 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June 2010
- (c) Relative cigarette prices in the Czech Republic, Hungary and Ukraine are subject to fluctuations as result of exchange rate changes of the koruna, forint and hryvnia respectively versus the Euro
- (d) Arrow size indicates relative cigarette flow volume

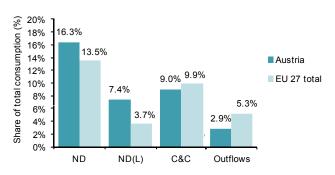
#### Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

- (2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010
- (3) Synovate ND(L) research 2006, 2008, 2009 and 2010

# Share of Austria consumption by type 2006-2010<sup>(1)(3)</sup>



# Comparison of EU and Austrian consumption by type $2010^{(1)(3)}$





# **Total non-domestic consumption**

Consumption of nondomestic cigarettes has remained stable from 2007 to 2010.

Total Austria consumption (1)(2					
Billion cigarettes	2006	2007	2008	2009	2010
Legal domestic sales (LDS)	13.40	13.66	13.20	13.39	13.54
Outflows	-0.46	-0.45	-0.48	-0.27	-0.45
Legal domestic consumption (LDC)	12.94	13.22	12.72	13.12	13.09
Non-domestic legal (ND(L))	0.20	0.56	1.04	1.25	1.15
Counterfeit and contraband (C&C)	1.74	1.98	1.51	1.34	1.41
Total non-domestic	1.94	2.54	2.55	2.59	2.56
Total consumption	14.87	15.76	15.27	15.71	15.65

Outflows from Austria <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
Germany	0.23	0.17	0.20	0.18	0.33
Other EU	0.24	0.28	0.28	0.09	0.12
Total outflows	0.46	0.45	0.48	0.27	0.45

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

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

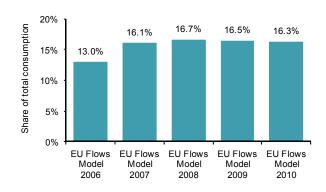


### Comparison of external sources for non-domestic estimates

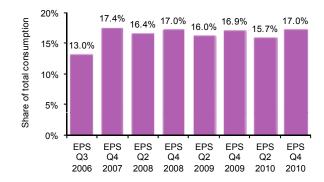
The EU Flows Model
estimate for non-domestic
consumption in 2010 is
calculated by equally
weighting results from
Empty Pack surveys
conducted in Quarter 2 and
Quarter 4.

The EU Flows Model suggests a slight decline in non-domestic incidence, from 16.5% in 2009 to 16.3% in 2010.

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



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



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

# The 2010 EU Flows Model results for Austria are in line with the Austrian Chamber of Commerce Empty Pack survey

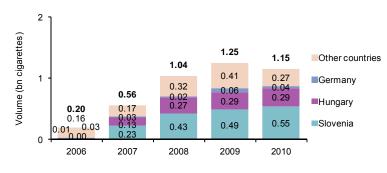
■ The EU Flows model estimates non-domestic incidence to be 16.3% in 2010 and this is comparable to the two estimates provided by the Austrian Chamber of Commerce of 15.7% and 17.0%



### Non-domestic (legal) breakdown

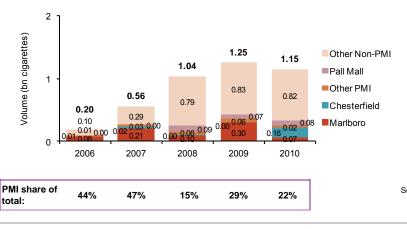
A decline in the number of trips made by smokers resulted in lower nondomestic (legal) inflows in 2010 compared to 2009.

# Non-domestic (legal) by origin 2006-2010 $^{(1)(2)(3)}$



ND(L) share of consumption:	1%	4%	7%	8%	7%
ND(L) share of ND:	10%	22%	41%	48%	45%

# Non-domestic (legal) by brand **2006-2010**<sup>(1)(2)(3)</sup>





3 x 4 1,109

1,175

807

959

Sources: (1) KPMG EU Flows Model

Average annual cigarettes purchased

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

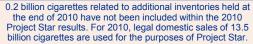
(3) Interviews with PMI Local Management

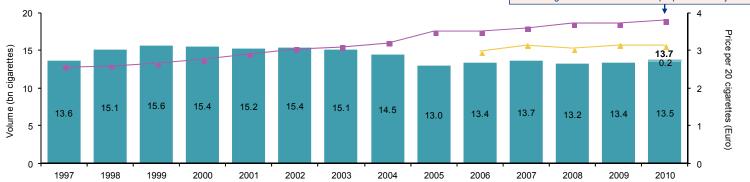


### **Historic sales and pricing trends**

Legal domestic cigarette sales increased by 1.2% in 2010 compared to 2009.







CAGR (%)	1997-2001	2001-2005	2005-2010	2009-2010
Legal domestic sales	2.9%	-3.9%	0.9%	1.2%
Average pack price	3.3%	4.9%	1.6%	2.4%
Consumption	n/a	n/a	1.3% <sup>(a)</sup>	-0.3%

(a) CAGR is 2006-2010

Sources: (1) Nielsen indicates legal domestic sales of 13.7 billion cigarettes in 2010. However, Project Star 2010 results use legal domestic sales of 13.5 billion which reflects an adjustment of 0.2 billion cigarettes to account for an increase in inventories held in December 2010 prior to the excise increase in January 2011

#### Legal domestic sales increased by 1.2% in 2010

- This increase took place despite a 2.4% increase in average pack price from 2009 to 2010
- The smoking ban first introduced in January 2009 came into force for all establishments in July 2010

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

<sup>(2)</sup> In Market Sales supplied by PMI based on data from local distributor

<sup>(3)</sup> PMI Management and EU Tax Tables



# Project Star 2010

# **Contents – country detail**

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

Italy

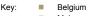


### **Market overview**

Counterfeit and contraband cigarette consumption in Belgium declined to 5.9% of total cigarette consumption in 2010.

Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows(1)(3)(a)(b)





Map shows flows over 1% of consumption. Arrow size indicates relative cigarette flow Notes: volume. Countries which are both source and destination countries are coded according to

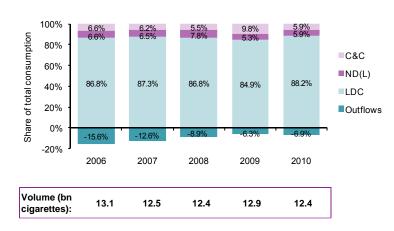
(b) Based on a pack of 20 Marlboro King Size as at July 1st 2009 and 2010

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

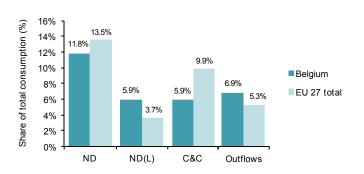
Synovate ND(L) research, 2006-2010

(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010

#### **Share of Belgium consumption by type** 2006-2010(1)(2)



#### Comparison of EU and Belgian consumption by type **2010**<sup>(1)(2)</sup>





# **Total non-domestic consumption**

Consumption of nondomestic cigarettes fell to 1.46 billion cigarettes in 2010, compared to 1.95 billion in the previous year.

Total Belgium consumption <sup>(1)(2</sup>	2)				
Billion cigarettes	2006	2007	2008	2009	2010
Legal domestic sales (LDS)	13.39	12.49	11.89	11.74	11.73
Outflows	-2.04	-1.58	-1.10	-0.81	-0.85
Legal domestic consumption (LDC)	11.35	10.92	10.78	10.93	10.89
Non-domestic legal (ND(L))	0.86	0.81	0.96	0.68	0.73
Counterfeit and contraband (C&C)	0.86	0.77	0.68	1.27	0.73
Total non-domestic	1.73	1.58	1.64	1.95	1.46
Total consumption	13.07	12.50	12.42	12.88	12.35

Outflows from Belgium <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
France	0.53	0.73	0.71	0.48	0.43
Netherlands	0.54	0.73	0.13	0.15	0.24
Other EU	0.96	0.12	0.26	0.18	0.19
Total outflows	2.04	1.58	1.10	0.81	0.85

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

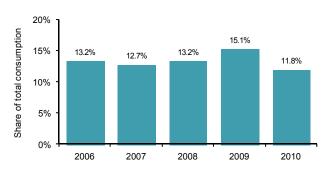
(2) Synovate ND(L) research, 2006-2010



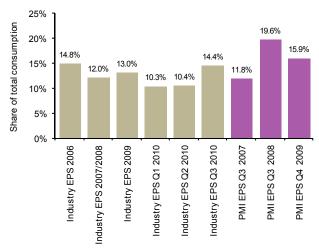
### Comparison of external sources for non-domestic estimates

The 2010 EU Flows Model is based on the Industry 2010 Empty Pack Surveys and shows a decline in total non-domestic incidence for the full year.

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



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



- Notes: (a) Industry survey results in 2006 and 2007/2008 are for PMI brands only
  - (b) Industry survey results in 2009 and 2010 are for PMI and other manufacturers
  - urces: (1) KPMG EU Flows Model
    - Industry market survey Q2 2006, Q4 2007, Q1 2009, Q2/Q3 2009, Q4 2009, Q1 2010, Q2 2010 and Q3 2010
    - (3) PMI Empty Pack Surveys Q3 2007, Q3 2008 and Q4 2009

# The 2010 EU Flows Model indicates a 3.3 percentage points decline in non-domestic incidence levels in Belgium.

- There has been a change of the data source used in the EU Flows Model
  - The 2010 and 2006 EU Flows Model results were based on Industry surveys.
  - In 2007, 2008 and 2009, the EU Flows Model results were based on PMI Empty Pack Surveys.

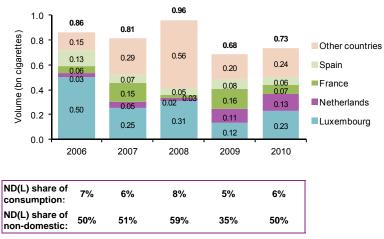
The EU Flows Model estimate for non-domestic consumption in 2010 is calculated by equally weighting results from Industry surveys conducted in the first three quarters of 2010.



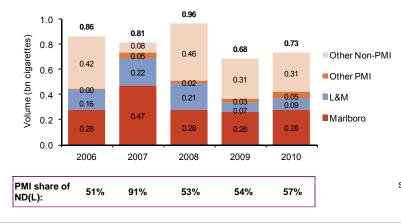
### Non-domestic (legal) breakdown

Non-domestic (legal) inflows increased by 7.3% to 0.73 billion cigarettes in 2010.

# Non-domestic (legal) by origin $2006-2010^{(1)(2)(3)}$



# Non-domestic (legal) by brand 2006-2010 $^{(1)(2)(3)}$





Sources: (1) KPMG EU Flows Model

(2) Synovate ND(L) research, 2006-2010

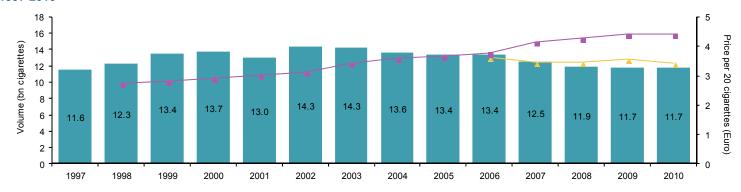
(3) Interviews with PMI Local Management



# **Historic sales and pricing trends**

Legal domestic cigarette sales volumes remained stable in 2010 at 11.7 billion cigarettes.

# Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1997-2000	2000-2003	2003-2006	2006-2010	2009-2010
Legal domestic sales	5.9%	1.3%	-2.2%	-3.2%	0.0%
Average pack price	n/a	5.6%	3.2%	3.9%	0.2%
Consumption	n/a	n/a	n/a	-1.4%	-4.1%

Sources: (1) In Market Sales supplied by PMI based on tax stamp and AC Nielsen Audit data

(2) PMI Management and EU Tax Tables

#### Legal domestic sales declined remained flat from 2009 to 2010, whilst the average pack price increased by 0.2%.

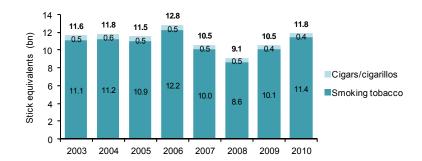
■ The 0.2% average pack price increase was manufacturer driven.



# **OTP** market size and growth

**Sales of Other Tobacco Products increased by 12.6%** to 11.8 billion stick equivalents in 2010.

#### Other Tobacco Products sales in billion stick equivalents 2006-2010(1)(a)(b)(c)(d)(e)



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

CAGR (%)	2003-2006	2006-2010	2009-2010
■ Cigar/cigarillos	1.0%	-7.4%	-10.2%
<ul><li>Smoking tobacco</li></ul>	3.3%	-1.6%	13.7%
Total	3.2%	-1.9%	12.6%
Manufactured cigarettes	-2.2%	-3.2%	0.0%

- (a) Smoking tobacco volumes have been calculated at one stick per 0.75 grams, while cigars and cigarillos have been calculated on a stick for stick basis
- (b) Smokeless tobacco is excluded from this analysis
- (c) 2008 OTP data shown in this report is 0.2 billion higher than the number stated in the Project Star report in 2008 . The difference is due to the revision of data received from PMI. The updated figure is used for this report
- (d) 2009 OTP data shown in this report is 0.3 billion higher than the number stated in the Project Star report in 2009. The difference is due to the revision of data received from PMI. The updated figure is used for this report

Source: (1) In 2008, 2009 and 2010, OTP data provided by PMI is based on tax stamps and AC Nielsen estimates. Prior to 2008, OTP data provided by PMI is based on tax stamps



# Project Star 2010

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<ul><li>Austria</li></ul>	Latvia
Belgium	<ul><li>Lithuania</li></ul>
<ul><li>Bulgaria</li></ul>	Luxembourg
Cyprus	Malta
■ Czech Republic	Netherlands
Denmark	Poland
Estonia	Portugal
■ Finland	Romania
■ France	Slovakia
Germany	Slovenia
■ Greece	Spain
Hungary	Sweden
Ireland	<ul><li>United Kingdom</li></ul>

Italy



### **Market overview**

The share of cigarette consumption in Bulgaria accounted for by counterfeit and contraband increased to 30.7% in 2010, nearly double compared to the 2009 level.

This increase is partly driven by a 35% decline in Legal Domestic Sales between 2009 and 2010.

# Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(3)(a)(b)(c)</sup>



#### Key: Bulgaria

Top two source countries

Top two destination countries

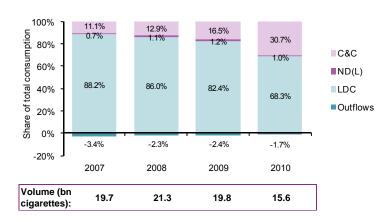
#### Notes:

- 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 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June 2010
- (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

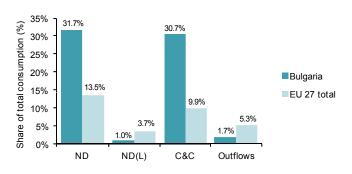
Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

- (2) Synovate ND(L) research 2007-2010
- (3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010

# Share of Bulgaria consumption by type $2007-2010^{(1)(2)}$



# Comparison of EU and Bulgarian consumption by type 2010<sup>(1)(2)</sup>





# **Total non-domestic consumption**

Consumption of nondomestic cigarettes increased to 4.93 billion cigarettes in 2010, driven largely by inflows of unspecified market variants.

Outflows from Bulgaria continued to decline in 2010.

Total Bulgaria consumption (1)(2)				
Billion cigarettes	2007	2008	2009	2010
Legal domestic sales (LDS)	18.06	18.77	16.80	10.91
Outflows	-0.67	-0.49	-0.47	-0.27
Legal domestic consumption (LDC)	17.38	18.28	16.33	10.64
Non-domestic legal (ND(L))	0.14	0.22	0.23	0.15
Counterfeit and contraband (C&C)	2.19	2.75	3.26	4.78
Total non-domestic	2.33	2.97	3.50	4.93
Total consumption	19.71	21.25	19.83	15.57

Outflows from Bulgaria <sup>(1)</sup>				
Billion cigarettes	2007	2008	2009	2010
Belgium	0.04	0.01	0.13	0.05
Italy	0.03	0.03	0.07	0.04
Netherlands	0.02	0.02	0.00	0.04
UK	0.09	0.13	0.09	0.03
Other EU	0.49	0.31	0.18	0.11
Total outflows	0.67	0.49	0.47	0.27

Note: (a) Since 2009, packs which had no clear indication of origin were classified as "Unspecified".

Prior to 2009, such packs were classified as Duty Free

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

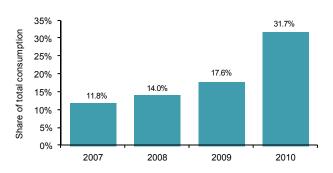
(2) Synovate ND(L) research 2007-2010



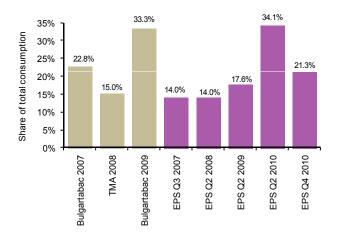
### Comparison of external sources for non-domestic estimates

The EU Flows Model shows non-domestic incidence of 31.7% in 2010, representing a 14.1 percentage point increase on prior year.

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



#### EPS and other non-domestic market estimates (2)(3)(4)(5)(6)



Sources: (1) KPMG EU Flows Model

- (2) PMI Empty Pack Surveys 2006-2010
- (3) 'Bulgaria loses BGN 180 M from illegal cigarettes', Trud Daily, 24th September 2007

# The EU Flows Model shows a 14.1 percentage point increase in non-domestic incidence level in Bulgaria to 31.7% in 2010.

- 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 guarter of 2010.
- The economic situation in Bulgaria improved in the last quarter of 2010 compared to the first three quarters of the year.
  - To reflect the improvement in the economic situation during the quarter four of 2010 and its subsequent impact upon purchasing patterns, a weighting was applied to the EPS results.
    - The quarter two EPS was weighted to represent the first three quarters of 2010.
    - The quarter four EPS was weighted to represent the last quarter of 2010.
- Additionally, the 2010 EPS results were weighted based on the number of cigarettes due to a significant change in share of smaller cigarette packs (10 cigarettes/pack), which are mainly domestic variant, collected in 2010 compared to the previous year.
  - Smaller cigarette packs (10 cigarettes/pack) represented 6.0% of all packs collected in 2010 compared to 0.1% of all packs in 2009.

# Bulgartabac have not updated their non-domestic surveys in 2010.

Bulgartabac's study in 2009 defined 'illegal cigarettes' as cigarette packs without a tax sticker, those with a foreign tax sticker or those with a Duty Free label.

Sources: (4) Association of Producers and Traders of Tobacco estimates as quoted in 'Share of Contraband Cigarettes on Bulgarian Market is 15%', Bulgaria News Agency, Nov 2008

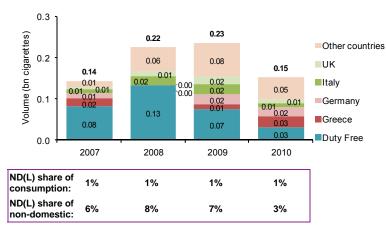
- (5) 'One Third of Bulgarian Cigarettes Sold Illegally', Novite, 4th August 2009
- (6) 'Bulgaria's illicit trade booming', Tobacco Reporter, 6th August, 2009



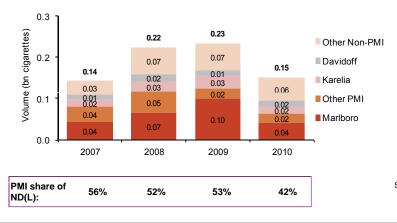
### Non-domestic (legal) breakdown

Non-domestic (legal) inflows declined to 0.15 billion cigarettes in 2010.

# Non-domestic (legal) by origin $2007-2010^{(1)(2)(3)}$



# Non-domestic (legal) by brand 2007-2010 $^{(1)(2)(3)}$





Sources: (1) KPMG EU Flows Model

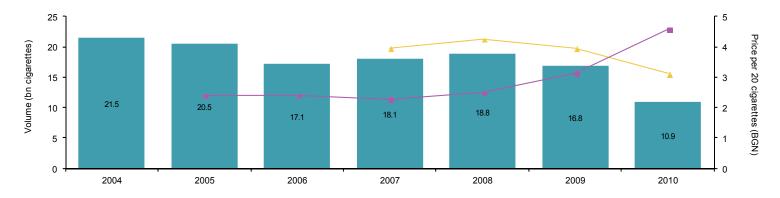
- (2) Synovate ND(L) research 2007-2010
- (3) Interviews with PMI Local Management



### **Historic sales and pricing trends**

Legal domestic cigarette sales declined by 35.1% in 2010, driven by significant price increases.

#### Historic cigarette prices and legal domestic sales 2004-2010(1)(2)(a)(b)



CAGR (%)	2004-2007	2007-2009	2009-2010
Legal domestic sales	-5.7%	-3.5%	-35.1%
Average pack price	-3.0% <sup>(c)</sup>	17.7%	46.6%
Consumption	n/a	0.3%	-21.5%

- Government data for sales of cigarette tax stamps suggested sales of 19.6 billion cigarettes in 2007, 21.9 billion cigarettes in 2008, 17.5 billion cigarettes in 2009 and 11.7 billion cigarettes 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 2010 indicate Legal Domestic Sales of 10.8 billion cigarettes. However, LDS estimates by PMI local management are equal to 10.9 billion cigarettes, the figure used in the above
- (c) CAGR is from 2005 to 2007 as average pack price data for 2004 was not available

- 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
  - (3) "Bulgaria Introduces Staggering Cigarette Tax Hike", Novinite, 1st January 2010
  - (4) "Bulgaria Smokers Face Staggering Cigarette Tax Hike", Novinite, 31st March 2010

#### Legal domestic sales declined by 35.1% in 2010, whilst the average pack price increased by 46.6%.

- An increase in excise duty on cigarettes was announced at the beginning of the year and effective as of 1st April 2010.<sup>(3)(4)</sup>
  - The level of duty increased from BGN 41 to BGN 101 per 1,000 cigarettes. (4)



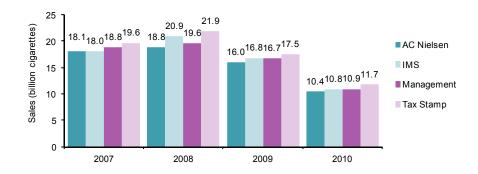
### **Legal Domestic Sales estimates**

Historic estimates of the level of Legal Domestic Sales from different industry sources have differed significantly.

Whilst the level of deviation between sources has fallen in 2010, it remain difficult to ascertain the correct level of Legal Domestic Sales in the year.

Project Star uses PMI
Bulgaria Management's
estimate of 10.9 billion
cigarettes for the purposes
of this report.

#### Estimates of Legal Domestic Sales 2007-2010<sup>(1)</sup>



Sources: (1) AC Nielsen estimates

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

(3) PMI local management

(4) Government Tax Stamp data



# Project Star 2010

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- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- United Kingdom



#### **Market overview**

The share of cigarette consumption in Cyprus accounted for by counterfeit and contraband declined to 0.6% in 2010, significantly below total EU levels.

**Outflows from Cyprus** declined in 2010.

#### Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows(1)(3)(a)(b)(c)



#### Cyprus

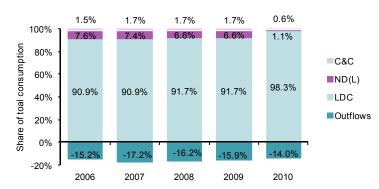
Major destination country

- Map shows flows over 2% of consumption. Countries which are both source and destination countries are coded according to the larger flow
- Based on a pack of 20 Marlboro King Size as at July 1st 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and
- (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

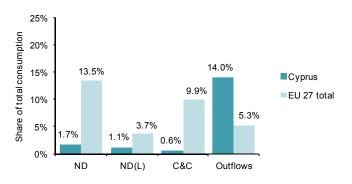
- (2) AC Nielsen ND(L) research 2006
- (3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010

#### **Share of Cyprus consumption by type** 2006-2010(1)(2)



Volume (bn cigarettes):	1.51	1.55	1.60	1.58	1.56

#### Comparison of EU and Cypriot consumption by type **2010**<sup>(1)(2)</sup>





# **Total non-domestic consumption**

Consumption of nondomestic cigarettes declined to 27 million cigarettes in 2010, compared to 131 million in 2009.

Total Cyprus consumption <sup>(1)(2)</sup>						
Billion cig	arettes	2006	2007	2008	2009	2010
Legal don	nestic sales (LDS)	1.605	1.670	1.720	1.705	1.752
Outflows		-0.230	-0.266	-0.258	-0.252	-0.218
Legal don	nestic consumption (LDC)	1.375	1.404	1.462	1.453	1.534
Non-dome	estic legal (ND(L))	0.115	0.115	0.105	0.105	0.018
Counterfe	it and contraband (C&C)	0.023	0.026	0.028	0.027	0.009
Total non-	domestic	0.138	0.141	0.132	0.131	0.027
Total con	sumption	1.513	1.545	1.595	1.584	1.561

Outflows from Cyprus <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
UK	0.213	0.250	0.241	0.214	0.200
Bulgaria	0.000	0.000	0.000	0.020	0.010
Other EU	0.017	0.016	0.017	0.018	0.009
Total outflows	0.230	0.266	0.258	0.252	0.218

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

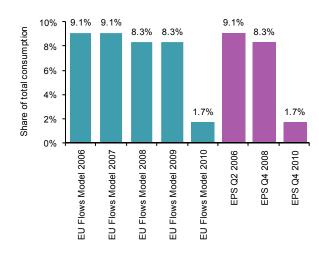
(2) AC Nielsen ND(L) research 2006



### **Comparison of external sources for non-domestic estimates**

The EU flows model indicates a 6.6 percentage point decline in non-domestic consumption from 2009 to 2010.

#### EU Flows Model and EPS non-domestic market estimates(1)(2)(a)



The EU Flows Model estimate for non-domestic consumption in 2010 uses the fourth quarter results of the PMI Empty Pack survey

Note: (a) Empty Pack Survey research indicated non-domestic incidence of 1.7% in 2010. Research was conducted in 2006, 2008 and 2010. Although research was not updated in 2007 or 2009, corroborating research did not indicate any significant changes to these results.

Sources: (1) KPMG EU Flows Model

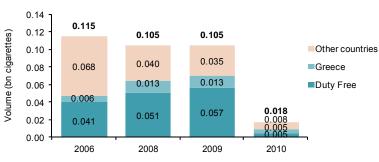
(2) PMI Empty Pack Surveys 2006-2010



### Non-domestic (legal) breakdown

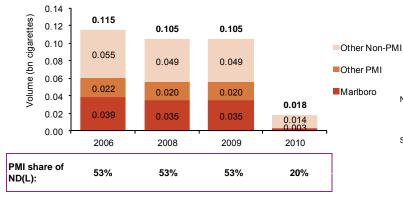
Non-domestic (legal) inflows declined to 18 million cigarettes in 2010.





ND(L)				
share of				
consumption:	8%	7%	7%	1%
ND(L) share of				
ND:	83%	79%	80%	67%

# Non-domestic (legal) by brand 2006, 2008-2010<sup>(1)(2)(3)</sup>





Non-domestic (legal) research has not been updated between 2007-2010, but corroborating research has not indicated any significant changes to 2006 results

- The total change in volume of outbound passengers from Cyprus to other countries has remained broadly stable in 2010.<sup>(4)(b)</sup>
- Travellers to Greece and the UK represented 58% of outbound passengers from Cyprus in 2010, compared to 59% in 2009.

 (a) ND(L) research was not updated in 2007, 2008, 2009 and 2010 but corroborating research has not indicated any significant changes to 2006 results

(b) According to the National Statistics Office in Cyprus the total volume of outbound passengers from Cyprus to EU destinations increased by approximately 6% between 2009 and 2010

Sources: (1) KPMG EU Flows Model

Notes:

(2) AC Nielsen ND(L) research 2006

(3) Interviews with PMI Local Management

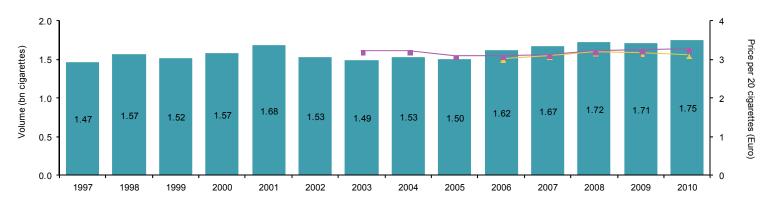
(4) National Statistics Office of Cyprus, Statistics on residents of Cyprus travelling abroad 2010, accessed May 2011



# **Historic sales and pricing trends**

Legal domestic cigarette sales increased by 2.8% in 2010 compared to 2009.

# Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1997-2001	2001-2005	2005-2010	2009-2010
<ul><li>Legal domestic sales</li></ul>	3.5%	-2.9%	3.2%	2.8%
Average pack price	n/a	n/a	1.1%	0.3%
Consumption	n/a	n/a	n/a	-1.5%

Sources: (1) PMI sales and estimates by local distributor

(2) PMI Management and EU Tax Tables

Legal domestic sales increased by 2.8% in 2010, whilst the average pack price increased by 0.3%



# Project Star 2010

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Lithuania

Luxembourg

Malta

Netherlands

Poland

Portugal

Romania

Slovakia

Slovenia

Spain

Sweden

United Kingdom

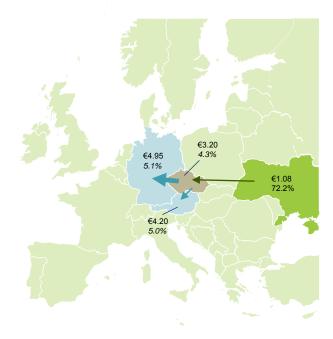


#### **Market overview**

The share of cigarette consumption in the Czech Republic accounted for by counterfeit and contraband declined slightly to 5.5% in 2010.

Outflows from the Czech Republic continued to increase in 2010, with Germany the main destination market.

# Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(3)(a)(b)(c)(d)</sup>



#### 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 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and lune 2010.
- (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

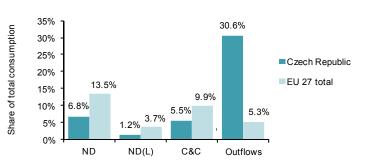
Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

- (2) AC Nielsen ND(L) research 2006, 2008 and 2009
- (3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010

# Share of Czech Republic consumption by type 2006-2010<sup>(1)(2)</sup>



# Comparison of EU and Czech consumption by type 2010<sup>(1)(2)</sup>





# **Total non-domestic consumption**

Consumption of nondomestic cigarettes declined to 1.15 billion cigarettes in 2010 compared to 1.32 billion in the previous year, driven largely by a decline in the volume of inflows from Ukraine.

	Total Czech Republic consumption (1)(2)							
	Billion cigarettes	2006	2007	2008	2009	2010		
	Legal domestic sales (LDS)	24.31	23.97	22.77	21.65	21.06		
_	Outflows	-4.76	-4.19	-4.06	-4.00	-5.21		
	Legal domestic consumption (LDC)	19.54	19.78	18.71	17.65	15.85		
	Non-domestic legal (ND(L))	0.15	0.15	0.15	0.23	0.21		
	Counterfeit and contraband (C&C)	0.06	0.06	1.30	1.09	0.94		
	Total non-domestic	0.21	0.21	1.45	1.32	1.15		
	Total consumption	19.75	19.99	20.16	18.97	17.01		

Outflows from Czech Republ	ic <sup>(1)</sup>				
Billion cigarettes	2006	2007	2008	2009	2010
Germany	3.77	3.28	3.53	3.53	4.66
Austria	0.17	0.16	0.20	0.23	0.25
Other EU	0.82	0.76	0.33	0.24	0.30
Total outflows	4.76	4.19	4.06	4.00	5.21

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

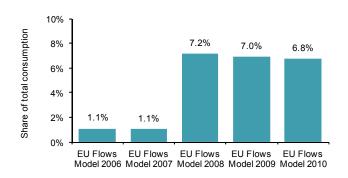
(2) AC Nielsen ND(L) research 2006, 2008 and 2009



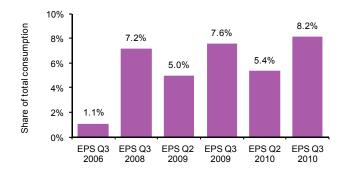
### Comparison of external sources for non-domestic estimates

The 2010 EU Flows Model results for the Czech Republic suggest relatively stable non-domestic incidence in 2010 based on 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 and Q3 2010

#### Non-domestic incidence of 6.8% for the 2010 EU Flows Model uses the average of the two Empty Pack Surveys conducted in 2010

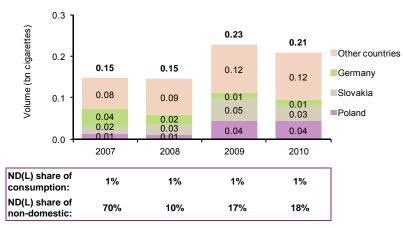
- In 2009, to reflect economic conditions, the EU Flows Model was weighted so that Q2 EPS results represented the first three months of the year, whilst Q3 EPS results represented the remaining nine months of the year.
  - Economic conditions have remained broadly stable in 2010 and therefore an equal weighting has been used for each EPS conducted during the year.



