

STRATEGIC AND COMMERCIAL INTELLIGENCE

# **Project Star**

2006 Results25<sup>th</sup> April 2007

**ADVISORY** 

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### **Basis of preparation**

- This presentation of key findings ('our report') is given in accordance with our agreed written terms of engagement dated 31 October 2005 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 25 EU Member States. We draw your attention to the limitations in scope set out therein.
- Our work commenced on 1 November 2005 and our fieldwork is now complete.
- In preparing our report, we have used a range of sources. Details of our principal information sources are set out in the Appendix and we have satisfied ourselves, so far as possible, that the information presented in our report is consistent with other information which was made available to us in the course of our work in accordance with the terms of our engagement letter. We have not, however, sought to establish the reliability of the sources by reference to other evidence. The scope of our work was different from that for an audit and, consequently, no assurance is expressed.
- Our report makes reference to 'KPMG Analysis'; this indicates only that we have (where specified) undertaken certain analytical activities on the underlying data to arrive at the information presented.
- Our report is provided solely for the benefit of the parties identified in our engagement letter and should not be copied, quoted or
  referred to in whole or in part without our prior written consent. We will not accept responsibility to any other party to whom our report
  may be shown or who may acquire a copy of our report.



# **Glossary of terms**

Cigarette industry		Project Star		
Bootlegging	Also called small-scale smuggling, bootlegging is the purchase of tobacco	CAGR	Compound Annual Growth Rate	
	products by individuals 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 illegally re-sold	Consumption gap	The difference between total consumption and legal domestic consumption	
	(for financial profit) in a higher priced market. There are generally two types of contraband: bootlegging and large scale smuggling/organised crime	Consumption index	A corroboratory source for estimating the consumption gap in a market. The model compares an index of consumption based on historic smoking	
Counterfeit (CF)	Cigarettes that are illegally manufactured and sold by a party other than the original trademark owner		prevalence, average consumption and population against legal domestic sales to track changes over time	
Duty-free	Purchases made outside the EU that have no state, local or provincial taxes,	EU	European Union comprising EU25 countries	
MPPC	federal import duties or any other type of taxation added to the cost of the item purchased. Subject to purchase volume restrictions  Most popular price category	EU flows model	The primary methodology for measuring consumption in a market. The model details the volume of inflows and outflows of product for a given market by country of origin (the model only specifies flows to EU countries)	
WILL	Most popular price category	Inflows	Inflows of non-domestic product into a market	
OTP	Other Tobacco Products (RYO/MYO, cigarillos, portions and rolls; excluding cigars)	LDS	Legal Domestic Sales are sales of genuine product with domestic tax stamps through legitimate, domestic channels	
RYO/MYO	Roll-your-own/Make-your-own - loose tobacco for the purpose of hand rolling / loose tobacco for the purpose of tubing	LDC	Legal Domestic Consumption is defined as legal domestic sales net of	
Smoking prevalence	The percentage of adult smokers in the total population	ND	outflows	
Stick	Preferred unit of measurement of tobacco product, either one cigarette or its equivalent for OTP	ND	Non-Domestic product – product that was not originally intended for the market in which it is consumed	
Tobacco taxes	The sum of all types of taxes levied on tobacco products. There are two basic	ND(L)	Non-Domestic (Legal) – product that is brought into the market legally by consumers, such as during a cross-border trip	
	methods of tobacco taxation: <i>Normal or specific taxes</i> are based on a set amount of tax per unit (e.g. cigarette); these taxes are differentiated according to the type of tobacco. <i>Ad valorem taxes</i> are assessed as a percentage mark up	OLAF	Office Européen de Lutte Anti-Fraude (European Commission Anti-Fraud Office)	
	on a determined value, usually the retail selling price or a wholesale price and includes any value added tax	PMI	Philip Morris International	
PMI data sources		Market research		
EPS	Empty Pack Survey	CAPI	Computer-aided personal interviewing	
GCTS	Global Consumer Tracking Survey	CATI	Computer-aided telephone interviewing	
IMS	In-Market Sales (the primary source of legal domestic sales volumes)	Measurements		
		Bn	Billion	
		Mn	Million	



# **Contents**

- Executive summary
- Project overview and timing
- Methodology
- European cigarette market
- 2006 Project Star results
- Appendices

### **Executive summary**

The scope of work undertaken during Project Star is unprecedented

#### Project Star represents the first concerted attempt to measure non-domestic cigarette penetration on a consistent basis at a supranational level

- Previous attempts at measuring non-domestic and illegal cigarette flows have been at an individual market level and have tended to apply inconsistent methodologies that cannot be integrated into a European overview
- Project Star applies a single methodology across all EU markets that incorporates the ability to measure outflows and hence derive an accurate consumption estimate

The methodology is based on large-scale primary research

#### We have used a single EU flows model to combine data from all markets into a robust and integrated picture of cigarette consumption in the EU

- The key sources for this model are legal domestic sales and empty pack surveys in each market
  - when integrated on an EU basis, these sources enable us to quantify both domestic and non-domestic cigarette consumption
  - the legal portion of non-domestic consumption has been estimated using additional primary market research
- Additional sources have been used to corroborate, and where necessary, refine our model

The decline in legal sales of cigarettes in the EU can be partly attributed to growing non-domestic penetration

#### Increasing prices and smoking restrictions have contributed to declining cigarette consumption across the EU

 Over the last three years all but one EU country has experienced a decline in smoking prevalence or average cigarette consumption, and in most cases both

#### Over the same period, changes in legal domestic sales have been more volatile

- Although legal sales in the EU declined by 3.7% per annum between 2002 and 2006, this concealed a steep decline across most of the EU 15 markets and an increase in many of the EU 10
  - Germany and France accounted for the majority of the decline with sales falling 10.2% and 8.8% per annum respectively
- Differences in sales and consumption trends between countries highlight the existence of price-driven cross-border trade

Non-domestic cigarettes account for 13% of consumption in the EU

#### Non-domestic cigarette consumption in the EU totals 88 billion sticks

Three major markets, Germany, France and the UK, account for 57% of this total

#### The illegal component of the non-domestic market is equivalent to 8.3% of total consumption

- Over two thirds of non-domestic cigarettes enter the destination country illegally
- Counterfeit accounts for a relatively small proportion of illegal cigarettes

Ongoing monitoring will allow the member states to define areas of focus and measure success

#### The 2006 results are a positive step in addressing cigarette smuggling effectively

- Our results highlight, on a consistent country-by-country basis, the key sources of illegal cigarettes and the most smuggled brands
- Future results will be crucial in monitoring how successfully these illicit channels have been tackled and how the markets have adapted



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# **Contents**

- Executive summary
- Project overview and timing
- Methodology
- European cigarette market
- 2006 Project Star results
- Appendices

### **Project overview (1 of 2)**

PMI is required to supply the European Commission with independent market data quantifying contraband and counterfeit products by market

KPMG has been assisting PMI in meeting this challenge

# PMI's obligations to the European Commission

- PMI has agreed with the European Commission to take constructive steps to combat the trafficking of contraband and counterfeit cigarettes
- A key element of PMI's approach is a commitment to supply the European Commission with independent market data that quantifies contraband and counterfeit cigarettes by market by brand starting in 2006

#### 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 C&C across all 25 EU markets
  - three pilot countries: Germany, Finland and Poland
  - roll-out across the remaining 22 markets

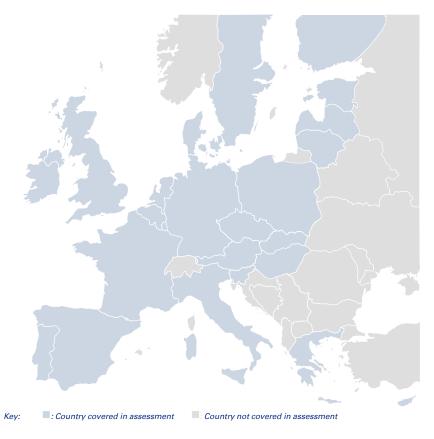


### Project overview (2 of 2)

The primary deliverable of Project Star is an assessment of the level of counterfeit and contraband tobacco across the 25 EU markets

The geographic coverage of an investigation of this kind is unprecedented

Though C&C trade is considered a substantial problem in many countries, specific information is hard to come by and often unreliable, creating significant barriers to accurate measurement of the illicit tobacco trade



#### Our primary deliverable is an assessment of C&C across 25 EU countries

- The scope of our work has covered an assessment of counterfeit and contraband tobacco trade across the 24 signatories to the Anti-counterfeit and Anti-contraband Agreement between PMI and the European Commission
  - our assessment has also included the UK (despite not being a signatory to the Agreement) to provide a complete assessment across the EU
- We have adopted a consistent approach and methodology for all markets, irrespective of market size or perceived C&C incidence
- Our approach will allow us to extend our methodology to new member states as and when required

#### Measuring C&C is challenging

- There are large discrepancies in external data quality and the availability of robust and comparable information across countries for consistent time periods
  - there are also significant issues with data that is available such as under-reporting of consumption, limited sample sizes and unclear methodologies
- The illegal nature of the overall market, the heavy involvement of organised crime and the clandestine nature of activities make accurate quantification of the market difficult

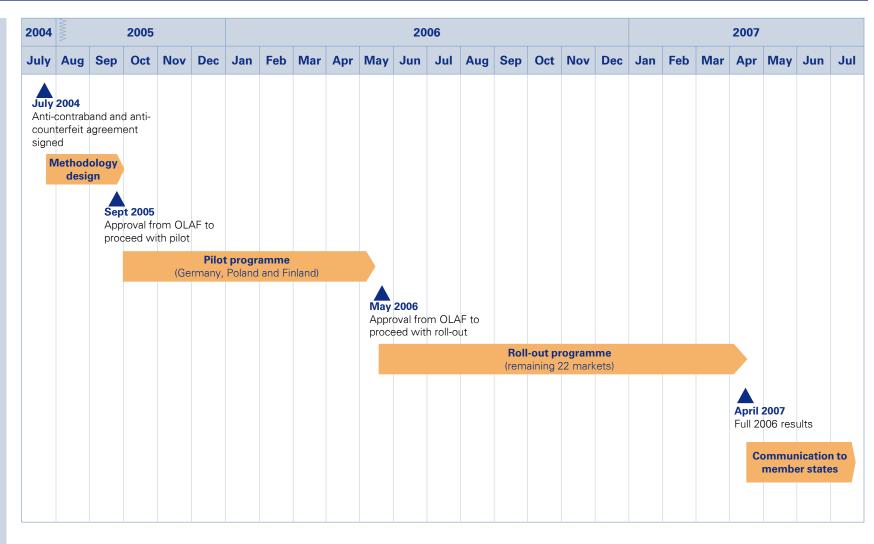
#### There is no precedent for success

- Previous attempts to estimate the C&C market have tended to be at a high level and directed at specific markets only rather than designed to be comparable across countries
- Research has revealed no other investigation of this scale or complexity

### **Project timing**

We have spent the past 18 months designing and refining a methodology to measure counterfeit and contraband cigarette incidence in the most robust and defensible way possible and then implementing this approach across the 25 EU markets

Full 2006 results are now available for all 25 EU markets and are contained in this report





### Design and development of the methodology

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

#### Methodology design steps

#### 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 threemarket pilot process

#### Pilot and refine

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

#### **Implement**

 Roll out approach to remaining 22 EU markets

#### 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

 The area of C&C is characterised by limited information but significant emotion. 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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## **Contents**

- Executive summary
- Project overview and timing
- Methodology
  - overview
  - limitations of results
  - country-specific refinements
- European cigarette market
- 2006 Project Star results
- Appendices

#### **Overview**

We have developed a methodology for quantifying C&C incidence across the 25 EU markets

#### The methodology has been tested extensively and refined to ensure that it can deliver the most robust and defensible results possible

- Our approach comprised four steps: initial information assessment, preliminary methodology design, pilot and refinement, and then implementation
- Our approach integrates multiple sources and custom-built analytical tools

The methodology is based primarily on objective evidence from legal domestic sales and empty pack survey results

#### The EU flows model is a dynamic, iterative model that is principally based on legal domestic sales and empty pack survey results

- Legal domestic sales are the starting point of the methodology, from which outflows of legal sales to other countries are then subtracted to determine legal domestic consumption
- EPS provides the most credible indication of the incidence of non-domestic and PMI counterfeit packs by country of origin

Historic GCTS consumption index modelling provided further corroboration of the extent of non-domestic consumption

#### Analysis of long-term GCTS consumption results provides a further source with which to triangulate our consumption gap estimates

- Historic GCTS data provides a useful indicator of market trends and helps to corroborate the scale of non-domestic consumption
  - GCTS cannot be used to quantify total consumption due to exclusions of particular age cohorts and under-reporting of consumption, although it is helpful in tracking broad developments over time
- Analysis of external data sources and a focused interview programme also delivered good supporting evidence with which to corroborate results

Primary market research was used to quantify legal non-domestic cigarette purchases

#### The key objective of the market research programme was to quantify genuine, legal non-domestic tobacco purchases in each market

- An extensive interview-based research programme was undertaken across all 25 EU markets with nearly 8,500 full interviews and almost 100,000 gross respondents contacted in aggregate
- The legal non-domestic market research programme was successfully trialled during the pilot phase and delivered credible results
- Primary research was critical to deliver robust results as no other sources of sufficient detail and accuracy are available for legal cross border shopping

There are some specific limitations to the results that our methodology delivers

#### Given the innate complexity of measuring C&C, some limitations to accurate quantification are to be expected

- There are broadly two types of limitations, scope exclusions and source limitations, which are covered in more detail in this section
  - scope exclusions include areas which cannot or have not been accounted for in our approach, such as geographic, brand (non-PMI counterfeit),
     category exclusions (OTP) and legal domestic product flows out of the EU
  - source limitations cover potential errors inherent with any data sources such as sampling criteria, coverage issues and seasonality factors

In order to maximise the accuracy of results some minor refinements were necessary at a country level

#### Triangulation of results from alternative sources identified a few markets where country-to-country flows required minor adjustment

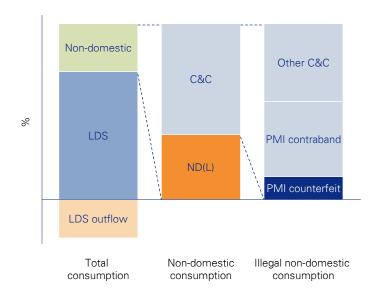
- In nearly all instances, overall country results and flows from the EU flows model appear reasonable
- . However, in a limited number of instances, specific adjustments were made to country-to-country flows on the basis of sound supporting evidence
- The impact of these adjustments was a limited reallocation of flows between countries (less than 2% of total consumption) and not to change overall non-domestic shares



### **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 product with domestic fiscal stickers through legitimate, domestic trade channels
- Outflows are defined as purchases of domestic product which are taken out of the country of purchase and consumed elsewhere
  - EPS provides a consistent source across all 25 markets of non-domestic packs by country of origin from which we estimate total product outflow from a market to the other 24 countries
  - we have not quantified outflows to non-EU markets
  - however, given the high prices of cigarettes in Europe relative to the rest of the world, LDS outflows to the rest of the world are not expected to be material
- Legal domestic consumption (LDC) is defined as legal domestic sales net of outflows
- Non-domestic product is defined as product of non-domestic origin, i.e. does not have a domestic tax stamp or is duty free
- ND(L) is defined as legitimate purchases of product in a non-domestic market for personal use on return to the home market
  - 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 country and illegally re-sold (for financial profit) in another 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 non-genuine product that is not produced by or with authorisation of the original trade mark owner



## **Corroboration of results**

We have sought to triangulate our findings against alternative sources wherever available

#### Methodology steps and key information sources

Calculation step	<b>1.</b> Measure legal domestic sales in all markets	<b>2.</b> Adjust legal domestic sales for product outflows	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		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' emp packs by country of origin in 25 country flow model		ND(L) market research programm	Measured from 'empty pack' surve results	Directly calculated by the KPMG methodology
Corroboratory	<ul><li>Tax stamp receipts</li><li>Euromonitor</li><li>Federal statistics</li></ul>	<ul><li>PMI management estimates</li><li>Border sales surveys</li></ul>	Consumption index modelling	<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>

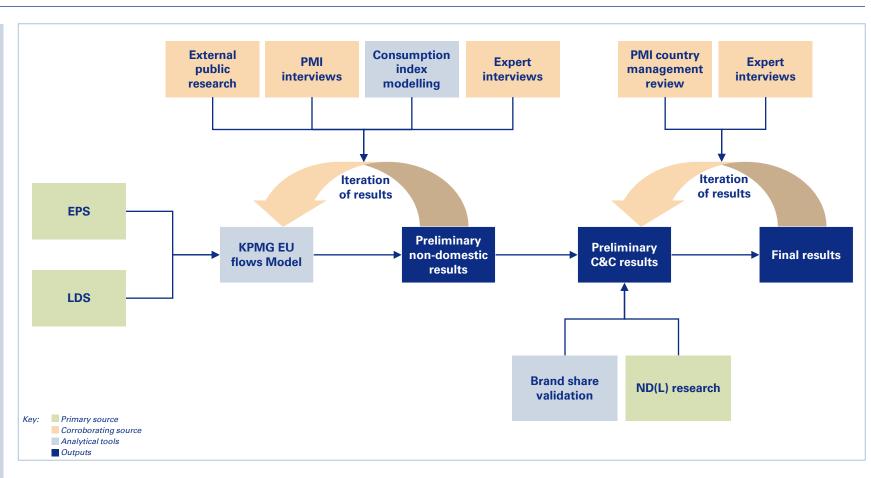
Preliminary results then went through a process of testing and review with local PMI management in each of the 25 markets



# **Primary information sources and tools**

Our approach integrates multiple sources with custom-built analytical tools

The results have then been through extensive iteration and testing to finalise



# **Primary information sources and tools – EPS**

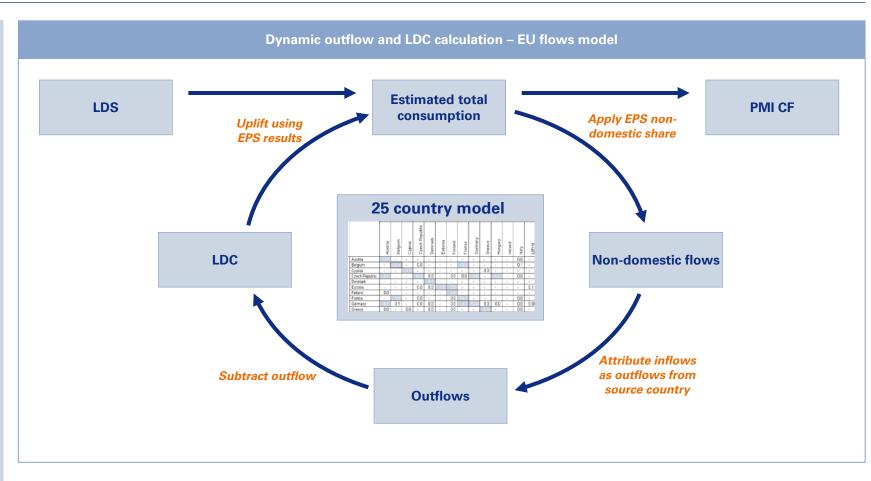
EPS provides a highly objective and robust view of the population samples and, notwithstanding some scope constraints, represents the most credible indication of the incidence of non-domestic and counterfeit packs

EPS overview	EPS is 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 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>Less potential for non-sampling error (e.g. results are not subject to respondent behaviour leading to endemic under-reporting of consumption)</li> </ul>
	Evidence based on collected packs: no discrepancies or scope for respondent confusion
	Reflects actual overall non-domestic share and provides good snapshot of brands consumed
EPS process	EPS measure shares of total consumption and avoids 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)</li> </ul>
	<ul> <li>In markets where collection is handled centrally, packs are sent to the manufacturers for analysis to determine which are genuine and which are counterfeit. Only the manufacturers can determine this, based on inks, paper, tobacco contents and other characteristics. Results of these analyses are not released to competitors</li> </ul>
	<ul> <li>EPS can also be used to extrapolate overall consumption in the market by projecting LDS using the percentage of non-domestic cigarettes in the market as found through EPS</li> </ul>
	In most markets, empty pack surveys are conducted annually, with the exception of:
	<ul> <li>Germany, which undertakes empty pack surveys every month and is the most comprehensive survey with a total of 120,000 packs collected each year</li> </ul>
	Slovakia, which undertakes a survey twice a year
Coverage of EPS	The empty pack surveys are designed to be fit for purpose and the coverage per market is tailored by the siz of the market, the likelihood of a high non-domestic incidence and the PMI 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):</li> <li>Austria, Belgium, Czech Republic, Finland, Greece, Hungary, Lithuania, Netherlands, Portugal, Slovakia, Sweden</li> </ul>
	<ul> <li>Small surveys (1,000 – 2,000 packs collected, top 4 – 5 cities covered): Cyprus, Denmark, Estonia, Ireland, Latvia Luxembourg, Malta, Slovenia</li> </ul>



### Primary information sources and tools – EU flows model

We have built a dynamic, iterative model based primarily on objective evidence from legal domestic sales and empty pack survey results



#### The EU flows model is a dynamic, iterative model that is principally based on legal domestic sales and empty pack survey results

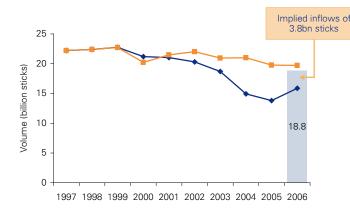
- Legal domestic sales are the starting point of the model from which outflows of legal sales to other countries are then subtracted to determine legal domestic consumption in a market
- EPS results provide a measurement of the share of non-domestic packs by country of origin in all markets
  - EPS results provide a consistent source across all 25 markets of non-domestic packs by country of origin from which we can calculate total product outflow from each market to the other 24 markets
- We have then iterated the model to refine estimates for legal domestic consumption



### Primary information sources and tools - consumption index modelling

Historic GCTS
consumption index
analysis was added to the
methodology during the
roll-out to provide a
further means of
estimating the
consumption gap

Example of historic GCTS consumption index estimate for Hungary 1996 to 2006 (1)(2)(3)



CAGR (%)	1998-2002	2002-2006
Consumption index	(1.5)%	(3.3)%
Legal domestic sales	(8.8)%	(1.3)%
KPMG consumption estimate	n/a	n/a

Sources: (1) KPMG EU flows model

(2) KPMG consumption index model

(3) In Market Sales supplied by PMI

# Historic GCTS data can provide a helpful indicator of market trends to corroborate the extent of non-domestic consumption in a market

- By comparing the legal domestic sales to an index of consumption over time, changes in consumer purchasing habits can be observed
- Although, GCTS cannot be used to quantify total consumption in a market (due to exclusions of particular age cohorts and the problem of underreporting of consumption), the rate of change in the GCTS smoking prevalence and average smoking volume figures provide a useful indication of observed changes in smoking habits
- Consumption modelling compares an index of consumption based on GCTS results against legal domestic sales to track changes over time
  - the difference between LDS volumes and indexed consumption modelling provides a reasonable indication of any significant change in a market's inflow / outflow status
- The estimated consumption figure is calculated using the incidence of smoking and the average daily consumption (both from GCTS) and the population of each market (from Euromonitor GMID)
  - these figures are then indexed to the earliest year for which we have both GCTS and LDS data available, in most cases 1997
- If LDS trends differ from those shown by the consumption index, it
  implies that the relationships between inflows, outflows and domestic
  consumption have changed over the analysed period

#### However, the consumption modelling can only identify market trends and cannot be used to quantify accurately actual total consumption

- Comparing consumption and sales trends helps to understand the direction of a market and its likely net inflow/outflow status. However, it will not identify any consumption gap that is present at the start of the period
  - the gap between indexed consumption and LDS in the final year is therefore only an indication of the extent to which the market has changed over the analysed period
  - in many markets, some level of inflows or outflows are likely to be present in the first analysed year
- Any changes in GCTS (methodology, supplier, sample size and selection, etc.) will also have an impact on the conclusions generated