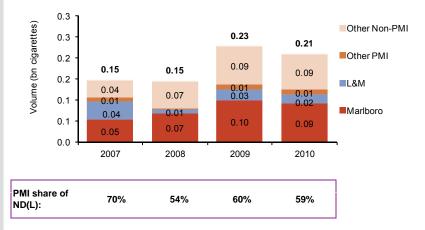
### Non-domestic (legal) breakdown

Non-domestic (legal) volumes declined to 0.21 billion cigarettes in 2010.

# Non-domestic (legal) by origin **2006-2010**<sup>(1)(2)(3)</sup>



# Non-domestic (legal) by brand 2006-2010 $^{(1)(2)(3)}$





Note: (a) ND(L) research was not updated in 2010 but corroborating research has not indicated any significant changes to 2009 results

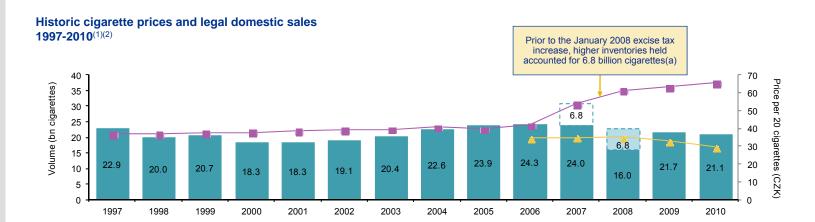
Sources: (1) KPMG EU Flows Model

- (2) AC Nielsen ND(L) research 2006, 2008 and 2009
- (3) Interviews with PMI Local Management



# **Historic sales and pricing trends**

Legal domestic cigarette sales declined by 2.7% in 2010.



CAGR (%)	1997-2000	2000-2006	2006-2010	2009-2010
Legal domestic sales	-7.2%	4.8%	-3.5%	-2.7%
Average pack price	1.0%	1.8%	11.8%	3.8%
Consumption	n/a	n/a	-3.7%	-10.4%

ote: (a) 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

Sources: (1) PMI sales, PwC estimates and Nielsen data

(2) PMI Management and EU Tax Tables

(3) 'Cigarette tax affects budget brands', Prague Post, February 2010

#### Legal domestic sales declined by 2.7% in 2010, whilst the average pack price increased by 3.8%

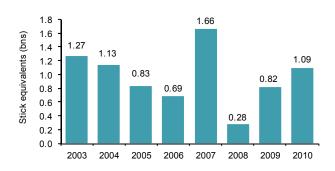
■ An increase in excise duty on tobacco products came into effect from 1 January 2010.<sup>(3)</sup>



# **OTP** market size and growth

Sales of smoking tobacco increased in 2010.

# Smoking tobacco sales in billion stick equivalents 2003-2010<sup>(1)(a)(b)</sup>



Cigarette sales (bn cigarettes)	20.4	22.6	23.9	24.3	30.7 <sup>(c)</sup>	16.0 <sup>(c)</sup>	21.7	21.1
---------------------------------------	------	------	------	------	---------------------	---------------------	------	------

CAGR (%)	2003-2006	2006-2009	2008-2009	2009-2010
<ul><li>Smoking tobacco</li></ul>	-18.5%	6.1%	190.6%	32.5%
Manufactured cigarettes	6.0%	-3.8%	-4.9%	-2.7%

#### Sales of smoking to bacco increased by 32.5% from 2009 to 2010

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.

(a) Smoking tobacco volumes have been calculated at one stick per 0.75 grams

(b) Cigars/cigarillos have been excluded from this analysis

(c) Manufactured cigarettes sales from In Market Sales supplied by PMI based on shipment data, competitive variants calculated based on AC Nielsen data. 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

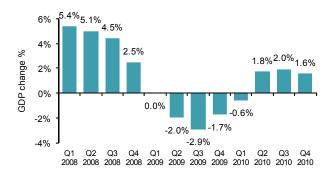


# Market developments 2010

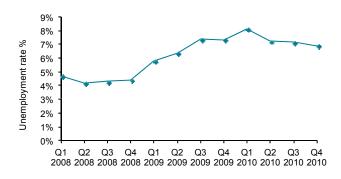
Economic conditions improved in Czech Republic in 2010, with higher GDP between quarter 2 and quarter 4 compared to equivalent periods in the prior year.

Unemployment increased in the first quarter of 2010, before declining during the remaining three quarters of the year.

# GDP percentage change compared to equivalent quarter in prior year 2008-2010<sup>(1)</sup>



# Unemployment by quarter 2008-2010<sup>(2)</sup>



Sources: (1) Czech Statistical Office, Gross Domestic Product at current prices, accessed April 2011

(2) Czech Statistical Office, General unemployment rate, accessed May 2011



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Germany	Slovenia
■ Greece	■ Spain
Hungary	Sweden
Ireland	<ul><li>United Kingdom</li></ul>

Italy



#### Denmark

#### **Market overview**

The share of cigarette consumption in Denmark accounted for by counterfeit and contraband increased to 4.3% in 2010.

Marlboro and cheapest brand 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(2)(a)(b)(c)(d)</sup>



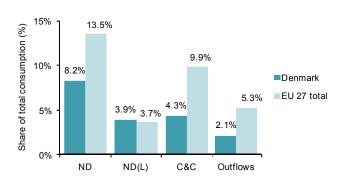
# ey: Denmark Top source country 2010 pack of 20 Marlboro KS price in Euros and percentage change from 2009 2010 pack of 20 cheapest available brand price in Euros and percentage change from 2009 otes: (a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow

- (b) Based on a pack of 20 Marlboro King Size as at July 1st 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June 2010
- (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 2009 and June 2010
  - (3) Synovate ND(L) research 2006 and 2008

# Share of Denmark consumption by type 2006-2010<sup>(1)(3)</sup>



# Comparison of EU and Danish consumption by type 2010<sup>(1)(3)</sup>





#### Denmark

# **Total non-domestic consumption**

Consumption of nondomestic cigarettes increased to 0.65 billion cigarettes in 2010, compared to 0.50 billion in the previous year.

Total Denmark consumption (1)(2)						
Billion cigarettes	2006	2007	2008	2009	2010	
Legal domestic sales (LDS)	8.08	7.93	7.79	7.75	7.39	
Outflows	-0.28	-0.17	-0.23	-0.17	-0.17	
Legal domestic consumption (LDC)	7.80	7.76	7.56	7.58	7.22	
Non-domestic legal (ND(L))	0.36	0.36	0.34	0.22	0.31	
Counterfeit and contraband (C&C)	0.15	0.15	0.51	0.28	0.34	
Total non-domestic	0.52	0.51	0.85	0.50	0.65	
Total consumption	8.32	8.28	8.41	8.08	7.87	

Outflows from Denmark (1)					
Billion cigarettes	2006	2007	2008	2009	2010
Netherlands	0.05	0.02	0.02	0.01	0.05
Sweden	0.17	0.07	80.0	0.03	0.05
Germany	0.03	0.02	0.04	0.04	0.04
Other EU	0.03	0.05	0.09	0.09	0.04
Total outflows	0.28	0.17	0.23	0.17	0.17

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

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

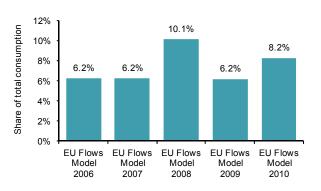


### Comparison of external sources for non-domestic estimates

The EU Flows Model estimate for non-domestic consumption in 2010 is calculated by equally weighting results from Empty Pack surveys conducted in Quarter 2 and Quarter 4.

The EU Flows Model confirms an increase in non-domestic incidence, from 6.2% in 2009 to 8.2% in 2010.

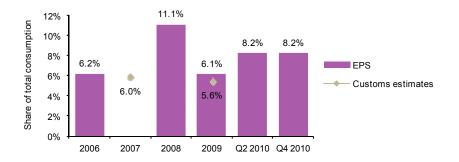
#### EU Flows Model non-domestic market estimates(1)



# The EU Flows Model and the PMI Empty Pack Survey results estimate that non-domestic consumption in 2010 was higher than in 2009

■ The Danish Chamber of Commerce estimates that cross border trade equated to around 0.45 billion cigarettes in 2009. Based on Project Star volumes, this equates to a non-domestic percentage of 5.6%

#### EPS and other non-domestic market estimates(2)(3)(4)



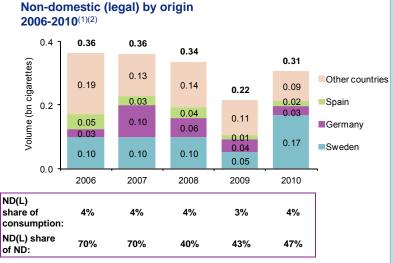
Sources: (1) KPMG EU Flows Model

- (2) PMI Empty Pack Surveys 2006, 2008, 2009 and Q2 2010
- (3) Q4 2010 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 & 2009

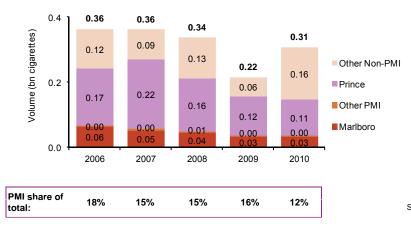


### Non-domestic (legal) breakdown

Non-domestic (legal) consumption increased to 0.31 billion cigarettes in 2010, primarily driven by increased inflows from Sweden.



# Non-domestic (legal) by brand 2006-2010 $^{(1)(2)}$





### Non-domestic (legal) inflows increased from 0.22 billion in 2009 to 0.31 billion in 2010

- This is primarily driven by an increase in Swedish inflows
- However, 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<sup>(3)</sup>

Sources: (1) KPMG EU Flows Model

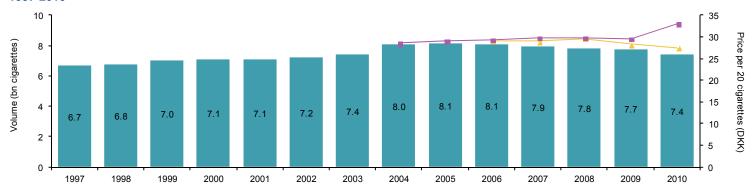
- (2) Synovate ND(L) research 2006 and 2008
- (3) TendensØresund.org



### **Historic sales and pricing trends**

Legal domestic cigarette sales declined by 4.7% in 2010.

# Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1997-2001	2001-2005	2005-2010	2009-2010
Legal domestic sales	1.6%	3.3%	-1.8%	-4.7%
Average pack price	n/a	n/a	2.6%	11.6%
Consumption	n/a	n/a	-1.4% <sup>(a)</sup>	-2.6%

lote: (a) CAGR from 2006 to 2010

Sources: (1) In Market Sales supplied by PMI based on data from local distributor

(2) PMI Management and EU Tax Tables

#### Legal domestic sales declined by 4.7% in 2010, whilst the average pack price increased by 11.6%

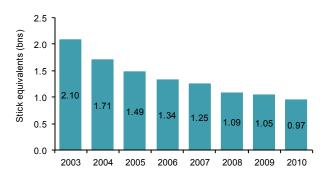
- Two excise tax increases took place in 2010, the first in January and the second in July;
  - The July increase took effect in September and was around 3 Kroner per pack of 20 cigarettes.



### **OTP** market size and growth

Sales of other tobacco products declined by 7.8% in 2010.

# OTP sales in billion stick equivalents 2003-2010<sup>(1)(a)</sup>



Cigarette								
sales (bn	7.4	8.0	8.1	8.1	7.9	7.8	7.7	7.4
cigarettes):								

CAGR (%)	2003-2006	2006-2010	2009-2010
Fine cut tobacco	-13.6%	-8.1%	-7.8%
Manufactured cigarettes	2.9%	-2.2%	-4.7%

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

Source: (1) OTP volumes pre 2006 supplied by Mac Baren distributors. Volumes from 2006 supplied by NMA



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Hungary	Sweden
Ireland	<ul><li>United Kingdom</li></ul>

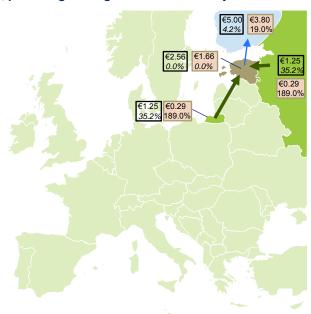
Italy



#### **Market overview**

The share of cigarette consumption in Estonia accounted for by counterfeit and contraband declined to 16.7% in 2010, although it remains significantly above the overall EU level.

Marlboro and cheapest available brand 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(3)(a)(b)(c)(d)</sup>



# Key: Estonia Major source country Major destination country 2010 pack of 20 Marlboro KS price in Euros and percentage change from 2009 2010 pack of 20 cheapest available brand price in Euros and percentage change from 2009 (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 2009 and 2010
- (c) Relative cigarette prices in Russia, Finland and Estonia (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

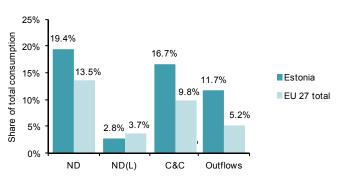
Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

- (2) AC Nielsen ND(L) research 2006, 2007 and 2009
- (3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010

### Share of Estonia consumption by type 2006-2010<sup>(1)(2)</sup>



### Comparison of EU and Estonian consumption by type 2010<sup>(1)(2)</sup>





### **Total non-domestic consumption**

Non-domestic consumption declined to 0.39 billion cigarettes in 2010, driven largely by a decline in inflows from Russia, which remains the major source country.

Total Estonia consumption <sup>(1)(2)</sup>	)				
Billion cigarettes	2006	2007	2008	2009	2010
Legal domestic sales (LDS)	2.26	2.46	2.37	1.89	1.85
Outflows	-0.65	-0.52	-0.43	-0.33	-0.24
Legal domestic consumption (LDC)	1.61	1.94	1.94	1.55	1.61
Non-domestic legal (ND(L))	0.14	0.05	0.03	0.10	0.06
Counterfeit and contraband (C&C)	0.42	0.24	0.15	0.46	0.33
Total non-domestic	0.55	0.29	0.18	0.56	0.39
Total consumption	2.16	2.23	2.12	2.11	2.00

Outflows from Estonia <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
Finland	0.43	0.25	0.25	0.27	0.21
Other EU	0.22	0.27	0.18	0.06	0.03
Total outflows	0.65	0.52	0.43	0.33	0.24

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

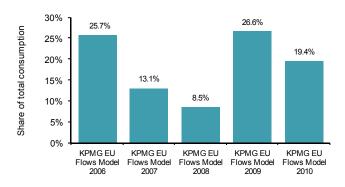
(2) AC Nielsen ND(L) research 2006, 2007 and 2009



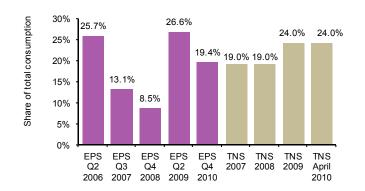
### Comparison of external sources for non-domestic estimates

EU Flows Model results directly reflect EPS results between 2006 and 2010 and show a decline in nondomestic incidence in 2010.

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



#### EPS and other non-domestic market estimates<sup>(2)(3)(a)</sup>



(a) TNS non-domestic estimates in 2007-2010 refer to the market share for illegal cigarettes

Sources: (1) KPMG EU Flows model

(2) PMI Empty Pack Surveys 2006-2010

(3) TNS estimates, as presented at the Foreign Investors Council in Latvia, April 2010



### Non-domestic (legal) breakdown

Non-domestic (legal) inflows declined to 0.06 billion cigarettes in 2010.

#### Non-domestic (legal) by origin 2006-2010(1)(2)(3) 0.2 Volume (bn cigarettes) 0.14 0.10 Russia 0.1

0.03

0.02

0.06

0.06

0.01

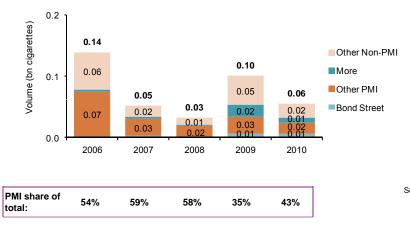
0.0	0.01	0.01	0.02	0.04	0.04
0.0 .	2006	2007	2008	2009	2010
ND(L) share of consumption:	<b>6%</b>	2%	2%	5%	3%
ND(L) share of ND:	25%	18%	18%	18%	14%

0.05

0.04

#### Non-domestic (legal) by brand 2006-2010(1)(2)(3)

0.13





Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research 2006, 2007 and 2009

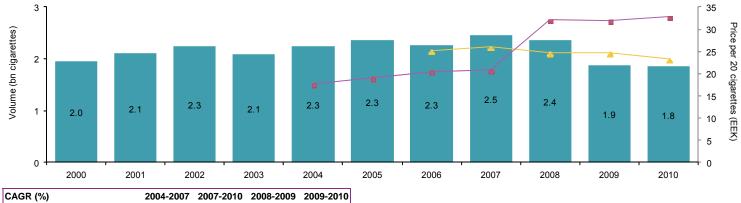
(3) Interviews with PMI Local Management



### **Historic sales and pricing trends**

Following a sharp decline in 2009, legal domestic sales decreased by a further 2.0% in 2010, to 1.8 billion cigarettes.

# Historic cigarette prices and legal domestic sales 2000-2010<sup>(1)(2)(a)(b)</sup>



CAGR (%)	2004-2007	2007-2010	2008-2009	2009-2010
<ul><li>Legal domestic sales</li></ul>	3.0%	-9.1%	-20.3%	-2.0%
Average pack price	5.3%	16.5%	-0.9%	3.0%
Consumption	n/a	-3.6%	-0.1%	-5.3%

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

(2) PMI Management and EU Tax Tables

Legal domestic sales declined by 2.0% in 2010 whilst the average pack price increased by 3.0%

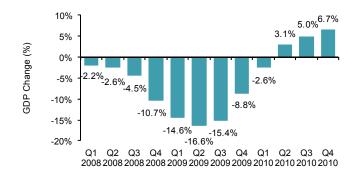


### **Market developments 2010**

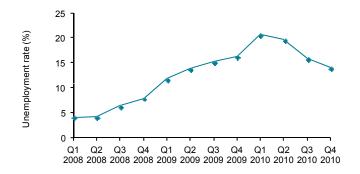
Economic conditions improved in Estonia in 2010 as GDP growth accelerated during the year and unemployment declined.

The Estonian kroon weakened slightly against the Russian rouble in the first half of 2010, although it recovered during the second half of the year.

GDP percentage change compared to equivalent quarter in prior year  $2008-2010^{(1)}$ 



### Unemployment by quarter 2008-2010<sup>(2)</sup>



### Exchange rate of Estonian kroon to Russian rouble 2009-2010<sup>(3)</sup>



Sources: (1) Estonian National Statistics, GDP at chain linked prices, accessed May 2011

(2) Estonian National Statistics, Unemployment rate, accessed May 2011

(3) Datastream, Russian rouble to Estonian kroon exchange rate, accessed January 2011



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Estonia	Portugal
Finland	Romania
■ France	Slovakia
Germany	Slovenia
■ Greece	■ Spain
<ul><li>Hungary</li></ul>	Sweden
Ireland	<ul><li>United Kingdom</li></ul>

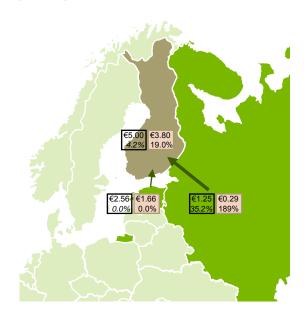
Italy



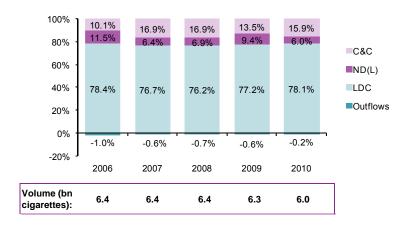
#### **Market overview**

The share of cigarette consumption in Finland accounted for by counterfeit and contraband increased to 15.9% in 2010.

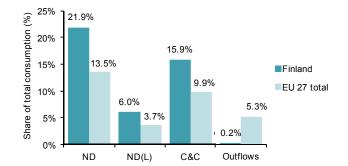
Marlboro and cheapest brand 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(2)(a)(b)(c)(d)</sup>



# Share of Finland consumption by type $2006-2010^{(1)(3)}$



### Comparison of EU and Finnish consumption by type 2010<sup>(1)(3)</sup>



Key: ■ Finland

Top two source countries

2010 pack of 20 Marlboro KS price in Euros and percentage change from 2009

2010 pack of 20 cheapest available brand price in Euros and percentage change from 2009

(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 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June 2010.

(c) Relative cigarette prices in Russia and Estonia 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 2009 and June 2010

(3) Synovate ND(L) research, 2006-2010



### **Total non-domestic consumption**

Consumption of nondomestic cigarettes declined to 1.31 billion cigarettes in 2010, compared to 1.43 billion in the previous year.

L&M remains the major nondomestic brand, accounting for 56% of inflows in 2010.

Total Finland consumption (1)(2)					
Billion cigarettes	2006	2007	2008	2009	2010
Legal domestic sales (LDS)	5.05	4.95	4.90	4.88	4.68
Outflows	-0.07	-0.04	-0.05	-0.04	-0.01
Legal domestic consumption (LDC)	4.99	4.91	4.85	4.85	4.67
Non-domestic legal (ND(L))	0.73	0.41	0.44	0.59	0.36
Counterfeit and contraband (C&C)	0.64	1.08	1.07	0.85	0.95
Total non-domestic	1.38	1.49	1.51	1.43	1.31
Total consumption	6.36	6.41	6.37	6.28	5.97

Outflows from Finland (1)					
Billion cigarettes	2006	2007	2008	2009	2010
Sweden	0.01	0.02	0.00	0.00	0.01
Other EU	0.05	0.02	0.04	0.03	0.01
Total outflows	0.07	0.04	0.05	0.04	0.01

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

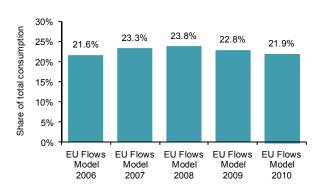
(2) Synovate ND(L) research, 2006-2010



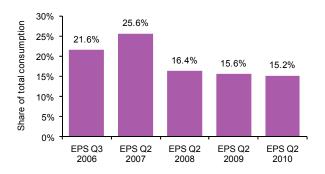
### Comparison of external sources for non-domestic estimates

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

#### 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 2006-2010

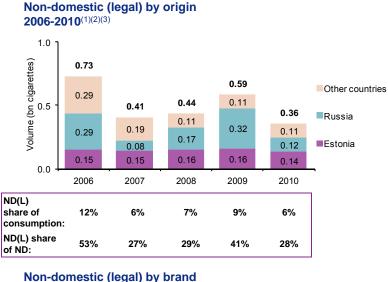
# PMI EPS results for 2010 report lower levels of inflows from Russia compared to the Project Star results in 2007, 2008 and 2009

- The level of Russian inflows implied by the EPS is not supported by analysis of external sources, such as relative price changes and changes in cross-border travel trends
- Based on the corroborating data currently available, inflows from Russia have been uplifted based on travel trends.

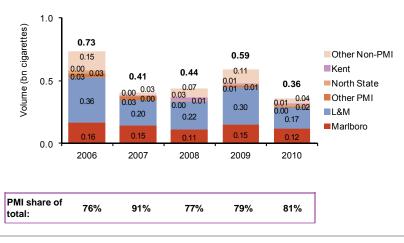


### Non-domestic (legal) breakdown

Non-domestic (legal)
consumption declined to
0.36 billion cigarettes in
2010, driven by a 0.20 billion
decline in inflows from
Russia.









Sources: (1) KPMG EU Flows Model

(2) Synovate ND(L) research, 2006-2010

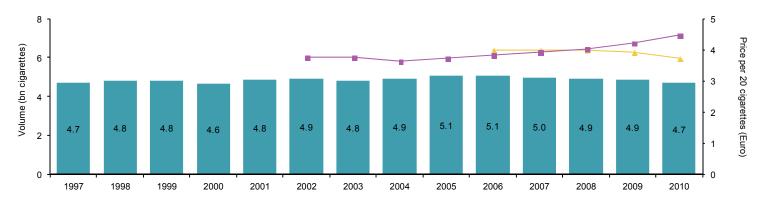
(3) Interviews with PMI Local Management



### Historic sales and pricing trends

Legal domestic cigarette sales declined by 4.2% in 2010.

### Historic cigarette prices and legal domestic sales 1997-2010<sup>(1)(2)</sup>



CAGR (%)	1997-2001	2001-2005	2005-2010	2009-2010
Legal domestic sales	0.6%	1.2%	-1.6%	-4.2%
Average pack price	n/a	n/a	3.7%	6.0%
Consumption	n/a	n/a	-1.6% <sup>(a)</sup>	-4.9%

lote: (a) CAGR from 2006 to 2010

Sources: (1) In Market Sales supplied by PMI based on data from local distributor

(2) PMI Management and EU Tax Tables

 $\hbox{(3)} \quad \hbox{`Finland makes giving tobacco to youth a crime', Associated Press, October 2010}$ 

#### Legal domestic sales declined by 4.2% in 2010 whilst the average pack price increased by 6.0%

■ The rate of VAT in Finland increased from 22% to 23% in July 2010

#### Finland introduced new anti-smoking legislation in 2010

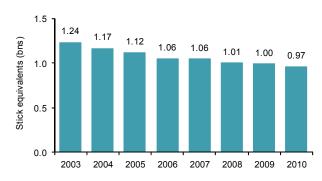
■ New legislation was brought in in October 2010 with the intention of making Finland 'smoke-free' by 2040<sup>(3)</sup>. The new legislation extended the existing smoking ban to new jurisdictions, including football stadiums and festivals



### **OTP** market size and growth

Sales of fine cut tobacco declined by 2.6% in 2010.

# Fine cut tobacco sales in billion stick equivalents 2003-2010<sup>(1)(a)(b)</sup>



Cigarette sales (bn	4.8	4.9	5.1	5.1	5.0	4.9	4.9	4.7
cigarettes):		4.5	5.1	J. I	5.0	4.5	4.5	4.7

CAGR (%)	2003-2006	2006-2010	2009-2010
Fine cut tobacco	-4.6%	-4.2%	-2.6%
Manufactured cigarettes	1.7%	-1.9%	-4.2%

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

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

Source: (1) OTP volumes supplied by Finnish Food and Drink Ind. Federation



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■ France	Slovakia
Germany	Slovenia
■ Greece	■ Spain
Hungary	Sweden
Ireland	<ul><li>United Kingdom</li></ul>

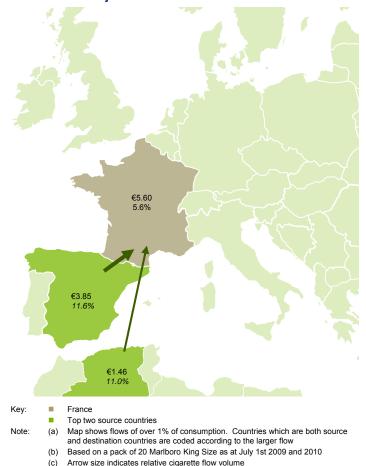
Italy



#### **Market overview**

The share of cigarette consumption in France accounted for by counterfeit and contraband declined by 0.1 percentage points to 13.7% in 2010.

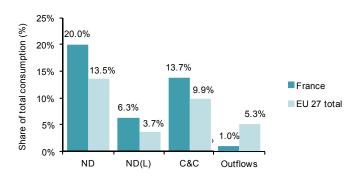
# Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows $^{(1)(3)(a)(b)(c)}$



# Share of France consumption by type 2006-2010<sup>(1)(2)</sup>



# Comparison of EU and French consumption by type $2010^{(1)(2)}$



(2) AC Nielsen ND(L) research, 2006-2010

as at June 2009 and June 2010

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

(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates



### **Total non-domestic consumption**

Consumption of nondomestic cigarettes increased to 13.53 billion cigarettes in 2010, compared to 12.49 billion in the previous year.

Non-domestic inflows of Marlboro increased from 1.91bn cigarettes in 2009 to 3.28bn in 2010.

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

Outflows from France <sup>(1)(a)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
Netherlands	0.37	0.35	0.12	0.08	0.35
Italy	0.02	0.00	0.05	0.04	0.10
Belgium	0.07	0.15	0.03	0.16	0.07
UK	0.16	0.38	0.28	0.14	0.05
Other EU	0.30	0.43	0.45	0.18	0.11
Total outflows	0.91	1.32	0.92	0.61	0.68

(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.

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

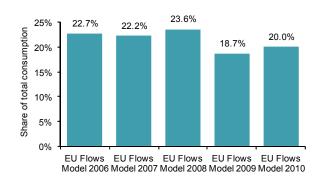
(2) AC Nielsen ND(L) research, 2006-2010



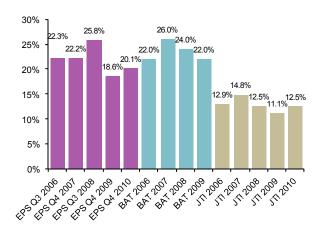
#### Comparison of external sources for non-domestic estimates

The EU Flows Model estimate for non-domestic consumption in 2010 uses the fourth quarter results of the PMI Empty Pack Survey.

#### Non-domestic market estimates(1)(2)



#### Other non-domestic market estimates(3)(a)



# The EU Flows Model indicates non-domestic consumption in 2010 to be 20.0%, 1.3 percentage points higher than in 2009

- The historical findings are corroborated by the *Observatoire*Francais des *Drogues et des Toxicomanies*, which reported nondomestic incidence of between 14% and 20% from 2004 to 2006<sup>(4)</sup>
- This increase is further supported by the trend in the JTI survey from 2009 to 2010.
- The EU Flows Model, BAT and JTI surveys all report different levels of non-domestic incidence. This may reflect differences in methodology:
  - JTI estimates are based upon a monthly consumer interview programme. The JTI estimates have been consistently lower than the EU Flows Model and BAT estimates, suggesting that consumers may under-report consumption in these interviews.
  - BAT estimates are based upon a pack swap methodology. BAT survey results for 2010 are currently unavailable.

Note: (a) JTI 2006-2009 surveys are the average of monthly non-domestic incidence from January-July and September-December. The 2010 JTI survey is the average of monthly non-domestic incidence from January-July and September-October

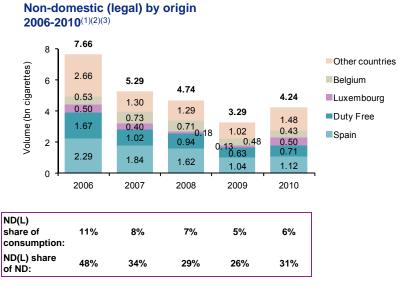
Sources: (1) KPMG EU Flows Model

- (2) PMI Empty Pack Surveys 2006-2010
- (3) JTI and BAT non-domestic market surveys, cited in Revue Des Tabacs magazine, December 2006–December 2010
- (4) "Estimation des achats transfrontaliers de cigarettes, 2004-2007," Observatoire Francais des Drogues et des Toxicomanies, March 2011

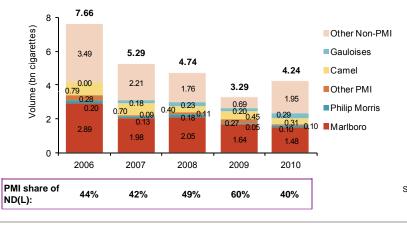


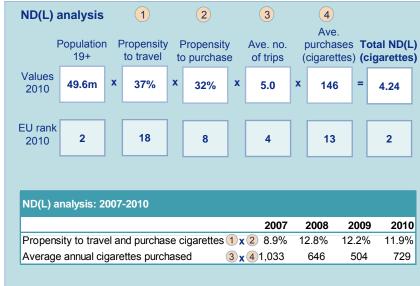
### Non-domestic (legal) breakdown

Non-domestic (legal) inflows increased to 4.24 billion cigarettes in 2010.









"Other Non-PMI" brands includes John Player Special, Lucky Strike and Peter Stuyvesant.

Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research, 2006-2010

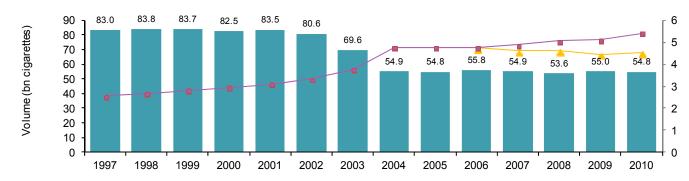
(3) Interviews with PMI Local Management



### Historic sales and pricing trends

Legal domestic sales remained relatively stable between 2009 and 2010, despite a 5.9% increase in average pack price over the same period.

### Historic cigarette prices and legal domestic sales 1997-2010<sup>(1)(2)</sup>



CAGR (%)	1997-2001	2001-2005	2005-2010	2009-2010
<ul><li>Legal domestic sales</li></ul>	0.1%	-10.0%	0.0%	-0.3%
Average pack price	4.8%	11.4%	2.6%	5.9%
Consumption	n/a	n/a	-1.2% <sup>(a)</sup>	1.2%

ote: (a)

- (a) Consumption CAGR is from 2006-2010
- Sources: (1) Altadis distribution France (monthly data)
  - (2) PMI Management and EU Tax Tables

# Legal domestic sales declined by 0.3% between 2009 and 2010 despite a 5.9% increase in average pack prices over this period

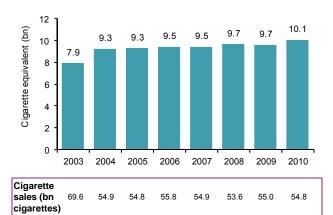
A price increase was implemented in November 2010. This increase did not have a significant impact on legal domestic sales in 2010.



### **OTP** market size and growth

Sales of fine cut tobacco increased from 9.7bn cigarette equivalents in 2009 to 10.1bn in 2010.

Fine cut tobacco sales in billion stick equivalents 2003-2010<sup>(1)(a)</sup>



CAGR (%)	2003-2006	2006-2010	2009-2010
Fine cut tobacco	6.1%	1.6%	4.4%
Manufactured cigarettes	(7.1%)	(0.4%)	(0.3%)

Fine cut tobacco sales increased by 0.4 billion cigarette equivalents from 2009 to 2010

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

Source: (1) Altadis distribution France (monthly data)



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Germany	Slovenia
■ Greece	■ Spain
Hungary	Sweden
Ireland	United Kingdom

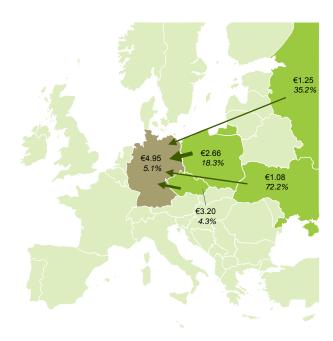
Italy



### **Market overview**

The share of cigarette consumption in Germany accounted for by counterfeit and contraband increased to 12.5% in 2010.

# Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(2)(a)(b)(c)(d)</sup>



#### Key: Germany

Top four source countries

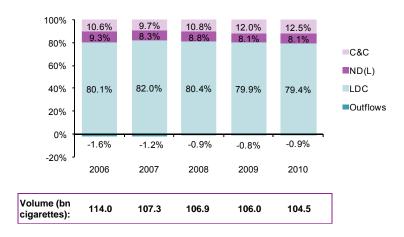
(a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow

- (b) Based on a pack of 20 Marlboro King Size as at July 1st 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June 2010
- (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

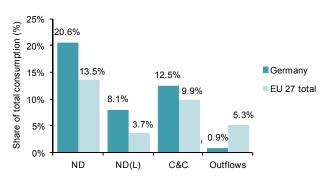
Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

- (2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010
- (3) GfK ND(L) research 2006, Synovate ND(L) research 2007-2010

### Share of Germany consumption by type 2006-2010<sup>(1)(3)</sup>



### Comparison of EU and German consumption by type $2010^{(1)(3)}$





### **Total non-domestic consumption**

Consumption of nondomestic cigarettes increased by 0.17 billion cigarettes between 2009 and 2010.

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

Outflows from Germany <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
Netherlands	0.45	0.29	0.20	0.13	0.35
France	0.68	0.23	0.19	0.24	0.22
Italy	0.03	0.05	0.01	0.04	0.11
Austria	0.09	0.09	0.04	0.06	0.07
Other EU	0.60	0.64	0.53	0.37	0.20
Total outflows	1.86	1.31	0.97	0.84	0.95

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

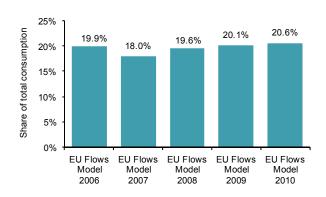
<sup>(2)</sup> GfK ND(L) research 2006, Synovate ND(L) research 2007-2010



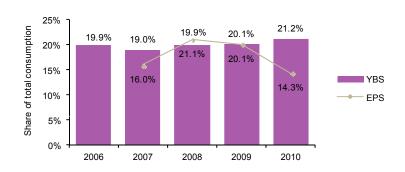
### Comparison of external sources for non-domestic estimates

Non-domestic incidence increased in 2010 according to both the Yellow Bag survey and the EU Flows model.

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



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



- Sources: (1) KPMG EU Flows Model
  - (2) Yellow Bag surveys 2006-2010
  - (3) PMI Empty Pack surveys 2007-2010

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

- KPMG has analysed both the Yellow Bag survey (YBS) and PMI's Empty Pack survey (EPS) results. The EU Flows Model is based on the Yellow Bag survey results for the following reasons:
  - The Project Star results were predominantly based on the Yellow Bag survey results from 2006 to 2009. Use of the Yellow Bag survey in 2010 enables greater comparability with the previous year's data
  - The Yellow Bag survey has a larger sample size, with 167,740 packs collected, compared to 13,185 packs collected for the EPS
- In previous Star reports, the level of counterfeit inflow has been generated from both EPS and YBS estimates;
  - In 2010, the Yellow Bag survey has been used to calculate the level and origin of counterfeit inflows

# Czech and Polish inflow levels appeared to be overstated in the 2010 Yellow Bag survey results compared to estimates from corroborating KPMG analysis

- Analysis of the composition of the Yellow Bag Survey recycling centre sampling plan indicated changes in the centres sampled in 2010:
  - The Görlitz recycling centre was included in the sampling plan for the first time in 2010. However, due to its location adjacent to the Polish and Czech borders, it was felt to be unrepresentative of the wider region.
  - The Gorlitz centre was therefore removed from the sample, and other centres in the region reweighted to compensate.



### Non-domestic (legal) breakdown

Non-domestic (legal) inflows declined to 8.43 billion cigarettes from 2009 to 2010.

#### Non-domestic (legal) by origin 2006-2010(1)(2)(3) 12 10.55 9.39 Volume (bn cigarettes) 10 8.87 8.62 8.43 2.61 Other countries 0.20 1.56 0.11 8 3.78 0.50 3.48 Netherlands 0.90 4.24 0.20 4.00 ■Spain 0.88 0.47 0.68 3.30 0.13 0.52 2.22 1.68 Poland 1.39 3.25 3.00 2.30 2.35 Czech Republic 2.13 2006 2007 2008 2009 2010 ND(L) share of 9% 8% 9% 8% 8%

45%

40%

39%



### Non-domestic (legal) by brand **2006-2010**<sup>(1)(2)(3)</sup>

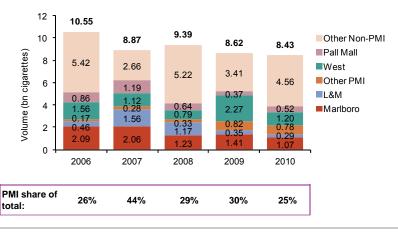
46%

47%

consumption:

ND(L) share

of ND:



Sources: (1) KPMG EU Flows Model

ND(L) analysis

Values

2010

EU rank

2010

19+

66.8m

1

(1)

Population Propensity Propensity

to travel

53%

13

(2)

to purchase

35%

6

3

Ave. no.

of trips

1.8

22

4

Ave.

385

1

purchases Total ND(L)

(cigarettes) (cigarettes)

8.43

1

(2) GfK ND(L) research 2006, Synovate ND(L) research 2007-2010

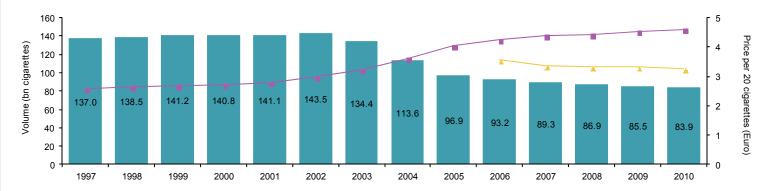
(3) Interviews with PMI Local Management



### **Historic sales and pricing trends**

Legal domestic cigarette sales declined by 1.9% in 2010 compared to 2009, while the average pack price increased by 1.5% over this period.

# Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1997-2001	2001-2005	2005-2010	2009-2010
Legal domestic sales	0.7%	-9.0%	-2.8%	-1.9%
Average pack price	1.8%	-10.1%	2.6%	1.5%
Consumption	n/a	n/a	-2.2% <sup>(a)</sup>	-1.5%

Note: (a) CAGR from 2006 to 2010

Sources: (1) In Market Sales supplied by PMI based on IMS segment data, offtake panels and publications

(2) PMI Management and EU Tax Tables

#### Legal domestic sales declined by 1.9% in 2010 whilst the average pack price increased by 1.5%

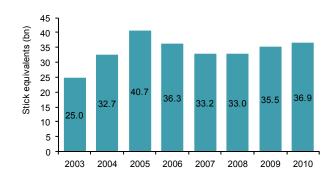
No Excise Duty increases took place in 2010



# **OTP** market size and growth

Sales of fine cut tobacco increased by 3.8% in 2010.

# Fine cut tobacco sales in billion stick equivalents 2006-2010<sup>(1)(a)(b)</sup>



Cigarette sales (bn	134.4	113.6	96.9	93.2	89.3	86.9	85.5	83.9
cigarettes)								

CAGR (%)	2003-2006	2006-2010	2009-2010
Fine cut tobacco	13.3%	0.4%	3.8%
Manufactured cigarettes	-11.5%	-2.6%	-1.9%

(a) Smoking tobacco RYO stick equivalents have been calculated using 0.46 grams for volume tobacco and 0.75 grams for traditional fine cut tobacco, based on PM Germany information

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

Source: (1) OTP volumes supplied by PM Germany based on IMS segment data, offtake panels and publications



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France	Slovakia
Germany	Slovenia
■ Greece	■ Spain
Hungary	Sweden
Ireland	<ul><li>United Kingdom</li></ul>

Italy



#### Greece

#### **Market overview**

The share of cigarette consumption in Greece accounted for by counterfeit and contraband continued to increase in 2010, reaching 6.3%.

At the same time legal domestic sales declined by 10.3%.

### Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(3)(a)(b)(c)(d)</sup>



#### Key: Greece

Major destination countries

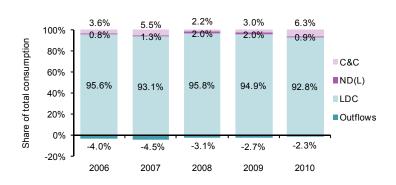
Notes:

- 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 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June 2010
- (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

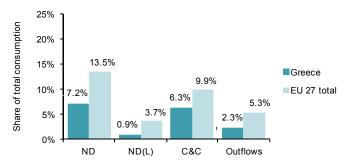
- (2) Synovate ND(L) research 2006, 2008, 2010
- (3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010

### Share of Greece consumption by type 2006-2010<sup>(1)(2)</sup>



Volume (bn cigarettes):	33.7	33.6	32.6	31.7	29.2
-------------------------	------	------	------	------	------

### Comparison of EU and Greek consumption by type 2010<sup>(1)(2)</sup>





#### Greece

### **Total non-domestic consumption**

Consumption of nondomestic cigarettes increased to 2.09 billion cigarettes in 2010, compared to 1.61 billion in the previous year.

Total Greece consumption <sup>(1)(2)</sup>	2)				
Billion cigarettes	2006	2007	2008	2009	2010
Legal domestic sales (LDS)	33.57	32.74	32.23	30.97	27.78
Outflows	-1.34	-1.49	-1.02	-0.85	-0.66
Legal domestic consumption (LDC)	32.22	31.25	31.21	30.11	27.12
Non-domestic legal (ND(L))	0.26	0.45	0.64	0.64	0.26
Counterfeit and contraband (C&C)	1.22	1.85	0.72	0.97	1.83
Total non-domestic	1.48	2.30	1.36	1.61	2.09
Total consumption	33.70	33.55	32.57	31.72	29.21

Outflows from Greece <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
Germany	0.27	0.28	0.24	0.26	0.19
UK	0.68	0.76	0.32	0.28	0.16
France	0.11	0.13	0.14	0.09	0.12
Other EU	0.28	0.32	0.31	0.22	0.19
Total outflows	1.34	1.49	1.02	0.85	0.66

Note: (a) In 2009 and 2010, packs with no clear indication of origin have been classified as 'Unspecified'; prior to 2009, such packs were classified as Duty Free

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

(2) Synovate ND(L) research 2006, 2008, 2010

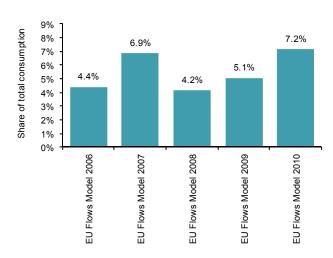


#### Greece

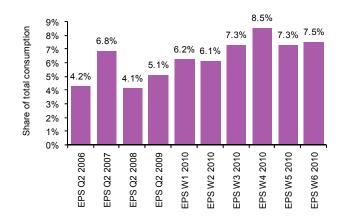
### Comparison of external sources for non-domestic estimates

The EU Flows Model estimate for non-domestic consumption in 2010 is calculated based on an average of the six Empty Pack Surveys conducted during the year and represents an increase in non-domestic incidence.

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



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



The 2010 non-domestic incidence in Greece of 7.2% is calculated by applying equal weighting to the six waves of Empty Pack Surveys conducted during the year<sup>(a)</sup>

Prior to 2010, a single Empty Pack Survey was undertaken in each year.

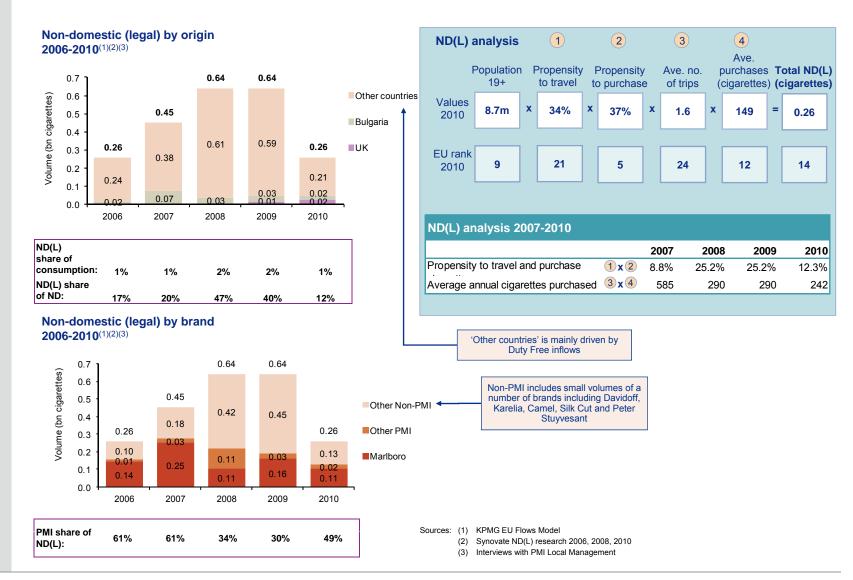
te: (a) Empty Pack Surveys were undertaken between May – November in 2010 (all conducted by PMI BI unless otherwise stated):

- Wave 1: 3 May 16 May 2010
- Wave 2: 7 June 18 June 2010
- Wave 3: 9 July 26 July 2010
- Wave 4: 16 August 27 August 2010
- Wave 5: 20 September 10 October (conducted in conjunction with the local industry association, ESKEE)
- Wave 6: 25 October 8 November 2010
- Sources: (1) KPMG EU Flows Model
  - (2) PMI Empty Pack Surveys 2006-2010



### Non-domestic (legal) breakdown

Non-domestic (legal) inflows declined to 0.26 billion cigarettes in 2010.

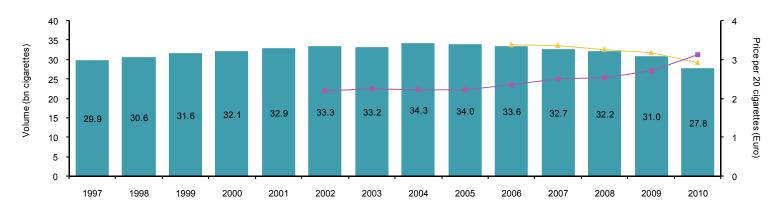




### Historic sales and pricing trends

Legal domestic cigarette sales declined by 10.3% in 2010 compared to 2009.

# Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1997-2004	2004-2010	2008-2009	2009-2010
Legal domestic sales	2.0%	-3.4%	-3.9%	-10.3%
Average pack price	n/a	5.9%	7.5%	15.1%
Consumption	n/a	n/a	-2.6%	-7.9%

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

- (2) PMI Management and EU Tax Tables
- (3) Discussions with local PMI management

#### Legal domestic sales declined by 10.3% in 2010 whilst the average pack price increased by 15.1%

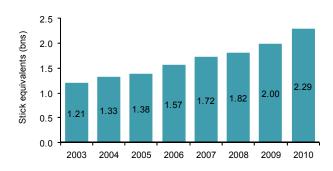
■ Three tax rises took place during 2010, in January, March and May, although there was generally only one price rise during the year for most brands.<sup>(3)</sup>



## **OTP** market size and growth

Volume sales of Other Tobacco Products increased by 14.6% in 2010.

# Smoking tobacco sales in billion stick equivalents 2003-2010<sup>(1)(a)</sup>



Cigarette								
sales (bn	33.2	34.3	34.0	33.6	32.7	32.2	31.0	27.8
cigarettes)								

CAGR (%)	2003-2006	2004-2010	2009-2010
<ul><li>Smoking tobacco</li></ul>	9.2%	9.5%	14.6%
Manufactured cigarettes	0.3%	-3.4%	-10.3%

# Smoking tobacco sales increased by 14.6% to 2.3 billion stick equivalents in 2010

Increased OTP sales between 2004 and 2010 have corresponded with a decline in manufactured cigarette sales.

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

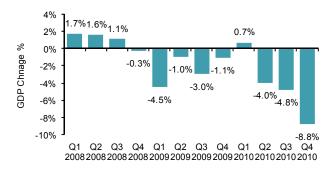
Source: (1) OTP volumes supplied by PMI based on actual IMS for PM brands and estimates for other manufacturers



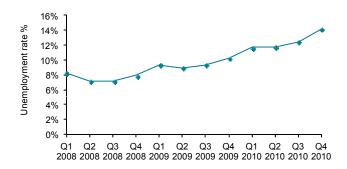
## **Market developments 2010**

Economic conditions continued to be challenging in Greece in 2010.

GDP percentage change compared to equivalent quarter in prior year 2008-2010<sup>(1)</sup>



# Unemployment by quarter 2008-2010<sup>(2)</sup>



Sources: (1) Hellenic Statistical Authority, GDP at constant prices, accessed May 2011

(2) Hellenic Statistical Authority, Unemployment rate, accessed May 2011



# Project Star 2010

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■ France	Slovakia
Germany	Slovenia
■ Greece	■ Spain
Hungary	■ Sweden
Ireland	United Kingdom

Italy



### **Market overview**

The share of cigarette consumption in Hungary accounted for by counterfeit and contraband continued to decline in 2010, reaching 5.5%.

#### Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(3)(a)(b)(c)(d)(e)</sup>



#### Key: Hungary Major source countries Major destination countries

- Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow
- Based on a pack of 20 Marlboro King Size as at July 1st 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June
- 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
- Total cigarette volume in Hungary relates to consumption of manufactured cigarettes only; all Other Tobacco Products are excluded

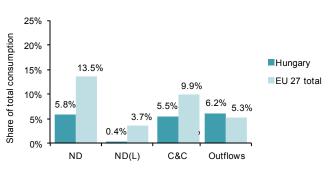
Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

- (2) AC Nielsen ND(L) research 2006, 2007, 2008 and 2009, Synovate ND(L) research 2010
- (3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010

#### **Share of Hungary consumption by type** 2006-2010<sup>(1)(2)(e)</sup>



#### Comparison of EU and Hungarian consumption by type **2010**<sup>(1)(2)</sup>





# **Total non-domestic consumption**

Consumption of nondomestic cigarettes declined to 0.83 billion cigarettes in 2010.

Total Hungary consumption <sup>(1)(2)</sup>						
Bil	llion cigarettes	2006	2007	2008	2009	2010
Le	gal domestic sales (LDS)	15.87	16.46	16.30	15.30	14.18
Οι	utflows	-0.44	-0.66	-0.78	-0.93	-0.87
Le	gal domestic consumption (LDC)	15.43	15.80	15.53	14.36	13.31
No	on-domestic legal (ND(L))	0.14	0.28	0.24	0.18	0.05
Co	ounterfeit and contraband (C&C)	3.26	1.69	1.35	1.03	0.78
То	tal non-domestic	3.40	1.97	1.59	1.21	0.83
To	otal consumption	18.83	17.77	17.11	15.57	14.14

Outflows from Hungary <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
Austria	0.13	0.32	0.45	0.48	0.48
Germany	0.12	0.12	0.13	0.16	0.17
Netherlands	0.02	0.02	0.02	0.02	0.06
Other EU	0.18	0.20	0.18	0.28	0.16
Total outflows	0.44	0.66	0.78	0.93	0.87

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

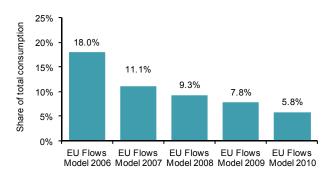
(2) AC Nielsen ND(L) research 2006, 2007, 2008 and 2009, Synovate ND(L) research 2010



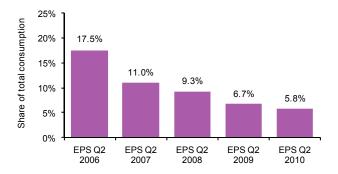
### Comparison of external sources for non-domestic estimates

The EU Flows Model estimate for non-domestic consumption in 2010 is based on weighted EPS results and shows a continued decline in non-domestic incidence.

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



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



#### Sources: (1) KPMG EU Flows Model

(2) Empty Pack Survey results 2006-2010 carried out by GfK for MDSZ, the local manufacturers 'association; all collections were undertaken during May and June of each year

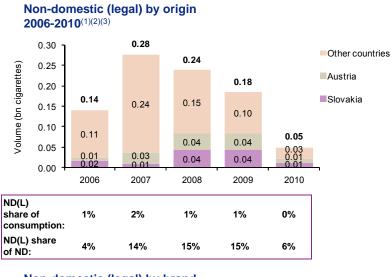
The 2010 non-domestic incidence in Hungary of 5.8% is calculated by applying a population weighting to the MDSZ Empty Pack Survey conducted in 2010

- EPS results for 20 major cities were included in the EU Flows Model in 2010 – 15 cities within the main sample and the 5 largest cities from the additional sample.
- An additional focus survey was undertaken by MEMRB, on behalf of PMI, in Q4 2010 in Budapest:
  - The focus survey found non-domestic incidence to be in line with the results from the Q2 2010 EPS survey.



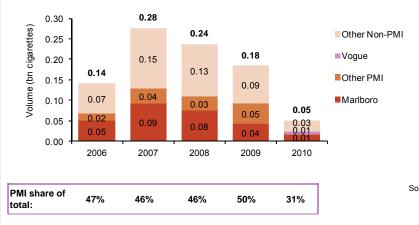
### Non-domestic (legal) breakdown

Non-domestic (legal) inflows declined to 0.05 billion cigarettes in 2010.









Sources: (1) KPMG EU Flows Model

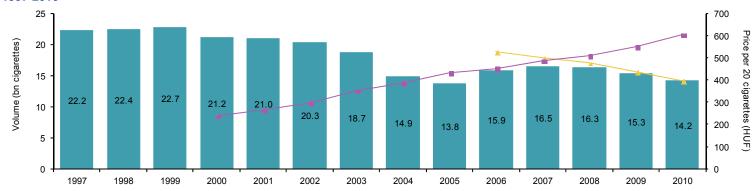
- (2) AC Nielsen ND(L) research 2006, 2007, 2008 and 2009, Synovate ND(L) research 2010
- (3) Interviews with PMI Local Management



### Historic sales and pricing trends

Legal domestic cigarette sales declined by 7.3% in 2010 compared to 2009.

# Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	2004-2007 20	07-2009 20	08-2009 20	09-2010
<ul><li>Legal domestic sales</li></ul>	3.3%	-4.8%	-6.2%	-7.3%
Average pack price	7.6%	11.9%	8.1%	10.2%
Consumption	n/a	-10.8%	-9.0%	-9.2%

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

- (2) PMI Management and EU Tax Tables
- (3) "Updated Convergence Programme of Hungary 2009-2012", Government of the Republic of Hungary, January 2010

#### Legal domestic sales declined by 7.3% in 2010, whilst the average pack price increased by 10.2%

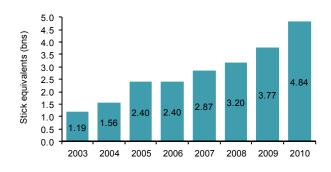
- There was a tax increase in January 2010, with both the "specific" and "minimum" taxes increased:
  - The excise tax rate for the most popular price category increased by 8.9%.<sup>(3)</sup>
  - This excise increase in 2010 followed excise increases in January and July 2009, in addition to a VAT rise in July 2009.



### **OTP** market size and growth

Volume sales of Other Tobacco Products increased by 28.5% in 2010.

# Smoking tobacco sales in billion stick equivalents $2003-2010^{(1)(a)}$



CAGR (%)	2003-2005	2006-2009	2009-2010
Smoking tobacco	41.8%	16.2%	28.5%
Manufactured cigarettes	-14.1%	-1.2%	-7.3%

# Smoking tobacco sales increased by 28.5% to 4.8 billion stick equivalents in 2010

- Increased OTP sales between 2007-2010 have corresponded with a decline in manufactured cigarette sales:
  - Consideration of combined consumption of both manufactured cigarettes and Other Tobacco Products, results in a much smaller annual total tobacco consumption decline of less than 2%.
- In 2010 OTP was available at prices significantly below those of manufactured cigarettes<sup>(2)(a)(b)</sup>:
  - The weighted average price of fine cut tobacco was €48 per kg, equating to approximately €0.72 per 20 stick equivalents.
  - The weighted average price of pipe tobacco was €47 per kg, equating to approximately €0.70 per 20 stick equivalents.

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 2010

Sources: (1) OTP volumes are based on NMA data and PMI estimates

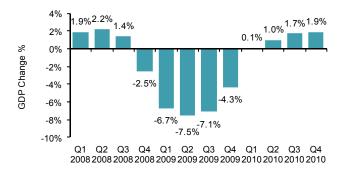
(2) Hungarian National Tax and Customs Authority, based on tax stamp databases



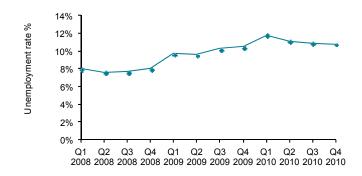
## Market developments 2010

Economic conditions
remained challenging in
Hungary during the first
quarter of 2010;
improvements occurred
during the remaining quarters
of the year with GDP
increasing and unemployment
declining.

GDP percentage change compared to equivalent quarter in prior year 2008-2010<sup>(1)</sup>



# Unemployment by quarter 2008-2010<sup>(2)</sup>



Sources: (1) Hungarian National Statistics, GDP change versus previous year, accessed May 2011

(2) Hungarian National Statistics, Unemployment rate, accessed May 2011



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Hungary	Sweden
Ireland	United Kingdom

Italy

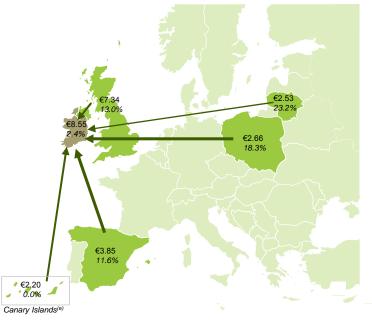


### **Market overview**

The share of cigarette consumption in Ireland accounted for by counterfeit and contraband declined to 19.3% in 2010.

Ireland remains the most expensive cigarette market in the European Union.

# Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(2)(a)(b)(c)(d)</sup>



#### Key: Irelan

Notes:

Major source countries

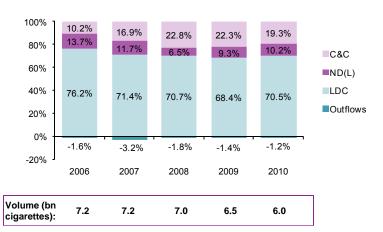
(a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow

- (b) Based on a pack of 20 Marlboro King Size as at July 1st 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June 2010
- (c) Relative cigarette prices in Lithuania, Poland and the United Kingdom are subject to fluctuations as a result of exchange rate changes of their respective currencies versus the
- (d) Arrow size indicates relative cigarette flow volume
- (e) Canary Islands are not shown to scale

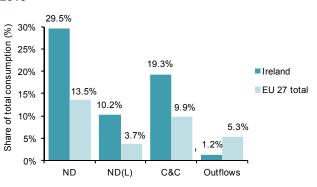
Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

- (2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010
- (3) Synovate ND(L) research, 2006-2010

# Share of Ireland consumption by type 2006-2010<sup>(1)(3)</sup>



# Comparison of EU and Irish consumption by type $2010^{(1)(3)}$





# **Total non-domestic consumption**

Consumption of nondomestic cigarettes declined to 1.76 billion cigarettes in 2010, compared to 2.04 billion in the previous year.

Total Ireland consumption (1)(2)					
Billion cigarettes	2006	2007	2008	2009	2010
Legal domestic sales (LDS)	5.63	5.39	5.08	4.52	4.28
Outflows	-0.12	-0.23	-0.13	-0.09	-0.07
Legal domestic consumption (LDC	5.52	5.16	4.96	4.43	4.21
Non-domestic legal (ND(L))	0.99	0.85	0.45	0.60	0.61
Counterfeit and contraband (C&C)	0.74	1.22	1.60	1.44	1.15
Total non-domestic	1.72	2.07	2.05	2.04	1.76
Total consumption	7.24	7.23	7.01	6.47	5.97

Outflows from Ireland (1)					
Billion cigarettes	2006	2007	2008	2009	2010
UK	0.08	0.14	0.09	0.05	0.02
France	0.00	0.01	0.00	0.01	0.02
Netherlands	0.03	0.03	0.00	0.02	0.02
Other EU	0.01	0.06	0.03	0.01	0.01
Total outflows	0.12	0.23	0.13	0.09	0.07

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

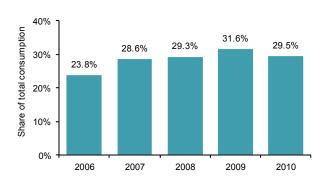
(2) Synovate ND(L) research, 2006-2010



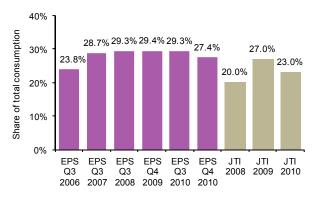
### Comparison of external sources for non-domestic estimates

The EU Flows Model estimate for non-domestic consumption in 2010 is calculated by weighting the Empty Pack survey results from the third and fourth quarters of 2010.

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



#### EPS and other non-domestic market estimates(2)(3)(4)(a)



Note: (a) 2010 JTI estimate of 23% shown is the midpoint of an 22% to 24% range estimate

Sources: (1) KPMG EU Flows Model

- (2) Steve Payne, Director JTI Ireland, Tom McGurck Show, 4FM, broadcast on 19th March 2008
- (3) JTI Illicit tobacco trade review 2010
- (4) PMI Empty Pack Surveys 2006-2010

# The 2010 non-domestic incidence in Ireland of 29.5% is calculated by applying a weighting to the two Empty Pack Surveys conducted in 2010

- The first EPS took place in July, and the second across October and November
- To reflect the relative timings of the EPS during the year a weighting was applied to the Empty Pack Surveys
  - 75% of the weighting is attributed to the July EPS and 25% is attributed the October and November EPS

# Both the EU Flows Model and the PMI Empty Pack survey suggest that non-domestic incidence declined in 2010

- In 2010, the EU Flows Model indicates a higher estimate of nondomestic incidence than the PMI Empty Pack survey
  - This is due in part to an uplift of 0.1 billion cigarettes to inflows from the UK to reflect regional sales and travel trends between the UK and Ireland in 2010

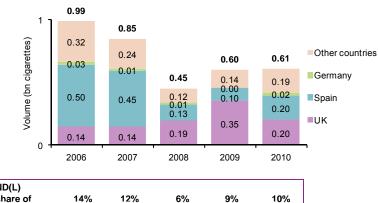


### Non-domestic (legal) breakdown

Non-domestic (legal) inflows remained stable at 0.61 billion cigarettes in 2010.

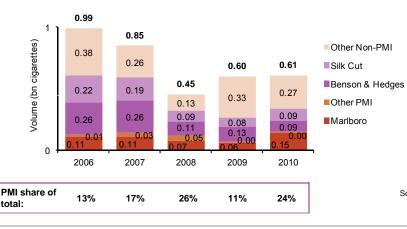
A decline in inflows from the United Kingdom was offset by increased inflows from Spain and other countries.

# Non-domestic (legal) by origin 2006-2010 $^{(1)(2)(3)}$



ND(L) share of consumption:	14%	12%	6%	9%	10%
ND(L) share of ND:	57%	41%	22%	29%	35%

# Non-domestic (legal) by brand 2006-2010 $^{(1)(2)(3)}$





#### UK inflows have been adjusted upwards to better reflect crossborder shopping trends

- UK inflows have been corroborated using regional sales trends to help reflect cross-border shopping patterns in 2010;
  - The uplift to UK inflows in 2010 is 0.06 billion cigarettes.