### Primary information sources and tools – non-domestic (legal) research (1 of 2)

Primary market research was conducted to quantify legal non-domestic cigarette purchases

The legal non-domestic market research programme design was refined over many months and successfully trialled during the pilot phase

#### **Approach**

- Our approach was to measure the number and volume of tobacco purchase occasions from a complete, nationally representative sample of males and females, aged 19 years and over who have travelled abroad in the past 12 months
- These results were then weighted and projected by age and gender to a national level to estimate the volume of legal nondomestic cigarettes brought back into each market by travellers returning from overseas

## Sample

- The sample was drawn from the most complete, nationally representative database available and was representative of both urban and rural areas, age and gender
  - a fully random sample approach was used to ensure results were as 'certifiable' as possible and could be projected to the total target population
- A target of 7,000 gross contacts (i.e. agreed to be interviewed and aged >19 years) or 400 net contacts (i.e. travelled abroad and purchased tobacco products in the past year) was set
  - these targets were considered sufficient to derive accurate volume estimate once projected to the national population and set based on past experience from the research agencies and findings from the pilot process
  - the target was achieved in all markets except the UK and Italy

Data collection

- Computer Aided Telephone Interviewing (CATI) was the data collection method in each market except for Malta, Estonia, Latvia and Lithuania which used pen and paper data collection
- The interview script was consistent across all markets, translated into local language and back translated into English for quality control purposes

#### Validation tools

- Numerous validation tools were built into the script to enhance the accuracy of responses, for example
  - respondents were asked to recall all trips abroad in the past year and purchase volumes and brands for each trip
  - for each trip, the purpose of visit was also recorded to ensure final results appear logical and within a reasonable range

#### Results capping

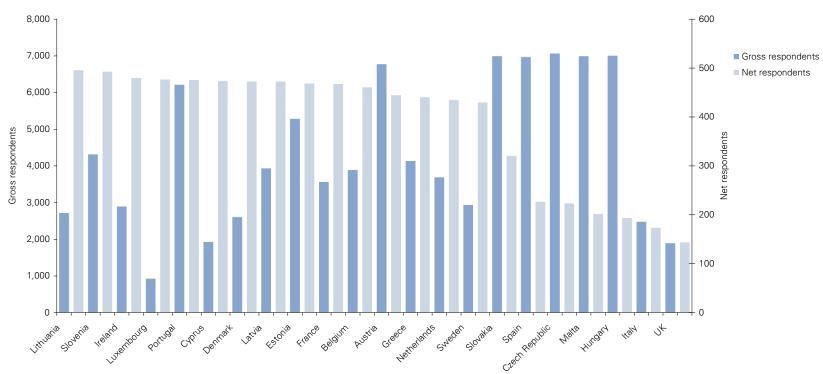
- To ensure that we were recording legal personal purchases only, results were capped at an individual respondent level
  - total annual purchases were limited to a maximum of 1,000 packs per person as this was considered the absolute upper level for a heavy smoker who makes all of their purchases abroad
  - purchases to non-EU destinations were limited to a maximum of 10 packs per trip in line with duty free purchase restrictions
  - purchases were also capped where intra-EU purchases to EU destinations apply



### Primary information sources and tools – non-domestic (legal) research (2 of 2)

The project has involved an extensive primary research programme with nearly 8,500 full interviews and almost 100,000 gross respondents during the roll-out process

#### Gross versus net respondents by country (roll-out countries only)



#### The key objective of the market research programme is to quantify genuine, legal non-domestic tobacco purchases in each market

- The market research programme incorporated an extensive interview programme across the 25 markets, using recognised market research specialists GfK, AC Nielsen and Synovate
  - AC Nielsen and Synovate covered 23 of the EU markets whilst GfK conducted pilot research in Finland and Germany
- In the EU 22 countries covered as part of the roll-out, 95,322 respondents were contacted and 8,477 successful interviews were conducted with contacts who had travelled abroad and purchased tobacco products in the past twelve months. This is in addition to 7,791 interviews from 27,648 gross respondents from the three pilot markets
- The ND(L) results rely heavily on the market research conducted as there is little corroborating data in any of the markets to support legal, non-domestic purchases
  - however, investigation during the pilot phase confirmed that primary research was far more effective at quantifying purchase decisions than consumption behaviour
  - brand, country of origin and trip purpose investigation of results across all 22 roll-out markets further corroborated this



### 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         <ul> <li>e.g. Priluki and Next in Hungary</li> </ul> </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>	<ul> <li>Totals by brand will not necessarily match total overall</li> <li>most effective as an estimate of share of nondomestic for major brands</li> <li>Small IMS share / high EPS nondomestic level discrepancies</li> <li>e.g. L&amp;M in Germany; St. George in Lithuania</li> </ul>		

#### Two parallel methodologies for calculating non-domestic brand share were used to ensure that the most reliable and realistic results were achieved

- While results at an overall market level were all highly robust and credible, smaller sample sizes at a brand level have the potential to introduce distortions at this lower level
- In order to maximise the accuracy of brand results, a dual methodology was used to estimate non-domestic brandlevel 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
- Methodology two was used in the following countries:
  - Denmark
  - France
  - Ireland
  - Poland
  - Spain
  - UK



### Primary information sources and tools – external public research and expert interviews

Analysis of external data sources has provided significant cross-validation of our research results

Although the interview programme delivered good circumstantial supporting evidence for our findings, interviews were not effective in delivering consistent and accurate estimates for the quantum of contraband and counterfeit

#### **External public research**

- We have undertaken extensive research into external data sources in each of the EU 25 countries
- 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 EU 25 countries 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 central and local in each market
- We devised a structured interview process for each interview category which underwent multiple iterations to ensure consistency and accuracy of both questioning and capturing results

#### Conclusions

- Analysis of external research has been highly effective in:
  - improving our understanding of local market dynamics, trends and the nature of C&C in each country
  - facilitating our judgement on the potential limitations of our findings
- However, external data is not sufficiently detailed on its own to obtain a credible estimate of the size and scale of C&C as:
  - basis for estimates is often unknown and may not be objective
  - data sources and estimates across countries lack consistency
  - data is often sparse and patchy
- External expert interview programme has provided good soft corroboration of trends and issues
  - however, it has been less effective in delivering quantitative results



## **Contents**

- Executive summary
- Project overview and timing
- Methodology
  - overview
  - limitations of results
  - country-specific refinements
- European cigarette market
- 2006 Project Star results
- Appendices

#### **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
  - inbound and outbound tourism

#### **Source limitations**

- Limitations are, of necessity, present with any primary information sources
- This primarily affects EPS, LDS and ND(L) sources
- For example, limitations can arise from
  - sampling criteria
  - coverage issues
  - timing/seasonality factors
  - specific regional or demographic exclusions



# **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, Gibraltar 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>No effect on total counterfeit and contraband volume</li> <li>However, we cannot distinguish between non-PMI brand counterfeit and contraband</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> <li>ND(L) OTP volumes not available for pilot countries</li> </ul>	<ul> <li>However, based on extensive interviews and seizure data, counterfeit is not believed to be material for OTP</li> <li>Analysis of available information confirms that the only significant non-domestic OTP inflow is into the UK, which is the only non-signatory to the agreement</li> <li>C&amp;C volumes for OTP therefore not available</li> </ul>	Not adjusted for
Non-EU outflows	<ul> <li>In order to calculate consumption, we have assumed no outflows of LDS outside the EU, with the exception of Sweden (see country- specific refinements)</li> </ul>	<ul> <li>Net outflows besides Sweden are believed to be minimal, supported by anecdotal evidence from non-EU EPS surveys</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
Inbound tourism	Consumption of cigarettes that tourists have brought with them into a country are not recorded in the ND(L) research	<ul> <li>By not including flows brought in by tourists in the ND(L) research, the flow is considered as an illicit flow</li> <li>This has been adjusted for in some specific countries (see following slide)</li> <li>Overall impact is minor at an EU level (estimated at 0.5% of consumption)</li> </ul>	Partially adjusted for

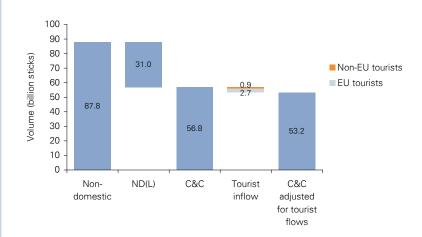


### Scope limitations: inbound tourism

The total contribution of inbound tourism to EU countries from within and outside the EU is estimated at 0.5% of EU consumption, representing a minor understatement of ND(L) volumes and an overstatement of C&C

However, this cannot be credibly and fairly applied at a market or brand level

# Estimated impact of inbound tourism 2006<sup>(1)(2)(3)(4)</sup>



Estimated impact of inbound tourism			
	Arrivals from EU	Arrivals from non-EU	
Travellers to the EU (million) <sup>(2)(a)</sup>	346	42	
of which 18+ (million)(3)	246	33	
of which smokers (million) <sup>(4)(b)</sup>	66	9	
Average number of packs	2	5	
Total sticks (billion)	2.7	0.9	

#### Non-domestic cigarettes brought in by inbound tourists from outside the EU or from within the EU are not captured as legal flows in the methodology at a country level

- Tourists are entitled to bring cigarettes for personal consumption into their destination country
  - tourists from outside the EU are limited to 200 sticks whereas most EU tourists are not subject to a limit
- However, the ND(L) research was not designed to estimate volumes entering the country with inbound tourists as it targets residents only
- As a result, any non-domestic volumes implied by non-domestic empty packs dropped by tourists and picked up during the EPS are not considered to be legal and therefore flow into C&C

#### We have estimated the impact of these flows at an EU level

- We have estimated the aggregate volumes of inflows due to EU and non-EU visitors to the EU using visitor numbers, smoking incidence and an assumption of the number of packs brought by each smoker
  - we have assumed that, on average, smokers visiting the EU from non-EU countries use half of their duty-free allowance and that EU visitors do not purchase additional cigarettes for their trip but have an average of two packs with them that they smoke at their destination
- We have not generally attempted to allocate these flows between countries on a consistent basis
  - on average, these adjustments indicate an overstatement of C&C by 5%, equivalent to 0.5% of consumption
  - in some specific instances, where the results of our research indicated significant C&C volumes from neighbouring and more expensive countries, we have adjusted for this as an inbound tourist flow and adjusted the results, representing an allocation of approximately one billion sticks of the total

Note

- (a) Arrivals in the EU from non-EU European countries including Russia and Ukraine are included in arrivals from EU and not in arrivals from non-EU
- (b) The number of smokers is calculated using the average smoking incidence for EU members

Source: (1) KPMG EU flows model

- (2) European Tourism Insights, European Travel Commission, 2005
- (3) US Census Bureau, International Database
- (4) Attitudes of Europeans Towards Tobacco, Eurobarometer, 2006



# **Source limitations (1 of 2)**

Although there are limitations to any source, we are comfortable that we have used the most appropriate sources available

Source	Limitations
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 the packs collected, either homes and workplaces or public spaces (in the case of 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>
	<ul> <li>with the exception of Germany (which has the most comprehensive pack collection of 10,000 per month), empty pack surveys are only conducted at set periods and results may be influenced by seasonal factors such as tourist inflow</li> </ul>
	Brand share can only be extrapolated with a degree of statistical accuracy for brands where a sufficiently large number of packs have been collected
	<ul> <li>However, EPS represents the most consistent source of non-domestic share across markets. We believe, especially at a total market level, that these results are credible and robust. Differences across brands and analysis of country flows from EPS results further supports this conclusion</li> </ul>
	When allied to other methods of corroboration, such as consumption index modelling, we believe the results are fully fit for purpose
	<ul> <li>In some specific instances, it is not possible to differentiate between duty-free and duty-paid variants from the empty packs collected as the tear tape on the packet is required</li> </ul>
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	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 2006 sales in each market</li> </ul>



# **Source limitations (2 of 2)**

Although there are limitations to any source, we are comfortable that we have used the most appropriate sources available

Source	Limitation
ND(L)	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
	• 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
	Respondents are asked to recall purchase volumes in packs and we assume 20 sticks per pack for our pack to stick conversion
	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
	Duty-free and duty-paid variants are impossible to distinguish between in the ND(L) research due to the consumer confusion when buying cigarettes abroad, particularly in airports when travelling intra-EU
	• Due to the consumer confusion between duty-free and duty-paid variants when buying abroad, it is impossible to separate duty-free in the ND(L) research.
	There are also some specific country limitations:
	<ul> <li>Austria - no gender information was captured for respondents who agreed to be interviewed but were screened out because they either did not travel of did not purchase tobacco products abroad. In order to weight the data appropriately, an additional omnibus was conducted for 1,000 respondents to capture gender information; The sample for the omnibus survey was drawn from the same, fully random sample as the core programme</li> </ul>
	<ul> <li>Estonia - three times more females than males in the Estonian sample. However, this is not an issue once the results have been re-weighted to gender and population</li> </ul>
	<ul> <li>France - gender information was not captured for all respondents who agreed to be interviewed but were screened out because they either did not travel or did not purchase tobacco products abroad. The French travel and purchase incidence results have therefore been weighted to age only, but purchase data to age and gender</li> </ul>
	<ul> <li>Italy - respondent targets were not met. Unfortunately this was not discovered until delivery of ND(L) results after the end of fieldwork. However, very low ND(L) purchase incidence in Italy means this is highly unlikely to have a significant impact on total ND(L) volumes</li> </ul>
	<ul> <li>Hungary and Lithuania - gender information was not captured for all gross respondents; therefore travel and purchase incidence is weighted by age only and not gender</li> </ul>
	<ul> <li>UK - the sample size in the UK was limited due to reluctance to participate in interview programme. Neither the gross respondent nor the net respondent targets were therefore reached in the UK. Given the low PMI brand share in the UK and non-signatory status, it was decided not to extend the overall project fieldwork phase for just this market</li> </ul>



### **Contents**

- Executive summary
- Project overview and timing
- Methodology
  - overview
  - limitations of results
  - country-specific refinements
- European cigarette market
- 2006 Project Star results
- Appendices

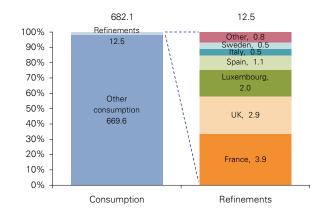


#### **Overview**

We have made some specific modifications to refine our results at a country level

The total scale of refinements is less than 2% of consumption

# Country flow adjustments versus total EU consumption ${\bf 2006}^{(1)}$



Source: (1) KPMG EU flows model

- Overall country results and flows from the EU flows model appear reasonable in nearly all instances
- Triangulation of results from alternative sources identified a very limited number of instances where the country-to-country flows appeared in need of minor adjustment
- Specific adjustments were made only where the balance of evidence from all sources both identified flows that the primary model had clearly understated and these flows could be corroborated to an appropriate level of accuracy
- Country adjustments are detailed on the following pages and were made to:
  - Denmark
  - Estonia
  - France
  - Ireland
  - Italy
  - Latvia
  - Luxembourg
  - Republic of Ireland
  - Slovakia
  - Spain
  - Sweden
  - UK
- The impact of these refinements was to reallocate the level of flows between countries and not to change non-domestic share
  - reallocated flows total 12.5 billion sticks, equivalent to 1.8% of total EU consumption



# **Country flow refinements (1 of 2)**

We have made specific modifications where required to refine our results at a country level

Country	Rationale	Description	Impact
Denmark	<ul> <li>Inbound flows not captured in ND(L) research are significant</li> </ul>	<ul> <li>Derived C&amp;C inflows from more expensive and neighbouring countries are more likely to be incidental flows from day tourists or people who work across the border than actual C&amp;C</li> </ul>	Flows from Sweden classified as ND(L) rather than C&C
Estonia	<ul> <li>Inbound flows not captured in ND(L) research are significant</li> </ul>	Derived C&C inflows from more expensive and neighbouring countries are more likely to be incidental flows from day tourists or people who work across the border than actual C&C	Flows from Lithuania classified as ND(L) rather than C&C
France	<ul> <li>PMI and consumer purchasing habits imply a higher inflow from Spain than EPS results suggest</li> <li>Implied EPS inflow from Luxembourg is low</li> <li>Minor issues in reconciling country-level flows from ND(L) research and EPS</li> </ul>	<ul> <li>Alternative estimates by PMI and Customer Purchasing Survey results imply an inflow from Spain in the region of 3 to 3.7bn sticks, compared to EPS results of 1.9bn sticks and ND(L) results of 2.3bn sticks</li> <li>Inflows from Spain uplifted by 1.5bn sticks to 4bn sticks</li> <li>Increased flows from Luxembourg of 0.59bn sticks</li> <li>Legal flows from the Belgium and Italy from the ND(L) research amount to more than was found in the EPS</li> <li>Reallocation of legal volumes from Italy of 0.49bn sticks and a reduction of legal volumes from Belgium of 1.31bn sticks</li> </ul>	<ul> <li>Non-domestic duty free reallocated to Spanish and Luxembourg non- domestic (no net effect on total non- domestic volume)</li> <li>Total levels of non-domestic and ND(L) remain the same, but a small re-assignment of some volumes at a country level</li> </ul>
Ireland	Spanish IMS implies EPS shortfall to Ireland	<ul> <li>See Spain for detail</li> <li>Inflows from Spain uplifted by 0.2bn sticks</li> </ul>	Non-domestic duty free reallocated to Spanish non-domestic (no net effect on total non-domestic volume)
Italy	<ul> <li>Unusually high incidence of Ukrainian L&amp;M</li> <li>Minor issues in reconciling country-level flows from ND(L) research and EPS</li> </ul>	<ul> <li>Ukraine L&amp;M EPS results re-weighted to adjust for the urban focus of this flow</li> <li>Legal flows from the Czech Republic, France and Spain from the ND(L) research amount to more than was found in the EPS</li> <li>Reallocation of legal volumes from the Czech Republic of 0.18bn sticks, France of 0.21bn sticks and Spain of 0.12bn sticks</li> </ul>	Total levels of non-domestic and ND(L) remain the same, but a small re-assignment of some volumes at a country level



# **Country flow refinements (2 of 2)**

We have made specific modifications where required to refine our results at a country level

Country	Rationale	Description	Impact
Latvia	<ul> <li>Inbound flows not captured in ND(L) research are significant</li> </ul>	Derived C&C inflows from more expensive and neighbouring countries are more likely to be incidental flows from day tourists or people who work across the border than actual C&C	Flows from Estonia and Lithuania classified as ND(L) rather than C&C
Luxembourg	<ul> <li>Outflows of legal domestic sales lower than anticipated</li> <li>Inbound flows not captured in ND(L) research are significant</li> </ul>	<ul> <li>Net outflow (modelled to outside of the EU) of 1.96bn sticks</li> <li>Derived C&amp;C inflows from more expensive and neighbouring countries are more likely to be incidental flows from day tourists or people who work across the border than actual C&amp;C</li> </ul>	<ul> <li>Net reduction of legal domestic consumption</li> <li>Flows from Belgium, France and Germany classified as ND(L) rather than C&amp;C</li> </ul>
Slovakia	Minor issues in reconciling country-level flows from ND(L) research and EPS	<ul> <li>Legal flows from the Czech Republic from the ND(L) research amount to more than was found in the EPS</li> <li>Reallocation of legal volumes from the Czech Republic of 140m sticks</li> </ul>	Total levels of non-domestic and ND(L) remain the same, but a small re-assignment of some volumes at a country level
Spain	<ul> <li>Analysis of Spanish consumption and outflows suggests an EPS shortfall to the UK and France</li> </ul>	<ul> <li>Outflows to the UK and Ireland increased to reflect sales of British brands in Spain, net of:         <ul> <li>estimated consumption by UK and Ireland nationals resident in Spain and tourist consumption whilst in Spain</li> </ul> </li> <li>Outflows to France increased as above</li> </ul>	Spanish LDS outflows increased resulting in a net reduction in consumption and therefore, total C&C volume
Sweden	Outflows to Norway unaccounted for	Net outflow to Norway of 0.5bn sticks as per results from Norwegian Border Sales document	Net reduction of legal domestic consumption
UK	Spanish IMS implies EPS shortfall to the UK	<ul><li>See Spain for detail</li><li>Inflows from Spain uplifted by 2.9bn sticks</li></ul>	Non-domestic duty free reallocated to Spanish non-domestic (no net effect on total non-domestic volume)



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# **Contents**

- Executive summary
- Project overview and timing
- Methodology
- European cigarette market
  - 2006 market overview
  - smoking trends
- 2006 Project Star results
- Appendices

#### **Overview**

Legal sales of cigarettes in the EU totalled 639 billion sticks in 2006

#### The European cigarette market is concentrated in a small number of countries and led by PMI brands

- The seven largest EU markets account for 76% of total cigarette sales
  - of these, Italy, Germany and Spain each account for more than 90 billion sticks
- Marlboro and L&M between them occupy market leading positions in 16 of the 25 EU markets
  - other market leaders are country specific, with no other brand occupying the number one spot in more than one market

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

The pricing and legislative environment for cigarettes has tightened across the EU over the last several years as a result of domestic policy and pressure on new member states to achieve a minimum level of cigarette taxation

- Over the last 10 years, prices have increased in 23 of the 25 EU markets
- An increasing amount of legislation has been introduced, limiting smoking in public places and preventing manufacturers from advertising their products in a growing number of media formats

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

- Over the last three years only four countries have experienced an increase in smoking prevalence and only seven countries have seen an increase in average daily consumption
  - only Slovenia has experienced an increase in both prevalence and average consumption

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

#### Total EU sales entered a period of steady decline in 2002

- EU cigarette sales were relatively flat until 2002 but have subsequently declined at a rate of 3.7% per annum
  - the majority of this decline can be attributed to Germany and France, which declined by 10.2% and 8.8% per annum respectively
  - most other members of the EU 15 also experienced declining sales, while seven of the EU 10 have seen an increase in sales

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

#### The relationship between changes in consumption and changes in sales differs substantially between markets

- Although the majority of markets have experienced a decline in consumption, the impact on legal sales differs markedly between markets
  - markets such as Germany and France, which have seen recent rapid price increases making them relatively expensive markets, have experienced more rapid sales decline than can be explained by the decrease in consumption

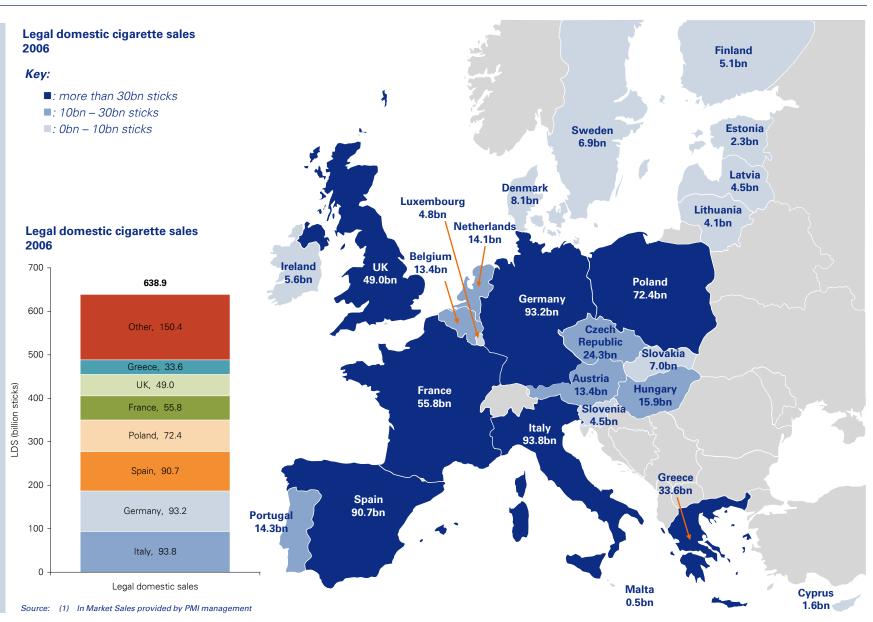
#### These differences point towards a significant and fluctuating cross-border trade in cigarettes