Sources: (1) KPMG EU Flows Model

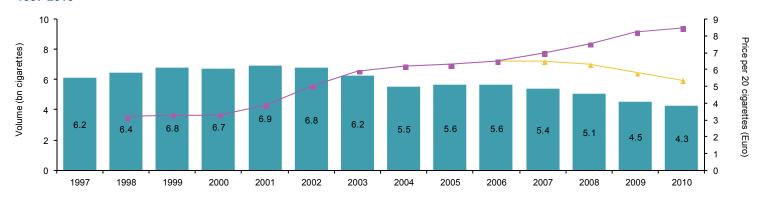
- (2) Synovate ND(L) research, 2006-2010
- (3) Interviews with PMI Local Management



### Historic sales and pricing trends

Legal domestic cigarette sales declined by 5.2% in 2010 to 4.3 billion cigarettes.

# Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1997-2001	2001-2005	2005-2010	2009-2010
Legal domestic sales	2.9%	-5.0%	-5.3%	-5.2%
Average pack price	6.8% <sup>(a)</sup>	12.8%	6.1%	3.1%
Consumption	n/a	n/a	-4.7% <sup>(b)</sup>	-7.6%

otes: (a) CAGR is from 1998 to 2001

(b) CAGR is from 2006 to 2010

Sources: (1) In Market Sales supplied by PMI based on JP&S estimates of total market volumes

(2) PMI Management and EU Tax Tables

#### Legal domestic sales declined by 5.2% in 2010 whilst the average pack price increased by 3.1%

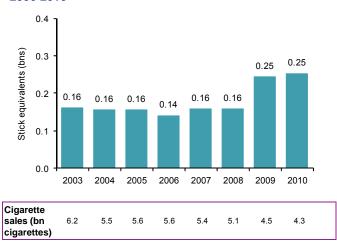
- The average pack price increased despite the reduction in the rate of VAT in January 2010 from 21.5% to 21%
- Ireland's previous Minimum Retail Price policy was discontinued in 2010



# **OTP** market size and growth

In Market Sales show that sales of fine cut tobacco increased by 4% in 2010.

# Fine cut tobacco sales in billion stick equivalents 2006-2010<sup>(1)(a)</sup>



CAGR (%)	2003-2006	2006-2010	2009-2010
Fine cut tobacco	-4.2%	15.5%	4.0%
Manufactured cigarettes	-3.3%	-6.6%	-5.2%

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

(b) This analysis excludes pipe tobacco

Source: (1) Volumes supplied by PMI based on JP&S estimates of total market volumes

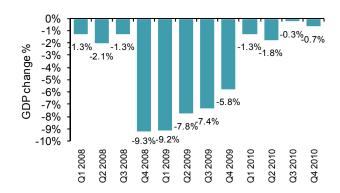


### Market developments 2010

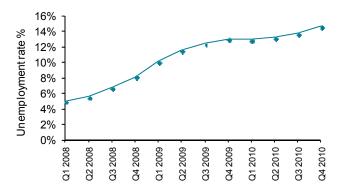
Economic conditions in Ireland remained challenging in 2010 with negative GDP growth and increasing unemployment.

Ireland continued to experienced net emigration in 2010.

Change in Gross Domestic Product compared to corresponding period in prior year, 2008-2010<sup>(1)</sup>



#### Unemployment rate by quarter 2008-2010(1)



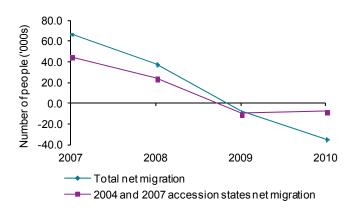
Note:

(a) Net migration statistics based on the Census of Population. The 2010 yearly data refers to the period between May 2009 and April 2010. This is the latest available data.

Sources:

- (1) Irish Central Statistics Office, accessed May 2011
- (2) 'Population and Migration Estimates', Irish Central Statistics Office, September 2010
- (3) 'Quarterly Economic Commentary, Winter 2010', The Economic and Social Research

#### Net migration 2007-2010<sup>(2)(a)</sup>



# Ireland has continued to experience a challenging economic climate during 2010

- Net emigration was estimated at 34,500 in the year to April 2010:
  - Forecasts predict continued net emigration of around 100,000 between April 2010 and April 2012<sup>(3)</sup>
- Whilst overall emigration has risen, the rate of emigration of nonlrish nationals fell in 2010, with nationals of the EU 12 States accounting for the bulk of this decline<sup>(2)</sup>



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■ Finland	Romania
France	Slovakia
Germany	Slovenia
■ Greece	Spain
Hungary	Sweden
Ireland	<ul><li>United Kingdom</li></ul>

Italy



# Italy Market overview

The share of cigarette consumption in Italy accounted for by counterfeit and contraband increased to 5.0% in 2010.

# Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(2)(a)(b)(c)(d)</sup>



### Key: Italy Top source country

lotes: (a)

- 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 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June 2010
- (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

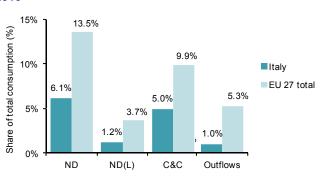
Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

- (2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010
- (3) Synovate ND(L) research, 2006-2007. AC Nielsen ND(L) research 2008-2010

# Share of Italy consumption by type 2006-2010<sup>(1)(3)</sup>



# Comparison of EU and Italian consumption by type $2010^{(1)(3)}$





# **Total non-domestic consumption**

Consumption of nondomestic cigarettes increased to 5.64 billion cigarettes in 2010, compared to 4.50 billion the previous year, driven by an increase in Ukrainian inflows.

Total Italy consumption (1)(2)					
Billion cigarettes	2006	2007	2008	2009	2010
Legal domestic sales (LDS)	93.81	92.81	92.00	89.16	87.05
Outflows	-2.13	-2.01	-1.83	-0.92	-0.93
Legal domestic consumption (LDC)	91.68	90.80	90.17	88.24	86.12
Non-domestic legal (ND(L))	0.98	0.51	1.91	1.46	1.09
Counterfeit and contraband (C&C)	4.04	4.31	2.00	3.04	4.55
Total non-domestic	5.02	4.82	3.90	4.50	5.64
Total consumption	96.70	95.62	94.08	92.74	91.76

Outflows from Italy (1)					
Billion cigarettes	2006	2007	2008	2009	2010
France	0.71	0.50	0.62	0.32	0.38
Netherlands	0.65	0.45	0.25	0.06	0.21
Germany	0.16	0.13	0.09	80.0	0.11
Other EU	0.62	0.93	0.87	0.46	0.23
Total outflows	2.13	2.01	1.83	0.92	0.93

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

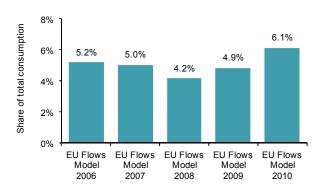
(2) Synovate ND(L) research, 2006-2007. AC Nielsen ND(L) research 2008-2010



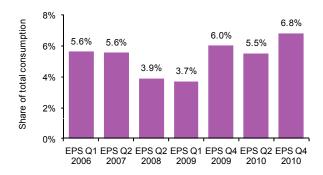
### **Comparison of external sources for non-domestic estimates**

The EU Flows Model suggests an increase in non-domestic incidence, from 4.9% in 2009 to 6.1% in 2010.

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



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



The 2010 EU Flows Model estimate for non-domestic incidence in Italy of 6.1% is calculated by applying an equal weighting to the two Empty Pack Surveys conducted in 2010

The Q2 survey took place across April and May, the Q4 survey in December

Sources: (1) KPMG EU Flows Model

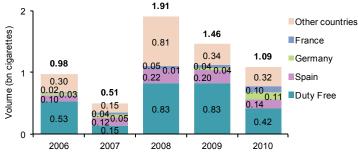
(2) PMI Empty Pack Surveys 2006-2010



### Non-domestic (legal) breakdown

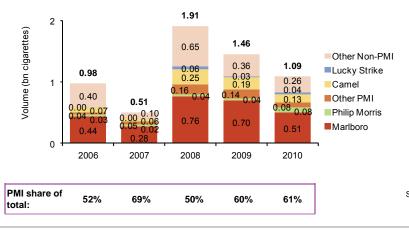
Non-domestic (legal) inflows declined to 1.09 billion cigarettes in 2010.

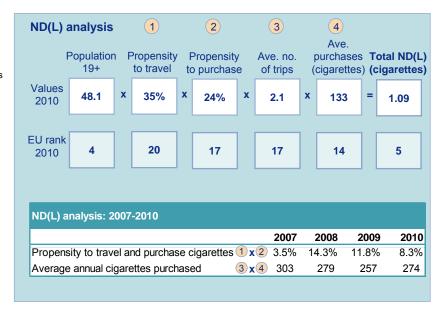
# Non-domestic (legal) by origin 2006-2010<sup>(1)(2)(3)</sup>



ND(L)					
share of	20%	11%	49%	32%	19%
consumption:					
ND(L) share of ND:	1%	1%	2%	2%	1%

# Non-domestic (legal) by brand 2006-2010 $^{(1)(2)(3)}$





A decline in both the propensity to travel and the propensity to purchase has resulted in lower non-domestic (legal) inflows in 2010 compared to 2009

Sources: (1) KPMG EU Flows Model

(2) Synovate ND(L) research, 2006-2007. AC Nielsen ND(L) research 2008-2010

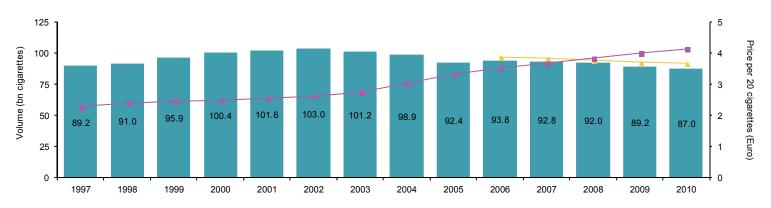
(3) Interviews with PMI Local Management



## **Historic sales and pricing trends**

Legal domestic cigarette sales declined by 2.4% in 2010.

# Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1997-2001	2001-2005	2005-2010	2009-2010
Legal domestic sales	3.3%	-2.3%	-1.2%	-2.4%
Average pack price	2.9%	6.9%	4.5%	3.3%
Consumption	n/a	n/a	-1.3% <sup>(a)</sup>	-1.1%

lote: (a) CAGR from 2006 to 2010

Sources: (1) In Market Sales supplied by PMI based on data from Etinera/Logista and AC Nielsen

(2) PMI Management and EU Tax Tables

Legal domestic sales declined by 2.4% in 2010, whilst the average pack price increased by 3.3%



# Project Star 2010

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Germany	Slovenia
■ Greece	Spain
Hungary	Sweden
■ Ireland	United Kingdom

Italy



### **Market overview**

The share of cigarette consumption in Latvia accounted for by counterfeit and contraband increased to 37.0% in 2010, significantly above overall EU levels.

At the same time legal domestic sales continued to decline sharply.

Marlboro and cheapest available brand 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(3)(a)(b)(c)(d)(e)</sup>



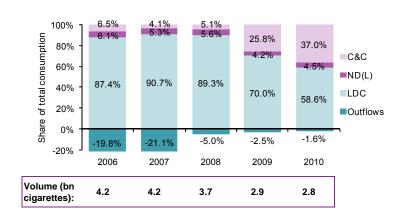
#### ey: Latvia

- Major source countries
- 2010 pack of 20 Marlboro KS price in Euros and percentage change from 2009
- 2010 pack of 20 cheapest available brand price in Euros and percentage change from 2009
- otes: (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 2009 and 2010
  - (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). Cigarette prices in Belarus declined in Euro terms in 2010 as a result of exchange rate changes of the Belarusian ruble versus the euro; in local currency pack price did not change in Belarus in 2010
  - (e) Arrow size indicates relative cigarette flow volume

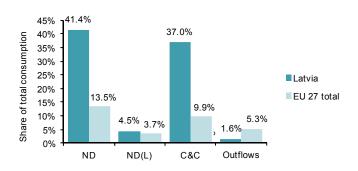
#### Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

- (2) AC Nielsen ND(L) research 2006, 2008 and 2009
- (3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010

# Share of Latvia consumption by type 2006-2010<sup>(1)(2)</sup>



# Comparison of EU and Latvian consumption by type 2010<sup>(1)(2)</sup>





# **Total non-domestic consumption**

Consumption of nondomestic cigarettes increased to 1.14 billion cigarettes in 2010.

Total Latvia consumption <sup>(1)(2)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
Legal domestic sales (LDS)	4.45	4.71	3.46	2.12	1.65
Outflows	-0.82	-0.89	-0.18	-0.07	-0.04
Legal domestic consumption (LDC)	3.63	3.82	3.28	2.04	1.61
Non-domestic legal (ND(L))	0.25	0.22	0.21	0.12	0.12
Counterfeit and contraband (C&C)	0.27	0.17	0.19	0.75	1.02
Total non-domestic	0.53	0.39	0.39	0.88	1.14
Total consumption	4.15	4.22	3.67	2.92	2.75

Outflows from Latvia <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
Ireland	0.13	0.20	0.02	0.02	0.02
UK	0.23	0.33	0.04	0.02	0.01
Germany	0.02	0.02	0.02	0.01	0.01
Other EU	0.44	0.34	0.10	0.03	0.01
Total outflows	0.82	0.89	0.18	0.07	0.04

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

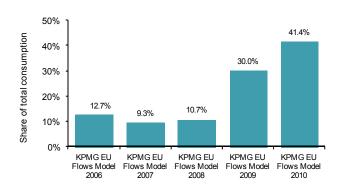
(2) AC Nielsen ND(L) research 2006, 2008 and 2009



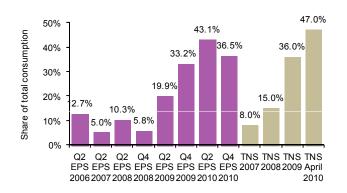
### Comparison of external sources for non-domestic estimates

The EU Flows Model estimate for non-domestic consumption in 2010 is calculated based on the weighted results of the Q2 and Q4 Empty Pack Surveys and shows a significant increase in non-domestic incidence.

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



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



# The 2010 non-domestic incidence in Latvia of 41.4% is calculated by applying a weighting to the two Empty Pack Surveys conducted during the year

- To reflect the impact of increased customs activity in Q4 2010, the Q2 survey result has been reweighted to represent the first nine months of the year, whilst the Q4 results represent the final three months of the year:
  - In 2009, EPS was weighted so that Q2 results represented the first four months of the year, whilst the Q4 results represented the remaining eight months of the year. This reflected the timing of price changes in Latvia in 2009.
- TNS estimates are directionally consistent with EU Flows Model results, with both reporting a continuous increase in non-domestic incidence since 2007.

Notes: (a) As of Q4 2009, the EPS geographical coverage was extended from 7 to 25 cities

(b) TNS non-domestic estimates in 2007-2010 refer to the market share for illegal cigarettes

Sources: (1) KPMG EU Flows Model

(2) PMI Empty Pack Surveys 2006-2010

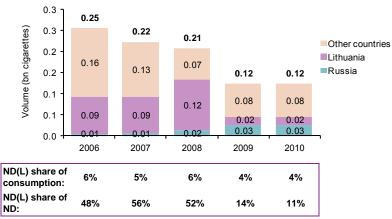
(3) TNS estimates, as presented at the Foreign Investors Council in Latvia, April 2010



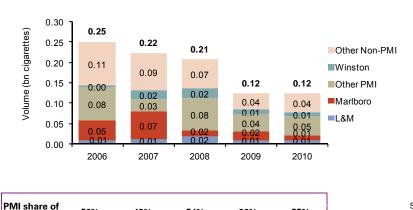
# Non-domestic (legal) breakdown

Non-domestic (legal) inflows remained stable at 0.12 billion cigarettes in 2010.

### Non-domestic (legal) by origin 2006-2010(1)(2)(3)



#### Non-domestic (legal) by brand **2006-2010**<sup>(1)(2)(3)</sup>



54%

60%

55%

ND(L) analysis 1 (3) (2) (4) Ave. Population Propensity Propensity purchases Total ND(L) Ave. no. 19+ to travel to purchase of trips (cigarettes) (cigarettes) Values 39% 25% Х 1.8m 6.5 110 0.12 2010 EU rank 16 22 16 3 19 19 2010 ND(L) analysis 2007-2010 2007 2008 2009 2010 Propensity to travel and purchase  $1 \times 2$ 15.5% 15.3% 9.5% 9.5% Average annual cigarettes purchased 3 x 4

789

390

716

716

Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research 2006, 2008 and 2009

(3) Interviews with PMI Local Management

49%

56%

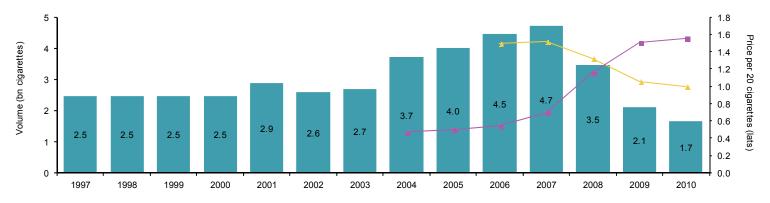
ND(L):



### Historic sales and pricing trends

Legal domestic cigarette sales declined by 21.9% in 2010 compared to 2009.

# Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1999-2003	2003-2007	2007-2010	2009-2010
<ul><li>Legal domestic sales</li></ul>	2.1%	15.1%	-29.5	-21.9%
Average pack price	n/a	n/a	31.0%	3.3%
Consumption	n/a	n/a	-13.3%	-5.8%

Notes:

- (a) This report and Project Star 2007, 2008 and 2009 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 2006 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

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

- (2) PMI Management and EU Tax Tables
- (3) Excise tax on wine and cigarettes to be raised in Latvia in 2010', The Baltic Course, December 2009

#### Legal domestic sales declined by 21.9% in 2010, whilst the average pack price increased by 3.3%

■ An increase in excise duty on cigarillo products, along with an increase in VAT, took place on 1 January 2010.<sup>(3)</sup>



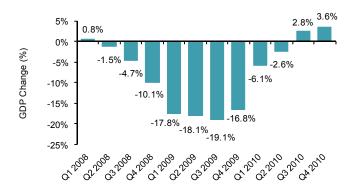
### **Market developments 2010**

Economic conditions
remained challenging in
Latvia at the start of 2010 as
GDP continued to decline and
unemployment increased.

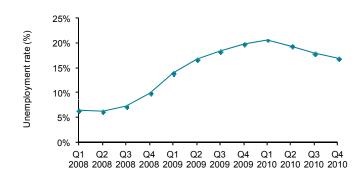
Improvements occurred in the second half of the year with GDP growing slightly and unemployment declining.

The Latvian lat weakened against the Russian rouble in the first half of 2010, but recovered during the second half of the year.

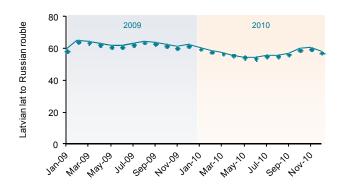
GDP percentage change compared to equivalent quarter in prior year 2008-2010<sup>(1)</sup>



# Unemployment by quarter 2008-2010<sup>(2)</sup>



Exchange rate of Latvian lat to Russian rouble 2009-2010<sup>(3)</sup>



Sources: (1) Latvian National Statistics, GDP at chain linked prices, accessed May 2011

- (2) Latvian National Statistics, Unemployment rate, accessed May 2011
- (3) Datastream, Russian rouble to Latvian lat exchange rate, accessed Jan 2011



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Germany	Slovenia
■ Greece	Spain
Hungary	Sweden
Ireland	United Kingdom
Italy	



### Lithuania

### Market overview

The share of cigarette consumption in Lithuania accounted for by counterfeit and contraband increased to 40.7% in 2010, significantly above overall EU levels.

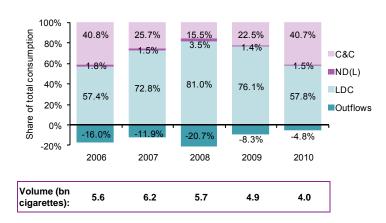
**Outflows from Lithuania** declined in 2010.

Marlboro and cheapest available brand 2010 price comparison in Euros, percentage change from 2009 and major flows(1)(3)(a)(b)(c)(d)(e)

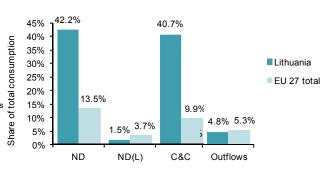


- Major destination countries
- 2010 pack of 20 Marlboro KS price in Euros and percentage change from 2009
- 2010 pack of 20 cheapest available brand price in Euros and percentage change from 2009 Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow
- Based on pack prices as at July 1st 2009 and 2010
- (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
- Price in Belarus refers to the Kent brand, which is an equivalent premium category brand to Marlboro (which is not sold in Belarus). Cigarette prices in Belarus declined in Euro terms in 2010 as a result of exchange rate changes of the Belarusian ruble versus the euro; in local currency pack price did not change in Belarus in 2010
- (e) Arrow size indicates relative cigarette flow volume
- Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management
  - AC Nielsen ND(L) research 2006, 2007, 2009 and 2010
  - Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010

#### Share of Lithuania consumption by type 2006-2010(1)(2)



#### Comparison of EU and Lithuanian consumption by type **2010**<sup>(1)(2)</sup>





### Lithuania

# **Total non-domestic consumption**

Non-domestic consumption increased to 1.67 billion cigarettes in 2010, driven largely by an increase in inflows from Belarus

Russia continues to be a significant source of inflows, accounting for 0.78 billion cigarettes in 2010.

Total Lithuania consumption <sup>(1)(2)</sup>						
Billion cigarettes	2006	2007	2008	2009	2010	
Legal domestic sales (LDS)	4.14	5.27	5.84	4.17	2.48	
Outflows	-0.90	-0.74	-1.19	-0.41	-0.19	
Legal domestic consumption (LDC)	3.24	4.53	4.65	3.76	2.29	
Non-domestic legal (ND(L))	0.10	0.09	0.20	0.07	0.06	
Counterfeit and contraband (C&C)	2.30	1.60	0.89	1.11	1.61	
Total non-domestic	2.40	1.70	1.09	1.18	1.67	
Total consumption	5.65	6.23	5.74	4.94	3.96	

Outflows from Lithuania <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
Ireland	0.13	0.06	0.12	0.07	0.06
UK	0.20	0.15	0.32	0.19	0.06
Germany	0.04	0.05	0.05	0.02	0.02
Other EU	0.54	0.48	0.69	0.13	0.04
Total outflows	0.90	0.74	1.19	0.41	0.19

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

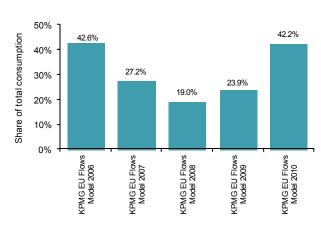
(2) AC Nielsen ND(L) research 2006, 2007, 2009 and 2010



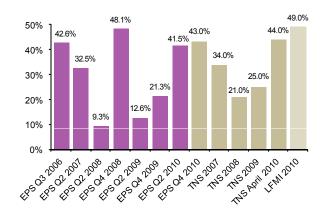
### Comparison of external sources for non-domestic estimates

The EU Flows Model estimate for non-domestic consumption in 2010 is calculated based on an average 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)(4)(a)(b)(c)



## The EU Flows Model results indicate a non-domestic incidence slightly lower than the TNS estimate

- Non-domestic incidence of 42.2% per the EU Flows Model 2010 uses the average of the two Empty Pack Surveys conducted in the year:
  - In 2009, non-domestic incidence was based on quarterly analysis to reflect volatile LDS during the year.
- TNS estimates are directionally consistent with the EU Flows Model results, with both reporting a continuous increase in non-domestic incidence since 2008.

Notes: (a) The EPS geographical coverage was extended from 12 to 20 cities as of Q4 2009.

(b) TNS non-domestic estimates in 2007-2010 refer to the market share for illegal cigarettes

(c) LFMI non-domestic estimate in 2010 is based on the proportion of cigarettes smoked in

Lithuania carrying foreign-language warning labels

Sources: (1) KPMG EU Flows model 2006-2010 (2) PMI Empty Pack Surveys 2006-2010

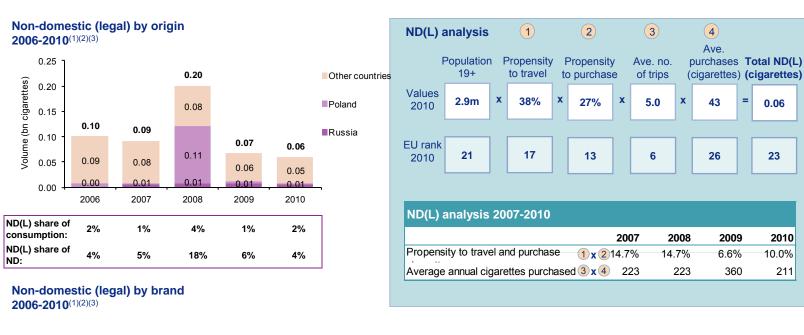
(3) TNS estimates, as presented at the Foreign Investors Council in Latvia, April 2010

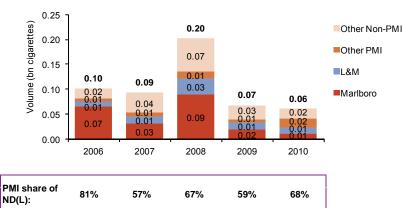
 (4) Lithuanian Free Market Institute data, 'Cigarette-smuggling gangs sap Lithuania budget', BBN, December 2010



### Non-domestic (legal) breakdown

Non-domestic (legal) volumes declined to 0.06 billion cigarettes in 2010.





Sources: (1) KPMG EU Flows Model

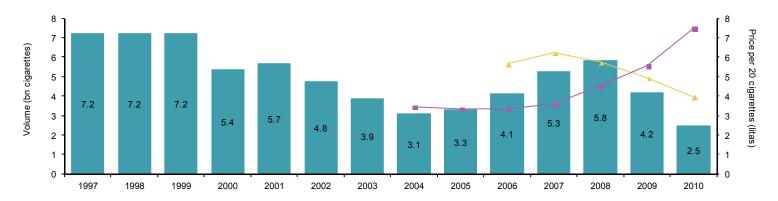
- (2) AC Nielsen ND(L) research 2006, 2007, 2009 and 2010
- (3) Interviews with PMI Local Management



### **Historic sales and pricing trends**

Legal domestic sales declined by 40.6% in 2010, to just 2.5 billion cigarettes.

## Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1997-2000	2004-2007	2008-2010	2008-2009	2009-2010
<ul><li>Legal domestic sales</li></ul>	-15.5%	19.3%	-34.8%	-28.5%	-40.6%
Average pack price	n/a	1.5%	28.2%	22.7%	34.0%
Consumption	n/a	n/a	-16.9%	-13.9%	-19.9%

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

(2) PMI Management and EU Tax Tables

#### Legal domestic sales declined by 40.6% in 2010 whilst the average pack price increased by 34.0%

■ There were no excise duty increases during the 2010 calendar year.

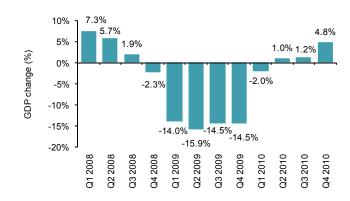


### **Market developments 2010**

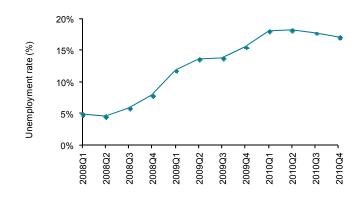
Economic conditions
remained challenging in
Lithuania at the start of 2010
as GDP continued to decline
and unemployment increased;
improvements occurred in
Q2-Q4 with unemployment
starting to fall and GDP
marginally increasing.

The Lithuanian lita weakened against the Russian rouble and Belarusian ruble in the first half of 2010, although it recovered against both during the second half of the year.

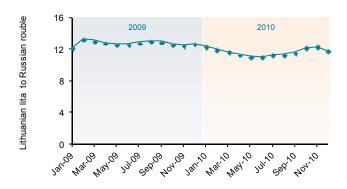
GDP percentage change compared to equivalent quarter in prior year  $2008-2010^{(1)}$ 



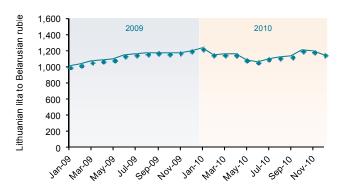
### Unemployment by quarter 2008-2010<sup>(2)</sup>



## Exchange rate of Lithuanian lita to Russian rouble 2009-2010<sup>(3)</sup>



### Exchange rate of Lithuanian lita to Belarusian ruble 2009-2010<sup>(3)</sup>



- Sources: (1) Lithuanian National Statistics, GDP at chain linked prices, accessed May 2011
  - (2) Lithuanian National Statistics, Unemployment rate from LFS, accessed May 2011
  - (3) Datastream, Russian rouble and Belarusian ruble to Lithuanian lita exchange rate, accessed Jan 2011



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Germany	Slovenia
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Hungary	Sweden
Ireland	United Kingdom

Italy



### **Market overview**

Luxembourg has low inflows and high outflows reflecting its lower prices relative to the surrounding countries.

Outflows from Luxembourg declined in 2010 but remain significant at approximately three times domestic consumption.

## Marlboro 2010 price comparison in Euros, percentage change from 2010 and major flows<sup>(1)(3)(a)(b)</sup>



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

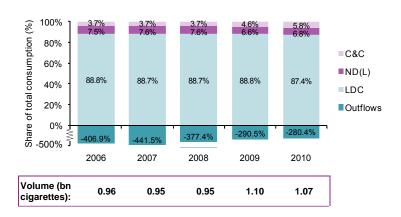
b) Based on a pack of 20 Marlboro King Size as at July 1st 2009 and 2010.

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

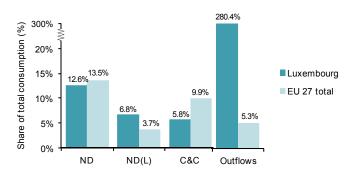
2) Synovate ND(L) research, 2006

(3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010

## Share of Luxembourg consumption by type 2006-2010<sup>(1)(2)</sup>



## Comparison of EU and Luxembourg consumption by type ${\bf 2010}^{(1)(2)}$





## **Total non-domestic consumption**

Consumption of nondomestic products accounted for 0.13 billion cigarettes in 2010.

Total Luxembourg consumption (1)(2)						
Billion cigarettes	2006	2007	2008	2009	2010	
Legal domestic sales (LDS)	4.77	5.05	4.43	4.15	3.93	
Outflows	-3.92	-4.20	-3.59	-3.18	-3.00	
Legal domestic consumption (LDC)	0.85	0.84	0.84	0.97	0.93	
Non-domestic legal (ND(L))	0.07	0.07	0.07	0.07	0.07	
Counterfeit and contraband (C&C)	0.04	0.04	0.04	0.05	0.06	
Total non-domestic	0.11	0.11	0.11	0.12	0.13	
Total consumption	0.96	0.95	0.95	1.10	1.07	

Outflows from Luxembourg <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
France	1.00	0.95	0.86	0.58	0.52
Germany	0.35	0.38	0.44	0.80	0.38
Belgium	0.47	0.25	0.31	0.12	0.23
Other EU	2.10	2.63	1.97	1.68	1.87
Total outflows	3.92	4.20	3.59	3.18	3.00

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

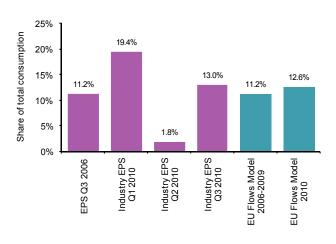
(2) Synovate ND(L) research, 2006



### Comparison of external sources for non-domestic estimates

The 2010 EU Flows Model estimate for non-domestic consumption in Luxembourg is based on Industry Empty Pack Surveys.

#### Non-domestic market estimates(1)(2)(3)



The EU Flows Model shows a 1.4 percentage point increase in nondomestic incidence level in Luxembourg in 2010.

- The 2010 EU Flows Model estimate for the non-domestic consumption share uses the results of Industry Empty Pack Surveys conducted in the first, second and third quarters of 2010.
- In prior years, the EU Flows Model was based on the results of Empty Pack Survey conducted by PMI in Q3 2006.

The Q1 Industry Empty Pack Survey was conducted in Luxembourg city only, whilst the Q2 and Q3 surveys were conducted in two cities, Luxembourg and Esch-sur-Alzette.

- In Q2 and Q3, the sampling was not collected proportionally to the population of the two cities and therefore may not fully reflect the national non-domestic incidence levels.
- For the purpose of Project star, the Industry survey results have been reweighted to more accurately reflect the relative population of both cities
  - For example, prior to the adjustment, Esch-Sur-Alzette represented 70% of the total sample in the Q2 Industry survey whilst only accounting for 25% of the population of both cities.

Sources: (1) KPMG EU Flows Model

(2) Industry market survey Q1 2010, Q2 2010 and Q3 2010

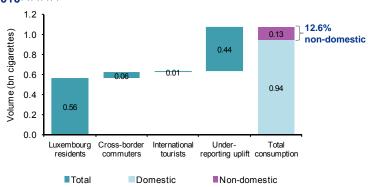
(3) PMI Empty Pack Surveys Q3 2006



### **Estimation of consumption**

KPMG's estimate of total consumption in Luxembourg is based on the same methodology as in prior years.

#### **Consumption estimates** 2010(1)(2)(3)(4)



Consumption calculation 2010						
	Luxembourg	Belgium				
Population 15+ (million)	0.4	8.7				
Smoking incidence <sup>(2)</sup>						
Regular smokers	24.2%	13.6%				
Occasional smokers	4.6%	1.4%				
Avg. daily consumption <sup>(3)</sup>	15.2	16.3				
Implied consumption (bn cigarettes) <sup>(2)(a)</sup>	0.6	7.14				
KPMG consumption (bn cigarettes) <sup>(4)</sup>	n/a	12.3				
Implied understatement	41%	41%				
Consumption estimate (bn cigarettes)	1.07	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<sup>(2)(3)</sup> to adjust the estimation of the consumption in 2010.

- 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 41% 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 1.07 billion cigarettes.

(a) Implied consumption for Luxembourg includes 0.07 billion cigarettes attributed to international commuters and tourists

Sources: (1) CIA Factbook, Population Estimate, July 2009

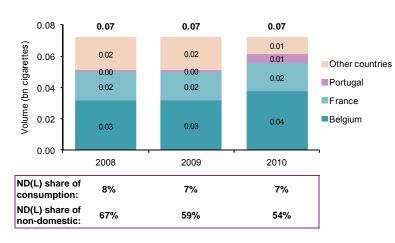
- (2) European Commission Eurobarometer, Survey on Tobacco: Analytical Report, March 2009
- (3) GCTS (Global Consumer Tracking Survey) provided by PMI
- (4) KPMG EU Flows Model



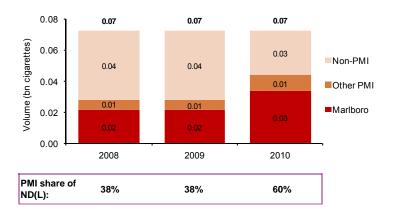
## Non-domestic (legal) breakdown

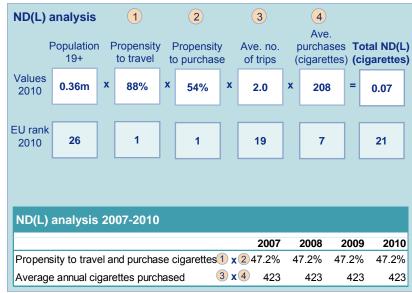
Non-domestic (legal) inflows account for 54% of non-domestic consumption in 2010.

## Non-domestic (legal) by origin 2008-2010 $^{(1)(2)(3)}$



# Non-domestic (legal) by brand 2008-2010 $^{(1)(2)(3)}$





Note: (a) ND(L) was not updated in 2007, 2008, 2009 and 2010 but corroborating research has not indicated any significant changes to 2010 results

Sources: (1) KPMG EU Flows Model

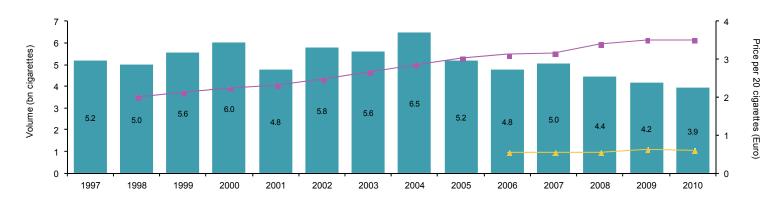
- (2) Synovate ND(L) research, 2006
- (3) Interviews with PMI Local Management



### **Historic sales and pricing trends**

Legal domestic cigarette sales declined by 5.4% in 2010.

# Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1997-2000	2000-2006	2006-2010	2009-2010
Legal domestic sales	5.2%	-3.8%	-4.7%	-5.4%
Average pack price	n/a	5.7%	3.0%	0.3%
Consumption	n/a	n/a	2.7%	-2.4%

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

#### Legal domestic sales declined by 5.4% in 2010, whilst the average pack price increased by 0.3%.

■ There were no tax increases during the 2010 calendar year.

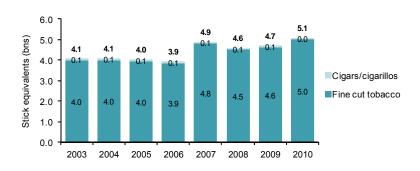


### **OTP** market size and growth

The market for Other

Tobacco Products increased
by 7.9% from 2009 to 2010.

## Other Tobacco Products sales in billion stick equivalents ${\bf 2006\text{-}2010}^{(1)(a)}$



Cigarette sales (bn cigarettes)	5.6	6.5	5.2	4.8	5.0	4.4	4.2	3.9
9								

CAGR (%)	2003-2006	2006-2010	2009-2010
■ Cigar/cigarillos	-9.9%	-5.0%	-25.6%
Fine cut tobacco	-1.0%	6.8%	8.3%
Total	-1.2%	6.6%	7.9%
Manufactured cigarettes	-5.3%	-4.7%	-5.4%

## Other Tobacco Products (OTP) sales grew by 7.9% and reached 5.1 billion stick equivalents in 2010.

- Legal domestic sales of fine cut tobacco accounted for 5.0 billion stick equivalents in 2010, up from 4.6 billion stick equivalents in 2009.
- Legal domestic sales of cigars and cigarillos declined by 25.6% to in 2010 compared to the previous year.

## Other Tobacco Products account for approximately 56% share of overall tobacco sales in Luxembourg.

- Total cigarette sales are estimated at 3.9 billion cigarettes versus 5.1 billion cigarettes equivalents for Other Tobacco Products in 2010.
  - Anecdotal evidence suggests that the majority of cigarettes and other tobacco products sold in Luxembourg are not consumed domestically.

Note

- (a) Smoking tobacco volumes have been calculated at one stick per 0.75 grams, while cigars and cigarillos have been calculated on a stick for stick basis
- (b) Smokeless tobacco is excluded from this analysis
- (c) 2009 Fine cut tobacco sales data shown in this report is 0.3 billion higher than the number stated in the Project Star report in 2009. The difference is due to revision of data received from PMI. The updated figure is used for this report

Sources: (1) Other Tobacco Products volumes based on IMS and shipment data provided by PMI



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■ France	Slovakia
Germany	Slovenia
■ Greece	Spain
Hungary	Sweden
Ireland	<ul><li>United Kingdom</li></ul>

Italy



#### Market overview

The share of cigarette consumption in Malta accounted for by counterfeit and contraband increased to 10.8% in 2010.

**Outflows from Malta** declined in 2010.

#### Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(3)(a)(b)(c)(d)</sup>



Major destination countries

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

- Based on a pack of 20 Marlboro King Size as at July 1st 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June
- 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

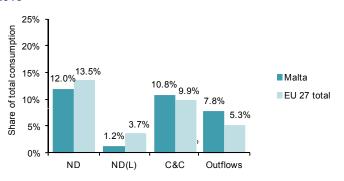
Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

- (2) Synovate ND(L) research 2006
- (3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010

#### **Share of Malta consumption by type** 2006-2010(1)(2)



#### Comparison of EU and Maltese consumption by type, **2010**<sup>(1)(2)</sup>





### **Total non-domestic consumption**

Consumption of nondomestic cigarettes increased to 69 million cigarettes in 2010, compared to 39 million in the previous year.

Total Malta consumption <sup>(1)(2)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
Legal domestic sales (LDS)	0.535	0.535	0.535	0.529	0.550
Outflows	-0.035	-0.040	-0.053	-0.071	-0.045
Legal domestic consumption (LDC)	0.500	0.495	0.482	0.458	0.505
Non-domestic legal (ND(L))	0.003	0.007	0.007	0.007	0.007
Counterfeit and contraband (C&C)	0.040	0.035	0.034	0.032	0.062
Total non-domestic	0.042	0.042	0.041	0.039	0.069
Total consumption	0.542	0.536	0.523	0.497	0.574

Outflows from Malta <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
UK	0.027	0.027	0.044	0.039	0.035
France	0.000	0.000	0.007	0.020	0.007
Ireland	0.004	0.000	0.001	0.001	0.002
Other EU	0.005	0.013	0.000	0.010	0.001
Total outflows	0.035	0.040	0.053	0.071	0.045

Note: (a) In 2010, packs with no clear indication of origin have been classified as 'Unspecified'

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

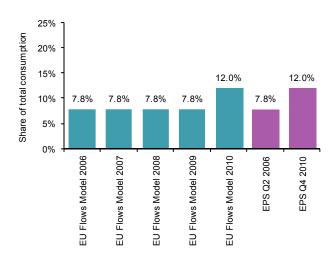
(2) Synovate ND(L) Research 2006



### **Comparison of external sources for non-domestic estimates**

The EU flows model indicates a 4.2 percentage point increase in non-domestic consumption from 2009 to 2010.

#### EU Flows Model and EPS non-domestic market estimates(1)(2)(a)



The EU Flows Model estimate for non-domestic consumption in 2010 uses the fourth quarter results of the PMI Empty Pack survey

Ide: (a) Empty Pack Survey research indicated non-domestic incidence of 12.0% in 2010. The Survey was not updated in 2007, 2008 or 2009 but corroborating research did not indicate any significant changes to 2006 results during this period

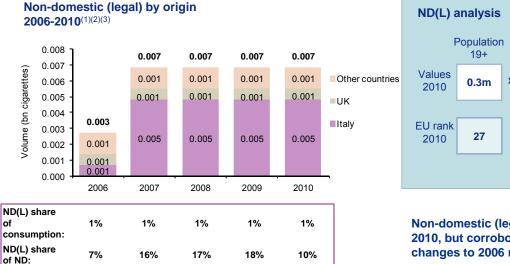
Sources: (1) KPMG EU Flows Model

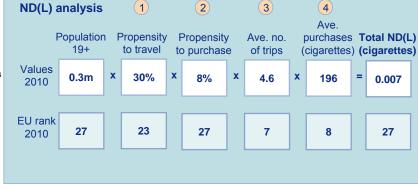
(2) PMI Empty Pack Surveys 2006-2010



### Non-domestic (legal) breakdown

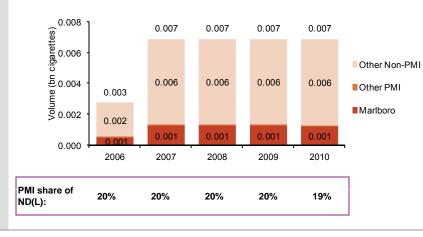
Non-domestic (legal) inflows have remained broadly stable year on year.





Non-domestic (legal) research has not been updated between 2007-2010, but corroborating research has not indicated any significant changes to 2006 results

■ The total change in volume of outbound passengers from Malta to other countries has remained broadly stable in 2010. (4)(b)



 ND(L) research was not updated in 2007, 2008, 2009 and 2010 but corroborating research has not indicated any significant changes to 2006 results

(b) According to the National Statistics Office in Malta the total volume of outbound passengers from Malta to EU destinations increased by around approximately 11% between 2009 and 2010.

Sources: (1) KPMG EU Flows Model

- (2) Synovate ND(L) Research 2006
- (3) Interviews with PMI Local Management

'Other non-PMI' includes Benson

& Hedges and Lambert & Butler

(4) National Statistics Office of Malta, Outbound Tourism: December 2010, accessed April 2011

Non-domestic (legal) by brand

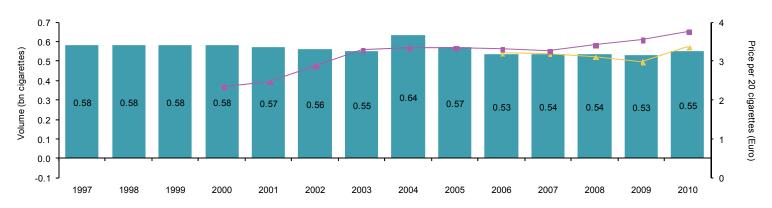
2006-2010(1)(2)(3)



### **Historic sales and pricing trends**

Legal domestic cigarette sales increased by 3.9% in 2010 compared to 2009.

## Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1997-2003	2003-2006	2006-2010	2009-2010
<ul><li>Legal domestic sales</li></ul>	-0.9%	-0.9%	0.7%	3.9%
Average pack price	n/a	0.4%	3.1%	5.9%
Consumption	n/a	n/a	1.5%	15.4%

Sources: (1) PMI sales and estimates by local distributor

(2) PMI Management and EU Tax Tables

Legal domestic sales increased by 3.9% in 2010, whilst the average pack price increased by 5.9%



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	France		Slovakia
	Germany		Slovenia
	Greece		Spain
-	Hungary		Sweden
	Ireland		United Kingdom

Italy



#### **Market overview**

The share of cigarette consumption in the Netherlands accounted for by counterfeit and contraband increased to 11.0% in 2010.

# Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(3)(a)(b)</sup>



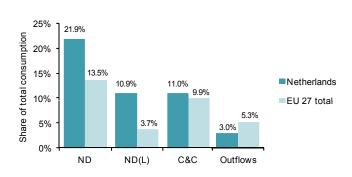
### Keys: The Netherlands Major source countries

- Notes: (a) Map shows flows over 1.25% 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 2009 and 2010.
- Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management
  - 2) Synovate ND(L) research, 2006-2010
  - (3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010

# Share of Netherlands consumption by type $2006-2010^{(1)(2)}$



## Comparison of EU and Dutch consumption by type 2010<sup>(1)(2)</sup>





## **Total non-domestic consumption**

Consumption of nondomestic cigarettes increased to 3.55 billion cigarettes in 2010.

Total Netherlands consumption (1)(2)							
Billion cigarettes	2006	2007	2008	2009	2010		
Legal domestic sales (LDS)	14.11	14.51	14.62	13.39	13.16		
Outflows	-0.57	-0.82	-0.53	-0.48	-0.49		
Legal domestic consumption (LDC)	13.54	13.69	14.09	12.91	12.67		
Non-domestic legal (ND(L))	0.87	2.38	1.30	0.97	1.77		
Counterfeit and contraband (C&C)	4.59	2.97	1.45	0.60	1.78		
Total non-domestic	5.46	5.36	2.75	1.56	3.55		
Total consumption	19.01	19.05	16.84	14.47	16.23		

Outflows from Netherlands <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
Germany	0.18	0.16	0.20	0.13	0.14
Belgium	0.09	0.05	0.02	0.11	0.13
France	0.14	0.26	80.0	0.14	0.09
Other EU	0.16	0.35	0.23	0.10	0.13
Total outflows	0.57	0.82	0.53	0.48	0.49

Note: (a) Other inflows include a number of brands. Of these only Lucky Strike, Winston and Kent had volumes greater than 100 million cigarettes each

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

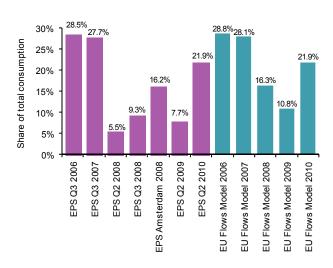
(2) Synovate ND(L) research, 2006-2010



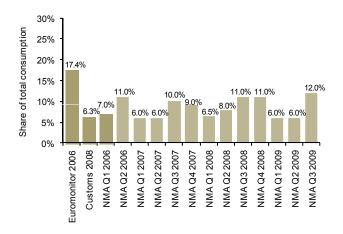
### Comparison of external sources for non-domestic estimates

The EU Flows Model estimate for non-domestic consumption in 2010 is based on the results of the 2010 Empty Pack Survey.

#### Non-domestic market estimates(1)(2)



#### Other non-domestic market estimates(3)(4)(5)



The EU Flows Model estimate for non-domestic consumption in 2010 is based on the results of the Empty Pack Surveys undertaken in the second quarter of 2010.

Empty Pack Surveys conducted during 2010 indicated an increase in non-domestic incidence in the Netherlands.

## Results of the survey conducted by the Dutch Tobacco Manufacturers Association in 2010 are not available.

The results of the surveys in 2008 and 2009 were based on questionnaires completed by participants and an analysis of their returned empty packs.

Sources: (1) KPMG EU Flows Model

 PMI Empty Pack Surveys Q3 2006, Q3 2007, Q2 2008, Q3 2008, Amsterdam Survey 2008, Q2 2009 and Q2 2010

Euromonitor, 2006

(4) 'Illegale handel van shag en sigaretten: Nederland als criminele groeimarkt', Integis B.V. for Vereniging Nederlandse Kerftabakindustrie (VNK), October 2008

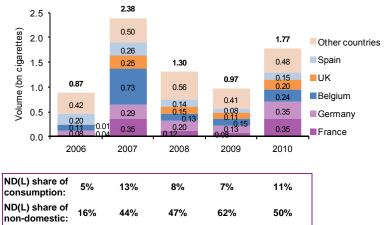
(5) 'Determine Market Share of International Tobacco Packages Cigarettes and RYO', TrendBox on behalf of Vereniging Nederlandse Kerftabakindustrie (VNK) and Stichting Sigarettenindustrie, February 2010



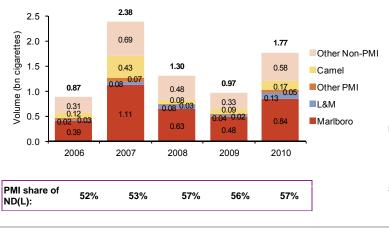
### Non-domestic (legal) breakdown

Non-domestic (legal) inflows increased to 1.77 billion cigarettes in 2010.

## Non-domestic (legal) by origin **2006-2010**<sup>(1)(2)(3)(a)(b)</sup>



## Non-domestic (legal) by brand **2006-2010**<sup>(1)(2)(3)(a)(b)</sup>





Note: (a) ND(L) analysis from Synovate excludes adjustments from inbound tourism flows. Total ND(L) including these inbound tourism flows is 1.77 billion cigarettes

(b) ND(L) inflows in 2007, 2008, 2009 and 2010 are higher than those in 2006 partly as a result of changes in treatment of inbound tourism flows. In 2006, had the same methodology been applied, ND(L) including overseas inbound visitor flow would have been approximately 1.33 billion cigarettes

Sources: (1) KPMG EU Flows Model

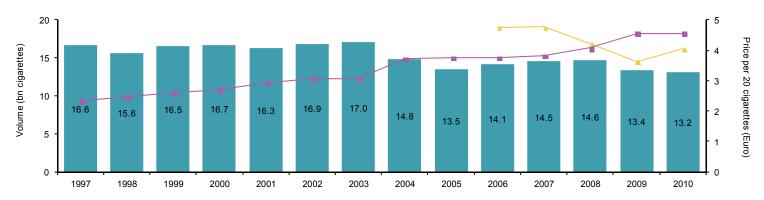
- (2) Synovate ND(L) research, 2006-2010
- (3) Interviews with PMI Local Management



### Historic sales and pricing trends

Legal domestic cigarette sales declined by 1.7% in 2010 compared to 2009.

## Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1997-2001	2001-2006	2006-2010	2009-2010
<ul><li>Legal domestic sales</li></ul>	-0.5%	-2.8%	-1.7%	-1.7%
Average pack price	5.9%	5.1%	4.9%	0.0%
Consumption	n/a	n/a	-3.9%	12.1%

Note: (a) Consumption CAGR is from 2006 to 2010

(b) The majority of cigarette packs in the Netherlands contain 19 or 23 sticks

Sources: (1) Tax stamp data supplied by PMI is used for historic data; In Market Sales data based on tax stamp and AC Nielsen is used for 2007, 2008, 2009 and 2010

(2) PMI Management and EU Tax Tables

#### Legal domestic sales declined by 1.7% in 2010, whilst the average pack price remained stable.

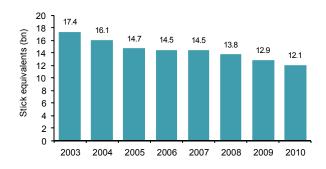
■ There were no tax increases during the 2010 calendar year.



### **OTP** market size and growth

Sales of smoking tobacco declined by 5.8% to 12.1 billion cigarette equivalents in 2010.

# Smoking tobacco sales in billion stick equivalents 2006-2010<sup>(1)(a)(b)</sup>



Cigarette								
sales (bn cigarettes)	17.0	14.8	13.5	14.1	14.5	14.6	13.4	13.2

CAGR (%)	2003-2006	2006-2010	2009-2010
Smoking tobacco	-5.9%	-4.4%	-5.8%
Manufactured cigarettes	-6.1%	-1.7%	-1.7%

es: (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



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Germany	Slovenia
■ Greece	Spain
Hungary	Sweden
Ireland	United Kingdom

Italy



#### Market overview

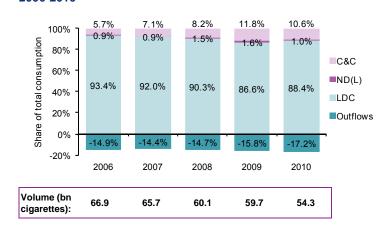
The share of cigarette consumption in Poland accounted for by counterfeit and contraband declined to 10.6% in 2010.

Outflows have increased in 2010 and remain significantly above total EU levels.

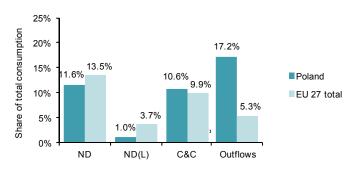
#### Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(3)(a)(b)(c)(d)(e)</sup>



#### Share of Poland consumption by type 2006-2010(1)(2)



#### Comparison of EU and Polish consumption by type **2010**<sup>(1)(2)</sup>



Major source countries

Major destination countries

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

- Based on a pack of 20 Marlboro King Size as at July 1st 2009 and 2010. For non-Euro currencies. Euro prices are based on PMI standard exchange rates as at June 2009 and June 2010
- Relative cigarette prices in Poland, Russia, Belarus, Ukraine and the UK are subject to fluctuations as a result of exchange rate changes of their respective currencies versus the Euro
- Price in Belarus refers to the Kent brand, which is an equivalent premium category brand to Marlboro (which is not sold in Belarus). Cigarette prices in Belarus declined in Euro terms in 2010 as a result of exchange rate changes of the Belarusian ruble versus the euro; in local currency pack price did not change in Belarus in 2010
- (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, 2008 and 2009; Synovate ND(L) research 2010
- Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010



## **Total non-domestic consumption**

The consumption of nondomestic product declined to 6.30 billion cigarettes in 2010, driven largely by a reduction in inflows from Ukraine.

Total Poland consumption <sup>(1)(2)</sup>	2)				
Billion cigarettes	2006	2007	2008	2009	2010
Legal domestic sales (LDS)	72.44	69.91	63.14	61.12	57.32
Outflows	-9.94	-9.47	-8.81	-9.43	-9.35
Legal domestic consumption (LDC)	62.50	60.44	54.32	51.68	47.97
Non-domestic legal (ND(L))	0.61	0.57	0.89	0.94	0.53
Counterfeit and contraband (C&C)	3.80	4.69	4.92	7.07	5.77
Total non-domestic	4.41	5.26	5.80	8.02	6.30
Total consumption	66.92	65.70	60.13	59.70	54.27

Outflows from Poland <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
Germany	6.53	6.85	6.32	7.54	7.49
UK	1.40	1.02	0.93	1.01	0.86
France	0.41	0.32	0.41	0.28	0.30
Other EU	1.60	1.27	1.16	0.61	0.69
Total outflows	9.94	9.47	8.81	9.43	9.35

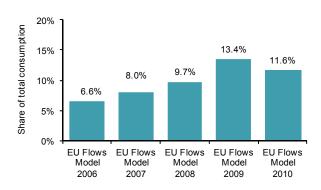
Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

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

### Comparison of external sources for non-domestic estimates

The EU Flows Model results suggest a decline in non-domestic incidence.

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



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



Note: (a) The number of cities sampled was extended for the Q4 2009, Q2 2010 and Q4 2010 EPS

ources: (1) KPMG EU Flows Model

- (2) PMI Empty Pack Surveys 2006-2010
- (3) Imperial Tobacco Survey (ITS) empty pack survey carried out by Almares Research for Imperial Tobacco. November 2010

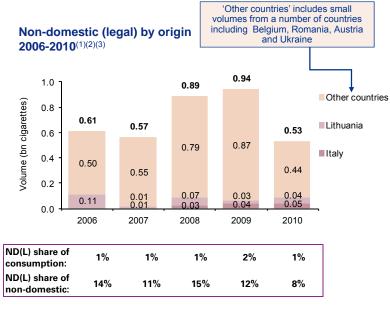
## The 2010 EU Flows Model indicates non-domestic incidence of 11.6% in Poland

- 2010 results were calculated by averaging the results from the two Empty Pack Surveys conducted in 2010; Q4 2010 results partially incorporate the results of a survey undertaken by Imperial Tobacco in Q4 2010:
  - The Imperial Tobacco survey, conducted in November 2010, estimated overall non-domestic incidence of 16.8%.
- The Imperial Tobacco Q4 survey results were amalgamated with Q4 2010 EPS results across 21 cities covered by both studies and weighted based on population:
  - Q2 EPS results were combined with the amalgamated Q4 EPS and Imperial Tobacco results, resulting in an average incidence of 11.6%.
- In 2009, the Empty Pack Surveys were weighted so that Q2 results represented the first five months of the year, whilst the Q4 results represented the remaining seven months of the year. This reflected the timing of price changes in Poland in 2009.



### Non-domestic (legal) breakdown

Non-domestic (legal) inflows declined to 0.53 billion cigarettes in 2010.



#### ND(L) analysis 2007-2010 2009 2007 2008 2010 Propensity to travel and purchase 1)x(2) 6.2% 7.2% 4.3% 3.6% Average annual cigarettes purchased 3 x 4 523 468 430 402

(2)

to purchase

12%

25

Propensity Propensity

3

Ave. no.

of trips

5.0

5

Х

(4)

Ave.

80

21

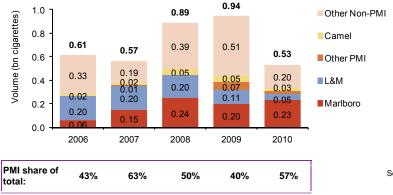
purchases Total ND(L)

(cigarettes) (cigarettes)

0.53

9

# Non-domestic (legal) by brand 2006-2010 $^{(1)(2)(3)}$



Sources: (1) KPMG EU Flows Model

ND(L) analysis

Values

2010

EU rank

2010

Population

19+

30.7m

6

(1)

to travel

36%

19

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

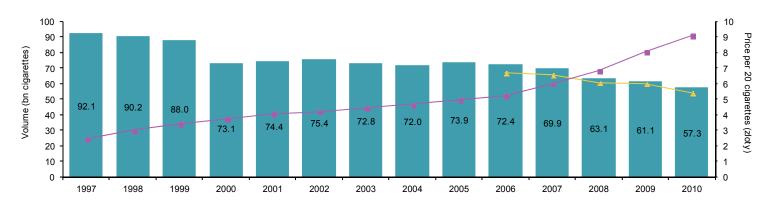
(3) Interviews with PMI Local Management



### **Historic sales and pricing trends**

Legal domestic cigarette sales declined by 6.2% in 2010 compared to 2009.

## Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1997-2000	2000-2005	2005-2009	2008-2009	2009-2010
Legal domestic sales	-7.4%	0.2%	-4.6%	-3.2%	-6.2%
Average pack price	15.5%	5.6%	13.0%	17.9%	12.8%
Consumption	n/a	n/a	n/a	-0.7%	-9.1%

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

#### Legal domestic sales declined by 6.2% in 2010 whilst the average pack price increased by 12.8%

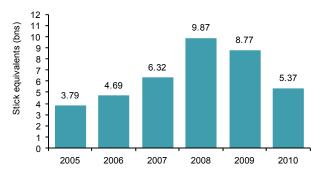
■ An increase in excise duty on tobacco products came into effect from 1 January 2010.<sup>(2)</sup>



### **OTP** market size and growth

Sales of smoking tobacco products declined by 38.8% in 2010.

## Smoking tobacco sales in billion stick equivalents 2005-2010<sup>(1)(a)</sup>



Cigarette						
sales (bn	73.7	72.4	69.9	63.1	61.1	57.3
cigarettes):						

CAGR (%)	2005-2008	2008-2009	2009-2010
<ul><li>Smoking tobacco</li></ul>	37.5%	-11.2%	-38.8%
Manufactured cigarettes	-5.1%	-3.2%	-6.2%

# Smoking tobacco sales declined by 38.8% in 2010, following a decline of 11.2% in 2009

Between 2005 and 2008 sales had increased at an average annual rate of 37.5%.

Note:

(a) Smoking tobacco volumes have been calculated at one stick per 0.75 grams

urce:

 OTP volumes supplied by PMI based on information supplied by PMI Poland, AC Nielsen retail audit, and PMI estimates of total market size

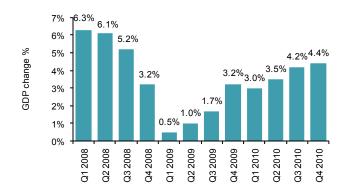


### Market developments 2010

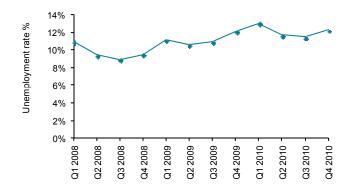
Economic conditions improved in Poland in 2010; GDP was higher throughout 2010 compared to equivalent periods in the prior year.

Unemployment fell during the first three quarters of the year, before increasing slightly during the final quarter of the year.

GDP percentage change compared to equivalent quarter in prior year 2008-2010<sup>(1)</sup>



### Unemployment by quarter 2008-2010<sup>(2)</sup>



Sources: (1) Central Statistics Office of Poland, GDP at constant average prices of the previous year, accessed May 2011

(2) Central Statistics Office of Poland, Registered Unemployment, accessed May 2011



## Project Star 2010

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-	Finland		Romania
-	France		Slovakia
-	Germany		Slovenia
-	Greece		Spain
-	Hungary		Sweden
-	Ireland		United Kingdom

Italy

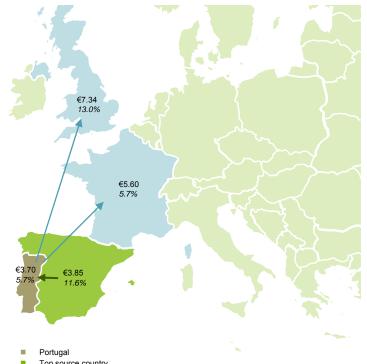


### Portugal

### **Market overview**

The share of cigarette consumption in Portugal accounted for by counterfeit and contraband increased slightly to 2.3% in 2010.

#### Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(2)(a)(b)(c)(d)</sup>



Top source country

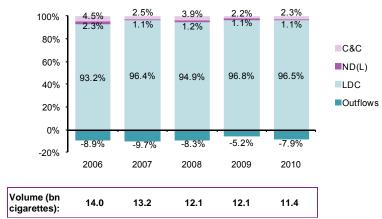
Top two destination countries

- Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow
- Based on a pack of 20 Marlboro King Size as at July 1st 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June
- (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

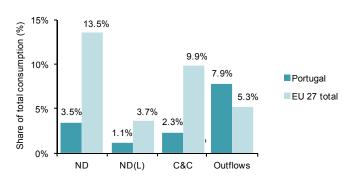
#### Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

- (2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010
- (3) AC Nielsen ND(L) research 2006, Synovate 2008 and 2009

#### **Share of Portugal consumption by type 2006-2010**<sup>(1)(3)</sup>



#### Comparison of EU and Portuguese consumption by type **2010**<sup>(1)(3)</sup>





### Portugal

## **Total non-domestic consumption**

Consumption of nondomestic cigarettes remained constant at 0.39 billion cigarettes from 2009 to 2010.

Total Portugal consumption <sup>(1)(2)</sup>							
Billion cigarettes	2006	2007	2008	2009	2010		
Legal domestic sales (LDS)	14.33	14.03	12.48	12.37	11.86		
Outflows	-1.24	-1.28	-1.00	-0.63	-0.89		
Legal domestic consumption (LDC)	13.08	12.75	11.48	11.73	10.97		
Non-domestic legal (ND(L))	0.32	0.14	0.15	0.13	0.13		
Counterfeit and contraband (C&C)	0.63	0.33	0.47	0.26	0.26		
Total non-domestic	0.95	0.48	0.62	0.39	0.39		
Total consumption	14.04	13.23	12.10	12.13	11.36		

	Outflows from Portugal (1)					
•	Billion cigarettes	2006	2007	2008	2009	2010
	France	0.56	0.48	0.47	0.27	0.51
	UK	0.31	0.51	0.34	0.12	0.10
	Spain	0.18	0.12	0.06	0.14	0.08
	Other EU	0.20	0.17	0.14	0.09	0.19
	Total outflows	1.24	1.28	1.00	0.63	0.89

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

(2) AC Nielsen ND(L) research 2006, Synovate 2008 and 2009

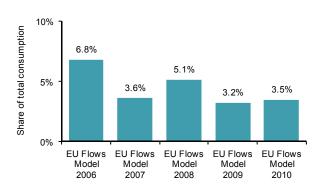


### Portugal

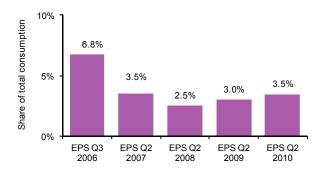
### **Comparison of external sources for non-domestic estimates**

The EU Flows Model estimate for non-domestic consumption in 2010 is based on the Empty Pack survey undertaken in Q2 2010.