- It is likely that markets where sales have declined more rapidly than consumption have experienced a growing penetration of non-domestic cigarettes
  - in contrast, markets such as the Czech Republic and Poland, which remain relatively low priced markets despite price increases, have experienced steady or growing sales despite declining consumption
  - markets where sales have increased or declined more slowly than consumption are likely to be among the corresponding source markets for these non-domestic flows



### Legal domestic sales by country

Despite falling sales, the seven biggest markets still account for over threequarters of total EU legal cigarette sales





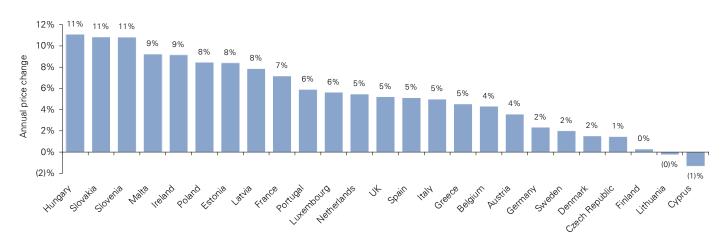
## **Contents**

- Executive summary
- Project overview and timing
- Methodology
- European cigarette market
  - 2006 market overview
  - smoking trends
- 2006 Project Star results
- Appendices

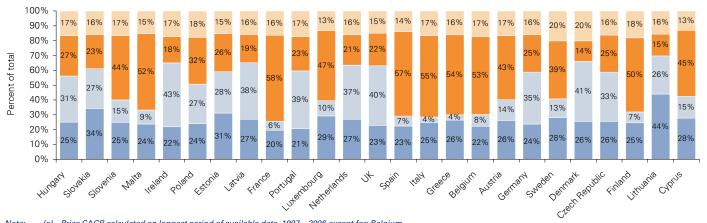
#### Price and tax breakdown

Prices have increased substantially across the EU, largely driven by increases in cigarette taxes

# Average annual price change 1997 – 2006<sup>(1)(a)</sup>



## Pack price breakdown of the MPPC 2006<sup>(2)</sup>



Note: (a) Price CAGR calculated on longest period of available data, 1997 – 2006 except for: Belgium, Ireland and Luxembourg (from 1998); Malta (1999); Hungary (2000); Finland (2002); Cyprus and Sweden (2003); and Denmark, Estonia, Latvia and Lithuania (2004)

Source: (1) Weighted average price data supplied by PMI management

(2) TMA website, www.the-tma.org.uk



VAT

Ad valorem tax

■ Manufacturer and trade take

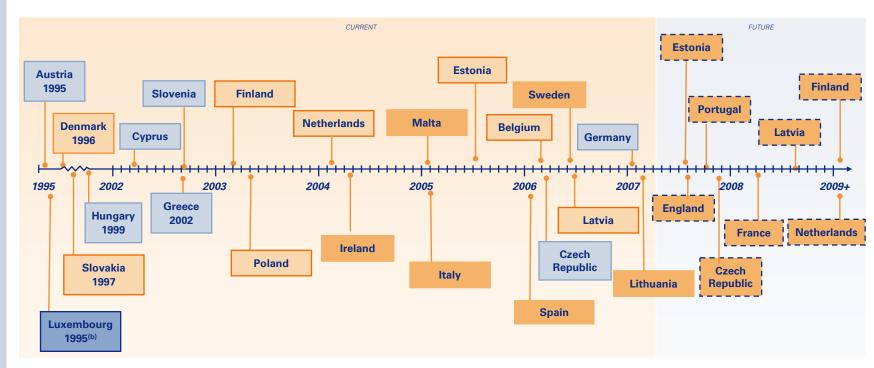
Specific tax

### **Smoking restrictions**

There has also been significant legislation to date limiting smoking in public places

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

#### Smoking legislation time-line(1)(a)



Key:

Minimal smoking restrictions - no smoking restrictions

Partial smoking restrictions - no smoking in government buildings, public transport, schools

Moderate smoking restrictions – partial smoking restrictions plus no workplace smoking

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

Denotes future smoking restrictions

Note:

(a) Restrictions shown are most stringent or most recent

(b) Luxembourg introduced a partial smoking restriction in the European Parliament buildings,

but has failed to enforce it

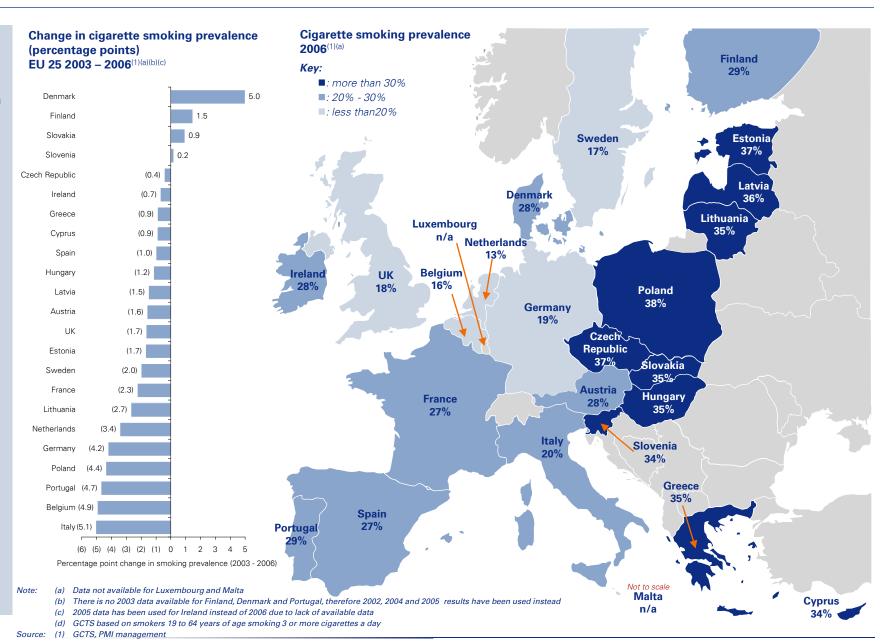
Source: (1)

(1) Press articles and other open-source research



### **Smoking prevalence**

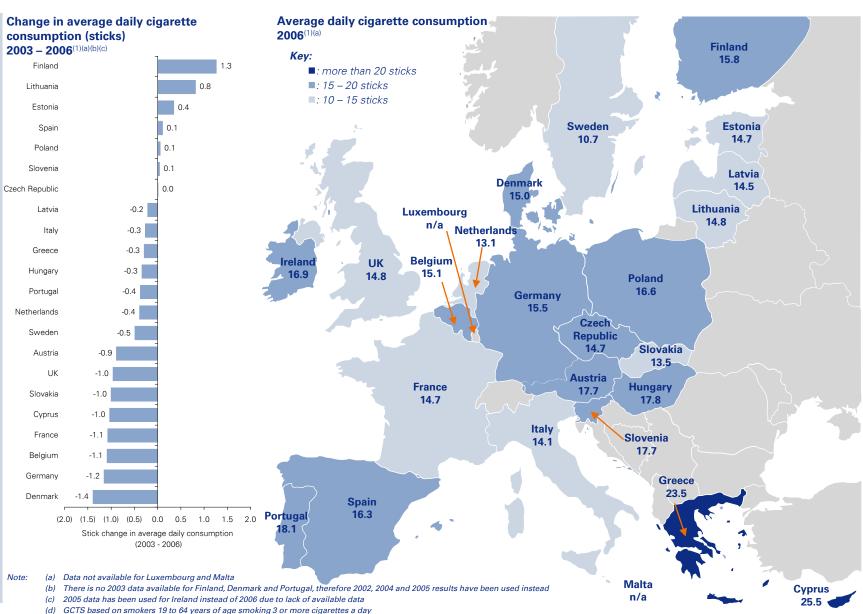
Some of the impact of increasing prices and the introduction of smoking restrictions can be seen in declining smoking prevalence across the large majority of markets





### Average daily cigarette consumption

Average daily consumption of cigarettes has also been declining in most markets



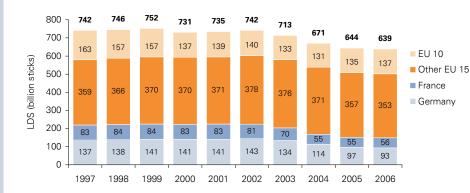


Source: (1) GCTS, PMI management

### **Legal sales trends**

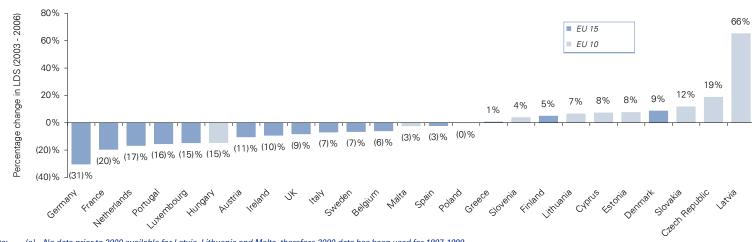
Prevalence and daily consumption declines have been key drivers of overall legal sales declines

These have been most marked in the EU 15 markets, and particularly France and Germany, since 2002 Historic legal domestic cigarette sales for EU 25 1997 – 2006<sup>(1)(a)</sup>



Total	0.7%	(0.5)%	(3.7)%
<ul><li>Germany legal sales</li></ul>	1.5%	0.5%	(10.2)%
France legal sales	0.4%	(1.3)%	(8.8)%
<ul> <li>Other EU 15 legal sales<sup>(b)</sup></li> </ul>	1.5%	0.7%	(1.7)%
EU 10 legal sales	(1.8)%	(3.9)%	(0.4)%
CAGR (%)	1997-99	1999-02	2002-06

# Percentage change in legal domestic cigarette sales for EU 25 2003 – 2006<sup>(1)</sup>



nte: (a) No data prior to 2000 available for Latvia, Lithuania and Malta, therefore 2000 data has been used for 1997-1999

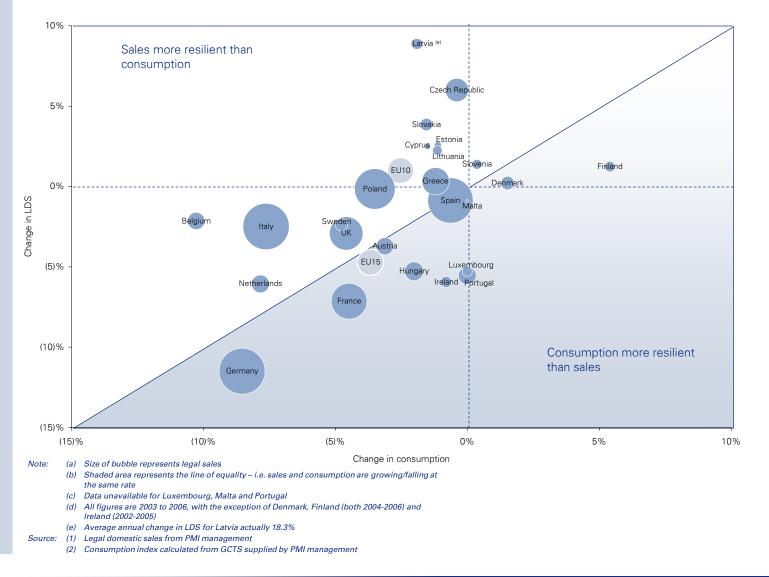
(b) Total sales in EU 15 less Germany and France

Source: (1) In Market Sales provided by PMI



### Sales and consumption trends

However, analysis of cigarette consumption patterns shows that legal sales trends can only explain part of the picture Change in legal cigarette sales versus change in cigarette consumption 2003 – 2006  $^{(1)(2)(a)(b)(c)(d)}$ 

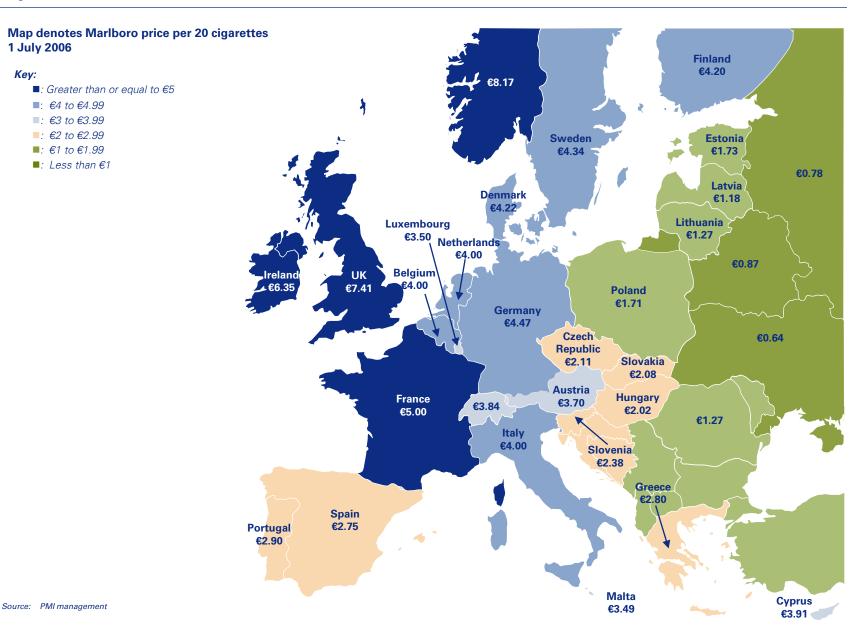




### Marlboro price comparison

Despite ongoing moves to align cigarette prices and taxes, retail prices vary markedly across the EU, with a pack of Marlboro costing from €1.18 in Latvia to over six times as much in the UK at €7.41

Furthermore, prices are even lower in many of the markets which border the EU, such as the Ukraine and Russia





### **Contents**

- Executive summary
- Project overview and timing
- Methodology
- European cigarette market
- 2006 Project Star results
  - total non-domestic
  - counterfeit & contraband
  - seizures
- Appendices



#### **Overview**

Non-domestic cigarette consumption in the EU totals 88 billion cigarettes

#### The non-domestic component is equivalent to 12.9% of total EU cigarette consumption

- Non-domestic consumption is concentrated in the large, higher priced markets of Western Europe
  - the three largest non-domestic markets, Germany, France and the UK, account for 57% of EU non-domestic consumption
  - markets which have experienced recent rapid price increases tend to have a relatively high penetration of non-domestic cigarettes
- Major source countries include EU markets such as Spain, Poland, the Czech Republic and Luxembourg as well as other low priced countries such as the Ukraine and Russia
  - international brands, such as Marlboro, and brands popular in Eastern Europe, such as L&M, are well represented in non-domestic consumption

Legal cross-border shopping amounts to 31 billion cigarettes

#### Approximately one third of non-domestic consumption enters the destination country legally, equivalent to 4.5% of total cigarette consumption

- ND(L) consumption is very highly concentrated in large expensive markets
  - Germany, France and the UK account for 70% of total ND(L) consumption
- Key sources of ND(L) are other EU markets and the most popular brand is Marlboro

The illegal element of nondomestic consumption totals 57 billion cigarettes

#### Almost two thirds of non-domestic consumption is illegal, equivalent to 8.3% of total consumption

- C&C consumption is less concentrated on major markets than ND(L) and a higher proportion originates from outside the EU
  - the top seven markets account for 75% of C&C consumption
  - the top two source markets are Russia and the Ukraine
- As a result of the methodology used, estimated C&C volumes will include both small-scale bootlegging and major smuggling operations

Seizures are a limited indicator of the penetration of illegal cigarettes

#### Seizure volumes are likely to be partially representative at best of underlying C&C trends in market

- The counterfeit share of seizures is substantially higher than the counterfeit share of C&C consumption
- Interception rates are driven by several country specific factors
- Seizures do not necessarily take place in the market where the product is intended for consumption, limiting their use in estimating C&C consumption

47



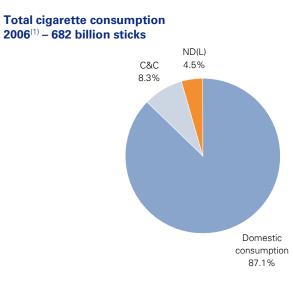
### **Contents**

- Executive summary
- Project overview and timing
- Methodology
- European cigarette market
- 2006 Project Star results
  - total non-domestic
  - counterfeit & contraband
  - seizures
- Appendices

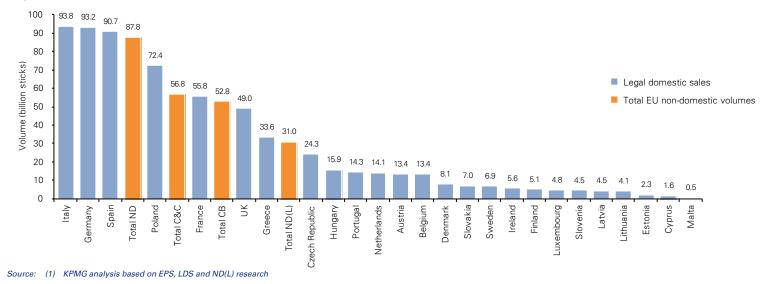
### Non-domestic overview

Non-domestic cigarettes account for 13% of European consumption

Nearly 60% of nondomestic flows are illicit, which includes small scale bootlegging as well as organised smuggling



# Legal domestic cigarette sales by market versus total EU non-domestic cigarette volumes 2006<sup>(1)</sup>

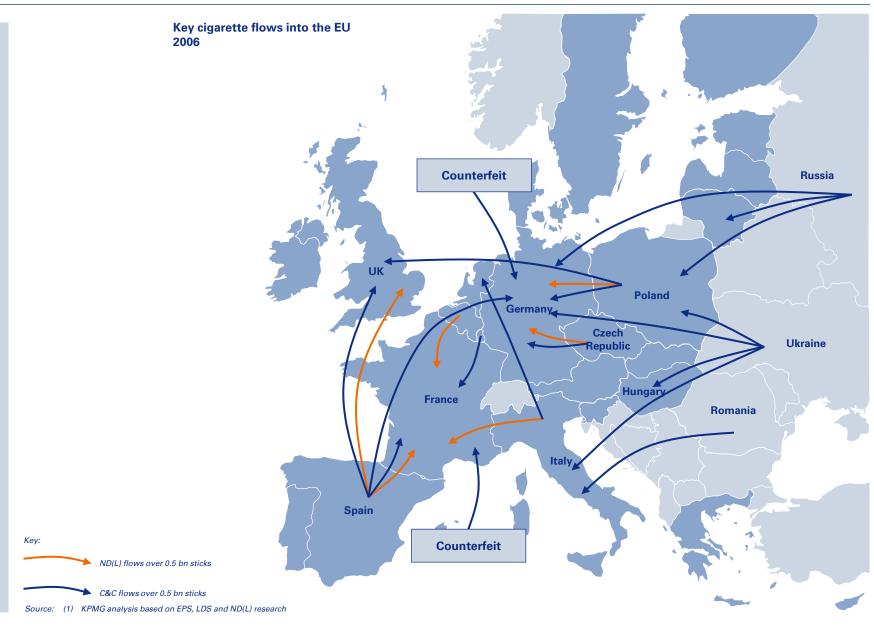




# **Major non-domestic flows**

Flows of illicit products appear substantially more complex than legal flows

Germany, France and the UK are key destination markets, while Ukraine and Russia are major source markets

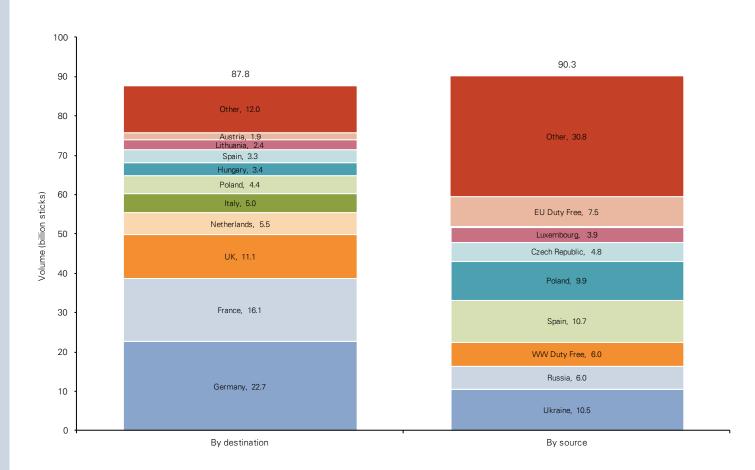




## **Total EU non-domestic cigarette market**

The large western
European markets
dominate non-domestic
inflows

Non-domestic cigarettes by country of origin and destination  $\textbf{2006}^{(1)}$ 



Note: (a) The 2.5bn stick difference represents outflows from Sweden to Norway and unallocated outflow from Luxembourg

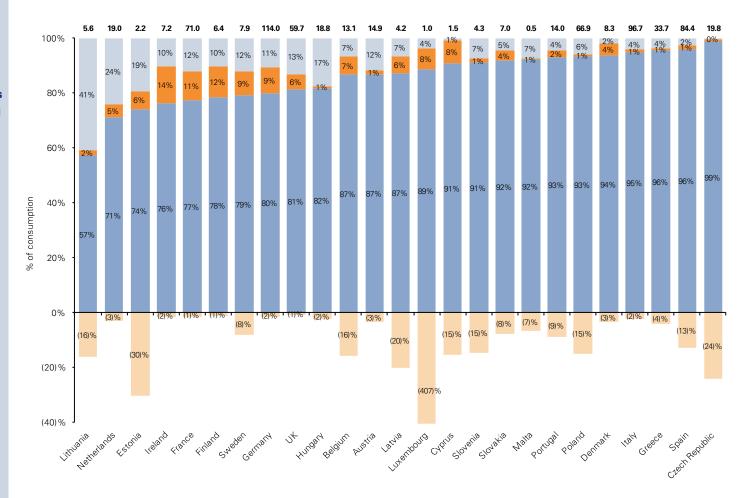
Source: (1) KPMG analysis based on EPS, LDS and ND(L) research



### Non-domestic and consumption overview by market

Non-domestic share of consumption varies from 1% to 43% across the EU

Complexity of flows can be seen by the fact that all 25 countries have outflows of cigarettes within the EU Total cigarette consumption by category 2006<sup>(1)</sup>



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



Outflows

■C&C ■ND(L)

■LDC

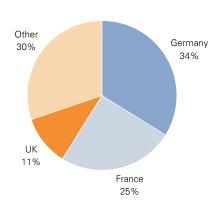
### ND(L) overview

Germany, France and the UK account for 70% of total ND(L). 43% of ND(L) comes from Poland, Spain and the Czech Republic

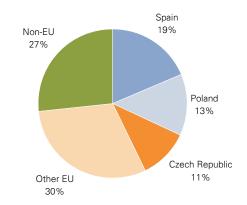
Ireland, Finland and France are the only markets where ND(L) is more than 10% of consumption

PMI products account for 38% of ND(L)

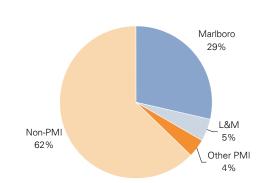
EU ND(L) cigarette volumes by destination 2006<sup>(1)</sup> – 31.0 billion sticks



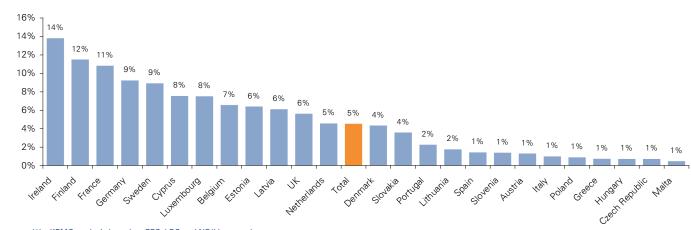
# EU ND(L) cigarette volumes by source 2006<sup>(1)</sup>



## EU ND(L) cigarette volumes by brand 2006<sup>(1)</sup>



# ND(L) share of cigarette consumption within each market $\mathbf{2006}^{(1)}$



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



## **Contents**

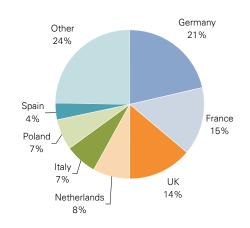
- Executive summary
- Project overview and timing
- Methodology
- European cigarette market
- 2006 Project Star results
  - total non-domestic
  - counterfeit & contraband
  - seizures
- Appendices

#### **C&C** overview

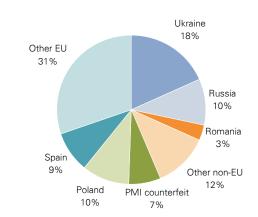
Germany, France and the UK account for half of total C&C inflows

Ukraine is the largest source market

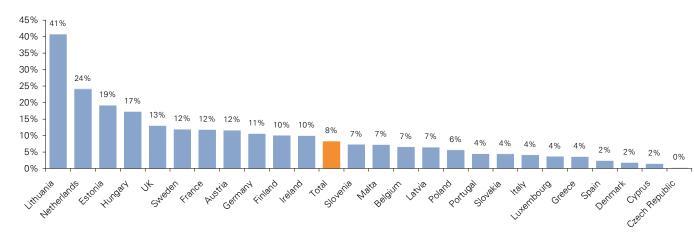
**EU C&C** cigarette volumes by destination 2006<sup>(1)</sup> – 56.8 billion sticks



EU C&C cigarette volumes by source 2006<sup>(1)</sup>



C&C share of cigarette consumption within each market  $\textbf{2006}^{(1)}$ 



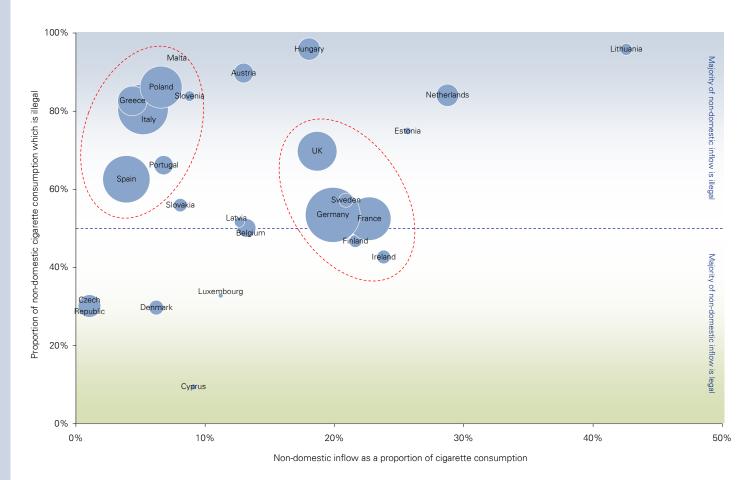
Source: (1) KPMG analysis based on EPS, LDS and ND(L) research



## Comparison of non-domestic incidence versus C&C share

C&C accounts for over half of non-domestic consumption in the majority of markets

The main EU markets appear to fall into two clusters, with northern European and Mediterranean markets displaying different characteristics Non-domestic share versus C&C share 2006<sup>(1)(a)</sup>



Note: (a) Size of bubble represents total consumption

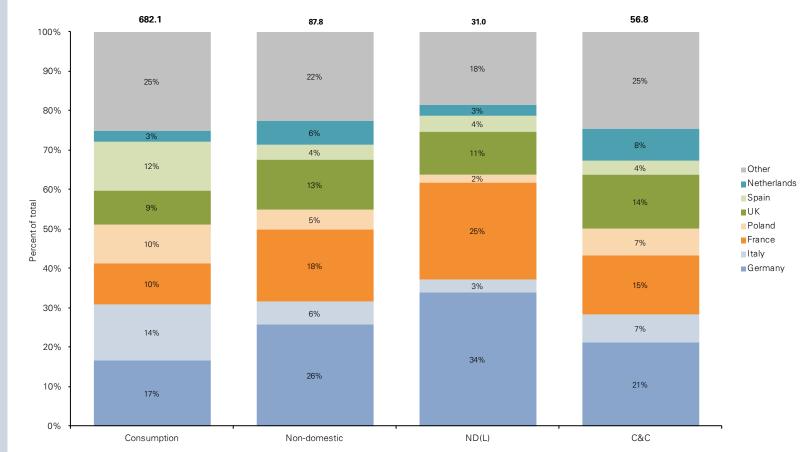
ce: (1) KPMG analysis based on EPS, LDS and ND(L) research



## Top seven market share

Seven key markets dominate across all categories and account for over 70% of volume

# Proportion of total EU cigarette volume from top seven markets $\mathbf{2006}^{(1)}$



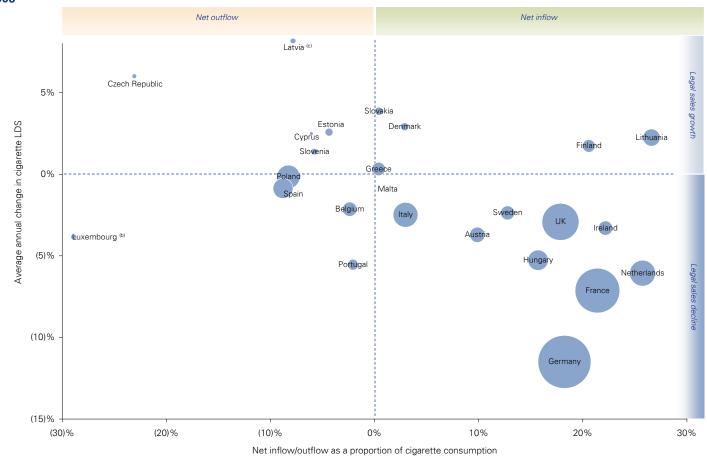
Source: (1) KPMG analysis based on EPS, LDS and ND(L) research



### Legal sales and inflows / outflows

The majority of the markets with declining legal cigarette sales are net inflow countries, showing that at least part of the sales decline has been offset by non-domestic purchases

# Percentage change in cigarette LDS (2003 – 2006) versus net inflow/outflow 2006



(a) Size of bubble represents total non-domestic volume

(b) Luxembourg net outflow of (396)%

(c) Latvia average annual growth of 18%

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



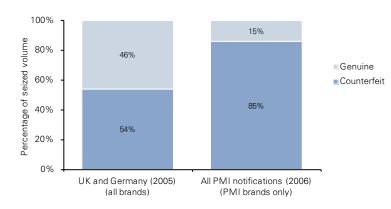
## **Contents**

- Executive summary
- Project overview and timing
- Methodology
- European cigarette market
- 2006 Project Star results
  - total non-domestic
  - counterfeit & contraband
  - seizures
- Appendices

#### **Counterfeit share of seizures**

Over half of seized cigarettes are counterfeit, driven by much larger average seizure sizes

# Counterfeit share of cigarette seizures Total UK and Germany 2005<sup>(1)(2)(a)</sup>



# Counterfeit products account for the majority of seized cigarettes in the EU

- Just over half of all cigarettes seized in the UK and Germany in 2005 were counterfeit
  - the breakdown of seizures by type is not publicly available for other markets

# Counterfeit cigarette seizures tend to be significantly larger than seizures of genuine products

- Anecdotal evidence suggests that counterfeit is more likely to be transported in large shipments such as containers
  - ready availability of cheaper genuine product in other markets means this can be moved in large numbers of smaller shipments

te: (a) HMRC in the UK reports seizures for the year ended April 2006

: (1) Information received from ZKA

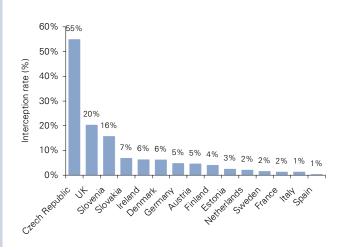
(2) HMRC Annual Report 2005-06



### **Interception rate**

Interception rates are affected by a wide range of factors and vary markedly across countries

# Implied interception rate of all C&C cigarettes by market 2005 and 2006 $^{(1)(2)(a)}$



# Interception rates appear to be substantially higher for counterfeit cigarette products

- The techniques available to Customs, such as container profiling and container scanning, also increase the likelihood of large counterfeit seizures
  - small-scale bootlegging of genuine product by individuals is also very difficult to intercept in significant volumes

#### Implied interception rates vary significantly by country and reflect several factors in addition to the volume of illicit consumption

- Each EU country faces a unique set of challenges in terms of border control
  - removal of controls at intra-EU borders
  - long land borders are likely to be more difficult to control than coastal borders
- In addition, the implied interception rate may not be representative of the actual rate if significant volumes of illicit cigarettes transit through the country
  - for example, significant volumes of cigarettes are known to transit through the Czech Republic to Germany, which is reflected in seizure volumes but not in consumption of C&C, thereby inflating the seizure rate in the Czech Republic

Note:

(a) Seizure data is 2005. C&C estimate is 2006

Source:

(1) Finance ministries, Customs reports and interviews with Customs representatives

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



## **Contents**

- Executive summary
- Project overview and timing
- Methodology
- European cigarette market
- 2006 Project Star results
- Appendices
  - country results
  - other tobacco products
  - sources

## **Contents – country detail**

- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

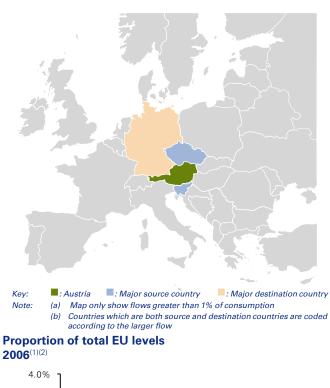
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
- UK



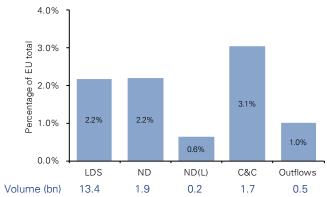
### **Overview**

13% of Austrian consumption is nondomestic

Duty free product is a major component of **Austrian inflows** 

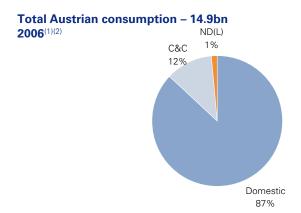


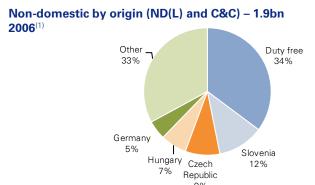
## 2006(1)(2)



Sources: (1) KPMG EU flows model

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







#### **Market context**

Austria introduced a minimum price in May 2006 to address the proliferation of ultra-low price brands



#### **Pricing**

- Austria introduced a minimum price in May 2006
  - the minimum price was set at €3.25
- The use of minimum pricing is currently being challenged by the European Commission
- Prices in Austria are lower than its Western neighbours but significantly higher than countries to the East
  - prices vary significantly by channel:
     Marlboro is priced at €3.80 in licenced retailers but approximately €4.20 in gas stations and €4.80 in restaurants

#### Market segmentation

- Price competition from the end of 2005 resulted in a proliferation of brands below €3.00 and increased the market share of the sub €3.30 segment by a factor of three
  - this trend has been reversed following the introduction of the minimum price
- The majority of the market is distributed by Tobaccoland, a subsidiary of Gallaher
  - Tobaccoland's share of distribution fell from 99% to 95% in 2006 when BAT switched to an alternative distributor

#### **Enforcement**

- Austrian residents are restricted to 25 cigarettes per person when entering the country from one of the neighbouring new EU countries
  - non-Austrian residents are limited to 200
- A counterfeit factory was uncovered in Austria in 2006, although it had not been operating since 2003

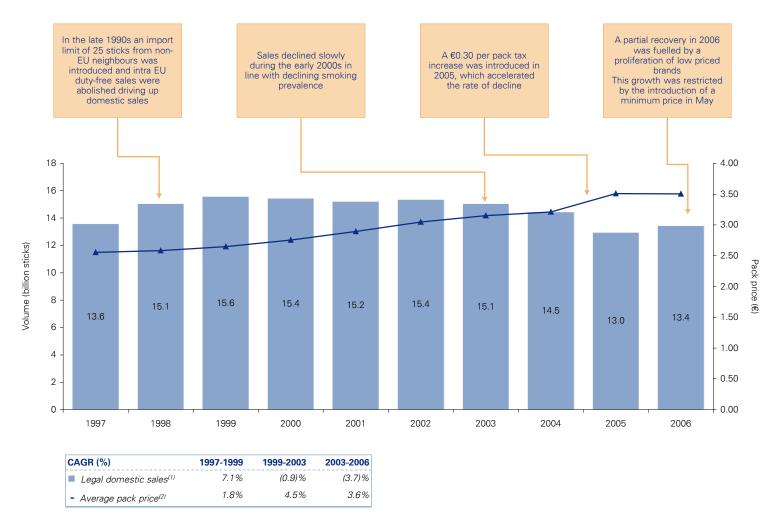
#### Social and legal

- Austria has the second highest smoking prevalence in the EU at 37%
  - anti-smoking legislation covers public buildings and transport but not workplaces
- The retail trade is divided between specialist licenced tobacconists and unlicenced retailers including gas stations and restaurants
  - licenced retailers are able to purchase stock at wholesale and sell at fixed prices, whereas unlicenced retailers buy at retail prices and add a margin



### Historic sales and pricing trends

The Austrian legal market has partly recovered through a change in the mix towards lower priced brands following a tax increase in 2005 Historic cigarette prices and legal domestic sales 1997 - 2006



Sources: (1) In Market Sales supplied by PMI

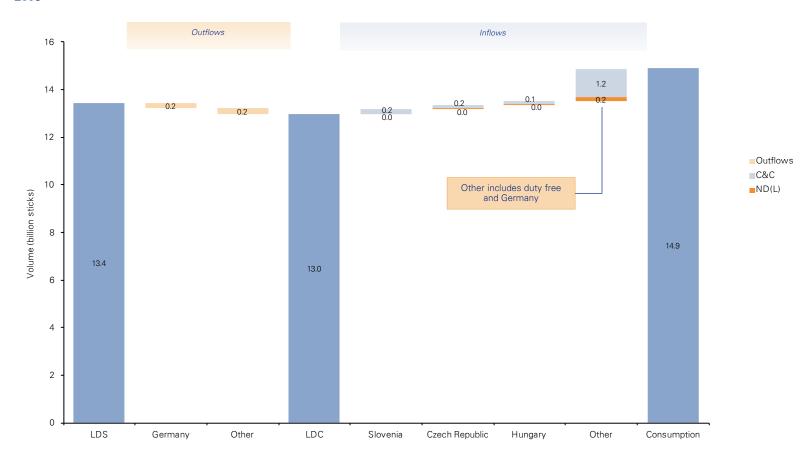
(2) Weighted average pack price supplied by PM Austria management



### Inflows and outflows

Austrian consumption is estimated at 14.9 billion sticks versus legal sales of 13.4 billion, a net inflow of 1.5 billion sticks

# Consumption breakdown 2006<sup>(a)(b)(1)(2)</sup>



lotes: (a) LDS – Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

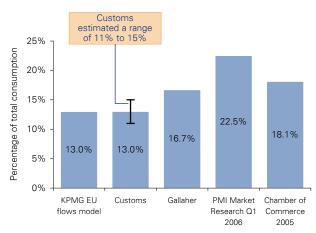
(2) Synovate ND(L) research, December 2006



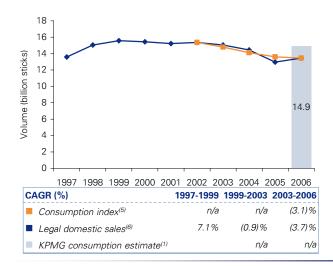
#### Comparison of sources for non-domestic estimates

Our estimate of the nondomestic market share is in line with that from Customs, and implies a decline in inflows consistent with the recovery in the domestic market seen in 2006

## Non-domestic market share estimates 2006 unless otherwise stated (1)(2)(3)(4)



# Consumption modelling 1997 – 2006



#### KPMG's estimate of the non-domestic market share is in line with Customs' expectations and implies a decline in the non-domestic share since 2005

- Customs' estimate of the non-domestic market is based on studies undertaken by the Ministry of Finance as well as the Chamber of Commerce
  - our estimate is in the middle of the range identified by Customs
- An empty pack study carried out by the Chamber of Commerce in 2005 implies a non-domestic market share significantly higher than our own estimate
  - this is consistent with a peak in the non-domestic market share in 2005 following a tax increase, and before the entry of ultra-low priced brands
  - a decline in the non-domestic share during 2006 may also explain the difference between our estimate and Gallaher's if their research was carried out earlier in the year, although we have received no details of the methodology used to produce this estimate
- The estimate from PMI Market Research is based on analysis of historic sales trends and was intended only as an interim estimate between empty pack studies

# Consumption modelling supports a decrease in the non-domestic market between 2005 and 2006

- Comparison of legal sales to changes in the consumption index suggests that the size of the non-domestic market is not significantly greater in 2006 than in 2002
  - we do not have sufficient historical data to perform the comparison over a longer period of time, when we would expect to see the nondomestic share increase
- Modelling suggests that the decline in legal sales in 2005 and the recovery in 2006 was not driven by changes in consumption
  - this is supportive of an increase in non-domestic consumption in 2005 and a decrease in 2006, as discussed above

Source: (1) `KPMG EU flows model

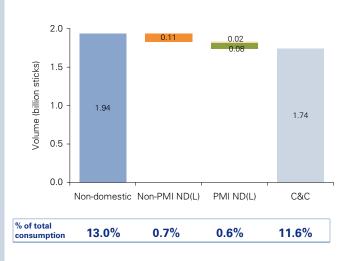
- (2) Interview with Austrian Customs
- (3) PMI Market Research based on historic market trends, 2006
- 4) Austrian Chamber of Commerce empty pack survey, published April 2006
- (5) KPMG consumption index modelling
- (6) In Market Sales supplied by PMI



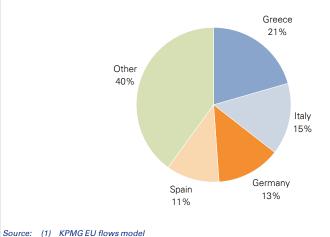
## Non-domestic (legal) results

ND(L) accounts for a relatively small proportion of non-domestic consumption and is mainly purchased in popular holiday destinations





# **ND(L)** by origin **2006**<sup>(2)</sup>



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





Other PMI

■ Non-PMI

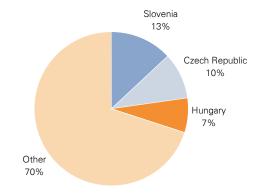
Total

■ MARLBORO

## **Counterfeit and contraband breakdown**

Bordering new EU members among the main sources

# C&C by origin (excluding PMI counterfeit) 2006 $^{(1)(2)}$



Source: (1) KPMG EU flows model

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



## **Contents – country detail**

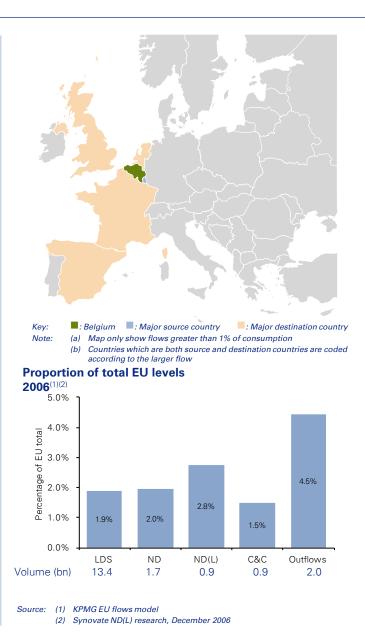
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- Czech Republic
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- Greece
- Hungary
- Ireland
- Italy

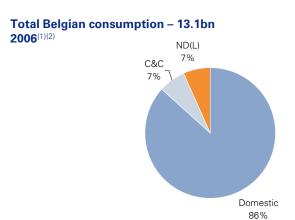
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- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

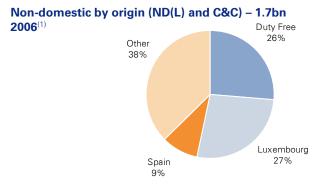


### **Overview**

Belgium is a source country for several EU markets, but also experiences significant inflows









### **Market context**

Taxes are expected to be increased significantly in 2007, which may result in an increase in the non-domestic share of the market



#### **Pricing**

- Belgium abolished its minimum price legislation in 2006 under pressure from the European Commission
  - however, a tax increase in March 2007 resulted in a price increase of more than €0.50 for premium brands
- During 2006 prices were lower than those in France and Germany but higher than in Luxembourg
- Belgium has a low specific tax component, at only 10% of the cigarette tax burden

#### Market segmentation

- Rolling tobacco is an important segment of the Belgian tobacco market with approximately 12 billion stick equivalents sold in 2006
  - this represents approximately 48% of the legal tobacco market
- The low priced segment has gained market share from both the medium and premium segments over the last three years, increasing from 6.9% of the market in 2004 to 20.5% in 2006
  - Belgium's tax structure favours low priced brands
- Larger pack sizes are a significant part of the Belgian market with 19s and 20s accounting for less than half of cigarette sales

#### **Enforcement**

- Customs focuses on combating smuggling through the port of Antwerp, which is a major route into the EU for large shipments of counterfeit cigarettes from China
  - Belgian authorities frequently work closely with other member states to track illegal shipments to their final destination and arrest all the involved parties
- Belgium is a transit country and shipments intended for other markets account for a large proportion of seizures
  - outflows to other countries are also relatively important to the legal market

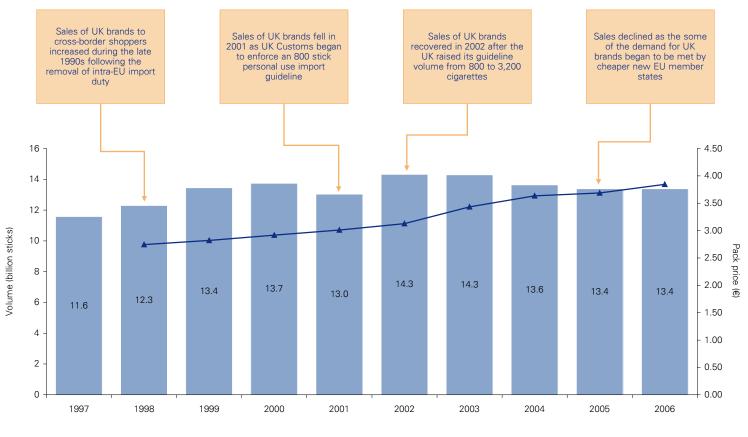
#### Social and legal

- Belgium passed a law in 2006 to mandate pictorial warnings on cigarette packs
  - manufacturers began to produce pictorial packs in November 2006 and these must be present on all retail packs by June 2007
  - pictorials are not mandated on packs of rolling tobacco
- In January 2007 Belgium introduced an antismoking law prohibiting smoking in bars and restaurants where food is served
  - a ban on smoking in offices came into effect in January 2006



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

Cigarette sales since 2003 have been affected by a declining trend in the number of smokers in Belgium Historic cigarette prices and legal domestic sales 1997 - 2006



CAGR (%)	1997-2002 <sup>(a)</sup>	2002-2006
Legal domestic sales <sup>(1)</sup>	4.3%	(1.7)%
- Average pack price <sup>(2)</sup>	3.3%	5.3%