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



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



Sources: (1) KPMG EU Flows Model

(2) PMI Empty Pack surveys 2006-2010

# The EU Flows Model result is based solely on the Q2 Empty Pack survey. It excludes the smaller Focus Empty Pack survey undertaken in Q2 2010

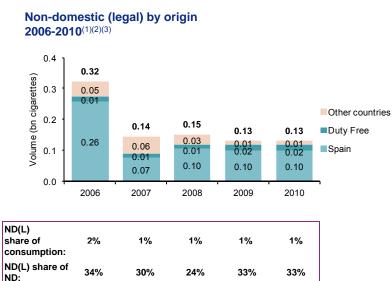
- The EU Flows methodology basis in 2010 is to exclude focus surveys for all EU countries;
  - The respective Portuguese focus surveys were included when calculating the EU Flows Model results in 2008 and 2009.



### Portugal

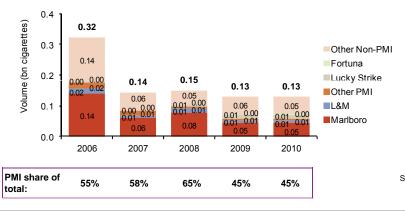
### Non-domestic (legal) breakdown

Non-domestic (legal) inflows remained stable at 0.13 billion cigarettes in 2010.





### Non-domestic (legal) by brand **2006-2010**<sup>(1)(2)(3)</sup>



Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research 2006, Synovate 2008 and 2009

(3) Interviews with PMI Local Management

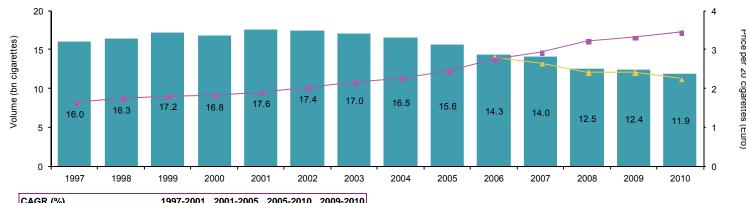


### Portugal

### **Historic sales and pricing trends**

Legal domestic cigarette sales declined by 4.1% in 2010.

## Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1997-2001	2001-2005	2005-2010	2009-2010
<ul><li>Legal domestic sales</li></ul>	2.4%	-3.0%	-5.3%	-4.1%
Average pack price	3.6%	6.6%	7.2%	3.9%
Consumption	n/a	n/a	-5.1% <sup>(a)</sup>	6.3%

Note: (a) CAGR from 2006 to 2010

Sources: (1) In Market Sales supplied by PMI based on data from Metris-GfK

(2) PMI Management and EU Tax Tables

#### Legal domestic sales declined by 4.1% in 2010 whilst the average pack price increased by 3.9%

■ The rate of VAT increased from 20% to 21% in July 2010



## Project Star 2010

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■ Finland	Romania
France	Slovakia
Germany	Slovenia
■ Greece	Spain
Hungary	Sweden
Ireland	United Kingdom

Italy



#### **Market overview**

Counterfeit and contraband cigarette consumption in Romania increased from 13.8% of total cigarette consumption in 2009 to 19.2% in 2010.

## Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(3)(a)(b)(c)</sup>



#### 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 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June 2010
- (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

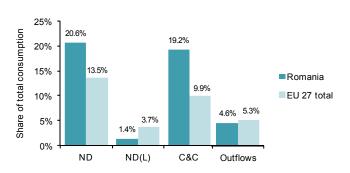
#### Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

- 2) AC Nielsen ND(L) research 2007, 2008, Synovate ND(L) research 2009, 2010
- (3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010

### Share of Romania consumption by type 2007-2010<sup>(1)(2)</sup>



### Comparison of EU and Romanian consumption by type $2010^{(1)(2)}$





### **Total non-domestic consumption**

Consumption of nondomestic cigarettes increased to 5.67 billion cigarettes in 2010, compared to 4.99 billion in the previous year.

This increase was partly driven by higher inflows from Serbia.

Outflows from Romania to other European countries declined by 33.3% to 1.26 billion cigarettes in 2010.

Total Romania consumption <sup>(1)(2)</sup>				
Billion cigarettes	2007	2008	2009	2010
Legal domestic sales (LDS)	31.15	30.57	29.81	23.10
Outflows	-2.94	-1.83	-1.89	-1.26
Legal domestic consumption (LDC)	28.21	28.75	27.92	21.84
Non-domestic legal (ND(L))	0.66	0.82	0.44	0.38
Counterfeit and contraband (C&C)	2.22	3.13	4.55	5.30
Total non-domestic	2.89	3.95	4.99	5.67
Total consumption	31.10	32.70	32.91	27.52

Outflows from Romania <sup>(1)</sup>				
Billion cigarettes	2007	2008	2009	2010
UK	0.14	0.25	0.30	0.37
France	1.30	0.61	0.62	0.32
Italy	0.68	0.29	0.51	0.18
Other EU	0.82	0.68	0.47	0.38
Total outflows	2.94	1.83	1.89	1.26

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

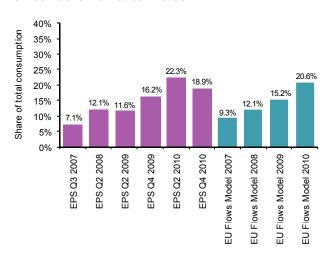
(2) AC Nielsen ND(L) research 2007, 2008, Synovate ND(L) research 2009, 2010



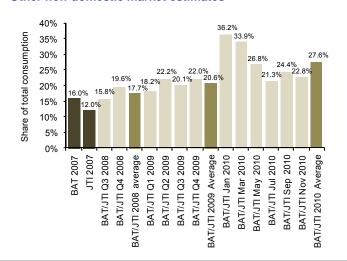
### Comparison of external sources for non-domestic estimates

The increasing nondomestic incidence trend shown in the EU Flows Model is directionally consistent with trend shown by the BAT/JTI estimates.

#### Non-domestic market estimates(1)(2)



#### Other non-domestic market estimates (3)(4)(5)(6)(7)(8)(9)



# The 2010 non-domestic incidence in Romania of 20.6% is based on equal weighting of the two Empty pack surveys conducted in 2010.

The Q2 EPS was conducted in May/June 2010 whilst the Q4 EPS was conducted in November/December 2010.

### The 2010 EU Flows Model results are directionally consistent with other estimates for non-domestic consumption

- The differences in estimates are believed to be driven by differences in methodology.
  - the BAT/JTI estimates are based on consumer research and analysis of packs collected from consumers<sup>(5)(6)</sup>.

Sources: (1) KPMG EU Flows Model

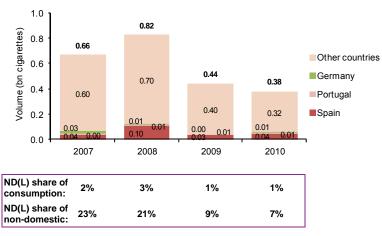
- (2) PMI Empty Pack Surveys Q3 2007, Q2 2008, Q2 2009, Q4 2009, Q2 2010 and Q4 2010
- (3) 'Economic Highlights', Rompres, 7th February 2007
- 4) 'Romania cracks down on tobacco smugglers', Nine O'Clock, 28th June 2008
- (5) Novel Research, Project DNP for BAT and JTI, May 2009 as provided by PMI Romania
- (6) Novel Research, Project DNP for BAT and JTI, March 2010 as provided by PMI Romania
- (7) Novel Research, Anti Illicit Trade Tracking Study, March 2011 as provided by PMI Romania
- (8) 'Cigarette Smuggling In Romania Down 2.3 Pcts In March To 33.9% of Market', Mediafax News Brief Service, 25th April 2010
- (9) 'Romanian Ctrl Bk Head: Higher Tobacco Taxes To Fuel Black Market', Mediafax News Brief Service. 4th November 2010



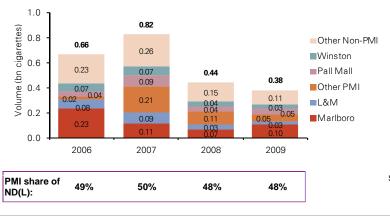
### Non-domestic (legal) breakdown

Non-domestic (legal) volumes declined by 13.9% in 2010 to account for 0.38 billion cigarettes.

## Non-domestic (legal) by origin $2006-2010^{(1)(2)(3)}$



## Non-domestic (legal) by brand 2006-2010 $^{(1)(2)(3)}$





Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research 2007, 2008, Synovate ND(L) research 2009, 2010

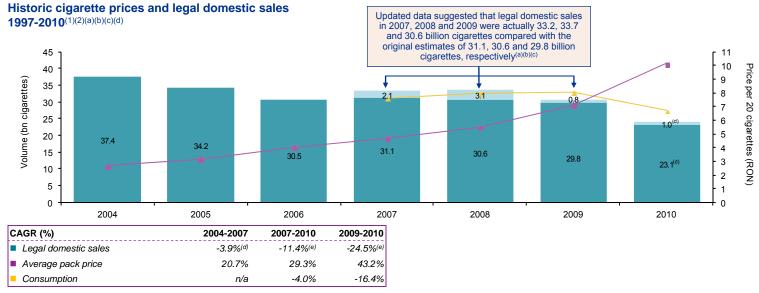
(3) Interviews with PMI Local Management



### Historic sales and pricing trends

Legal domestic cigarette sales declined by 24.5% in 2010.

Average pack price increased driven by tax rises during 2010.



lotes:

- (a) This report, the Project Star 2007, 2008 and 2009 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) This report, the Project Star 2008 and 2009 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) This report, the 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. Therefore, legal sales data could potentially be restated once the actual full year figure becomes available
- (e) The CAGR percentage change is based on the management 2010 estimate and the revised management estimates. If the legal domestic sales (LDS) estimates from the 2009 report were applied, the percentage change would have been -5.9% between 2007, -9.5% between 2007 and 2010, and -22.5% between 2009 and 2010

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 2009 and 2010
  (2) PMI Management and EU Tax Tables
  - (3) "Smuggling to Feed One Third of Romania's 2010 Cigarette Market", SeeNews , 21 October 2010.
  - (4) "Romania plans to raise excise duties on fuels, tobacco in 2011", 8 December 2010.
  - (5) "Higher tobacco taxes to fuel black market", Mediafax News, 4 November 2010.

#### Legal domestic sales declined by nearly 25% in 2010 whilst the average pack price increased by over 40%.

- In January 2010, excise tax increased by €10 to €74 per 1,000 cigarettes<sup>(3)</sup>.
  - A further raise to €76.6 per 1,000 cigarettes occurred in January 2011<sup>(4)</sup>.
- VAT increased from 19% to 24% in July 2010<sup>(5)</sup>.



## Project Star 2010

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■ Finland	Romania
■ France	Slovakia
Germany	Slovenia
■ Greece	Spain
Hungary	Sweden
Ireland	United Kingdom

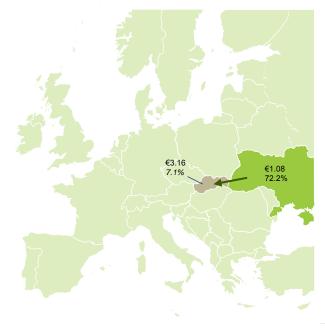
Italy



#### **Market overview**

The share of cigarette consumption in Slovakia accounted for by counterfeit and contraband increased slightly to 1.3% in 2010, although it remains significantly below overall EU levels.

### Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(3)(a)(b)(c)</sup>



#### Key: Slovakia

Major source country

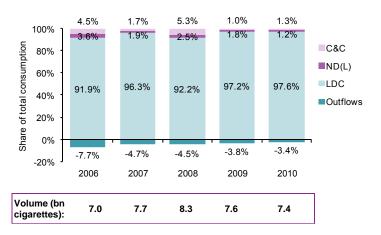
letes (a) Manahawa flavo

- (a) Map shows flows over 0.7% 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 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June 2010
- (c) Relative cigarette prices in Ukraine are subject to fluctuations as result of exchange rate changes versus the Euro

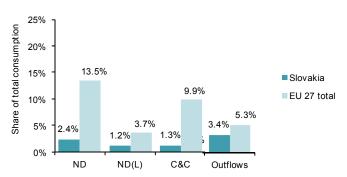
Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

- (2) AC Nielsen ND(L) research 2006, 2007, 2010
- (3) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010

## Share of Slovakia consumption by type 2006-2010<sup>(1)(2)</sup>



## Comparison of EU and Slovak consumption by type 2010<sup>(1)(2)</sup>





### **Total non-domestic consumption**

Non-domestic consumption was 0.18 billion cigarettes in 2010.

Total Slovakia consumption <sup>(1)</sup>	(2)				
Billion cigarettes	2006	2007	2008	2009	2010
Legal domestic sales (LDS)	7.01	7.74	8.03	7.69	7.48
Outflows	-0.54	-0.36	-0.37	-0.29	-0.25
Legal domestic consumption (LDC)	6.47	7.38	7.66	7.40	7.23
Non-domestic legal (ND(L))	0.25	0.15	0.21	0.14	0.09
Counterfeit and contraband (C&C)	0.32	0.13	0.44	0.07	0.09
Total non-domestic	0.57	0.28	0.65	0.21	0.18
Total consumption	7.04	7.66	8.31	7.62	7.41

Outflows from Slovakia <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
UK	0.04	0.04	0.07	0.08	0.05
Germany	0.07	0.06	0.04	0.04	0.04
Ireland	0.03	0.02	0.02	0.03	0.04
Other EU	0.41	0.23	0.25	0.14	0.12
Total outflows	0.54	0.36	0.37	0.29	0.25

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

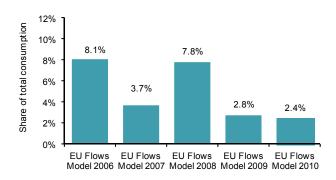
(2) AC Nielsen ND(L) research 2006, 2007, 2010



### **Comparison of external sources for non-domestic estimates**

The 2010 EU Flows Model results for Slovakia suggest a slight decline in non-domestic incidence in 2010.

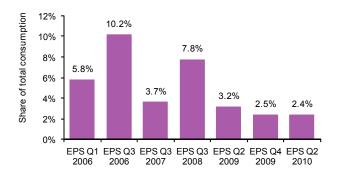
#### **EU Flows Model non-domestic market estimates**(1)



2010 uses the second quarter results of the PMI Empty Pack survey

The EU Flows Model estimate for non-domestic consumption in

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



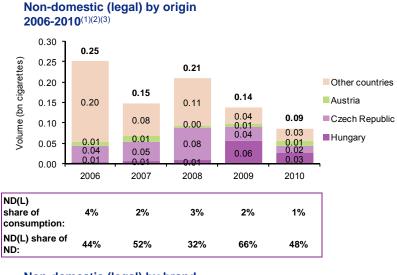
Sources: (1) KPMG EU Flows Model

(2) PMI Empty Pack Surveys 2006-2010



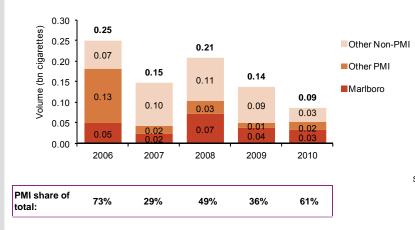
### Non-domestic (legal) breakdown

Non-domestic (legal) inflows declined to 0.09 billion cigarettes in 2010.









Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research 2006, 2007, 2010

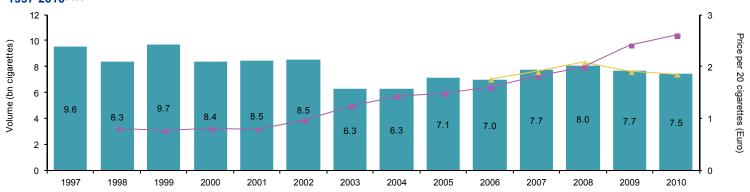
(3) Interviews with PMI Local Management



### **Historic sales and pricing trends**

Legal domestic cigarette sales declined by 2.8% in 2010.

## Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1998-2002	2002-2003	2003-2008	2008-2010	2009-2010
<ul><li>Legal domestic sales</li></ul>	0.6%	-26.6%	5.1%	-3.5%	-2.8%
Average pack price	4.6%	27.3%	10.1%	14.3%	7.4%
Consumption	n/a	n/a	n/a	-5.5%	-2.7%

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

(2) PMI Management and EU Tax Tables

#### Legal domestic sales declined by 2.8% in 2010, whilst the average pack price increased by 7.4%

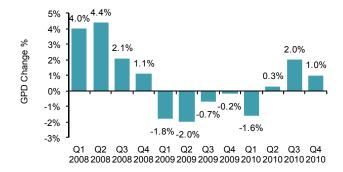
■ There were no excise tax driven price increases during 2010 calendar year.



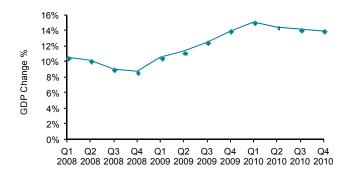
### Market developments 2010

Economic conditions
remained challenging in
Slovakia at the start of 2010
as GDP continued to decline
and unemployment increased;
improvements occurred in the
final three quarters of the year
with a marginal increase in
GDP and a slight decline in
unemployment.

GDP percentage change compared to equivalent quarter in prior year 2008-2010<sup>(1)</sup>



### Unemployment by quarter 2008-2010<sup>(2)</sup>



Sources: (1) Eurostat, GDP and its main components, accessed May 2011

(2) Statistical Office of the Slovak Republic, Unemployment rate by age, accessed May 2011



## Project Star 2010

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Austria	Latvia
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Denmark	Poland
■ Estonia	Portugal
Finland	Romania
France	Slovakia
■ Germany	Slovenia
■ Greece	Spain
Hungary	Sweden
Ireland	United Kingdom

Italy



#### Market overview

The share of cigarette consumption in Slovenia accounted for by counterfeit and contraband declined by 1.2 percentage points to 5.4% in 2010.

#### Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(3)(a)(b)(c)(d)</sup>



#### Comparison of EU and Slovenian consumption by type **2010**<sup>(1)(2)</sup>

Share of Slovenia consumption by type

5.1%

1.0%

93.8%

2007

4.2

5.4%

1.6%

93.0%

2010

4.0

C&C

■ND(L)

LDC Outflows

6.6%

91.4%

2009

4.2

2006-2010(1)(2)

100%

80%

60%

40%

20%

0% -20%

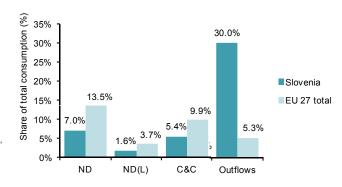
Volume (bn

cigarettes):

91.2%

2006

4.3



2008

4.7

countries are coded according to the larger flow

- Based on a pack of 20 Marlboro King Size as at July 1st 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June 2010
- Relative cigarette prices in Bosnia-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 2009 and June 2010



### **Total non-domestic consumption**

Consumption of nondomestic cigarettes declined to 0.28 billion cigarettes in 2010, compared to 0.36 billion in the previous year.

This decline was partly attributable to a 0.10 billion decline in inflows from Bosnia and Herzegovina over this period.

Total Slovenia consumption (1)(	(2)				
Billion cigarettes	2006	2007	2008	2009	2010
Legal domestic sales (LDS)	4.52	4.78	5.11	4.98	4.87
Outflows	-0.62	-0.83	-1.13	-1.11	-1.19
Legal domestic consumption (LDC)	3.90	3.95	3.98	3.86	3.68
Non-domestic legal (ND(L))	0.06	0.04	0.13	0.08	0.06
Counterfeit and contraband (C&C)	0.32	0.22	0.60	0.28	0.21
Total non-domestic	0.38	0.26	0.74	0.36	0.28
Total consumption	4.27	4.21	4.72	4.23	3.96

Outflows from Slovenia	(1) I				
Billion cigarettes	2006	2007	2008	2009	2010
Austria	0.23	0.53	0.73	0.79	0.85
Germany	0.06	0.07	0.10	0.14	0.16
Italy	0.25	0.14	0.19	0.13	0.09
Other EU	0.08	0.08	0.11	0.05	0.09
Total outflows	0.62	0.83	1.13	1.11	1.19

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

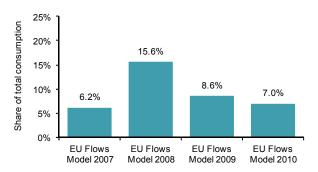
(2) AC Nielsen ND(L) research, 2006-2010



### **Comparison of external sources for non-domestic estimates**

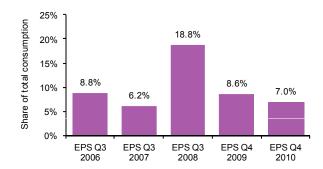
The EU flows model indicates a 1.6 percentage point decline in non-domestic consumption from 2009 to 2010.

#### Non-domestic market estimates(1)



The EU Flows Model estimate for non-domestic consumption in 2010 uses the fourth quarter results of the PMI Empty Pack survey.

#### Other non-domestic market estimates<sup>(2)</sup>



Sources: (1) KPMG EU Flows Model

(2) PMI Empty Pack Surveys 2006-2010



### Non-domestic (legal) breakdown

Non-domestic (legal) inflows declined by 0.02 billion cigarettes from 2009 to 2010.

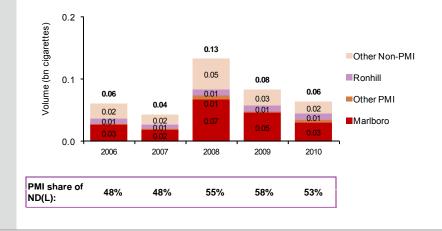
The ND(L) share of total consumption remained in line with 2009 levels.

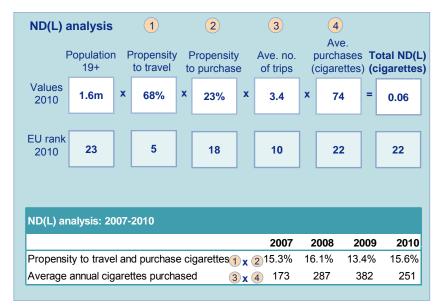
Marlboro's volume of ND(L) by brand declined by 0.02 billion cigarettes from 2009 to 2010.





## Non-domestic (legal) by brand 2006-2010 $^{(1)(2)(3)}$





Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research, 2006-2010

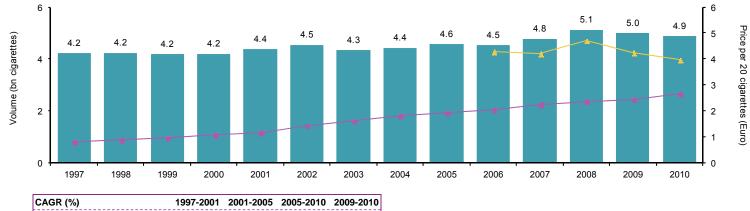
(3) Interviews with PMI Local Management



### Historic sales and pricing trends

Legal domestic cigarette sales declined by 2.2% in 2010 compared to 2009, while average pack price increased by 9.9%.

## Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



 CAGR (%)
 1997-2001
 2001-2005
 2005-2010
 2009-2010

 ■ Legal domestic sales
 0.9%
 1.1%
 1.3%
 -2.2%

 ■ Average pack price
 9.8%
 13.6%
 6.6%
 9.9%

 ■ Consumption
 n/a
 n/a
 -2.1%
 -6.6%

Note: (a) CAGR is 2006-2010

Sources: (1) In Market Sales supplied by PMI based on data from local distributor

(2) PMI Management and EU Tax Tables

The increase in average pack price from 2009 to 2010 was partly driven by increases in excise duty in April and August 2010



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Estonia	Portugal
■ Finland	Romania
■ France	Slovakia
Germany	Slovenia
■ Greece	Spain
Hungary	Sweden
Ireland	United Kingdom

Italy



#### Market overview

The share of cigarette consumption in Spain accounted for by counterfeit and contraband increased to 2.5% in 2010.

Whilst Spain remains a major outflow market, with cigarettes equivalent to 6.6% of total consumption flowing out to other countries, the volume of Spanish outflows declined from 2009 to 2010.

## Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(2)(a)(b)(c)(d)</sup>



### SpainTop two source countries

Top four 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 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June 2010
- (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

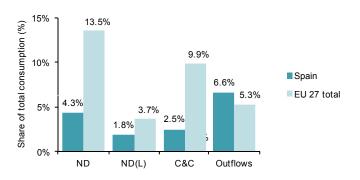
Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

- (2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010
- (3) Synovate ND(L) research 2006, 2007, 2008 and 2010

### Share of Spain consumption by type 2006-2010<sup>(1)(3)</sup>



### Comparison of EU and Spanish consumption by type 2010<sup>(1)(3)</sup>





### **Total non-domestic consumption**

Cigarette consumption declined to 71.07 billion cigarettes in 2010, compared to 79.45 billion in the previous year.

Outflows from Spain have declined from 5.76 billion in 2009 to 4.68 billion cigarettes in 2010 driven largely by lower outflows to France and the UK.

Total Spain consumption (1)(2)					
Billion cigarettes	2006	2007	2008	2009	2010
Legal domestic sales (LDS)	90.69	89.51	89.74	81.67	72.70
Outflows	-9.61	-10.10	-10.04	-5.76	-4.68
Legal domestic consumption (LDC)	81.08	79.41	79.70	75.91	68.01
Non-domestic legal (ND(L))	1.23	2.43	1.91	1.60	1.30
Counterfeit and contraband (C&C)	2.06	1.85	2.13	1.94	1.76
Total non-domestic	3.29	4.28	4.03	3.54	3.06
Total consumption	84.37	83.69	83.73	79.45	71.07

Outflows from Spain <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
France	3.42	3.25	4.38	2.40	2.08
UK	4.07	4.22	3.17	1.91	1.15
Germany	1.10	0.92	0.73	0.52	0.44
Ireland	0.51	0.49	0.50	0.37	0.25
Other EU	0.52	1.23	1.26	0.57	0.75
Total outflows	9.61	10.10	10.04	5.76	4.68

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

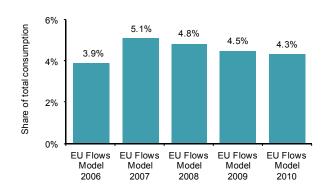
(2) Synovate ND(L) research 2006, 2007, 2008 and 2010



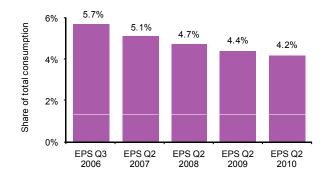
### Comparison of external sources for non-domestic estimates

The EU Flows Model estimate for non-domestic consumption in 2010 is based on the results of the Empty Pack survey conducted in Q2 2010.

#### 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 2006-2010

## The EU Flows Model shows that non-domestic incidence in Spain declined to represent 4.3% of consumption in 2010

 This decline in non-domestic incidence is consistent with PMI EPS results, and is a continuation of the decline in non-domestic incidence observed since 2007

The difference in non-domestic share when comparing EU Flows Model results for 2006 and 2007 reflects changes in the treatment of the Canary Islands and Andorran variant packs found in Spain

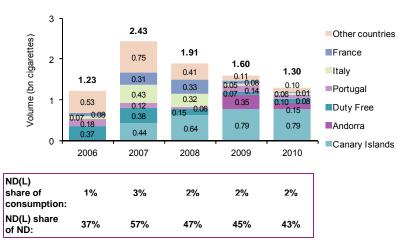
In the 2006 Project Star results, Canary Islands and Andorra variant cigarettes were classified as Spanish legal domestic. In 2007 and subsequent years, Canary Islands and Andorra variant cigarettes have instead been classified as non-domestic



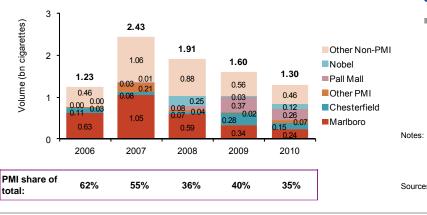
### Non-domestic (legal) breakdown

Non-domestic (legal) inflows declined to 1.30 billion cigarettes in 2010.

### Non-domestic (legal) by origin **2006-2010**<sup>(1)(2)(3)(a)(b)</sup>



### Non-domestic (legal) by brand **2006-2010**<sup>(1)(2)(3)(a)</sup>





The non-domestic (legal) inflow level of 1.30 billion cigarettes is above the level estimated by the non-domestic (legal) research of 0.46 billion cigarettes

- This is because:
  - The non-domestic (legal) research does not separate the Canary Islands as an independent destination to the Spanish mainland, so Canary Island ND(L) flows are not included.
  - The ND(L) research does not reflect any of the adjustments to inbound tourism flows.

(a) In 2006 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 excludes adjustments to inflows from Canary Islands and Andorra and inbound tourism flows. Total ND(L) including these adjustments is 1.30 billion cigarettes

Sources: (1) KPMG EU Flows Model

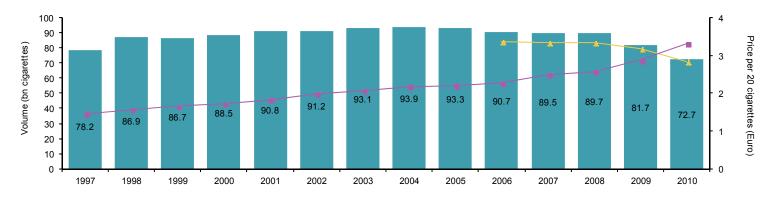
- (2) Synovate ND(L) research 2006, 2007, 2008 and 2010 10
- (3) Interviews with PMI Local Management



### **Historic sales and pricing trends**

Legal domestic cigarette sales declined by 11.0% in 2010.

### Historic cigarette prices and legal domestic sales 1997-2010<sup>(1)(2)(a)</sup>



CAGR (%)	1997-2001	2001-2005	2005-2010	2009-2010
Legal domestic sales	3.8%	0.7%	-4.9%	-11.0%
Average pack price	6.0%	4.9%	8.4%	15.1%
Consumption	n/a	n/a	-4.2% <sup>(b)</sup>	-10.5%

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
- (b) CAGR is from 2006 to 2010

Sources: (1) In Market Sales supplied by PMI based on data from Logista and Comisionado de Tabacos

(2) PMI Management and EU Tax Tables

#### Legal domestic sales declined by 11.0% in 2010, whilst the average pack price increased by 15.1%

- The rate of VAT increased from 16% to 18% on the 1st of July 2010
- Excise duty on manufactured cigarettes was increased in December 2010 by around €0.40 a pack

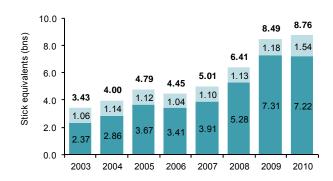


### **OTP** market size and growth

**Sales of Other Tobacco** Products increased by 3.2% in 2010.

Other Tobacco Products has a 10.8% share of total tobacco consumption in Spain.

#### Other tobacco product sales in billion stick equivalents 2003-2010<sup>(1)(a)(b)(c)(d)</sup>



Cigarette sales (bn	93.1	93.9	93.3	90.7	89.5	89.7	81 7	72.7
cigarettes)	00.1	00.0	00.0	00.7	00.0	00.1	01.7	72.7

CAGR (%)	2003-2006	2006-2010	2009-2010
Fine cut tobacco	12.9%	20.6%	-1.2%
Cigars & Cigarillos	-0.9%	10.4%	30.7%
Total smoking tobacco	9.0%	18.5%	3.2%
Manufactured cigarettes	-0.9%	-5.4%	-11.0%

- (a) Smoking tobacco volumes have been calculated at one cigarette per 0.75 grams
- (b) Pipe tobacco has been excluded from this analysis
- (c) In 2008 fine cut tobacco is represented by 'roll your own' tobacco only whereas in 2003-2007, 2009 and 2010 fine cut tobacco is represented by 'roll your own' and 'make your
- (d) 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

Source: (1) Until 2007, OTP volumes are supplied by PMI based on Tobacco Commissioner and Logista data except in 2008 when volumes are estimates provided by PMI Spain, 2009 and 2010 volumes are supplied by Tobacco Commissioner and Logista data.



### 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.

#### In 2010, adjustments have been made to outflows from Spain to UK and Ireland in line with prior years

- External data suggests that outflows from Spain to the UK and Republic of Ireland are understated by Empty Pack Survey results.
- The EPS shortfall was estimated at 0.7 billion cigarettes in 2010, compared to estimates of 1.3 billion, 2.3 billion and 2.6 billion cigarettes in 2009, 2008 and 2007 respectively.
- Outflows to the UK and Ireland were therefore adjusted upwards by 0.6 billion cigarettes and 0.1 billion cigarettes respectively to reflect sales of UK and Ireland brands in Spain of 1.6 billion cigarettes and non-domestic incidence of other brands found in the UK and Irish EPS of 0.2 billion cigarettes, net of;
  - Estimated consumption by permanent UK and Irish expatriate residents in Spain.
  - 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, 2010
- (3) GCTS Ireland (2007) and UK (2010)
- (4) Eurostat, 2010
- (5) Spanish Institute for Tourist Studies

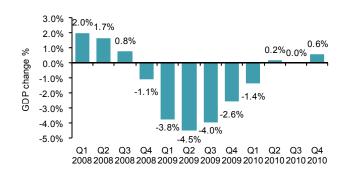


### **Market developments 2010**

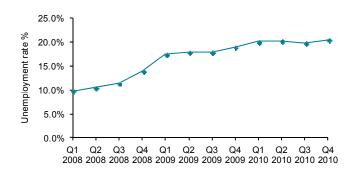
Economic conditions remained challenging in Spain during 2010 as GDP remained flat and the unemployment rate remained high.