Note: (a) Average pack price CAGR is 1998 to 2002

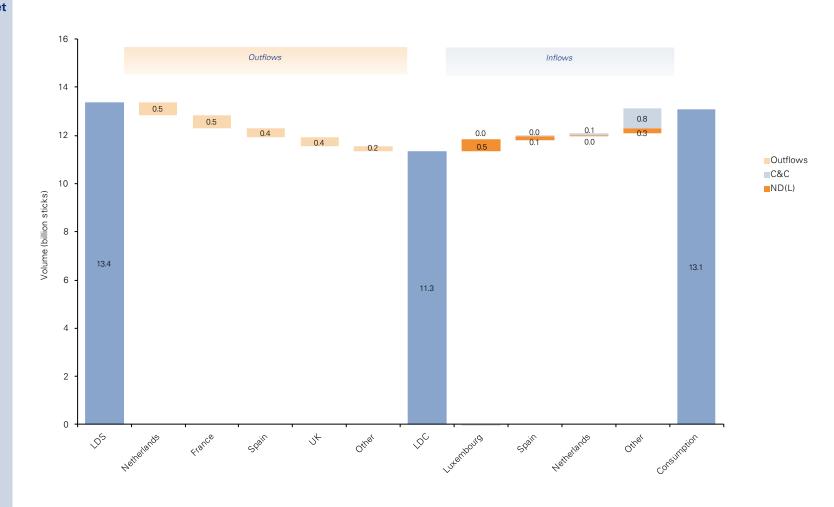
Source: (1) Tax stamp data supplied by PM Benelux management and Ministry of Finance



### Inflows and outflows

Belgian consumption of 13.1 billion sticks is the net result of a 2 billion stick outflow balanced by an equal inflow

## Consumption breakdown 2006<sup>(a)(b)(1)(2)</sup>



Notes: (a) LDS – Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

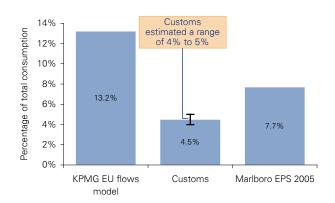
(2) Synovate ND(L) research, December 2006



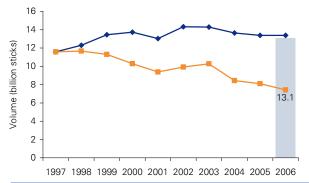
### Comparison of sources for non-domestic estimates

There are no robust external estimates of the non-domestic share of the market

## Non-domestic market share estimates 2006 unless otherwise stated (1)(2)(3)



## Consumption modelling 1997 – 2006



CAGR (%)	1997-2002	2002-2006
Consumption index <sup>(4)</sup>	(3.0)%	(7.0)%
■ Legal domestic sales <sup>(5)</sup>	4.3%	(1.7)%
KPMG consumption estimate <sup>(1)</sup>	n/a	n/a

## Customs' estimate of non-domestic market share is based on an estimate for the Netherlands performed by Dutch Customs

- Belgian Customs has not performed its own measurement of the scale of non-domestic consumption and assumed that the market share in Belgium is similar to the Netherlands, where customs has estimated a 5% market share
  - however, Dutch Customs has indicated that its estimate includes only illegally imported cigarettes and is therefore likely to underestimate the total market
  - in addition, our results suggest a significant understatement of the non-domestic market share by Dutch Customs

## Our estimate is significantly higher than the non-domestic share implied by a Marlboro only empty pack study performed in 2005

- The Marlboro results from the 2006 pack collection indicate a nondomestic share of Marlboro packs of 11.7%, and is likely to be more reliable than the 2005 study due to a larger sample size
  - the sample size of the 2005 pack collection was limited to 1,000 packs, compared to 4,520 Marlboro packs in the 2006 study
- In addition to its larger sample size, the non-domestic share of the 2006 study is raised by the inclusion of L&M packs, 21% of which were nondomestic
- We note that our results for Belgium are based on a PMI-only empty pack survey and that there is no corroboration available for the non-domestic share of non-PMI brands

## Consumer tracking data imply that outflows from Belgium have become increasingly important relative to inflows

- Domestic sales increased between 1997 and 2006, in contrast to a substantial decline in the consumption index
  - this implies a shift in the balance of inflows and outflows, with outflows becoming relatively more important
  - however, the magnitude of the change is only indicative as the consumption tracking data is highly volatile

Source: (1) KPMG EU flows model

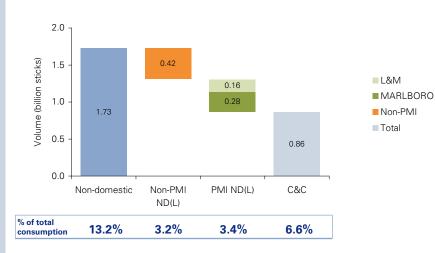
- (2) Interview with Belgian Customs
- (3) PMI Marlboro empty pack study, Q3 2005
- (4) KPMG consumption index modelling
- (5) Tax stamp data supplied by PMI and Ministry of Finance



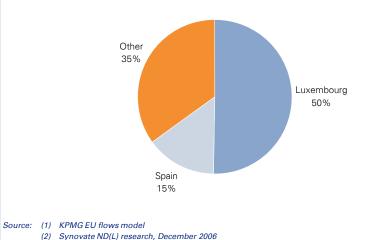
## Non-domestic (legal) results

Luxembourg is the primary source of ND(L) purchases





## **ND(L)** by origin **2006**<sup>(2)</sup>



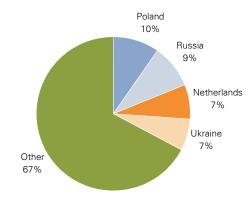




## Counterfeit and contraband breakdown

Principally originates in Eastern Europe

## C&C by origin (excluding PMI counterfeit) 2006 $^{(1)(2)}$



Source: (1) KPMG EU flows model

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



## **Contents – country detail**

- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

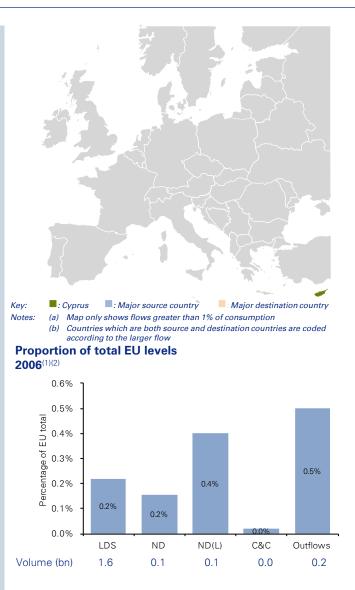
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
- UK



### **Overview**

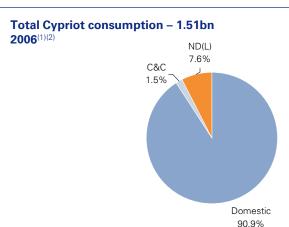
Domestic sales account for a high proportion of consumption, with approximately 10% of cigarettes either legal foreign purchases or illegal product

Duty Free is the leading channel for purchasing non-domestic cigarettes with Marlboro the leading brand purchased

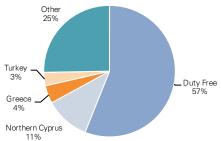


Sources: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006



Non-domestic by origin (ND(L) and C&C) – 0.14bn 2006  $^{(1)}$ 





### **Market context**

The market remained relatively stable in 2006 with no price increases or new government legislation enforcing any change in the current environment

Greater levels of immigration to the island are ensuring the total market remains relatively stable



#### **Pricing**

- There were no cigarette price or excise tax changes in 2006
- The last significant price increase was in May 2004, simultaneously with the change of the excise tax regime in Cyprus (from a multi-tier to an EU compliant regime), where the MPPC price increased at the level of 1.65 CYP/20 and remained stable since them
- It can be noted that Marlboro's latest maximum RSP increase took place in Oct. 2003 from 2.00 CYP/20 to 2.25 CYP/20.

#### **Market segmentation**

- Over 80% of all cigarette sales are via convenience stores and grocery outlets
- Tourists purchase an average of 250 million cigarettes per year
- Historically, British American Tobacco (BAT) brands have dominated the market in Cyprus, however PMI brands (13% increase in 2006 vs. 2005), Gallaher and Imperial are gaining share

#### **Enforcement**

- In February 2005, the EU Commission and the Cypriot government reached an agreement between the island's divided Republic of Cyprus and Turkish Cypriot community allowing 40 cigarette sticks per trip from the Turkish Cypriot area to be brought into the Republic of Cyprus side
  - shopping buses now run between Ayia
     Napa to open air markets in the Turkish
     Cypriot Community where cigarette prices are much cheaper
- In 2006, the most significant seizure was the discovery of 50,000 packs of contraband cigarettes that were hidden in furniture in a shipping container that had arrived from Dubai

#### Social and legal

- Smoking incidence and average daily consumption is high (34.2% and 25.2 respectively 2005 GCTS data)
- Cypriot anti-smoking laws currently prevent smoking in all public places, including public transport
  - smoking is also banned in private cars carrying passengers under 16, but remains regulated in workplaces
- Post 2004, the influx of immigrants to Cyprus from Asia and from new EU accession countries has helped maintain high levels of sales

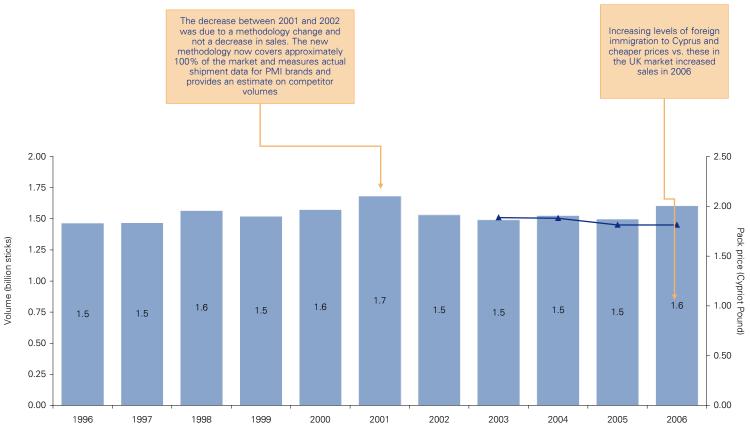


### Historic sales and pricing trends

Historically, cigarette sales in Cyprus have remained relatively flat. However, in 2006 the market grew by over 7%

Higher levels of immigration to the Island and comparably cheaper prices have been the key drivers of growth within the domestic market





CAGR (%)	1996 - 2003	2003 - 2005	2005 - 2006
Legal domestic sales <sup>(1)</sup>	0.3%	0.3%	7.1%
- Average pack price <sup>(2)</sup>	n/a	(2.0)%	(0.02)%

(a) Actual shipment data and a PMI estimate for competitors was used to measure LDS in 2003 to 2006, while 1996 – 2003 data is from actual shipment data for PMI and where possible competitor information

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PMI Greece management - based on estimates



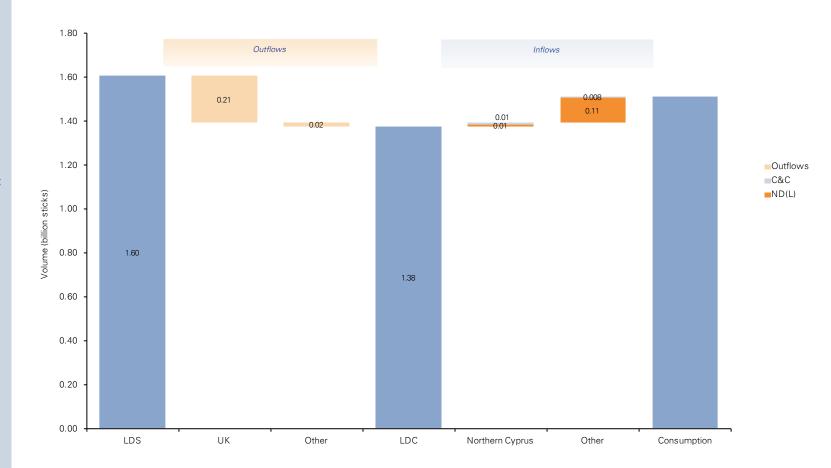
### Inflows and outflows

Cyprus consumption is estimated at 1.51bn sticks versus legal sales of 1.6bn sticks, a net outflow of 0.09bn sticks

The only significant outflow of cigarettes from Cyprus are to the UK

Over 30% of contraband and counterfeit cigarettes flowing into Cyprus are from the Northern Cypriot region of the island

## Consumption breakdown 2006 (1)(2)(a)(b)



Notes: (a) LDS – Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006

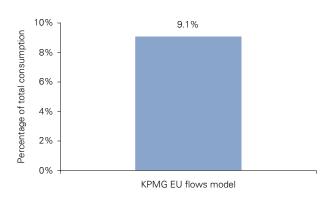


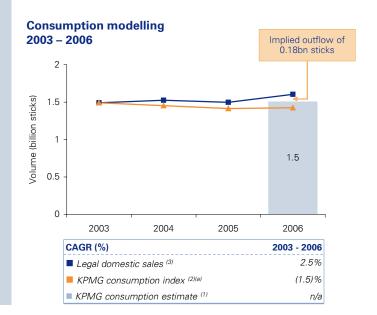
### **Comparison of sources for non-domestic estimates**

KPMG estimates suggest that non-domestic consumption in Cyprus is approximately 9% of total cigarette consumption

Consumption modelling supports the flow model assessment of Cyprus as having a small net outflow







## KPMG estimates suggest that non-domestic consumption in Cyprus is approximately 9% of total cigarette consumption

 Currently there are no other estimates available to corroborate our findings from external research or interviews

## The consumption model indicates that Cypriot consumption is less than overall legal domestic sales

- The model suggests that the implied outflow of cigarettes has increased since 2003 while consumption has remained relatively constant
  - higher levels of foreign immigration to Cyprus and tourists appear to be driving the gap between consumption and sales
- The total outflow of cigarettes from Cyprus according to KPMG estimates is approximately 0.23bn sticks (0.09bn sticks net outflow) which is relatively consistent with the consumption model estimate of 0.18bn sticks

Note: (a) Smoking prevalence and smoking incidence for 2004 taken as an average of 2004/05, and 2006 smoking prevalence and incidence extrapolated from 2005 data

Sources: (1) KPMG EU flows model

(2) KPMG consumption index model

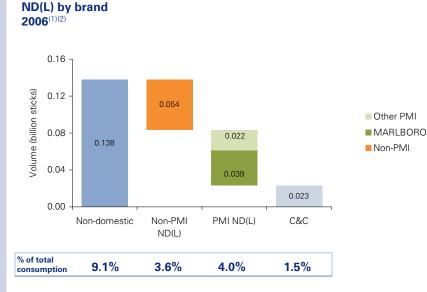
(3) In Market Sales supplied by PMI



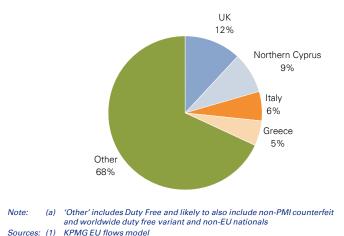
### Non-domestic (legal) results

A significant proportion of non-domestic consumption is ND(L)

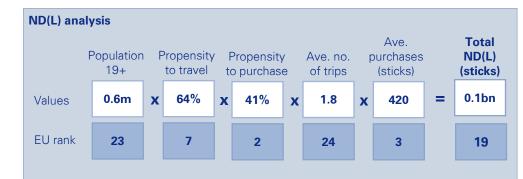
Key ND(L) flows into
Cyprus comes from the UK
and Northern Cyprus



## ND(L) by origin 2006<sup>(2)</sup>



(2) AC Nielsen ND(L) research, December 2006

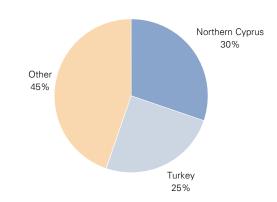




### Contraband and counterfeit breakdown

C&C is minimal, with product flowing in primarily from Northern Cyprus

## C&C by origin (excluding PMI counterfeit) 2006 $^{(1)(a)}$



Note: (a) 'Other' includes Duty Free and likely to also include non-PMI counterfeit and worldwide duty free variant and non-EU nationals

Sources: (1) KPMG EU flows model



## **Contents – country detail**

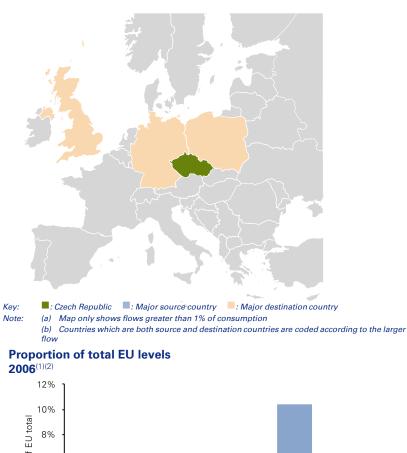
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- Greece
- Hungary
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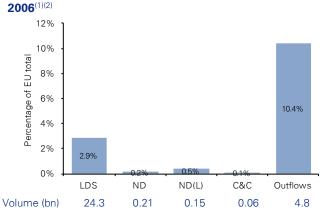
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- Poland
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- Slovakia
- Slovenia
- Spain
- Sweden
- UK



### **Overview**

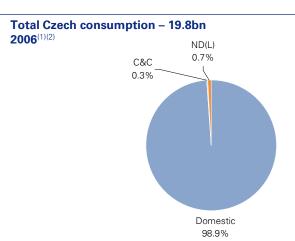
The Czech Republic has a very low non-domestic share but is a significant outflow country particularly to Germany

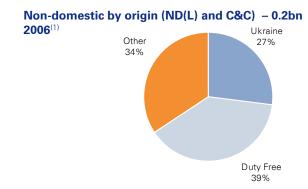




Source: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006







### **Market context**

Counterfeit on the German border is seen as a major issue, particularly by Philip Morris who have launched a leaflet campaign to attempt to combat the problem



#### Pricing

- With accession to the EU in 2004, excise tax increases are being imposed to come in line with EU regulations
  - an increase was introduced in April 2006, increasing the average price by 6 Koruna (€0.21)
  - a further rise occurred in March 2007, with another due in 2008 which will fulfil the EU criteria
- A new regulation was introduced in January 2007 to limit the amount of inventory manufacturers can hold to 1.5 months, to limit the time lapse between price increases and their impact on the retail channel

#### **Market segmentation**

- A shift is continuing towards the Cheap brand segment
  - since February 2004, the Cheap segment has grown from 21% to 63% of the market at the end of 2006
- A legal minimum on the number of sticks per pack was introduced at 20, due to be enforced by July 2007
- Virtually all of the illegal product sold in the Czech Republic is sold in the open markets, 60 of which exist on the German border

#### **Enforcement**

- The main concentration of the enforcement community in the Czech Republic is on counterfeit products
- Seizure volumes have more than doubled since 2004, from 46m to 102m in 2006
- The majority of counterfeit cigarettes made in the Czech Republic are understood to be for supply to major Western European markets, mostly Germany

#### Social and legal

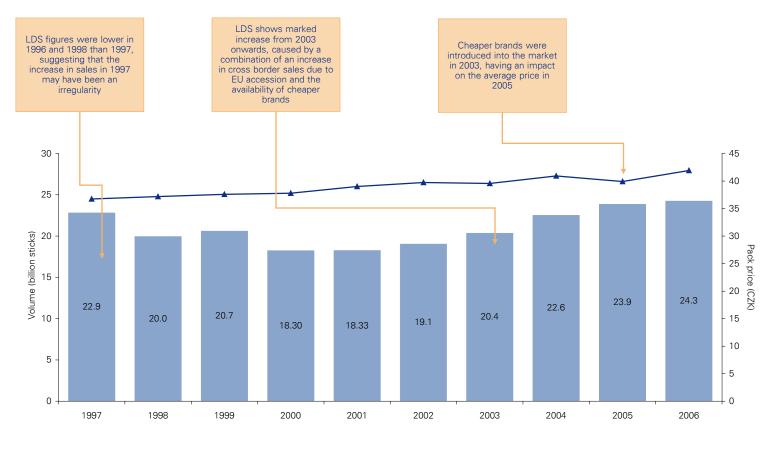
- Philip Morris launched a leaflet campaign on the German border to attempt to educate tourists to the counterfeit issue
- Further smoking regulation is under discussion
  - a recent survey suggested it would be supported by only 33% of Czechs, against a European average of 60% support (Eurobarometer, 2005)



### Historic sales and pricing trends

Sales declined from 1997
to 2001, reflecting a
decline in overall smoking,
with an increase in sales
since, driven by a marked
increase in cross-border
sales, primarily by
Germans, as well as the
introduction of cheap
brands into the market

Historic cigarette prices and legal domestic sales 1997 – 2006



CAGR (%)	1997-2001	2001-2006
Legal domestic sales <sup>(1)</sup>	(5.4)%	5.8%
- Average pack price <sup>(2)</sup>	1.5%	1.4%

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PM management

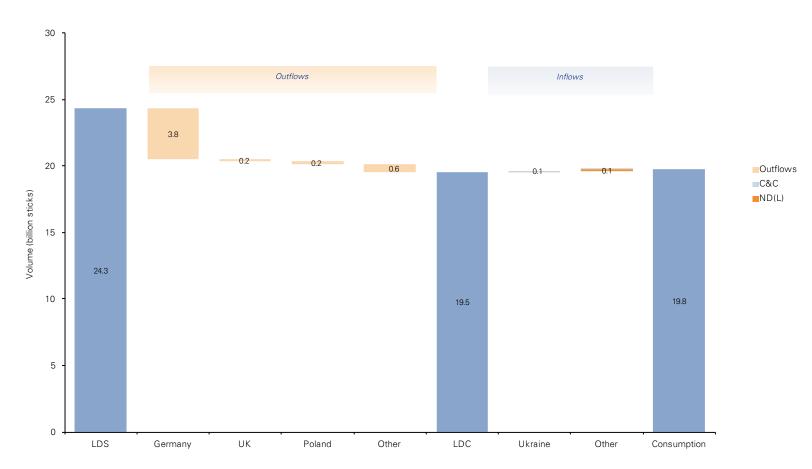


### Inflows and outflows

Czech consumption is estimated at 19.8bn sticks versus legal sales of 24.3bn sticks

Germany accounts for approximately 80% of outflows





Notes: (a) LDS – Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006

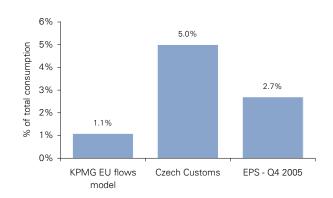


### Comparison of sources for non-domestic estimates

The Czech Republic has the lowest non-domestic share in the EU at 1% of consumption

Although our estimate is below customs, the decline in non-domestic share of EPS since 2005 supports the view that there has been a reduction in non-domestic in 2006

#### Non-domestic market share estimates 2006 unless otherwise stated (1)(2)(3)



#### Consumption modelling 1997 - 2006



#### KPMG's estimates of non-domestic share are likely to be lower than other external estimates as both outflows and transit flows are often considered as part of this issue

- KPMG's estimates of non-domestic share of consumption in the Czech Republic are 1.1%, which is significantly lower than the Czech Customs estimate of 5%
- The Czech Republic is a significant outflow country for both genuine and counterfeit products
  - 3.9 bn sticks were bought by Germans in the Czech Republic in 2006, representing over 15% of LDS (1)(b)
- The high penetration of counterfeit and the high level of focus on this aspect of the market by customs officials is likely to induce an overestimate of the share within the country as well

#### The consumption modelling corroborates the degree to which outflows are the significant flow from the Czech Republic

- The significant drop in the consumption index in 2000 suggests that an anomaly occurred in the GCTS sampling plan in that year
- 1998 was used as the base year for the consumption modelling as LDS in 1997 was at least 12% higher than LDS in either 1996 or 1998

Consumption index CAGR calculated from 1998 - 2001 Notes:

> Although the Flows Model suggests this is genuine product, the methodology can not identify counterfeit by manufacturers other than PMI

KPMG EU Flows Model Source: (1)

Interview with Czech Customs

Empty pack survey results, PMI Brand Integrity, Q4 2005

KPMG Consumption Index Model

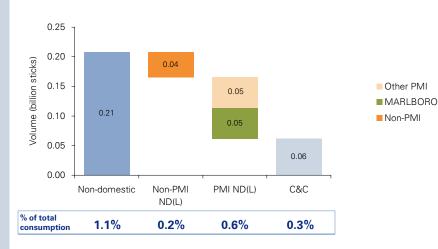
In Market Sales supplied by PMI management



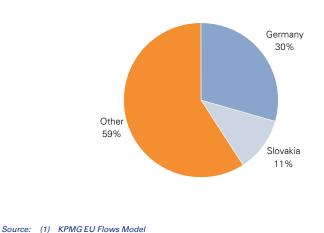
## Non-domestic (legal) breakdown

The majority of the nondomestic flows into the Czech Republic are legal, accounting for approximately threequarters of non-domestic consumption

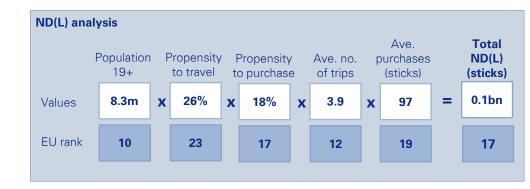
## Non-domestic legal by brand 2006<sup>(1)(2)</sup>



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



(2) AC Nielsen ND(L) research, December 2006

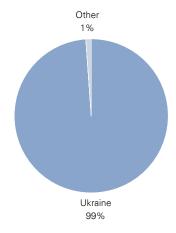




### Counterfeit and contraband breakdown

Ukrainian product accounts for virtually all of the minimal C&C consumed in the Czech Republic

## C&C by origin (excluding PMI counterfeit) 2006



Source: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006



## **Contents – country detail**

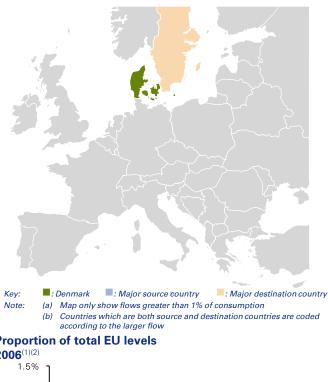
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- Finland
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- Greece
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- Portugal
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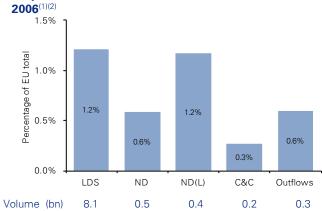


### **Overview**

Denmark has a low market share of non-domestic cigarettes, with relatively small flows from several countries



#### **Proportion of total EU levels**

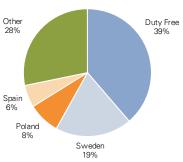


Source: (1) KPMG EU flows model

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

# **Total Danish consumption – 8.3bn** 2006(1)(2) C&C 2% Domestic 94%

#### Non-domestic by origin (ND(L) and C&C) - 0.5bn **2006**<sup>(1)</sup>





### **Market context**

The Danish cigarette market is dominated by domestic brands and Scandinavian Tobacco holds an 88% market share



#### **Pricing**

- Cigarette prices have generally increased over time but were rebased in October 2003 with a DKK4 per pack reduction in excise tax
  - the aim of the tax reduction was to counter high levels of cross-border shopping in Germany
- Danish prices offer a small discount to Swedish consumers but are higher than those in Germany

### Market segmentation

- The market is dominated by Scandinavian Tobacco with an 88% share
- Until 2003 the premium price segment accounted for over 95% of the market
  - however, following the 2003 reduction in excise duty and a trend towards lighter cigarettes the share of the low-priced segment has increased to over 30%
- Gallaher introduced LD, an ultra-low price brand, in December 2004 at DKK20 (compared to Marlboro at DKK32)

#### **Enforcement**

- The Finance Ministry believes that the 2003 price reduction effectively eliminated crossborder shopping in Germany but that the entry of new EU countries and a large population of migrant workers has created new flows
- Denmark is a transit country for illegal cigarette shipments destined for Norway and the UK

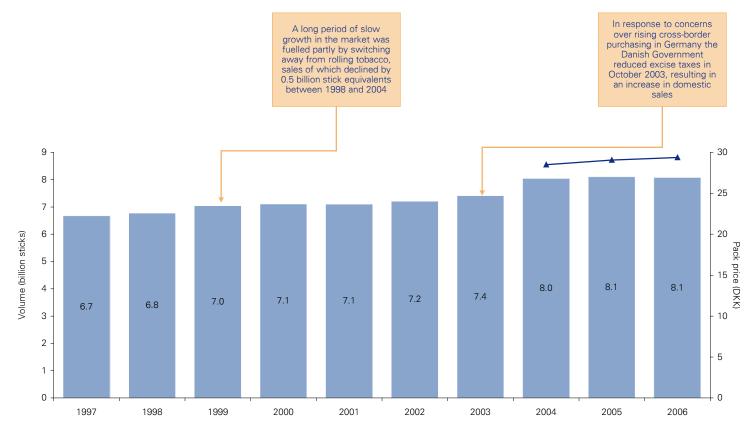
#### Social and legal

- Denmark has started to introduce smoking legislation and a ban on smoking in bars and restaurants will take effect in August 2007
- Queen Margrethe II of Denmark announced in November 2006 that she would no longer smoke in public
  - this has been seen as reflecting a sea change in public opinion



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

A reduction in excise tax in 2003 resulted in a 0.6 billion stick increase in the legal market as consumers switched away from nondomestic cigarettes Historic cigarette prices and legal domestic sales 1997 - 2006



CAGR (%)	1997-2003	2003-2004	2005-2006 <sup>(a)</sup>
Legal domestic sales <sup>(1)</sup>	1.8%	8.5%	0.2%
- Average pack price <sup>(2)</sup>	n/a	n/a	1.5%

te: (a) Average pack price CAGR is 2004 to 2006

Source: (1) In Market Sales supplied by PMI

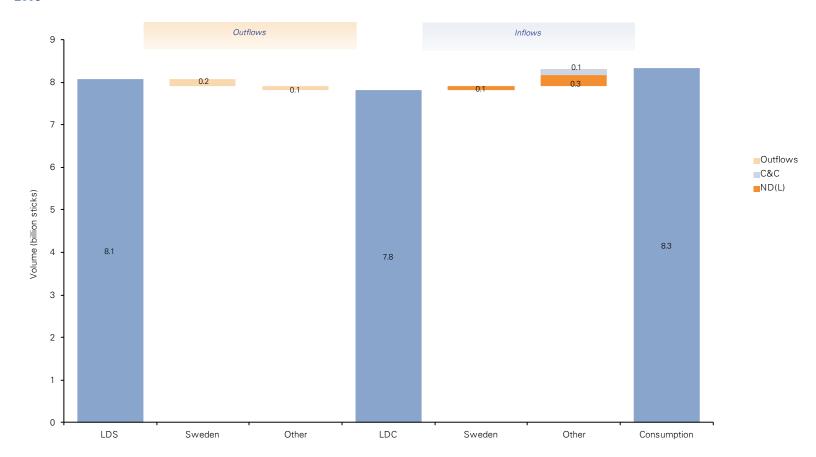
(2) Weighted average pack price supplied by PM Denmark management



### Inflows and outflows

Denmark experiences
marginal net inflows,
although flows in from
Sweden are more likely to
reflect cigarette packs
entering the country
incidentally than
deliberate smuggling or
cross-border shopping

## Consumption breakdown 2006<sup>(a)(b)(1)(2)</sup>



Notes: (a) LDS – Legal Domestic Sales

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

(c) PM Denmark management has indicated that they do not believe outflows to Norway to be significant and we have not attempted to estimate this flow

Sources: (1) KPMG EU flows model

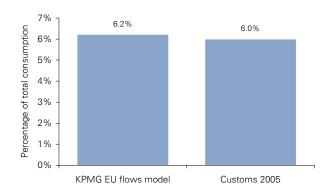
(2) Synovate ND(L) research, December 2006



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

Our estimate of nondomestic cigarette inflows in 2006 is consistent with Customs' estimate for 2005

## Non-domestic market share estimates 2006 unless otherwise stated (1)(2)



Source: (1) `KPMG EU flows model

(2) Status Over Graensehandel, Finance Ministry, June 2006

## KPMG's estimate of non-domestic market share is in line with Customs' estimate from 2005

- Danish Customs produces an annual estimate of the scale of nondomestic cigarette consumption
  - Customs' estimate for 2005 supports our findings for 2006

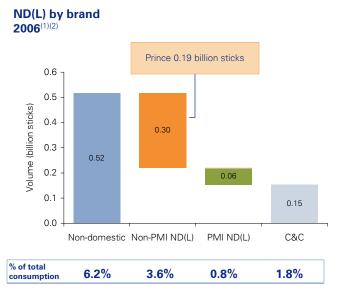
## Insufficient consumer tracking data are available to provide further support to our estimate

- In many markets we have been able to derive an estimate of the scale of the non-domestic market using consumer tracking data to indicate how consumption has changed over a period of 10 years
- Consumer tracking study results are not available for Denmark prior to 2004 and do not indicate a clear trend

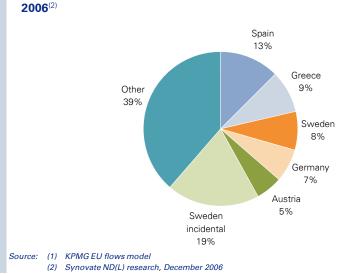


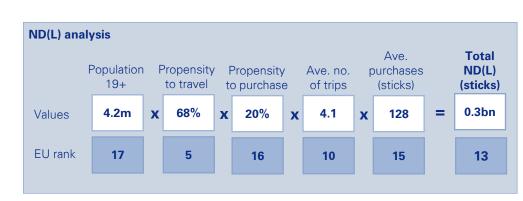
## Non-domestic (legal) results

PMI products have a relatively low share of ND(L), which is dominated by House of Prince



## ND(L) by origin







■ MARLBORO

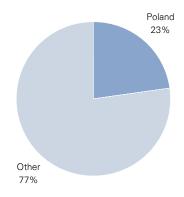
■ Non-PMI

■ Total

## Counterfeit and contraband breakdown

Poland the primary source country

## C&C by origin (excluding PMI counterfeit) 2006 $^{(1)(2)}$



Source: (1) KPMG EU flows model

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



## **Contents – country detail**

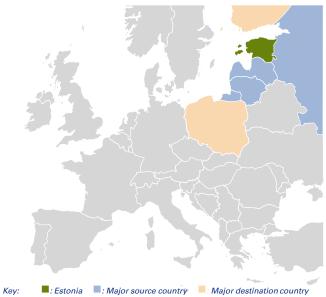
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### **Overview**

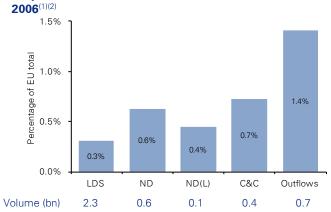
Estonia has a combination of high non-domestic share as well as being a significant source country for non-domestic products



(a) Map only shows flows greater than 1% of consumption

 $(b) \quad \textit{Countries which are both source and destination countries are coded according to the larger flow$ 

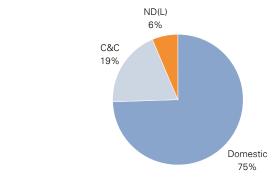
### Proportion of total EU levels



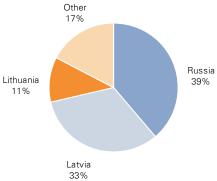
Source: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006

## Total Estonian consumption – 2.2bn 2006<sup>(1)(2)</sup>



## Non-domestic by origin (ND(L) and C&C) $\,$ – 0.6bn 2006 $^{(1)}$





### **Market context**

Estonia is one of the smaller markets in the EU, with more similarities to Scandinavian markets than its Baltic neighbours



#### **Pricing**

- Estonia is raising prices to come inline with EU excise tax regulations with prices rising at a CAGR of 8.4% from 2004 to 2006
  - no tax rise is planned for 2007
- Latvia and Russia are yet to raise their prices, hence the perceived increase in non-domestic purchasing by Estonians
  - Premium brands are much more expensive in Estonia than Latvia due to the high specific tax proportion in Latvia
  - Russian prices are approximately half those in Estonia

# Market segmentation

- In 2005, 25% of domestic Marlboro sales were sold on board ferries destined for Finland
- Estonia is the most polarised market in the Baltic States
  - Low segment dominates the market with 57% while premium accounts for 20%

#### Enforcement

- 2006 was the first time a counterfeit factory had been discovered in Estonia
  - the factory was manufacturing Russian brands likely for sale into the Estonian market
- Smugglers are starting to take alternative routes to Western Europe other than through Estonia due to the improved border controls now in place with Russia
  - seizures have dropped from 24m in 2002 to 11m in 2005

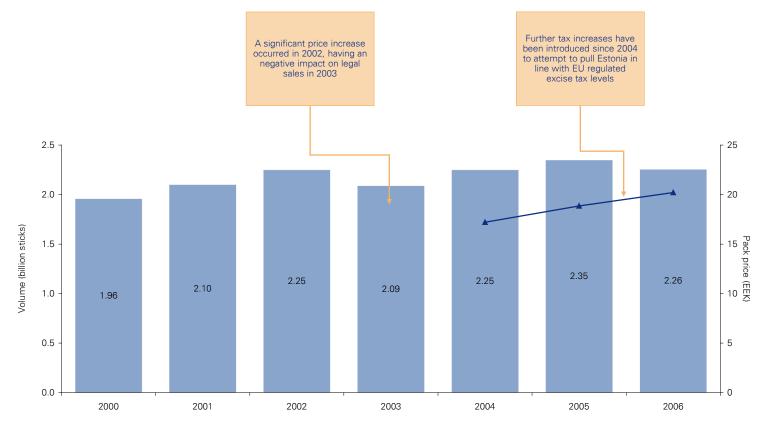
#### Social and legal

- Estonia is more similar to other Scandinavian markets than its Baltic neighbours
  - St. George, a Russian brand, was not popular when launched
- Smoking bans exist in enclosed public places and workplaces (with the exception of the hospitality sector, where partial restrictions apply)
- Although Estonia has the second highest smoking incidence in the EU, its average daily consumption is relatively low (37% and 14.7 respectively)



## **Historic sales and pricing trends**

Sales in Estonia have been broadly flat since 2000, with falling legal consumption by Estonians being offset by an increase in sales to day-tourists from Finland Historic cigarette prices and legal domestic sales 2000 – 2006



CAGR (%)	2000-2004	2004-2006
Legal domestic sales <sup>(1)</sup>	3.5%	0.1%
- Average pack price <sup>(2)</sup>		8.4%

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PM management

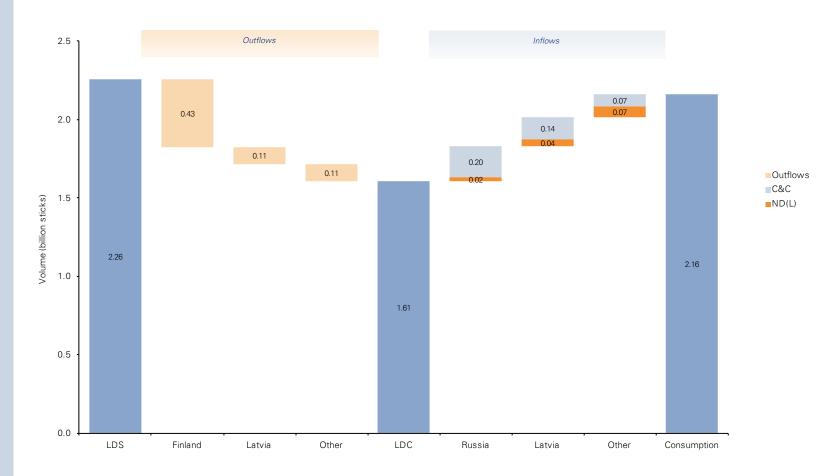


### Inflows and outflows

Estonian consumption appears to be in line with legal sales as a result of both substantial inflows and outflows

Estonia has significant outflows to day tourists from Finland, and inflows from Russia and Latvia, which are predominantly illegal





Notes: (a) LDS – Legal Domestic Sales

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

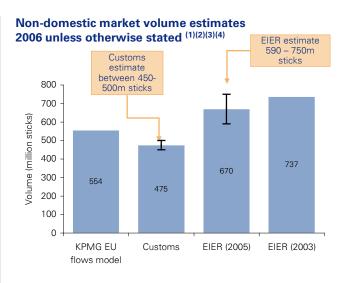
Sources: (1) KPMG EU flows model

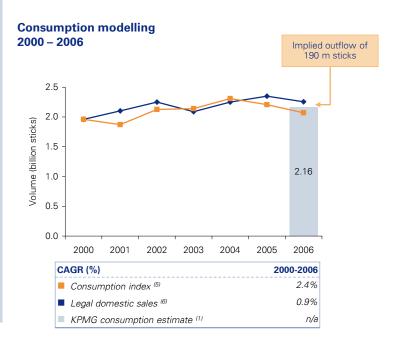
(2) AC Nielsen ND(L) research, December 2006



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

The KPMG estimate of Estonia's non-domestic share is reasonably consistent with other sources





# KPMG estimates of non-domestic consumption are in line with other figures available in the market

- KPMG estimates are slightly higher than customs estimates, but lower than estimates from The Estonian Institute of Economic Research
- The EIER bases its estimates on the tax revenue lost by Estonians buying illicit tobacco products and is therefore likely to overstate the issue
- The methodology used by the Customs department in Estonia is fairly robust, including estimated inflows from Latvia and Russia, and falls very closely in line with the KPMG estimate

# Consumption modelling suggests a small net outflow from Estonia, consistent with our overall results

 The total outflow from Estonia is approximately 650m sticks which, when combined with total inflows (550m), is consistent with the consumption modelling<sup>(1) (5)</sup>

Source: (1) KPMG EU Flows Model

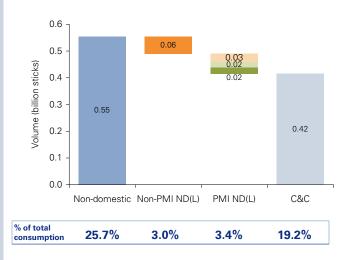
- 2) Interview with Estonian Customs
- (3) "Consumption of and trade in illegal tobacco products in Estonia", Estonian Institute of Economic Research, April 2006
- (4) Illegal Market of cigarettes in Estonia, Evelin Ahermaa, Estonian Institute of Economic Research. 2005
- (5) KPMG Consumption Index Model
- (6) In Market Sales supplied by PMI management



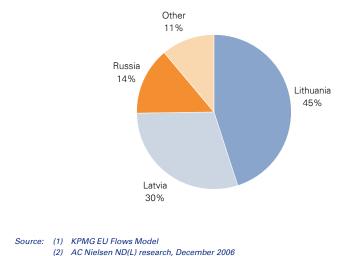
# Non-domestic (legal) breakdown

Approximately a quarter of non-domestic consumption in Estonia is legal





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



ND(L) analysis **Total** Ave. Population Propensity Propensity purchases ND(L) Ave. no. 19+ (sticks) to travel to purchase of trips (sticks) 40% 0.1bn 1.0m Values 34% 3.5 155 EU rank 22 16 9 21 14



Other PMI

■ Non-PMI

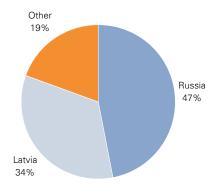
■ Total

■ MARLBORO ■ L&M

# Counterfeit and contraband breakdown

Over 80% of contraband products come from Russia and Latvia

# C&C by origin (excluding PMI counterfeit) 2006



Source: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006



## **Contents – country detail**

- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

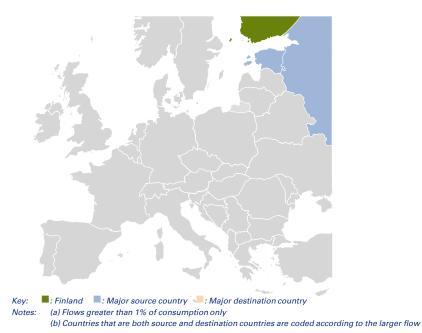
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
- UK



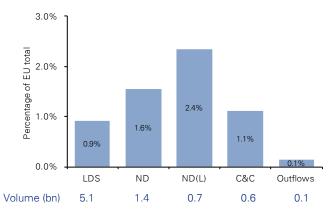
## **Overview**

Non-domestic products account for 22% of total consumption

Russia and Estonia provide 76% of cigarette inflows



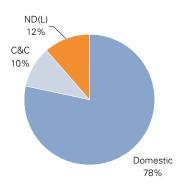
**Proportion of total EU levels 2006**<sup>(1)(2)</sup>



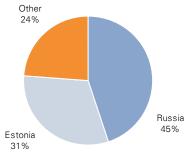
Source: (1) KPMG EU flows model

(2) GFK ND(L) research, March 2006

# Total Finnish consumption – 6.4bn 2006<sup>(1)(2)</sup>



Non-domestic by origin (ND(L) and C&C) – 1.4bn  $2006^{(1)}$ 





## **Market context**

Despite a relatively stable pricing environment, the low priced brand segment has grown materially



### **Pricing**

- Growing sales of economy brands have led to a slight decrease in average cigarette prices
- The price of Marlboro has risen by less than 6% in five years, while the price of L&M has been reduced to combat low price segment growth
- Finland has not amended its tobacco taxation policy in 10 years but tobacco tax is high compared to neighbouring countries Russia and Estonia
  - duty is 57.38% and EUR151.3 per 1,000 sticks, above the EU statutory minimum
  - as the popularity of low price product has increased, the most popular price level has changed, reducing overall tobacco prices further

### Market segmentation

- Premium cigarette brands have lost market share to low-price cigarette segments as
  - a fourth 'super-low price' segment has emerged
  - low priced segment quality has improved
- The narrow price differential between RYO and manufactured cigarettes has also encouraged a category switch towards cigarettes

### **Enforcement**

- Finnish National Board of Customs reported an increase in tobacco smuggling in 2005, driven in part by a reduction on alcohol tax
  - 28.3m cigarettes were confiscated in 2005, more than three times the 9.4m in 2004; 75% of illicit cigarette seizures originated from Russia
- Major seizures accounted for 75% of the total volumes with several cases greater than 1m sticks
- Estonian imports are believed to have not materially increased post accession, a 200 stick limit remains
- Counterfeit is not considered significant and seizures of counterfeit are small in relation to total seizures, with product originating largely from China
  - no counterfeit factories have been found in Finland

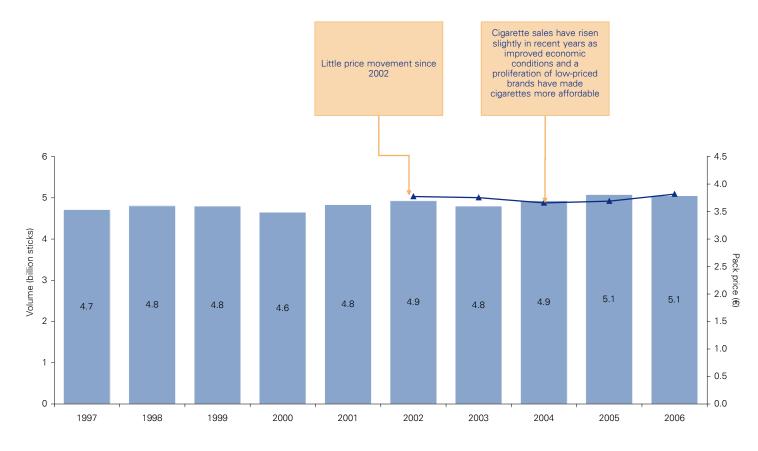
### Social and legal

- Smoking prevalence has declined significantly since the late 1970s and stabilised at 26% for men and 18% for women
- Smoking prevalence marginally increased by 0.5% from 2004-2005, but continues to be one of the lowest smoking rates in Europe
- Finland was one of the first countries to introduce comprehensive tobacco legislation
  - 1978 tobacco product advertising ban
  - 1995 smoking banned in the work place and minimum purchase age raised to 18
  - 2000 restaurants made partially smoke free
  - June 2007 total smoking ban in restaurants