The overall number of inbound tourist visits in 2010 were similar to the number in 2009.

Change in Gross Domestic Product compared to equivalent quarter in prior year, 2008-2010<sup>(1)</sup>



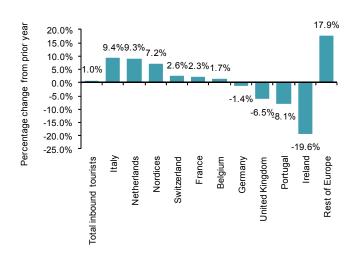
## Unemployment rate by quarter 2008-2010<sup>(1)</sup>



ource: (1) Spanish Statistics office, accessed May 2011

(2) 'Tourist border movement survey', Instituto de Estudios Turisticos, December 2010

## Inbound tourism: percentage change in visitors compared to prior year, 2009-2010<sup>(2)</sup>





## Project Star 2010

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■ Finland	Romania
■ France	Slovakia
Germany	Slovenia
■ Greece	Spain
Hungary	Sweden
Ireland	United Kingdom

Italy



#### Market overview

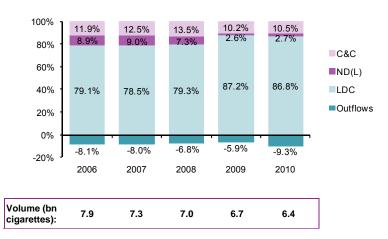
The share of cigarette consumption in Sweden accounted for by counterfeit and contraband increased to 10.5% in 2010.

Marlboro and cheapest brand 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(2)(a)(b)(c)(d)</sup>

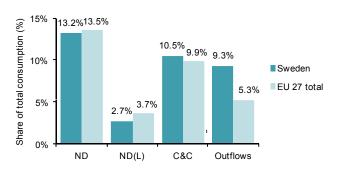


- Key: Sweden
  - Major source country
  - Top two destination countries
  - □ 2010 pack of 20 Marlboro KS price in Euros and percentage change from 2009
  - 2010 pack of 20 cheapest available brand price in Euros and percentage change from 2009
- Notes: (a) Map shows flows over 1% of consumption. Countries 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 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June
  - (c) Relative cigarette prices in Sweden, Norway and 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 2009 and June 2010
  - (3) AC Nielsen ND(L) research 2006-2008, Synovate ND(L) research 2009-2010

## Share of Sweden consumption by type 2006-2010<sup>(1)(3)</sup>



### Comparison of EU and Swedish consumption by type $2010^{(1)(3)}$





### **Total non-domestic consumption**

Consumption of nondomestic cigarettes remained stable at a level of 0.85 billion cigarettes in 2010.

Total Sweden consumption (1)(2)					
Billion cigarettes	2006	2007	2008	2009	2010
Legal domestic sales (LDS)	6.93	6.33	6.00	6.22	6.18
Outflows	-0.64	-0.58	-0.47	-0.39	-0.60
Legal domestic consumption (LDC)	6.29	5.74	5.52	5.83	5.58
Non-domestic legal (ND(L))	0.71	0.66	0.51	0.17	0.17
Counterfeit and contraband (C&C)	0.95	0.92	0.94	0.68	0.68
Total non-domestic	1.66	1.58	1.44	0.85	0.85
Total consumption	7.95	7.32	6.97	6.68	6.43

Outflows from Sweden <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
Norway	0.50	0.37	0.31	0.23	0.30
Denmark	0.10	0.10	0.10	0.05	0.17
Other EU	0.04	0.11	0.06	0.11	0.13
Total outflows	0.64	0.58	0.47	0.39	0.60

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

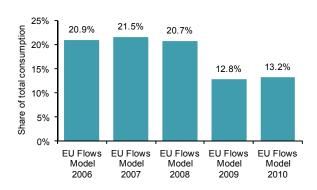
(2) AC Nielsen ND(L) research 2006-2008, Synovate ND(L) research 2009-2010



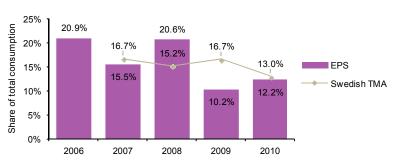
### Comparison of external sources for non-domestic estimates

The EU Flows Model estimate for non-domestic consumption in 2010 is based on the results of the Empty Pack survey conducted in Q2 2010.

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



#### EPS and other non-domestic market estimates<sup>(2)(3)</sup>



## The EU Flows Model indicates a slight increase in non-domestic consumption in 2010

- In 2009, the EU Flows Model estimate for non-domestic consumption was higher than the PMI Empty Pack survey. This was because non-domestic consumption was uplifted in several cities to more accurately reflect market trends.
- In 2010, uplifts to non-domestic consumption were not required in these cities.

# The Empty Pack Survey results for 2009 and 2010 have been adjusted to reclassify the status of 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 of 0.06 billion cigarettes in non-domestic consumption in 2010. This is in comparison to an adjustment of 0.04 billion in 2009, an increase of 33%

The Swedish Tobacco Manufacturers Association (TMA) indicates a similar level of non-domestic consumption to the EU Flows Model in 2010

■ The 2009 and 2010 TMA estimates include packs priced below the minimum tax yield in the non-domestic estimate.

Sources: (1) KPMG EU Flows Model

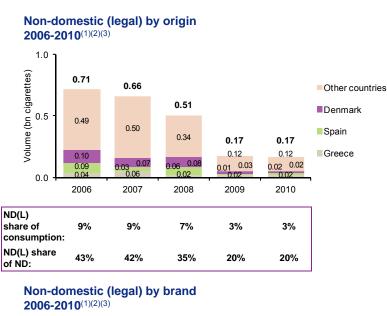
(2) PMI Empty Pack Surveys 2006-2010

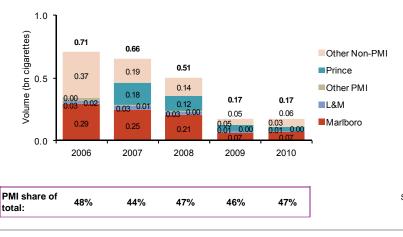
(3) 'The non-duty paid market for cigarettes in Sweden', AB Handelns Utredningsintitut 2010



### Non-domestic (legal) breakdown

Non-domestic (legal) inflows remained stable at 0.17 billion cigarettes in 2010.







Sources: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research 2006-2008, Synovate ND(L) research 2009-2010

(3) Interviews with PMI Local Management

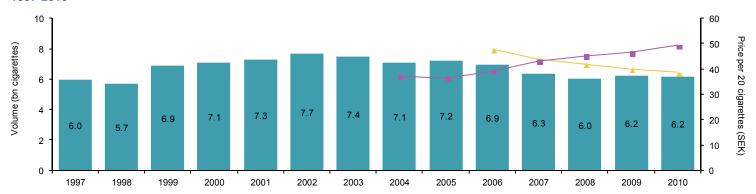


#### Sweden

# Historic sales and pricing trends

Legal domestic cigarette sales declined by 0.6% in 2010.

# Historic cigarette prices and legal domestic sales $1997-2010^{(1)(2)}$



CAGR (%)	1997-2001	2001-2005	2005-2010	2009-2010
<ul><li>Legal domestic sales</li></ul>	5.1%	-0.3%	-3.0%	-0.6%
Average pack price	n/a	n/a	6.3%	6.0%
Consumption	n/a	n/a	-5.2% <sup>(a)</sup>	-5.5%

Note: (a) CAGR from 2006 to 2010

Sources: (1) In Market Sales supplied by PMI based on data from Swedish Match Distribution

(2) PMI Management and EU Tax Tables

#### Legal domestic sales declined by 0.6% in 2010 whilst the average pack price increased by 6.0%

- Whilst there were no excise tax increases in 2010, the weighted average pack price increased by 6.0%
  - This was mainly due to a higher proportion of 'Premium' priced cigarettes being sold in 2010.

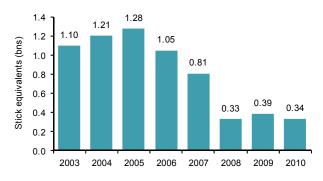


#### Sweden

# **OTP** market size and growth

Sales of fine cut tobacco were equivalent to 0.34 billion cigarettes in 2010.

# Fine cut tobacco sales in billion stick equivalents 2003-2010<sup>(1)(a)(b)</sup>



Cigarette sales (bn	7.4	7 1	72	6.9	6.3	6.0	6.2	6.2
cigarettes):				0.0	0.0	0.0	0.2	0.2

CAGR (%)	2003-2006	2006-2010	2009-2010
Fine cut tobacco	-1.4%	-25.5%	-12.7% <sup>(c)</sup>
Manufactured cigarettes	-2.4%	-2.8%	-0.6%

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

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

(c) 2010 volumes were 0.1% lower than equivalent 2009 volumes of 0.34 billion cigarette equivalents estimated by PMI based on PM Scandinavia, Swedish Match Distributor and tax authorities

Source: (1) Until 2007, OTP volumes supplied by PMI based on PM Scandinavia, Swedish Match Distributor and tax authorities. 2008 and 2009 volumes based on estimates supplied by PMI. 2010 volumes supplied by PMI based on PM Scandinavia, Swedish Match Distributor and tax authorities



# Project Star 2010

# **Contents – country detail**

<ul><li>Austria</li></ul>	Latvia
Belgium	<ul><li>Lithuania</li></ul>
<ul><li>Bulgaria</li></ul>	Luxembourg
Cyprus	Malta
■ Czech Republic	Netherlands
Denmark	Poland
Estonia	Portugal
■ Finland	Romania
■ France	Slovakia
Germany	Slovenia
■ Greece	Spain
Hungary	Sweden
Ireland	United Kingdom

Italy



### **Market overview**

The share of cigarette consumption in the United Kingdom accounted for by counterfeit and contraband declined to 10.5% in 2010

# Marlboro 2010 price comparison in Euros, percentage change from 2009 and major flows<sup>(1)(2)(a)(b)(c)(d)</sup>





Top two source countries

Notes: (a) Map shows flows over 1%

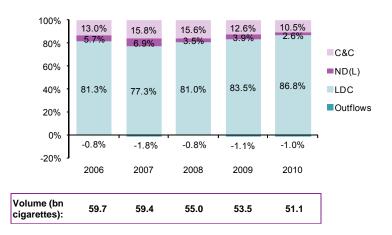
(a) Map shows flows over 1% of consumption. Countries which are both source and destination countries are coded according to the larger flow

- (b) Based on a pack of 20 Marlboro King Size as at July 1st 2009 and 2010. For non-Euro currencies, Euro prices are based on PMI standard exchange rates as at June 2009 and June 2010
- (c) 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
- (d) Arrow size indicates relative cigarette flow volume
- (e) Canary Islands are not shown to scale

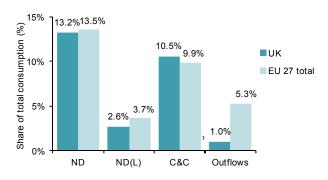
Sources: (1) KPMG EU Flows Model and interviews with PMI Local Management

- (2) Marlboro retail selling price supplied by PMI, based on PMI standard exchange rates as at June 2009 and June 2010
- (3) AC Nielsen ND(L) research 2006, 2008, 2009 and 2010

# Share of United Kingdom consumption by type ${\bf 2006\text{-}2010}^{(1)(3)}$



# Comparison of EU and UK consumption by type 2010<sup>(1)(3)</sup>





# **Total non-domestic consumption**

Consumption of nondomestic cigarettes declined to 6.73 billion cigarettes in 2010, compared to 8.85 billion in the previous year

Total UK consumption (1)(2)					
Billion cigarettes	2006	2007	2008	2009	2010
Legal domestic sales (LDS)	49.01	46.99	44.97	45.27	44.85
Outflows	-0.48	-1.05	-0.47	-0.57	-0.50
Legal domestic consumption (LDC	48.53	45.94	44.50	44.70	44.35
Non-domestic legal (ND(L))	3.37	4.08	1.91	2.10	1.35
Counterfeit and contraband (C&C)	7.77	9.39	8.55	6.75	5.38
Total non-domestic	11.14	13.47	10.46	8.85	6.73
Total consumption	59.67	59.41	54.96	53.54	51.08

Outflows from UK <sup>(1)</sup>					
Billion cigarettes	2006	2007	2008	2009	2010
Ireland	0.03	0.14	0.19	0.35	0.20
Netherlands	0.20	0.25	0.15	0.11	0.20
Other EU	0.25	0.65	0.12	0.11	0.10
Total outflows	0.48	1.05	0.47	0.57	0.50

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

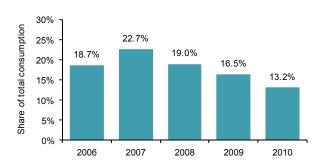
(2) AC Nielsen ND(L) research 2006, 2008, 2009 and 2010



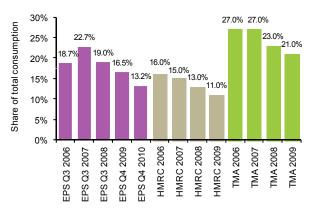
### Comparison of external sources for non-domestic estimates

The trend in the EU Flows
Model results is in line with
the trends of the estimates
of both HMRC and the UK
Tobacco Manufactures
Association.

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



#### EPS and other non-domestic market estimates(2)(3)(4)



Sources: (1) KPMG EU Flows Model

- (2) PMI Empty Pack Surveys 2006-2010
- (3) HMRC estimates of illicit market share for cigarettes in the UK. Estimates are based on the mid point of a range. 'Measuring Tax Gaps 2010', 16th September 2010
- Estimates of non-UK Duty paid cigarette consumption, Tobacco Manufacturer's association. 2006-2009
- (5) Discussion with Ian Howell, TMA, 9th December 2008

# The HMRC estimate of non-domestic incidence of 16.0% in 2009 is similar to the EU flows model estimate of 16.5% in 2009

- HRMC estimated that illicit products accounted for 11% of the UK cigarette market in 2009, whilst cross-border shopping accounted for a further 5% of the UK cigarette market;
  - Updated HMRC estimates for 2010 were not available prior to the completion of the Star report.

The UK Tobacco Manufactures Association (TMA) has historically estimated a much higher level of non-domestic incidence compared to the EU Flows Model.

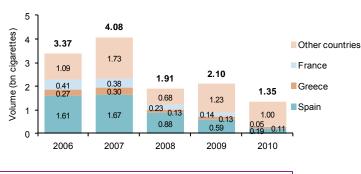
- The TMA use a different methodology than that applied by the EU Flows Model
- The TMA estimate is of non-UK duty paid cigarette consumption. The methodology is based on consumption and prevalence levels, as well as empty pack collection samples. These empty pack collections are carried out in various locations including sports events<sup>(5)</sup>



# Non-domestic (legal) breakdown

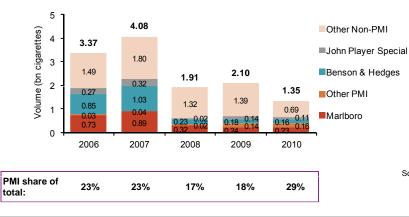
Non-domestic (legal) inflows declined to 1.35 billion cigarettes in 2010, partly driven by a decline in inflows from Spain.

# Non-domestic (legal) by origin 2006-2010 $^{(1)(2)(3)}$



ND(L) share of consumption:	6%	7%	3%	4%	3%	
ND(L) share of ND:	30%	30%	18%	24%	20%	

# Non-domestic (legal) by brand **2006-2010**<sup>(1)(2)(3)</sup>



ND(L) a	nalysis		1		2		3		4 Ave.		
F	Population 19+		Propensity to travel		Propensity purchas		Ave. no. of trips		ourchas		otal ND(L igarettes
Values 2010	48.3	x	45%	x	21%	x	1.3	x	220	=	1.35
EU rank 2010	3		15		19		27		6		3
				' '						_ '	
ND(L) analysis: 2007-2010											
							2007	2	2008	2009	2010
Propensi	ty to trave	el an	nd purchas	e ci	garettes	1) x	2 8.1%	5	5.7% 1	2.1%	9.7%

A decline in the number of cigarettes purchased and the propensity to purchase has resulted in lower non-domestic (legal) inflows in 2010 compared to 2009

■ Travel data shows a 6.5% decline in the number of UK tourists visiting Spain in 2010<sup>(4)</sup>

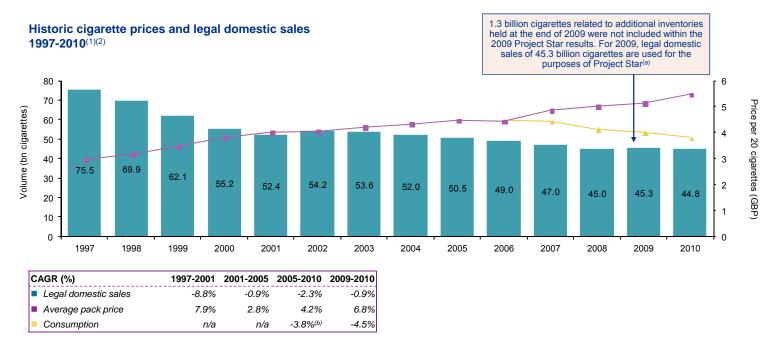
Sources: (1) KPMG EU Flows Model

- (2) AC Nielsen ND(L) research 2006, 2008, 2009 and 2010
- (3) Interviews with PMI Local Management
- (4) Instituto de Estudios Turisticos, December 2010



### Historic sales and pricing trends

Legal domestic cigarette sales declined by 0.9% in 2010.



Note:

- (a) IMS indicated legal domestic sales of 46.6 billion cigarettes in 2009. However, Project Star 2009 results use legal domestic sales of 45.3 billion which reflects an adjustment of 1.3 billion cigarettes to account for an increase in inventories held in December 2009 prior to the VAT increase on 1 January 2010. This adjustment was carried forward and included within legal domestic sales in 2010. However, Project Star 2010 results use legal domestic sales of 44.8 billion which reflects both the inclusion of the 1.3 billion cigarette adjustment from 2009 and an equal adjustment of 1.3 billion cigarettes to account for an increase in inventories held in December 2010 prior to the VAT increase on 1 January 2011. Thus, a 1.3 billion cigarette adjustment will be carried forward and included within legal domestic sales in 2011
- (b) CAGR from 2006 to 2010

Sources: (1) In Market Sales supplied by PMI based on ITL's estimate of Total market volumes

(2) PMI Management and EU Tax Tables

#### Legal domestic sales declined by 0.9% in 2010, whilst the average pack price increased by 6.8%

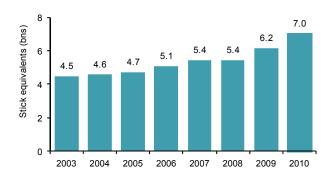
- VAT increased from 15% to 17.5% in January 2010.
- Excise Duty on manufactured cigarettes was increased in March 2010 to 24% of the retail pack price, plus £119.03 per 1,000 cigarettes.



# **OTP** market size and growth

In Market Sales show that sales of fine cut tobacco increased by 8.5% in 2010.

#### Fine cut tobacco sales in billion stick equivalents **2006-2010**<sup>(1)(a)</sup>



Cigarette								
sales (bn	53.6	52.0	50.5	49.0	47.0	45.0	45.3	44.8
cigarettes):								

CAGR (%)	2003-2006	2006-2010	2009-2010
Fine cut tobacco	2.6%	4.4%	14.1%
Manufactured cigarettes	-2.2%	0.7%	-0.9%

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

Source: (1) OTP volumes up to 2009 supplied by HM Revenue and Customs. Volumes for 2010 based on ITL estimates and sales to trade data. 2010 CAGR rates use ITL data for 2010 and HMRC data for prior years. IMS growth rate to 2010 was 8.5%



# Project Star 2010

### **Contents**

- Project overview and timing
- European cigarette market
- 2010 Project Star results
- Appendices
  - Country results
  - Methodology
    - Overview
    - Limitations of results
  - Summary of country flow refinements
  - Sources
  - Scope of work



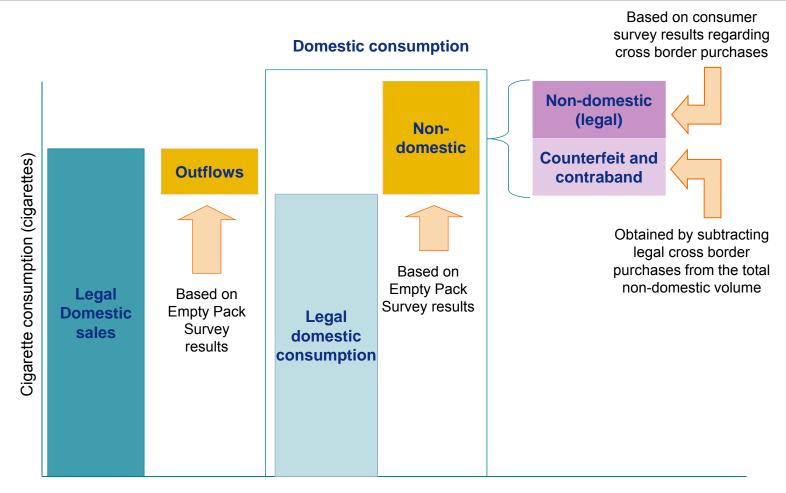
# Methodology **Overview**

We have developed a methodology for quantifying C&C incidence across the 27 EU markets	<ul> <li>The methodology has been tested extensively and refined to ensure that it can deliver the most robust and defensible results possible</li> <li>Our approach comprises four steps: initial information assessment, preliminary methodology design, pilot and refinement, and then implementation</li> <li>Our approach integrates multiple sources and custom-built analytical tools</li> </ul>
The methodology is based primarily on objective evidence from legal domestic sales and Empty Pack Survey results	<ul> <li>The EU Flows Model is a dynamic, iterative model that is principally based on legal domestic sales and Empty Pack Survey results</li> <li>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</li> <li>Empty Pack Survey results provide the most credible indication of the incidence of non-domestic and PMI counterfeit packs by country of origin</li> </ul>
Primary market research was used to quantify legal non-domestic cigarette purchases	<ul> <li>The key objective of the market research programme was to quantify genuine, legal non-domestic tobacco purchases in each market</li> <li>ND(L) data for 2010 Project Star results is based upon approximately 160,000 full interviews and over 14,600 gross respondents. This research was updated in 19 Member States during 2010</li> <li>Primary research is critical to deliver robust results as no other sources of sufficient detail and accuracy are available for legal cross border shopping</li> <li>In addition to the research programme, ND(L) data is adjusted to reflect inbound visitor inflows from higher cost markets</li> </ul>
There are some specific limitations to the results that our methodology delivers	Given the innate complexity of measuring C&C, some limitations to accurate quantification are to be expected  There are broadly two types of limitations: scope exclusions and source limitations, which are covered in more detail in this section  scope exclusions include areas which cannot or have not been accounted for in our approach, such as geographic, brand (non-PMI counterfeit), category exclusions (OTP) and legal domestic product flows out of the EU  source limitations cover potential errors inherent with any data sources such as sampling criteria, coverage issues and seasonality factors
In order to maximise the accuracy of results, some minor refinements were necessary at a country level	Triangulation of results from alternative sources identified a few markets where country-to-country flows required minor adjustment  In nearly all instances, overall country results and flows from the EU Flows Model appeared reasonable  However, in a limited number of instances, specific adjustments were made to country-to-country flows on the basis of sound supporting evidence



### **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



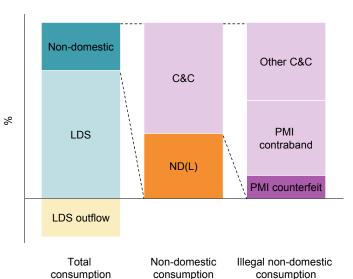
The Project Star methodology was developed by KPMG and approved by OLAF. It has been deployed on a consistent basis since 2006, enabling comparisons to be made between counterfeit and contraband volumes from year to year



### **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 shipment data
  - legal domestic sales are defined as sales of genuine domestic product through legitimate, domestic channels based on In Market Sales (IMS) data
- Outflows are defined as purchases of domestic product which are taken out of the country of purchase and consumed elsewhere
  - EPS provides a consistent 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 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

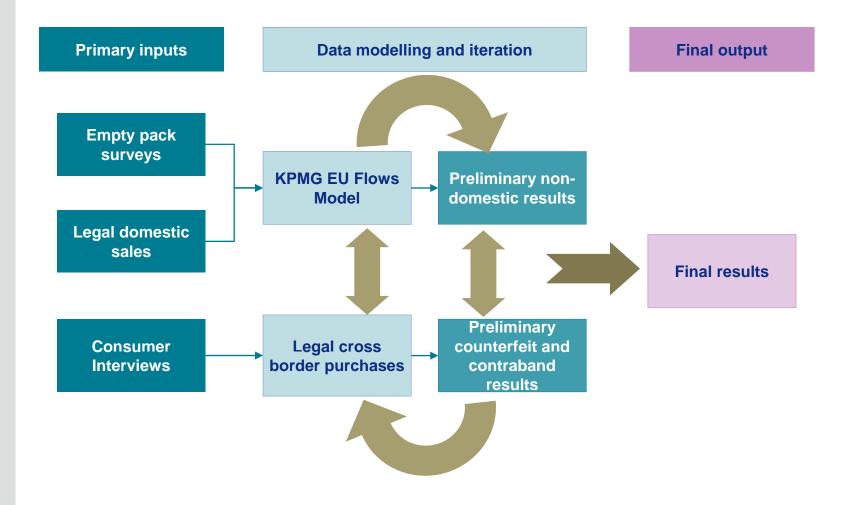


### **Primary information sources and tools**

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.



All results are extensively tested using both a wide range of interviews and analyses



### **Corroboration of results**

We have sought to triangulate our findings against alternative sources wherever possible.

#### Methodology steps and key information sources

Calculation step	1.  Measure legal domestic sales in all markets	2. Adjust legal domestic sales for product outflows	3.  Add total non- domestic consumption to adjusted legal domestic sales to derive estimated total consumption	4.  Deduct legal non- domestic purchases from total non- domestic volume to arrive at illicit purchase volume	counterfeit volumes from total illicit purchase volume	6.  Deduct PMI contraband volume from remaining illicit volume to arrive at non-PMI C&C
Primary source	Directly measured from shipment data or equivalent	Directly measured from the ground' empty packs by country of origin in 27 country flow model		ND(L) market research programme	Measured from Empty Pack Surve results	Directly calculated by the KPMG methodology
Corroboratory source	<ul><li>Tax stamp receipts</li><li>Federal statistics</li></ul>	<ul><li>PMI management estimates</li><li>Border sales surveys</li></ul>	Consumption trends based on smoking prevalence and average daily consumption data from GCTS	<ul><li>PMI Duty Free market estimates</li><li>External research</li><li>Expert interview programme</li></ul>	<ul><li>Expert interview programme</li><li>Seizure data</li></ul>	<ul><li>Expert interview programme</li><li>Seizure data</li></ul>

Preliminary results are subject to testing and review with local PMI management in each of the 27 EU markets



# **Primary information sources and tools – Empty Pack Surveys (1 of 3)**

Empty Pack Surveys provide a highly objective and robust view of the population samples and, notwithstanding some scope constraints, represent the most credible indication of the incidence of nondomestic 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				
	<ul> <li>Results are based on a large sample of packs collected in various cities throughout the countries, although the collection plan differs by country. Accuracy and credibility of results is driven by sound design of the sampling plan</li> </ul>				
	<ul> <li>Results are not subject to subject to respondent behaviour and are therefore less prone to sampling errors than many other alternative methodologies</li> </ul>				
	<ul> <li>Evidence is based on collected packs: no discrepancies or scope for respondent confusion</li> </ul>				
	<ul> <li>Data reflects actual overall non-domestic share and provides good snapshot of brands consumed</li> </ul>				
Process	Empty Pack Surveys measure shares of total consumption and avoid potential errors associated with estimating volumes				
	<ul> <li>Once packs are collected, they are sorted by manufacturer and the number of packs with domestic versus non-domestic tax stamps are counted to determine the proportion of packs that did not originate from that jurisdiction (including duty-free variants)</li> </ul>				
	<ul> <li>in cases where tax stamps are not shown on a packet, health warning and packaging characteristics are used to define the source market</li> </ul>				
	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				
	<ul> <li>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</li> </ul>				
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				
	<ul> <li>Large surveys (10,000 packs collected; all cities with over 100,000 inhabitants covered / at least 20 cities): France, Germany, Italy, Poland, Spain, UK</li> </ul>				
	<ul> <li>Medium surveys (5,000 packs collected, all cities with over 100,000 inhabitants or top 10 cities by population): Belgium, Bulgaria,</li> <li>Czech Republic, Denmark, Finland, Greece, Ireland, Latvia, Lithuania, Netherlands, Portugal, Romania, Slovakia, Sweden</li> </ul>				
	<ul> <li>note that in Austria and Belgium the Empty Pack Surveys are carried out by the National Tobacco Manufacturers Associations, based on a sample over 10,000 and 5,000 packs respectively. In Hungary, the Empty Pack Survey is carried out by the GfK Hungária Market Research Institute and is based on a sample of 21,575 packs</li> </ul>				
	■ Small surveys (1,000 – 3,000 packs collected, top 4 – 5 cities covered): Cyprus, Estonia, Malta, Slovenia				
	<ul> <li>note that the Luxembourg Empty Pack Survey is carried out by the National Tobacco Manufacturer Association, based upon a sample of 1,000 packs</li> </ul>				

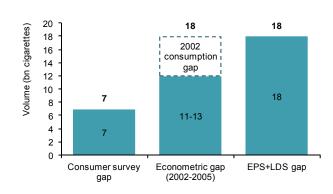


# Primary information sources and tools – Empty Pack Surveys (2 of 3)

During the pilot phase, the advantages of using Empty Pack Survey results to monitor non-domestic consumption became clear.

The case of Germany provides a good example of the benefits of this approach.

#### German consumption gap estimates by source(1)(2)(3)



#### Implied EPS + LDS German consumption gap calculation (2006)



Sources: (1) GfK consumption survey 2006

- (2) Legal Domestic Sales PMI In Market Sales, In Market Sales 2006-2010; KPMG analysis
- (3) German EPS market study 2005

# We believe that Empty Pack Surveys provide the most reliable indicator of non-domestic consumption

- The standalone consumption survey does not deliver a credible consumption result without a significant uplift for under-reporting (in the order of a further 15-20%)
  - estimates of consumption gap (i.e. the difference between legal sales and actual consumption) of 7 billion cigarettes for Germany from consumer research results alone was too low given external estimates of ND(L), C&C and results from border studies
- Econometric analysis provides corroboration of a significant growth in the consumption gap over the last few years
  - however, while this analysis can support the quantification of a gap, it would not be appropriate to use it as the primary source
- Given consumption limitations, we believe that Empty Pack Surveys provide the most credible indicator of the incidence of non-domestic and illicit packs. Benefits of Empty Pack Surveys include:
  - less potential for non-sampling error (e.g. results are not distorted by behavioural error such as systematic underreporting of consumption)
  - evidence based on physical collected packs so there are no discrepancies or potential for respondent confusion
  - reflects actual consumption and provides good snapshot of brands consumed
- Therefore, we have used the Empty Pack Survey results to derive a consumption gap for our analysis, and have focused on this estimate rather than those obtained from consumer research
  - Empty Pack Survey results for 2006 showed that nondomestic purchases represented 17% of overall German consumption. As a result, the total consumption in 2006 was estimated at 103.5bn cigarettes, with a consumption gap of approximately 18bn cigarettes

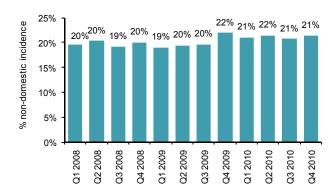


### Primary information sources and tools – Empty Pack Surveys (3 of 3)

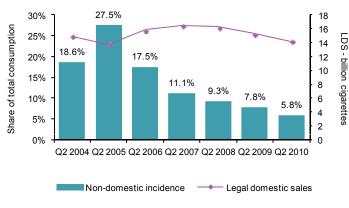
Empty Pack Surveys can provide a method for monitoring trends in individual markets.

In countries where historical EPS data is available, there is a strong correlation between results and observed market trends in domestic sales and legal non-domestic flows.