## Historic sales and pricing trends

Legal domestic sales of cigarettes have been relatively stable over a long period Historic cigarette prices and legal domestic sales 1997 – 2006



CAGR (%)	1997-2001	2001-2006
Legal domestic sales <sup>(1)</sup>	0.6%	0.9%
- Average pack price <sup>(2)</sup>	na	0.3% <sup>(a)</sup>

te: (a) Price CAGR taken from 2002 – 2006 due to lack of data available

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PM management

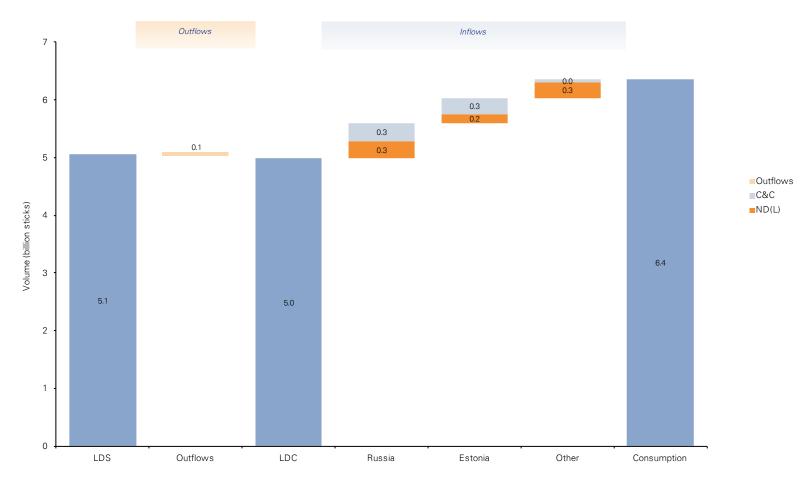


# Inflows and outflows

Finnish consumption is estimated at 6.4bn sticks versus legal sales of 5.1bn, a net inflow of 1.3bn sticks

Russia and Estonia are the two major sources of nondomestic product





Notes: (a) LDS – Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

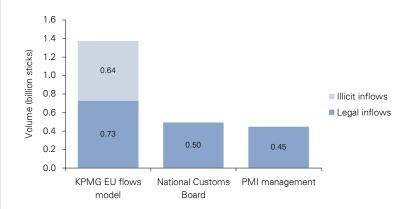
(2) GFK ND(L) research, March 2006



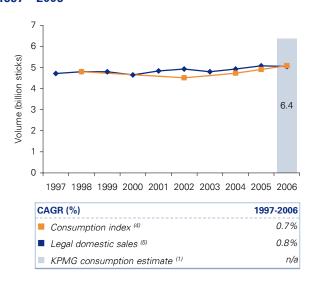
## Comparison of sources for non-domestic estimates

The two alternative sources for non-domestic consumption are likely to be understated as they account for legal non-domestic purchases only and will not capture counterfeit and contraband flows

# Non-domestic market volume estimates 2006 unless otherwise stated (1)(2)(3)



# Consumption modelling 1997 – 2006



### KPMG's estimate of legal inflows appear consistent with other sources

- Tobacco Statistics Finland estimate non-domestic sales of 495 million sticks, approximately 10% of legal domestic sales
  - however, this estimate is derived from a 'Finnish Travel' interview survey and accounts for legal, non-domestic purchases only
- Local PMI Management also estimate cross border sales in the region of 450 million sticks, originating primarily from:
  - Estonia at 250 million sticks
  - Duty Free boats 125 million sticks
  - Russian border sales of 20 million sticks
  - Russian Duty Free sales of 55 million sticks
- These estimates are focused on legitimate, cross-border sales channels only and will not capture large scale, organised inflows of illicit product
- Non-domestic consumption is reported to be more prolific in regional pockets along the Eastern border
  - in a limited survey conducted in Imatra, a small regional town close to the Russian border, 58% of respondents claimed to have made nondomestic purchases without paying tax <sup>(6)</sup>

# Consumption modelling implies that there has been limited change in non-domestic inflows since 1997

Given that this analysis only estimates the variance in flows from the start
of the period, this suggests that there have been fairly stable but
significant non-domestic inflows into Finland throughout the period

Source: (1) KPMG EU Flows Model

(2) Finnish National Statistics

(3) PMI Management Finland

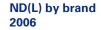
(4) KPMG Consumption Index Model

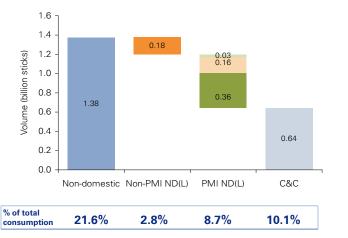
(5) In Market Sales supplied by PMI management

6) Esmerk Finnish News, "In Imatra 58% smoke Russian Cigarettes", 21 November 2006

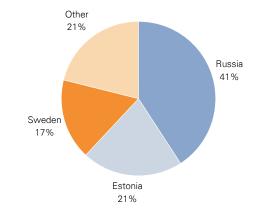
## Non-domestic (legal) breakdown

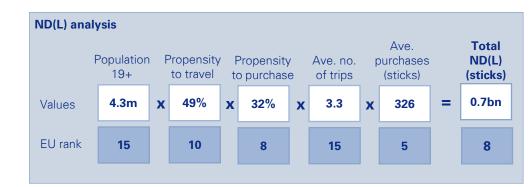
Approximately half of the non-domestic product in Finland is legal, with the majority coming from its cheaper neighbours, Russia and Estonia





# ND(L) by origin 2006







Other PMI

■L&M

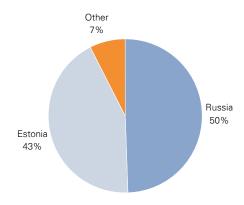
■ Non-PMI

MARLBORO

## **Contraband and counterfeit breakdown**

Russia and Estonia are also the major source countries for C&C in Finland

# C&C by origin (excluding PMI counterfeit) 2006





# **Contents – country detail**

- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
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- Sweden
- UK

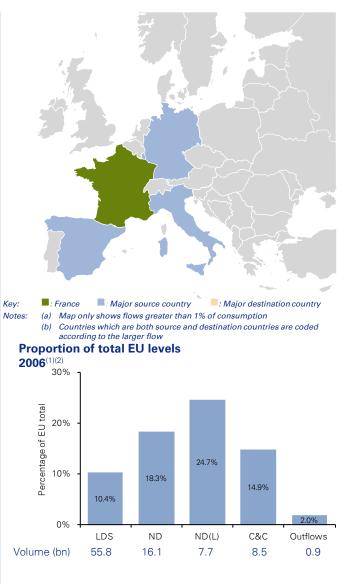


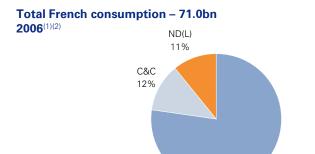
## **Overview**

Domestic sales account for only 77% of consumption, with the remainder of flows nearly equally split between non-domestic (legal) and illicit purchases

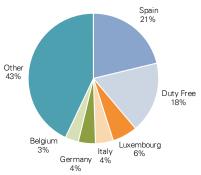
France's counterfeit and contraband flows are significant

Non-domestic inflows are mostly from Spain and Duty Free channels





Non-domestic by origin (ND(L) and C&C) – 16.1bn  $2006^{(1)}$ 



Domestic

77%

Sources: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006

## **Market context**

The aggressive price and tax increases that had a profound effect on the domestic market between 2002 and 2004 have now stabilised

The closure of border shops along the Spanish / France border and increasing prices in other neighboring countries helped lift legal sales slightly in 2006



### **Pricing**

- French cigarette prices are significantly higher than bordering countries, but have remained relatively fixed since 2004
  - the French government aggressively increased taxes in January 2003 (10%), October 2003 (20%) and January 2004 (10%)
- The price gap between the super low category of cigarettes (e.g. L&M) and the premium category (e.g. Marlboro) has now reduced to only 50 cents difference due to the introduction of a Minimum Reference Price (MRP)

### **Market segmentation**

- Altadis is the sole distributor of cigarettes
  - France's 30,000 tobacconists account for approximately 99% of sales while 1% to 2% of sales are via point of resale (bars, cafes and restaurants)
  - point of resale are required to hold a licence to sell cigarettes and must buy product from the nearest tobacconist
- Categorisation of cigarettes based on price is reducing. The 'super low' and 'low' categories have all but merged with only 10 cents now separating each category
- France has strict pack sizing regulations. In January 2005, 19 stick packs were banned

### **Enforcement**

- The French government has been proactive in the fight against contraband and counterfeit cigarettes. Recent initiatives include:
  - limiting the amount of tobacco to 1 kg that an individual can carry legally into the country
  - submitting a formal complaint to the EU outlining the need for tougher EU tobacco guidelines and a review of current levels of excise tax in all EU member states
- In January 2007, the government continued its push to reduce smoking consumption by announcing that it will reimburse nicotine replacement therapies (NRTs) by up to 50 Euro per year

### Social and legal

- France introduced a smoking ban in February 2007 that prohibits smoking in all public buildings
  - restaurants and bars have until December 2007 to comply with the new smoking ban
  - French police and an army of inspectors can now issue on the spot fines to offenders caught smoking in a prohibited area
- Since 2003 in France there has been a social shift people's attitudes towards smoking
  - greater public awareness campaigns, bans on advertising and smoking prevention campaigns have impacted consumption
- Shops selling cigarettes on the French / Spain border were closed in the late part of 2006

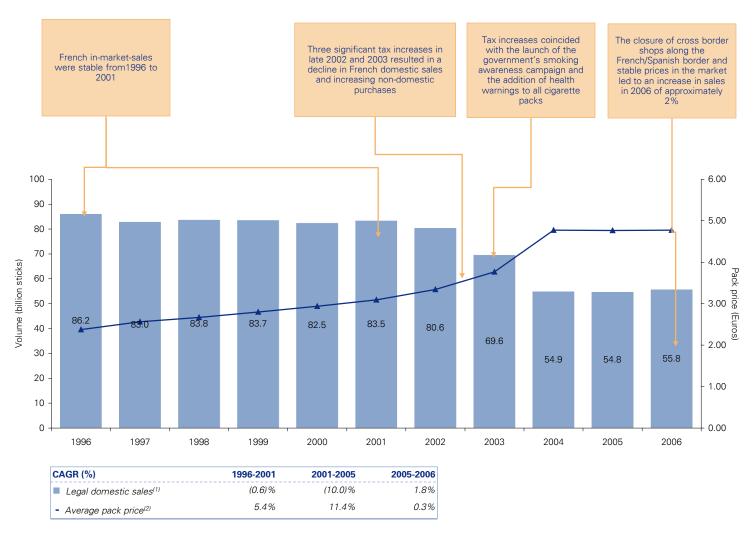


## Historic sales and pricing trends

In France, legal sales of cigarettes have declined significantly since 2001

High in-market prices, aggressive taxation increases by the government and the availability of cheaper cigarettes from neighbouring countries were primary drivers of this downturn in sales

Historic cigarette prices and legal domestic sales 1996 – 2006



Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PMI France management

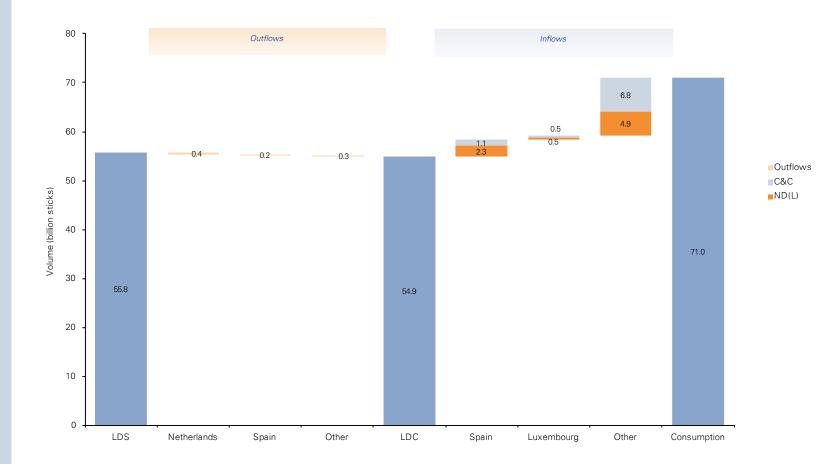


## Inflows and outflows

French consumption is estimated at 71bn sticks versus legal sales of 55.8bn sticks, a net inflow of over 15bn sticks

Spain is the major source of inflows, followed by Luxembourg and 'Other' which includes EU and worldwide duty free

# Consumption breakdown 2006 (1)(2)(a)(b)



Notes: (a) LDS – Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006

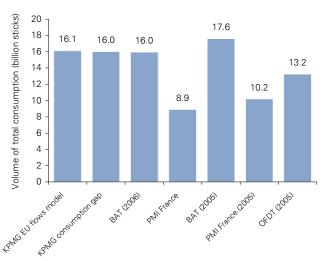


## Comparison of sources for non-domestic estimates (1 of 2)

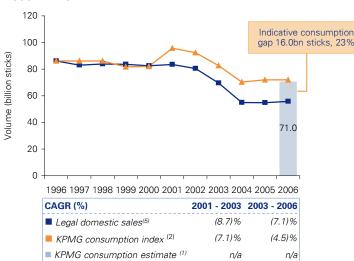
KPMG estimate of ND(L) appears consistent with PMI France estimates

KPMG estimate of overall non-domestic is in line with a BAT 2006 and 2005 estimates but higher than other external sources

# Non-domestic market volume estimates 2006 unless otherwise stated (1)(2)(3)(4)(5)(6)



# Consumption modelling 1996 – 2006 (1)(2)(5)



# KPMG estimates of non-domestic consumption in France is in line with estimates from BAT

- BAT's 2006 estimate of non-domestic consumption at 16.0bn sticks (22% of consumption) is consistent with our estimate of 16.1bn sticks (22.7% of consumption)
  - BAT's 2006 estimate of non-domestic consumption is based on a study undertaken by Epsy (research agency) for BAT in September 2006
  - Epsy's methodology is based on 2,000 interviews with cigarette smokers aged between 18 and 44 years of age
  - a packet swap was conducted with interviewees to collect cigarette packs for non-domestic and domestic analysis

### KPMG estimates are broadly in line with other industry estimates

- KPMG estimates from the EU flows model and consumption model agree and are reasonably close to estimates by OFDT
- OFDT's 2005 non-domestic estimates is not underpinned by a robust methodology and may explain the differences in estimates
  - OFDT measures non-domestic consumption by analysing the difference in sales between 2004 and 2005 in border regions

# PMI France estimates are lower than KPMG, however these estimates may not include some retail channels and illegal flows

- PMI France 2005 and 2006 estimates are for cross border purchases and do not appear to include either duty free flows or counterfeit and contraband cigarettes coming into the country
  - KPMG estimates the total non-domestic market at 16.1bn sticks of which 7.7 is ND(L) and the remainder is C&C
  - PMI France estimate for 2006 of 8.9 billion is more in line with our ND(L) result of 7.7bn

# The consumption model highlights the gap between legal sales and consumption

- France is a major inflow country for cigarettes which accounts for the significant difference in legal sales versus the consumption index
- France's high prices and close proximity to cheaper priced neighbouring markets supports a significant consumption gap

Sources: (1) KPMG EU flows model; (2) KPMG consumption index model; (3) 'Customer Purchasing Habits' PMI France; (4) 'Achats transfrontaliers de cigarettes 1999 – 2005', OFDT; (5) In Market Sales supplied by PMI; (6) 'Un paquet de blondes sur cinq selon BAT / Epsy', Revue des Tabacs nº 540, Match 2007

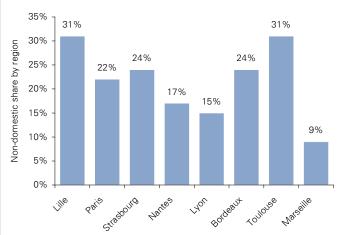


## Comparison of sources for non-domestic estimates (2 of 2)

KPMG estimate of overall non-domestic consumption is in line with an estimate by BAT

However, estimates differ on origin of non-domestic share due to fundamental differences in the methodologies that underpin each result

### BAT estimate of non-domestic share by region<sup>(1)</sup>



Sources: (1) 'Un Paquet de blondes sur cinq selon BAT / Epsy', Revue des Tabacs nº 540, March 2007

# KPMG's estimate of total non-domestic consumption in France is in line with estimates from BAT

 BAT estimate non-domestic at 16.0bn sticks (22% of consumption) is consistent with our estimate of 16.1bn sticks (22.7% of consumption)

# However when comparing estimates, origin of non-domestic share and regional weighting of results vary due to fundamental differences in methodology

- BAT's sample size and regional coverage is less extensive than EPS
  - BAT's estimate is based on 2,000 customer interviews versus 10,000 packs collected in the EPS. EPS covers 51 French cities whereas BAT's estimate is based on eight cities only
  - we do not have the sample volume broken out by location but the range of 9% – 31% non-domestic share across just eight locations make nationallevel extrapolation indicative at best, especially when moving below total non-domestic to country of origin results
  - difficulty of extrapolating for Spain results from eight cities is supported by the fact that Spanish share of packs in the EPS in Toulouse and Lyon is four to five times higher than in Bordeaux
  - although unspecified, it also appears that BAT's sample has been equally weighted across the eight cities rather than weighted by population
- BAT's estimate is based on customer interviews rather than an 'Empty Pack Survey'
  - using a customer interview approach may potentially understate illegal flows, in particular counterfeit packs, interviewees may be less inclined to discuss illicit purchases or know if packs are counterfeit
  - low non-domestic share in Marseille supports this (21.4% in EPS)

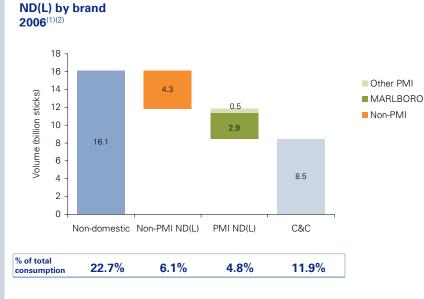
### BAT's estimate of Duty free flows from non-EU countries appears low

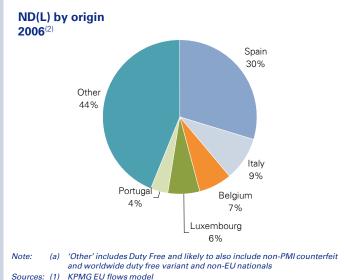
- BAT's estimate of non-EU flows is 2.1bn compared to 5.1bn from the KPMG EU flows model
  - BAT's estimate appears to understate flows from non-EU countries and world wide duty free
- BAT's results appear more comparable with ND(L) results
  - Spanish share of non-domestic is 44% in BAT's estimate. This is more in line with ND(L) results where Spain flows account for 30% of total ND(L)



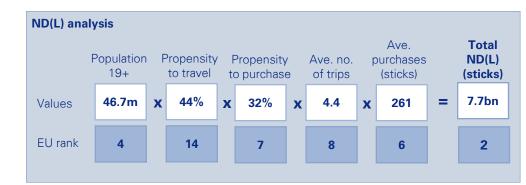
# Non-domestic (legal) results

The majority of legal flows into France are from Spain





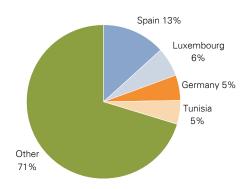
(2) AC Nielsen ND(L) research, December 2006





## **Contraband and counterfeit breakdown**

# **C&C** by origin (excluding PMI counterfeit) 2006<sup>(1)(a)</sup>



(a) 'Other' includes Duty Free and likely to also include non-PMl counterfeit and worldwide duty free variant and non-EU nationals

Sources: (1) KPMG EU flows model

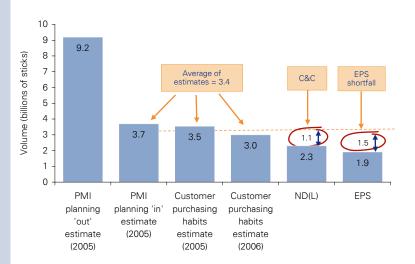
(2) AC Nielsen ND(L) research, December 2006



## **Country flow refinements (1 of 2)**

Further analysis identifies a country-to-country shortfall in the EPS outflows to France

### Cigarette flows from Spain to France (1)(2)(3)



### Adjustments were made to outflows from Spain to France

- Both PMI France and consumer purchasing habits imply a higher inflow from Spain than EPS results suggest
- Alternative estimates by PMI and Consumer Purchasing Survey results imply an inflow from Spain in the region of 9.2 to 3.0bn sticks, compared to EPS results of 1.9bn sticks and ND(L) results of 2.3bn sticks
- PMI Planning 'in' estimate of 3.7bn sticks in 2005 appears in line with 2005 purchasing habits estimate of 3.5bn sticks
- Reduction in purchasing estimates to 3.0bn sticks in 2006 is in line with market context of closure of border shops
- 3.4bn sticks, which is an average of the three sources, was used as the most credible estimate for 2006 and appears to fit with ND(L) research results

Sources: (1)

(1) "European Union Industry Size" PMI Lausanne, 2006

(2) France EPS 2006

AC Nielsen ND(L), December 2006



## **Country flow refinements (2 of 2)**

Analysis of French tourists and French day-trippers to Spain estimates total flows to France ranging from 3.0bn sticks to 4.6bn sticks versus our estimate of 3.4bn sticks

# French tourism and border sales analysis 2006<sup>(1)(2)(3)(4)(a)</sup>

Spain to France flows - tourists and border sales				
French tourists to Spain				
French tourists to Spain (million)	9.0			
French tourists 19+ year of age to Spain (millions)	7.2			
French smoking incidence <sup>(b)</sup>	27%			
French tourists to Spain who smoke (millions)	1.9			
Average number of sticks purchased (leisure / holidays)	256			
Volume (billion sticks)	0.5			
French border sales (day-trippers)				
French excursionists to Spain (millions)	32			
French tourists 19+ year of age to Spain (millions)	26			
French smoking incidence <sup>(b)</sup>	27%			
French tourists to Spain who smoke (millions)	6.9			
Average number of sticks purchased (shopping)	366			
Volume (billion sticks)	2.5			
France border sales (based on In Market sales)				
Local consumption (billon sticks)	4.5			
Adjusted local consumption (billion sticks) <sup>(a)</sup>	6.3			
IMS in France border areas (billions sticks)	10.9			
Consumption gap (billion sticks)	4.6			

Note:	(a)	Local consumption adjustment for under-reporting calculation: KPMG consumption minus GCTS consumption divided by GCTS consumption figure ((84.4bn – 60.0bn)/60.0bn = 41%)
	(b)	Purchase incidence likely to be higher than smoking incidence due to purchases of cigarettes for family and friends. 3.0bn stick flow is therefore considered to be at the lower end of expectations
Sources:	(1)	Synovate ND(L) research, December 2006
	(2)	GCTS Spain
	(3)	PMI Spain management
	(4)	U.S. Census Bureau, International

# French tourists to Spain are estimated to purchase 0.5bn cigarette sticks

- We have assumed that of the 9.0 million French tourists to Spain, 80% are aged 19+ years<sup>(4)</sup>
- Of the 19+ age population, we have applied the French smoking prevalence of 27% to estimate smoking tourists to Spain from France
- The average number of sticks purchased (256 sticks) for leisure / holiday trips is based on ND(L) research conducted by Synovate in December 2006

# Purchases by French day-trippers to Spain are estimated at 2.5bn cigarette sticks

- French day-trippers to Spain for shopping are estimated to be 32 million of which we have assumed that 80% are 19+ years
- Of the 19+ age population, we have applied the French smoking prevalence of 27%
- The average number of sticks purchased (366 sticks) for shopping is based on ND(L) research conducted by Synovate in December 2006
- Total volume for French day-trippers to Spain in 2006 is estimated to be 2.5bn sticks