#### Germany historical Empty Pack Survey results(1)



#### Hungary historical Empty Pack Survey results(2)



Source: (1) "Yellow Bag" survey, an Empty Pack Survey undertaken by the German Cigarette Industry

Associátion (VDC) in 2007 and by IFT from 2008 to 2010. Full PMI results were available with total non-domestic size

(2) GfK Empty Pack Surveys, 2004 to 2010

#### 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 from since 2005 show a continued decline in non-domestic incidence

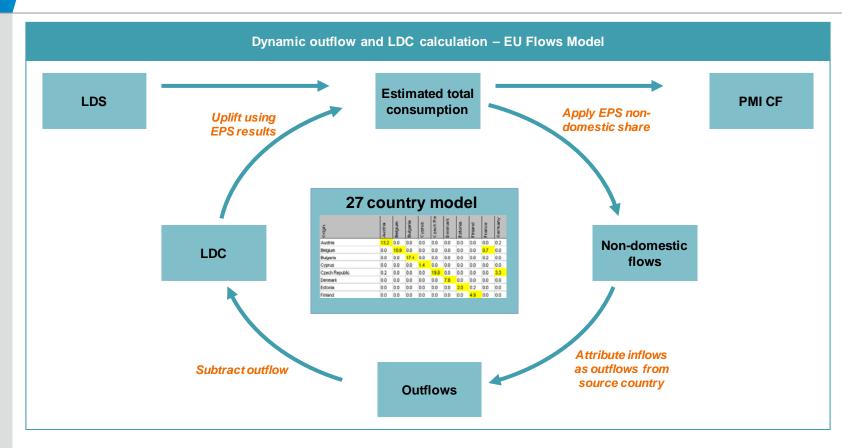
- This reduction is in line with the understanding of Hungarian Customs.

  Changes in border controls may have contributed to lower non-domestic flows in the past three years:
  - For example, in 2008 individuals bringing in more than 40 cigarettes to Hungary were required to complete a declaration for the cigarettes imported.
- The fall in non-domestic consumption from 2006 to 2010 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 nondomestic cigarettes by a Member State's inhabitants.

During 2010, research was updated in 19 key markets.

Approach	<ul> <li>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</li> </ul>
	<ul> <li>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</li> </ul>
	<ul> <li>during 2010 research was updated in 19 markets</li> </ul>
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
	<ul> <li>a fully random sample approach was used to ensure results were as 'certifiable' as possible and could be projected to the total target population</li> </ul>
	<ul> <li>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</li> </ul>
	<ul> <li>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</li> </ul>
	- the target was achieved in all markets except Estonia
	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	■ Computer Aided Telephone Interviewing (CATI) was the data collection method in each market
collection	<ul> <li>The interview script was consistent across all markets, translated into local language and back translated into English for quality control purposes</li> </ul>
Validation	Numerous validation tools were built into the script to enhance the accuracy of responses, for example:
tools	<ul> <li>respondents were asked to recall all trips abroad in the past year and purchase volumes and brands for each trip</li> </ul>
	— for each trip, the purpose of visit was also recorded to ensure final results appear logical and within a reasonable range
Results	To ensure that we were recording legal personal purchases only, results were capped at an individual respondent level
capping	<ul> <li>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</li> </ul>
	<ul> <li>purchases from non-EU destinations were limited to a maximum of 10 packs per trip in line with Duty Free purchase restrictions</li> </ul>
	purchases were also capped for intra-EU purchases where limits are enforced



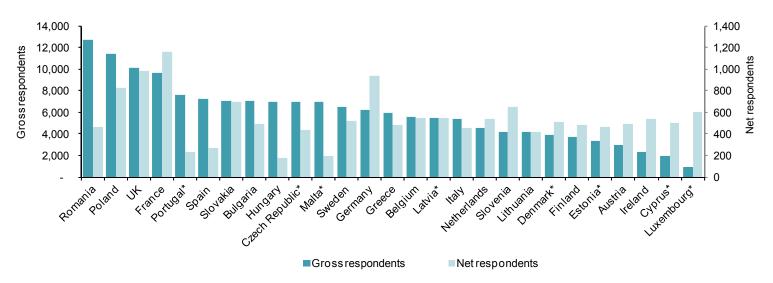
### Primary information sources and tools – non-domestic legal analysis (2 of 2)

The project has involved an extensive primary research programme.

ND(L) for Project Star results in 2010 is based upon over 14,600 full interviews from over 160,000 gross respondents, contacted during the second half of the year.

ND(L) data is also adjusted to reflect inbound visitor inflows.

#### Non-domestic (legal) research: gross and net respondents(1)(a)



#### The key objective of the market research programme is to quantify genuine, legal non-domestic tobacco purchases in each market

- The 2010 market research programme incorporated an extensive interview programme across the 19 markets, using recognised market research specialists AC Nielsen and Synovate
  - research for the remaining 8 Member States was conducted during previous years by either AC Nielsen or Synovate
- ND(L) data for countries where research was not carried out during 2010 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 160,818 contacted respondents and 14,629 successful interviews with adults (age 19+) who had travelled abroad and purchased tobacco products in the preceding twelve months.

#### In addition to the research programme, ND(L) data is adjusted to reflect inbound visitor inflows

- Non-domestic product found in Empty Pack Surveys from high cost inbound tourist /visitor countries is likely to represent an incidental inflow and is therefore categorised as legal
  - flows attributable to inbound tourism and visitors can not be identified in the market research programme

\* denotes country where ND(L) research was not updated in 2010 Note:

AC Nielsen, 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 x Total consumption gap	Non-domestic share of brand  x  Domestic sales by brand		
Key assumption	Brand share of non-domestic in the EPS is representative of the national picture  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	<ul> <li>Brand totals tally to overall total of non-domestic</li> <li>Can track flows by brand and country</li> <li>Can calculate non-domestic volumes where no legal sales are present</li> <li>e.g. Jin Ling in Germany and Priluki in Hungary</li> </ul>	More robust for brands which are overweight in the EPS samples at a non- domestic brand share level		
Limitations	<ul> <li>Some potential to overstate premium brands due to concentration on cities in EPS         <ul> <li>e.g. Marlboro and L&amp;M</li> </ul> </li> <li>Small IMS share / large EPS share discrepancies         <ul> <li>e.g. Marlboro in UK</li> </ul> </li> </ul>	Totals by brand will not necessarily match total overall: most effective as an estimate of share of nondomestic for major brands  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 crosscheck and test our research results
  - we tested the reasonableness of our research results against a range of quantitative estimates obtained on the size and scale of C&C in each market

#### **Expert interviews**

- In addition, we have undertaken structured interviews with industry specialists to canvas their opinions on C&C in each of the 27 EU markets where possible
- Our contacts were identified from multiple sources, including:
  - PMI recommendations
  - OLAF recommendations
  - KPMG external search
  - other interviewee recommendations
- We have interviewed specialists across a broad spectrum of areas and backgrounds, including:
  - governmental and policy-making organisations
  - academic research institutes
  - trade and industry associations
  - PMI management, both centrally and at a country level
- We devised a structured interview process for each interview category which underwent multiple iterations to ensure consistency and accuracy of both questioning and capturing results

#### Conclusions

- Analysis of external research has been highly effective in:
  - improving our understanding of local market dynamics, trends and the nature of C&C in each country
  - facilitating our judgement on the potential limitations of our findings
- However, external data is not sufficiently detailed on its own to obtain a credible estimate of the size and scale of C&C as:
  - basis for estimates is often unknown and may not be objective
  - data sources and estimates across countries lack consistency
  - data is often sparse and patchy
- External expert interview programme has provided good soft corroboration of trends and issues
  - however, it has been less effective in delivering quantitative results



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#### **Overview**

We have designed a methodology that is as robust and inclusive as we believe could practicably have been delivered.

However, given the innate complexity of C&C, our methodology does have limitations.

#### **Scope limitations**

- There are specific scope exclusions which cannot be or have not been accounted for in our approach:
  - geographic exclusions
  - brand exclusions non-PMI counterfeit
  - category exclusions OTP
  - LDS product flows out of the EU

#### **Source limitations**

- Limitations are, of necessity, present with any primary information 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	<ul> <li>We have limited our geographic coverage in some markets where extension would significantly impair confidence levels in the ND(L) research for the further territories included</li> <li>In some instances (e.g. Greek islands), shipment data is also insufficient for the purposes of this study</li> </ul>	<ul> <li>Spanish results only cover mainland Spain and do not include the Canary Islands, Balearic Islands or Ceuta &amp; Melilla</li> <li>French results cover only mainland France and do not include Corsica</li> <li>Portuguese results only cover mainland Portugal and do not include Madeira or the Azores</li> <li>Greek results only cover mainland Greece and do not include the Greek islands</li> <li>UK results only cover Great Britain and Northern Ireland and do not include the Channel Islands</li> </ul>	Not adjusted for
Non-PMI counterfeit	<ul> <li>Empty Pack Survey results do not identify non-PMI brand counterfeit packs</li> <li>only the manufacturer / trademark owner can confirm whether their brand pack is genuine</li> </ul>	<ul> <li>In some instances, the volume of legal domestic consumption may be overstated where domestic counterfeit variants are identified</li> <li>this may lead to minimal understatements of C&amp;C volumes for non-PMI brands</li> <li>Moreover, we cannot distinguish between non-PMI brand counterfeit (non-domestic variants) and contraband product, although this will not impact the overall volume of C&amp;C</li> </ul>	Not adjusted for
ОТР	<ul> <li>Empty Pack Surveys collect cigarette packs only</li> <li>non-domestic consumption for OTP cannot be measured via Empty Pack Survey results</li> </ul>	Anecdotal evidence suggests that there do exist some non- domestic flows of OTP within the EU. However, based on extensive interviews, seizure data and analysis of other available information, the scale of non-domestic OTP consumption is believed to be limited when compared to manufactured cigarettes	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)	<ul> <li>Net outflows besides Sweden are believed to be minimal, supported by anecdotal evidence from non-EU EPS surveys (including Switzerland and Turkey)</li> <li>Non-EU LDS outflows are not considered to be material due to the high prices relative to other parts of the world and Duty Free import restrictions</li> <li>Potential minimal overstatement of EU consumption</li> </ul>	Partially adjusted for



# **Source limitations (1 of 2)**

Although there are limitations to any source, we are comfortable that we have used the most appropriate sources available.

Source	Li	mitation
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
		<ul> <li>depending on the source of packs collected, either homes and workplaces or public spaces (in Germany) are not covered</li> </ul>
		<ul> <li>the sample is more heavily weighted towards populous, urban areas and therefore may not be fully representative of consumption habits in rural regions</li> </ul>
	-	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
	-	Empty Pack Surveys are only conducted at set periods and results may be influenced by seasonal factors such as tourist inflows
		<ul> <li>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</li> </ul>
	-	Brand and market variant share can only be extrapolated with a degree of statistical accuracy for brands where a sufficiently large number of packs have been collected
	•	EPS results are analysed to identify any outliers that may impact results, such as geographic concentrations of a specific brand or market variant. Brand specific data is also compared to known sales in the source market to identify whether results are credible
		<ul> <li>where data suggests a sampling or data capture error may have occurred at a specific location, results are adjusted and the remainder of the survey is re-weighted accordingly</li> </ul>
	-	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
	•	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
	•	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	Shipment data is the most reliable source for legal domestic sales in a market. However, in some markets it is not available. In the absence of shipment data, we have used either AC Nielsen Retail Audit data or tax stamp data as available
sales	<ul> <li>in some cases tax stamp data may not correspond to the calendar year and may also be distorted by inventory holdings in advance of increases in taxation. In these instances we have used the LDS source considered by local PMI management to be the most representative of smoker consumption during the calendar year</li> </ul>
	AC Nielsen Retail Audit data is derived from retail sales information but may exclude particular sales channels or retailers
	<ul> <li>in markets where we have used Retail Audit data, PMI local management have calculated the appropriate uplift to derive total market sales, including volumes not accounted for in Retail Audit data</li> </ul>
	<ul> <li>Slight timing variances may arise between the date the product was shipped and actual consumption but, following discussions with local management, this is not considered significant and the full year LDS information we have is considered to be a fair and accurate representation of full year 2010 sales in each market</li> </ul>
ND(L)	<ul> <li>As with any CATI-based market research approach, our samples may potentially exclude certain demographic segments, in particular, those without a permanent home, registered address or telephone line</li> </ul>
	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
	<ul> <li>Respondents are asked to recall purchase volumes in packs and we assume 20 cigarettes per pack for our pack to cigarette conversion</li> </ul>
	<ul> <li>To ensure that we record legal imports only, we have capped total individual purchases and applied a cap to imports from certain source countries where import restrictions apply</li> </ul>
	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
	It is not possible to reliably distinguish between Duty Free and Duty Paid variant in the ND(L) research due to the consumer confusion when buying cigarettes abroad, particularly in airports when travelling intra-EU. We have however attempted to estimate legal Duty Free purchases by using ND(L) inflows from non-EU markets as an approximation. This approach assumes that EU nationals purchase Duty Free variants when they travel to non-EU markets and buy cigarettes as measured by the ND(L) research
	<ul> <li>this assumption is predicated on the fact that Duty Free variants are typically available at a lower prices than legal tax- paid cigarettes in non-EU destination countries</li> </ul>



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# **Country results refinements (1 of 6)**

Country	Rationale	Description	Impact
Belgium brand share	<ul> <li>Non-domestic Marlboro brand share appeared to be overstated</li> </ul>	<ul> <li>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</li> <li>Non-domestic Marlboro volumes calculated using methodology one were 0.59 billion cigarettes, compared to methodology two volumes of 0.25 billion in 2010</li> </ul>	<ul> <li>Average of methodology one and methodology two brand share applied to total non-domestic volume for Marlboro</li> <li>Adjustments made to 'Other Non-PMI' to compensate for changes to Marlboro volumes</li> </ul>
Bulgaria	<ul> <li>Two EPS were conducted in Bulgaria reporting non-domestic incidence of 34.1% in Quarter 2 2010 and 21.3% in Quarter 4 2010</li> <li>Smaller cigarette packs (10 cigarettes/pack) represented 6.0% of all packs collected in 2010 compared to 0.1% of all packs in 2009</li> </ul>	<ul> <li>Analysis of changes in the economic environment in Bulgaria indicated that the economic situation improved in the last quarter of 2010 compared to the first three quarters of the year</li> <li>The Quarter 2 Empty Pack Survey was weighted to represent the first three quarters of 2010, whilst the Quarter 4 Empty Pack Surveys was weighted to represent the last quarter of 2010</li> <li>Additionally, the 2010 EPS results were weighted based on the number of cigarettes due to a significant increase in the proportion of smaller cigarette packs collected (10 cigarettes/pack) in 2010 compared to 2009.</li> </ul>	Total non-domestic inflows increased by 0.85 billion cigarettes
Cyprus	■ The implied decline in outflows to the UK did not appear realistic given tourism flows and changes to relative prices.	Outflows to the UK reduced from 2009 levels in line with annual trend in UK tourists arriving in Cyprus	<ul> <li>Outflows to UK increased from 37 million cigarettes to 200 million cigarettes</li> </ul>



# **Country results refinements (2 of 6)**

Country	Rationale	Description	Impact
Finland	Implied flows from Russia appeared to be understated given relative pricing and cross border statistics for 2010	<ul> <li>Cross border travel statistics for 2010 indicated a comparable level of travel to and from Russia compared to 2009 and 2008, which did not support the trend observed in EPS results:         <ul> <li>This was corroborated by further travel trend analysis from several different sources</li> </ul> </li> <li>Russian inflows uplifted by 0.47 billion cigarettes to 0.68 billion:         <ul> <li>This has been estimated by applying the proportional change of the raw EPS flow from Russia to Finland between 2009 and 2010</li> </ul> </li> </ul>	<ul> <li>Russian inflows increased by 0.47 billion cigarettes. This resulted in a 0.47 billion increase to counterfeit and contraband inflows</li> </ul>
France brand share	<ul> <li>Non-domestic Marlboro brand share appeared to be overstated</li> </ul>	■ Brand share methodology two has been used which is more in line with ND(L) results and domestic brand share (methodology one nondomestic Marlboro volumes were 6.18 billion cigarettes compared to methodology two volumes of 3.44 billion in 2010)	<ul> <li>Brand Share methodology two applied to total non-domestic volume for Marlboro</li> <li>Adjustments made to 'Other Non-PMI' to compensate for changes to Marlboro volumes</li> </ul>
Germany inflows	<ul> <li>Czech and Polish nondomestic incidence appeared to be overstated in the 2010 Yellow Bag survey results:</li> <li>Analysis of regional sales trends in the three countries did not support the increase in non-domestic flows indicated by the Yellow Bag Survey results in 2010</li> </ul>	<ul> <li>Analysis of the composition of the Yellow Bag Survey recycling centre sampling plan indicated changes in the centres sampled in 2010:</li> <li>The Görlitz recycling centre was included in the sampling plan for the first time in 2010. Due to its location, it was deemed to be producing an unrepresentative non-domestic estimate (83.7%) when compared to prior year regional results</li> <li>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</li> </ul>	<ul> <li>Total non-domestic inflows and counterfeit and contraband declined by 0.81 billion cigarettes:</li> <li>Czech inflows declined by 0.18 billion cigarettes</li> <li>Polish inflows declined by 0.63 billion cigarettes</li> </ul>



# **Country results refinements (3 of 6)**

Country	Rationale	Description	Impact
Ireland inflows	<ul> <li>Spanish legal sales of UK and Irish Virginia brands suggest there is a shortfall in outflows to Ireland as measured by the Irish EPS</li> </ul>	<ul> <li>Inflows from Spain to Ireland were uplifted by 0.13 billion cigarettes to 0.25 billion:</li> <li>See Spain country section for detail</li> </ul>	<ul> <li>Inflows from Spain increased by 0.13 billion cigarettes</li> </ul>
	Legal sales trends on both sides of the border between the Republic of Ireland and Northern Ireland suggest a shortfall in outflows from the UK to Ireland as measured by the Irish EPS	the border regions of the Republic of Ireland/ Northern Ireland border	<ul> <li>Inflows from the UK increased by 0.06 billion cigarettes:</li> <li>The non-domestic (legal) inflow increased by 0.06 billion cigarettes</li> </ul>
	In 2010, two EPS were conducted in Ireland reporting non-domestic incidence of 29.3% in Quarter 3 and 27.4% in Quarter 4	To reflect the relative timings of the EPS during the year, the Quarter 3 EPS was weighted to represent the first nine months of 2010, with the Quarter 4 EPS representing the remaining three months	■ Total non-domestic inflows increased by 0.10 billion cigarettes



# **Country results refinements (4 of 6)**

Country	Rationale	Description	Impact
Ireland brand share	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 0.46 billion cigarettes compared to methodology two volumes of 0.27 billion in 2010)	<ul> <li>Brand Share methodology two applied to total non-domestic volume for Marlboro</li> <li>Adjustments made to 'Other Non-PMI' to compensate for changes to Marlboro volumes</li> </ul>
Latvia	<ul> <li>Two EPS were conducted in Latvia reporting non-domestic incidence of 10.5% in Quarter 2 2010 and 12.7% in Quarter 4 2010</li> <li>Research indicated that customs activity in Latvia increased significantly in the final quarter of 2010 and that this had an impact on non-domestic consumption levels</li> </ul>	■ The Quarter 2 EPS was weighted to represent the first nine months of 2010, with the Quarter 4 EPS representing the remaining three months	■ Total non-domestic inflows increased by 0.08 billion cigarettes
Luxembourg	<ul> <li>The 2010 EU Flows Model uses the results of NMA Empty Pack Surveys</li> <li>The Q1 NMA Empty Pack Survey was conducted in Luxembourg city only, whilst the Q2 and Q3 surveys were conducted in two cities; Luxembourg and Esch-sur-Alzette</li> <li>In Q2 and Q3, sampling was not collected proportionally to the population of the two cities and therefore may not fully reflect the national non-domestic incidence levels</li> </ul>	<ul> <li>EPS results have been reweighted to more accurately reflect the relative population of both cities:</li> <li>Prior to the adjustment, Esch-Sur-Alzette represented 70% of the total sample in the Q2 NMA survey despite accounting for only 25% of the combined population of the two cities</li> </ul>	■ Total non-domestic inflows increased by 0.02 billion cigarettes



# **Country results refinements (5 of 6)**

Country	Rationale	Description	Impact
Luxembourg outflows	■ EPS results did not accurately capture outflows	<ul> <li>Outflows of legal domestic sales were not accurately captured in destination market EPS results, leading to an unrealistic implied consumption trend</li> </ul>	Net outflow (modelled to outside of the EU) increased from 1.66 billion cigarettes in 2009 to 1.82 billion in 2010
Malta	■ The implied large decline in outflows to the UK does not appear realistic given tourism flows and changes to relative prices	<ul> <li>Outflows to the UK reduced from 2009 levels in line with annual trend in UK tourists arriving in Malta</li> </ul>	<ul> <li>Outflows to UK increased from 12 million cigarettes per the implied EPS level to 35 million cigarettes</li> </ul>
Poland	<ul> <li>Detailed survey results based on an Imperial Tobacco survey carried out on a comparable basis to the PMI EPS methodology were made available to KPMG for inclusion in Project Star to increase the overall</li> </ul>	■ The Imperial Tobacco Q4 survey results were amalgamated with Q4 2010 EPS results across 21 common cities covered by both studies and weighted based on population:	■ Total non-domestic inflows increased by 0.21 billion cigarettes following the inclusion of additional survey
	sample size	<ul> <li>Q2 EPS and Q4 combined EPS and Imperial Tobacco survey results were weighted equally to each represent half of the year</li> </ul>	
Spain	<ul> <li>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 EPS</li> </ul>	<ul> <li>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</li> </ul>	<ul> <li>Spanish outflows increased resulting in a net reduction in consumption and therefore total C&amp;C volume</li> </ul>
	<ul> <li>Inflows from Spain to Portugal appeared to be understated in 2010 EPS results</li> </ul>	Portuguese inflows were substantially below historic levels, and below the inflow level estimated by the ND(L) research:	<ul> <li>Inflows from Portugal increased by 34 million cigarettes</li> </ul>
		<ul> <li>Total inflows were thus uplifted from 0.05 billion cigarettes to 0.08 billion, in line with the level suggested by the ND(L) research</li> </ul>	



# **Country results refinements (6 of 6)**

Country	Rationale	Description	Impact
Spain brand share	<ul> <li>Non-domestic Marlboro brand share appeared to be overstated</li> </ul>	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 0.39 billion cigarettes compared to methodology two volumes of 0.35 billion)	<ul> <li>Average of methodology one and methodology two brand share applied to total non-domestic volume for Marlboro</li> <li>Adjustments made to 'Other Non-PMI' to compensate for changes to Marlboro volumes</li> </ul>
Sweden	<ul> <li>The EPS results highlighted the presence of domestic packs being sold the minimum tax yield price:</li> <li>These brands are not legally distributed for sale in Sweden</li> </ul>	<ul> <li>Below tax-yield brands were reclassified as illicit product including the following;</li> <li>Amor, Blue Jeans, Brookfield, Burton, Goal, Hamilton, Matrix, Red Eagle, The King and Vito</li> </ul>	■ Total non-domestic inflows and C&C inflows uplifted by 0.06 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 EPS.	<ul> <li>For Spanish flows, see Spain for detail:</li> <li>Inflows from Spain uplifted by 0.60 billion to 1.16 billion cigarettes.</li> </ul>	Inflows from Spain increased by 0.60 billion cigarettes.
	<ul> <li>Implied EPS inflows from Cyprus appeared to be understated given 2010 tourism statistics.</li> </ul>	Inflows from Cyprus increased by 103 million cigarettes to reflect the 2009-2010 trend in UK tourists arriving in Cyprus.	<ul> <li>Non-domestic Duty Free volumes reallocated to Spanish, Cyprus and Malta non-domestic.</li> </ul>
	Implied EPS inflows from Malta appeared to be understated given 2010 tourism statistics.	Inflows from Malta increased by 23 million cigarettes to reflect the 2009-2010 trend in UK tourists arriving in Malta.	■ Total non-domestic level unchanged.



# Adjustments to non-domestic (legal) research

A limited number of adjustments to ND(L) results have been made on the basis of corroborating evidence.

The net impact of these adjustments is a 1.3 billion cigarette reallocation from C&C to ND(L).

Nature of adjustment	Impact
Corroboration with total non-domestic volumes  Some discrepancies may exist between the ND(L) data and total non-domestic volumes which leads to a negative counterfeit and contraband level	<ul> <li>Belgium to France: 0.88 billion cigarette reallocation from ND(L) to C&amp;C</li> <li>ND(L) research overstated flows from Belgium. Volumes were capped at the total non-domestic inflow level from Belgium</li> <li>Germany to France: 0.56 billion cigarette reallocation from ND(L) to C&amp;C</li> <li>ND(L) research overstated flows from Germany. Volumes were capped at the total non-domestic inflow level from France</li> </ul>
Cross-referencing with tourist and border crossing data  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	<ul> <li>Poland to Germany flow: 1.70 billion cigarette reallocation from C&amp;C to ND(L):         <ul> <li>Visitor numbers reported during research programme understated versus actual data</li> <li>Flow volume recalculated based on actual visitor numbers</li> </ul> </li> <li>Czech Republic to Germany flow: 1.43 billion cigarette reallocation from C&amp;C to ND(L):         <ul> <li>Visitor numbers reported during research programme understated versus actual data</li> <li>Flow volume recalculated based on actual visitor numbers</li> </ul> </li> <li>Luxembourg to France flow: 0.13 billion cigarette reallocation from ND(L) to C&amp;C:         <ul> <li>Flow volume recalculated based upon the 2007-2009 historical average number of trips</li> </ul> </li> </ul>
Review of key indicators for specific flows  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	<ul> <li>Poland to Germany flow: 0.84 billion cigarette reallocation from C&amp;C to ND(L):</li> <li>Average packs per trip considered high at over 30 in 2010 compared with historical levels and flows between other markets with similar price differentials</li> <li>Flow volume recalculated based on 2008 and 2009 average number of packs purchased per trip by German consumers of 22 packs.</li> <li>Czech Republic to Germany flow: 0.61 billion cigarette reallocation from C&amp;C to ND(L):</li> <li>Average packs per trip considered low at less than 20 in 2010 compared with historical levels and flows between other markets with similar price differentials</li> <li>Flow volume recalculated based on 2008 and 2009 average number of packs purchased per trip by German consumers of 26 packs.</li> </ul>



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#### Sources

### External data sources (1 of 3)

Our assessment incorporates analysis from several sources.

#### Other sources

- 'Achats transfrontaliers: Tendance de fond ou fin de cycle', Revue des Tabacs no 570. December 2009
- 'Achats transfontailers: Les deputes francais s'opposent a la Comission europeenne,' Revue des Tabacs no 581, December 2010
- Austrian Chamber of Commerce Empty Pack Survey, 2006-2010
- 'BAT France révèle son étude annuelle', Revue des Tabacs no 570, December 2009
- '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
- 'Bulgaria to introduce complete ban on smoking in small cafes in mid-2011', The Sofia Echo, 19 January 2011
- Central Statistical Office of Poland, GDP at constant average prices of the previous year, accessed May 2011
- Central Statistical Office of Poland, Registered unemployment, accessed May 2011
- 'Cigarette tax affects budget brands', Prague Post, February 2010
- CIA Factbook, EU-27 Population Estimates, accessed January 2011
- 'Cigarette Smuggling In Romania Down 2.3 % in March To 33.9% of Market', Mediafax News Brief Service, 25th April 2010

#### Other sources

- Czech Statistical Office, General unemployment rate, accessed April 2011
- Czech Statistical Office, Gross Domestic Product at current year prices, accessed May 2011
- Danish Chamber of Commerce estimates 'Status over Grænsehandel' 2007 & 2009
- Datastream exchange rates, accessed January 2011
- 'Determine Market Share of International Tobacco Packages Cigarettes and RYO', TrendBox on behalf of Vereniging Nederlandse Kerftabakindustrie (VNK) and Stichting Sigarettenindustrie, February 2010
- '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
- Empty Pack Survey carried out for ESKEE the Greek industry association, September – October 2010
- Empty Pack Surveys carried out by GfK for MDSZ, Hungarian Tobacco Manufacturers' Association, 2006-2010
- Empty Pack Surveys conducted by Ultex for the Czech Republic Tobacco Manufacturers' Association 2009-2010
- Estimation des achats transfrontanliers de cigarettes 2004-2007, Observatoire Francais des drogues et des toxicomanies. March 2011
- Estonian National Statistics, Gross Domestic Product at chain linked prices, accessed May 2011
- Estonian National Statistics, Labour status of population aged 15 and over, accessed May 2011
- Euromonitor, 2006 (Netherlands)



#### Sources

### External data sources (2 of 3)

Our assessment incorporates analysis from several sources.

#### Other sources

- European Commission Eurobarometer, Survey on Tobacco: Analytical Report, March 2009
- European Commission website, http://ec.europa.eu
- 'Europe's heaviest smokers try new ban on smoking', Bloomberg News, July 2009
- 'European Trends towards non-smoking provisions', European Network for Smoking Prevention, December 2007
- European Union Tax Tables, January 2010
- Eurostat, Arrivals of non-residents, accessed February 2011
- Eurostat, Gross Domestic Product, accessed February 2011
- Eurostat, GDP and its main components, accessed March 2011
- Eurostat, Total outbound holidays 2010, accessed February 2011
- Eurostat, Tourism data from the Eurostat website, http://ec.europa.eu/eurostat, accessed February 2011
- Eurostat, Unemployment rates, accessed February 2011
- 'Excise tax on wine and cigarettes to be raised in Latvia in 2010'. The Baltic Course. December 2009
- 'Finland aims to stub out smoking habit', BBC Online, 15 January 2010
- 'Finland makes giving tobacco to youth a crime', Associated Press, October 2010
- GCTS (Global Consumer Tracking Survey) provided by PMI
- Hellenic Statistical Authority, GDP at constant prices, accessed May 2011
- Hellenic Statistical Authority, Unemployment rate, accessed May 2011
- Hungarian National Statistics, GDP change versus previous year, accessed May 2011
- Hungarian National Statistics, Unemployment rate, accessed May 2011
- Higher tobacco taxes to fuel black market', Mediafax News, 4 November 2010

#### Other sources

- 'Illegale handel van shag en sigaretten: Nederland als criminele groeimarkt', Integis B.V. for Vereniging Nederlandse Kerftabakindustrie (VNK), October 2008
- Instituto de Estudios Turisticos, Accessed December 2010 (Spain)
- JTI Illicit tobacco trade review 2010
- Latvian National Statistics, Gross Domestic Product (chain linked reference year 2000), accessed May 2011
- Latvian National Statistics, Unemployment rate, accessed May 2011
- Lithuanian Free Market Institute data, 'Cigarette-smuggling gangs sap Lithuania budget', BBN, December 2010
- Lithuanian National Statistics, GDP at chain linked prices accessed May 2011
- Lithuanian National Statistics, Unemployment rate from LFS, accessed May 2011
- 'Measuring Tax Gaps 2010', HMRC, September 2010
- 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 2010, accessed April 2011
- Novel Research, Anti Illicit Trade Tracking Study, March 2011, 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)
- OLAF, Seizure data, 2010
- 'One Third of Bulgarian Cigarettes Sold Illegally', Novite, 4th August 2009



#### Sources

### External data sources (3 of 3)

Our assessment incorporates analysis from several sources.

#### Other sources

- 'Origine des paquets de cigarettes et de tabac a rouler fumes en France Etude EPSY', Revue de Tabacs, September 2008
- RAI Consultants, Market share by brand information in Cyprus, 2010
- '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
- 'Share of Contraband Cigarettes on Bulgarian Market is 15%', Bulgaria News Agency, November 2008
- Smoking restriction information from the European Public Health Alliance website, http://epha.org , Accessed April 2011
- 'Smuggling still thriving in the Baltic States', Tobacco Journal, January 2010
- 'Smuggling to Feed One Third of Romania's 2010 Cigarette Market', SeeNews, 21 October 2010.
- Spanish Institute of Tourist Studies, accessed April 2011
- Spanish National Statistics Institute, Economic and Social statistical indicators. Accessed May 2011
- Statistical Office of the Slovak Republic, Unemployment rate by age, accessed May 2011
- Statistical Office of the Republic of Slovenia, Consumer price indices, May 2009
- Statistical Office of the Republic of Slovenia, Gross Domestic Product, accessed March 2011
- Statistical Office of the Republic of Slovenia, migration data, access March 2011

#### Other sources

- Statistical Office of the Republic of Slovenia, Unemployment Rate, accessed March 2011
- Steve Payne, Director JTI Ireland, Tom McGurck Show, 4FM, broadcast on 19th March 2008
- Swedish Statistics Office, accessed March 2011
- Tax stamp estimates, Hungarian National Tax and Customs Authority
- TendensØresund.org , Accessed March 2011 (Denmark)
- 'The cigarette smuggling centre of Europe', Irish Times, 20 February 2010
- The European Commission, Excise Duty Tax Tables (January 2009, July 2009, January 2010), July 2010, accessed February 2011
- 'The illicit tobacco trade: Annual Review', JTI Ireland, 2009
- 'The non-duty paid market for cigarettes in Sweden', AB Handelns Utredningsintitut 2010
- TNS data, as presented at the Foreign Investors Council in Latvia, April 2010
- 'Updated Convergence Programme of Hungary 2009-2012', Government of the Republic of Hungary, January 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



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### Scope of work

- 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.
- 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.
- 3. 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 with coverage to be agreed between PMI and KPMG at a planning meeting to be held in August 2010.

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 at a planning meeting to be held in August 2010.

Third party research will be directed by KPMG, but will be contracted directly by PMI. Where agreed, data gained through this research will be passed directly to KPMG, and will not be released to PMI, for example data regarding the prevalence of smoking among the juvenile segment of the population

Expert opinions and expert panel data

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

4. 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.



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