# Border sales to France based on regional In Market Sales data are estimated at up to 4.6bn sticks

- IMS for French border regions is estimated to be 10.9bn sticks of which 4.5bn sticks is consumed locally
- High level analysis suggests that under-reporting of consumption in Spain of approximately 41%. Due to under-reporting, local consumption has been uplifted to 6.3bn sticks
- This leaves a 'consumption gap' of 4.6bn sticks, which is likely to be met not just by French visitors but also by a combination of Spanish visitors from other regions and other foreign visitors (e.g. German and Belgium nationals driving home from holiday)



## **Contents – country detail**

- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

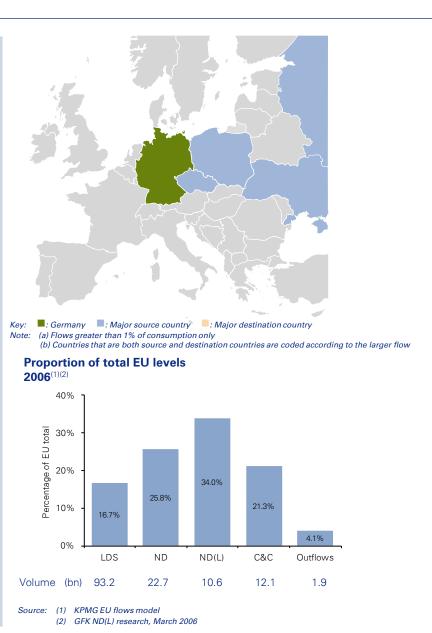
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

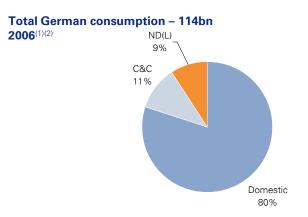


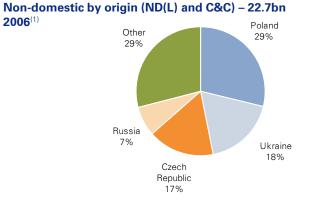
## **Overview**

The non-domestic share of consumption is relatively high, driven by high domestic prices and its proximity to lower-priced neighbouring Eastern European markets

Poland, Ukraine and the Czech Republic account for 60% of non-domestic flows









## **Market context**

The decline in legal domestic sales continued in 2006 despite the removal of lower priced tobacco portions and the growing low-price brand segment



### **Pricing**

- Successive tax rises in recent years have continued to impact overall market size
- Significant tax increases took place in March 2004, December 2004 and September 2005
  - in order to pass the rise to consumers, the pack size was reduced from 19 to 17 sticks and price lowered by 20 Euro cents in 2005
- In 2006, the EU ruled that tobacco portions be taxed on a par with cigarettes, leading manufacturers to cease production
  - portions had experienced significant growth from their introduction in 2002 as a cheap alternative to cigarettes, growing 139% from 2002 to 2005

### **Market segmentation**

- Despite sustained absolute decline in domestic sales volumes, the low-priced branded sector has gained market share to 7.5% of cigarette sales in 2005
  - this is reflected in rapid growth of low cost brands such as JPS, priced at €3.30 for 17 sticks
  - private label has lost market share from approximately 10% of consumption in 2005 to 9% in 2006
- The category shift from tobacco portions to manufactured cigarettes did not materialise in full in 2006 due to the continued sell off of tobacco portion stocks in the market
  - portion sales amounted to 0.13bn sticks in 2006 compared to 0.24bn sticks in 2005

### **Enforcement**

- The cross-border sales channel is growing in importance, reflected in the increasing number of shops and kiosks along the border
  - EPS and GCTS consumer survey also indicate increased consumption of foreign brands
- The borders with Poland and Czech Republic are cited as being relatively porous and the 200 stick purchase restrictions (40 sticks for residents living close to the border) are reportedly not enforced
  - there are infrequent checks at the border and Border Control do not have authority to check cars or vehicles
  - there are 60 mobile Customs Units to perform spot checks across the whole country
- There were two large counterfeit factory raids in 2005

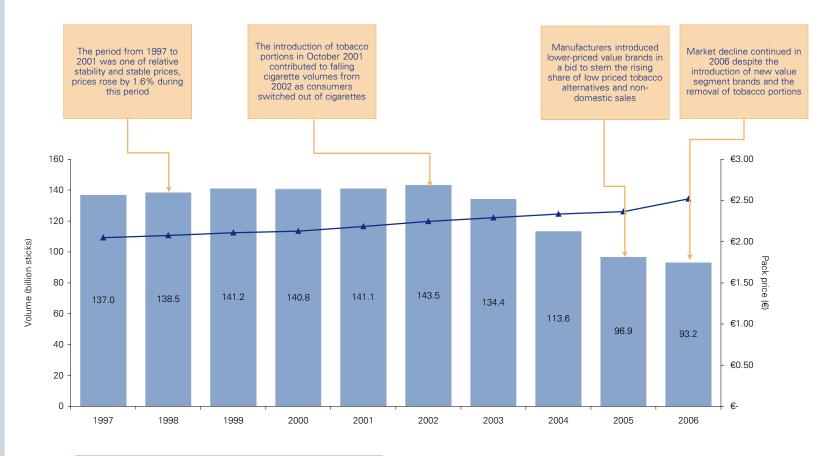
### Social and legal

- The smoking prevalence in Germany is amongst the highest in Europe at 32%
- Germany has been criticised for being slow to implement anti-tobacco legislation
  - in 2005, the ruling coalition signalled their intent to appeal against the EU advertising ban and appeared less inclined to raise duties further
- The coalition announced in December 2006 that a smoking ban would be implemented in restaurants, schools, discos and other public buildings
- A tobacco advertising ban was introduced in Germany in January 2007



## **Historic sales and pricing trends**

Steady tax increases and the introduction of lowpriced alternative tobacco products (portions) drove a sharp decline in cigarette sales from 2002 Historic cigarette prices and legal domestic sales  $1997 - 2006^{(1)(2)}$ 



CAGR (%)		1997-2002	2002-2006
	Legal domestic sales <sup>(1)</sup>	0.9%	(10.2)%
	- Average pack price <sup>(2)</sup>	1.9%	2.9%

Sources: (1) In Market Sales supplied by PMI

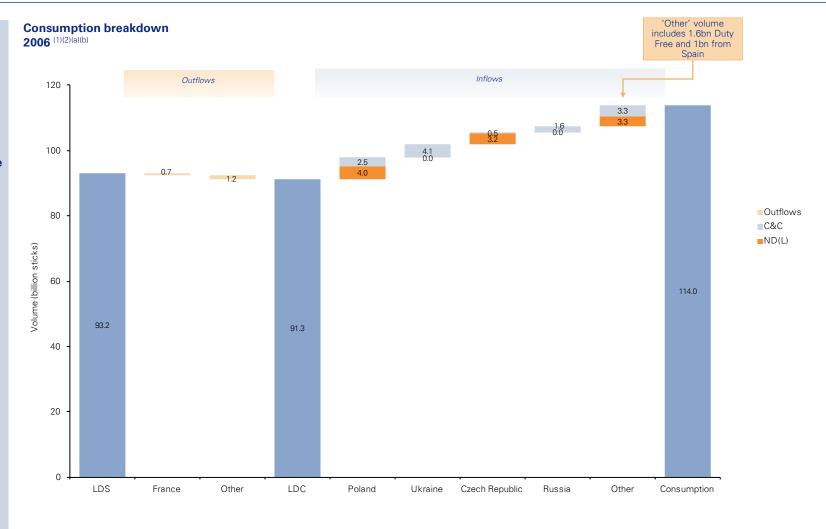
(2) Weighted average pack price supplied by PMI Germany management



## Inflows and outflows

German consumption is estimated at 114 billion sticks versus legal sales of 93.2 billion, a net inflow of 21 billion sticks

Poland, Ukraine and the Czech Republic and are the main sources of nondomestic product



Notes: (a) LDS - Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

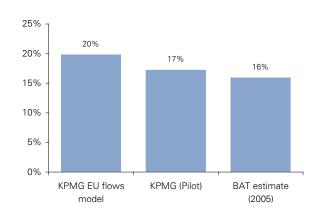
(2) GfK ND(L) research, March 2006



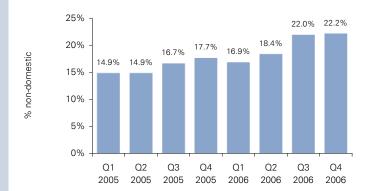
## Comparison of sources for non-domestic estimates (1 of 2)

An alternative estimate of non-domestic consumption from BAT is broadly consistent

# Non-domestic market share estimates 2006 unless otherwise stated



### Historic EPS results Q1 2005 – Q3 2006

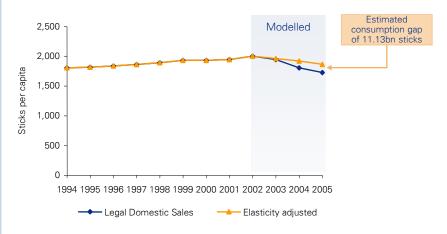


- There is a growing gap between domestic tobacco sales and actual consumption in Germany, driven by increasing imports of non-domestic product
  - EPS results for the last eight quarters have shown a consistent increase in non-domestic share
  - the increase in Q3&4 in 2006 is also due in part to the inclusion of a new regional, recycling centre with a higher observed incidence of non-domestic packs
- BAT estimated that there were 18 billion non-domestic sticks in the German market in 2005, of which 4.5 billion are illegal
  - equivalent to 16% of total consumption
  - this estimate was compiled in 2005 and the growing number of shops and kiosks at the border combined with quarterly increases in EPS non-domestic share support an increase in border trade since

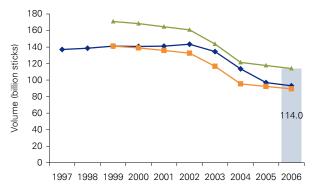


## Comparison of sources for non-domestic estimates (2 of 2)

Consumption index modelling provides improved corroboration of trends in the complex German market Legal domestic sales per capita of cigarettes and OTP vs. KPMG model<sup>(1)</sup> 1994-2005



# Consumption modelling 1997 - 2006



CAGR (%)	1997-2002	2002-2004	2004-2006
Legal domestic sales	0.9%	(11.0)%	(9.4)%
Consumption index	n/a	(15.2)%	(3.2)%
■ Indicative consumption	n/a	(13.1)%	(3.1)%
■ KPMG consumption estimate	n/a	n/a	n/a

- For Germany, pilot econometric regression analysis was not effective due to positive price and sales correlation over the test period
- However, using 2002 as a point of inflection (being the year where portions properly impacted the market) elasticity analysis did imply a consumption gap delta between 2002 and 2005
  - elasticity inferred from Polish econometric analysis and external research
- For the purposes of the roll-out, an improved approach was devised to estimate consumption using indexed GCTS consumption data
- Whilst, this method has worked successfully in several markets, complexities of the German market mean it requires careful interpretation
  - phasing out of rolls and the introduction then exit of portions in Germany make this a highly complex market and mean that there are multiple factors at play
  - both econometric analysis and consumption index modelling are only able to estimate the change in any non-domestic consumption gap from the starting point of analysis
  - similar to Finland, the consumption index suggests that the scale of consumption gap in 2006 is both large and broadly similar to that in 1999
  - given both the weight of multiple EPS findings and the BAT estimate, it is clear that there is a significant consumption gap in Germany
  - transposing the consumption index up to include the measured level of non-domestic flows (green line on chart) identifies some noticeable trends, specifically, it implies:
    - significant growth in non-domestic in 2005 and 2006 as cigarette consumption decline flattens out, responding to phasing out of portions
    - consumption declined more rapidly than legal sales between 2002 and 2004 showing that non-domestic inflows bore some of the impact from portions
- The ability of consumption index modelling to pick up these shifts in a
  market where econometric analysis was not effective (without the use of
  an external elasticity relationship) supports the view that the index
  modelling provides the stronger corroboration of the two approaches

ources: (1) Le

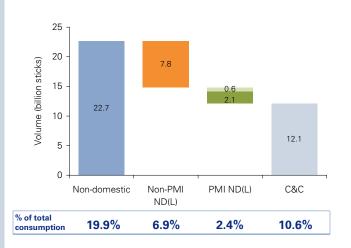
Legal domestic sales – PMI In Market Sales, In Market Sales 2006 01 Population data - National statistical offices/UN/Euromonitor International Regression and forecast model - KPMG calculations



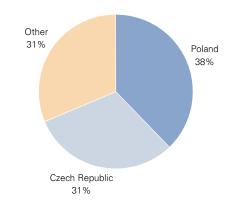
## Non-domestic (legal) breakdown

Poland and Czech Republic are the two main sources of ND(L) cigarettes, representing 69% of total





# **ND(L)** by origin **2006**<sup>(2)</sup>



Sources: (1) KPMG EU Flows Model

(2) GfK ND(L) research, April 2006





Other PMI

■ Non-PMI

Total

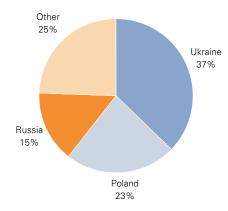
■ MARLBORO

## Contraband and counterfeit breakdown

German C&C is 12.1 billion sticks, equivalent to 10.6% of consumption

The majority of product originating from the Ukraine and Poland

# C&C by origin (excluding PMI counterfeit) 2006 $^{(1)(2)}$



Sources: (1) KPMG EU Flows Model

(2) GfK ND(L) research, April 2006



# **Contents – country detail**

- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

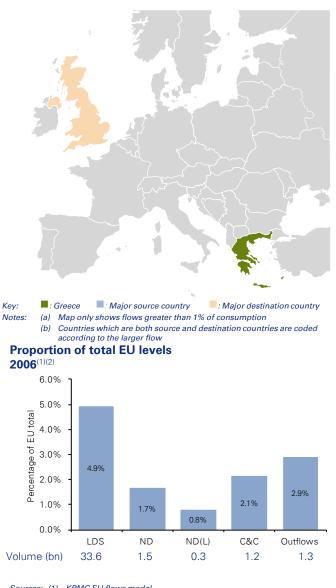
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

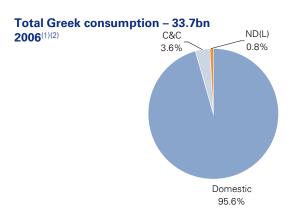


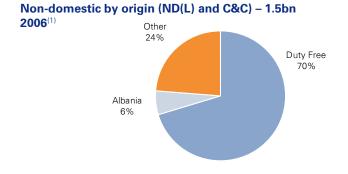
## **Overview**

Domestic sales account for 95% of consumption

Duty Free is the leading channel for purchasing non-domestic cigarettes









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



## **Market context**

The market decreased slightly in 2006 following a price increase of the MPPC by 0.20 euro and a price increase of the low end of the market, as a result of the increase of the Minimum Excise Tax (MET) level

Greece implemented the maximum 10mg cigarette tar limit as of January 1st 2007



### **Pricing**

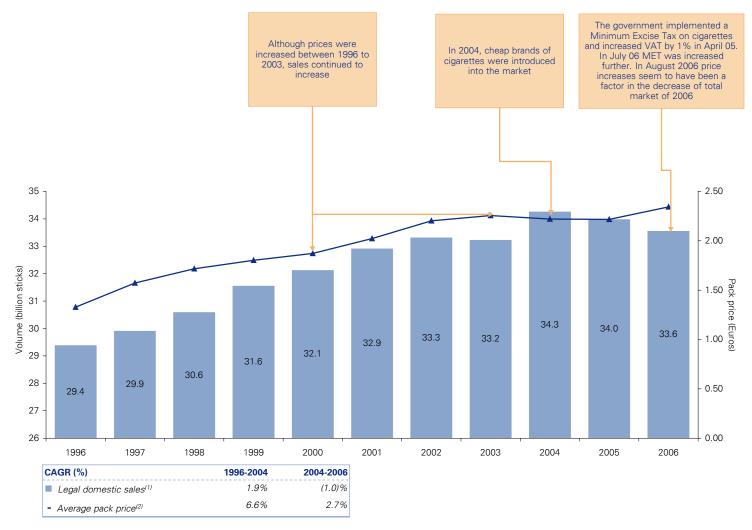
- In 2005, the government implemented a minimum excise tax at the level of 65% of excise tax on MPPC per 20 cigarette pack
- In July 2006 the Government increased MET to 75%. Following this increase, the lowest retail selling price moved to €1.60
- Prices in Greece are still much lower than the EU average but also much higher than the neighbouring EU and non-EU countries
- Most manufacturers raised the prices of cigarettes by an average of 20 cents in August 2006. Prior to this increase, prices were increased in May 2005 (by an average of 10 cents), and in October 2003 (by an average of 20 cents)

#### **Market segmentation Enforcement** Social and legal • Greece has high cigarette prevalence (30.1%) Cigarette distribution and retail sale are In 2006, approximately 4.5 million packs of contraband cigarettes were seized by the and one of the highest daily cigarette fragmented, with over 850 wholesalers and over 40,000 retailers Greek authorities consumption in the EU (23.9 sticks per day) -2006 GCTS data Cheap cigarettes were launched in the Greek • The most recent illegal factory raid was in • Greece's anti-smoking legislation bans market in 2004 (down to 0.80 EUR/20 September 2005 in Thessaloniki where 80 tonnes (4.5 million sticks) of counterfeit Assos smoking in most public buildings and bars / cigarettes) as a result of an intensifying and UK brands of cigarettes were confiscated restaurants must allocate space for noncompetition at the low end of the market smokers Greece is an active participant of the SECI (South Eastern Co-operation Initiative), which The large inflow of migrant workers in recent is a multi-lateral agreement focused on years continues to support high levels of tracking contraband and counterfeit products cigarette sales, but the market seems to decline following the price increases of August Currently, outdoor and cinema (under 2006 restrictions) advertising is allowed in Greece



## Historic sales and pricing trends

Historically, cigarette sales in Greece grew steadily from 1996 and peaked in 2004. However, since 2005 legal sales of cigarettes have declined slightly due to increased prices Historic cigarette prices and domestic sales 1996 – 2006



Sources: (1) In Market Sales supplied by PMI

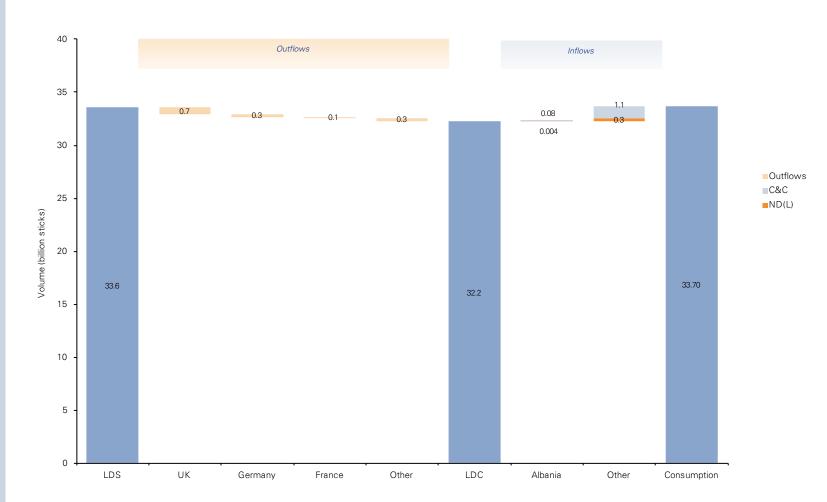
(2) Weighted average pack price supplied by PMI Greece management - based on estimates



# Inflows and outflows

Greek consumption is estimated at 33.7bn sticks, in line with legal sales of 33.6bn sticks

# Consumption breakdown 2006 (1)(2)(a)(b)



Notes: (a) LDS - Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

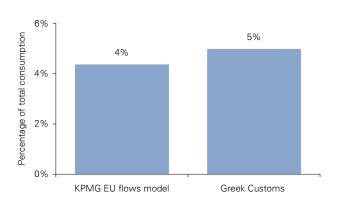
(2) Synovate ND(L) research, December 2006

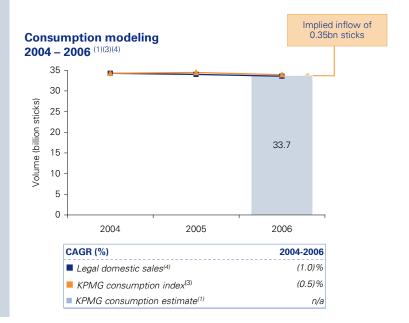


#### **Comparison of sources for non-domestic estimates**

The KPMG estimate of non-domestic share is in line with Greek Customs

# Non-domestic market share estimates 2006 unless otherwise stated (1)(2)





#### KPMG estimates of non-domestic consumption in Greece are comparable to the Greek Customs estimate

- Greek Customs estimate non-domestic at approximately 5% of consumption
  - no other estimates are available to corroborate our findings from external research or interviews
- Low non-domestic share in Greece is in line with PMI Greek management's view that Greek smokers rarely purchase cigarettes when returning from abroad due to the lower prices in the domestic market<sup>(5)</sup>

# Consumption modelling suggests a small net inflow from Greece, consistent with our overall results

 The total outflow from Greece is approximately 1.35bn sticks which, when combined with total inflows (1.48bn), is consistent with the consumption modelling result of minimal net inflow<sup>(1)(3)</sup>

Sources: (1) KPMG EU flows model

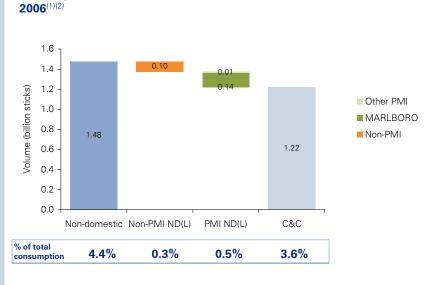
- (2) Interview Customs Control Greece
- (3) KPMG consumption index model
- (4) In Market Sales supplied by PMI
- (5) Interview with PMI Management Greece, 28 September 2006

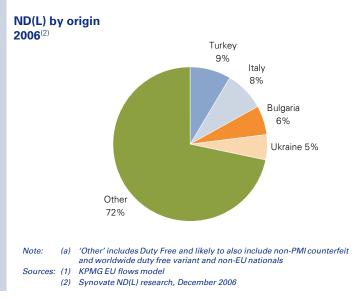


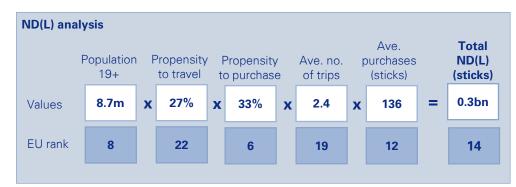
# Non-domestic (legal) results

ND(L) by brand

PMI product accounts for more than half of ND(L), with Germany, France, and Turkey the key source markets



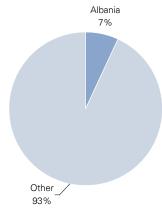






# Contraband and counterfeit breakdown

# C&C by origin (excluding PMI counterfeit) 2006 (1)(a)



Note: (a) 'Other' includes Duty Free and likely to also include non-PMI counterfeit and worldwide duty free variant and non-EU nationals

Sources: (1) KPMG EU flows model



# **Contents – country detail**

- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

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



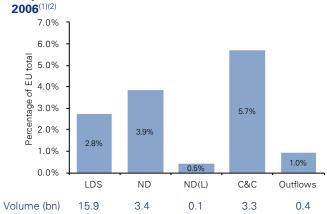
# **Overview**

Hungary has a relatively high non-domestic share, predominantly coming from the Ukraine



(b) Countries which are both source and destination countries are coded according to the larger flow  $\,$ 

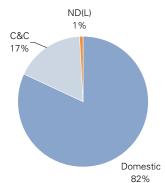
### Proportion of total EU levels



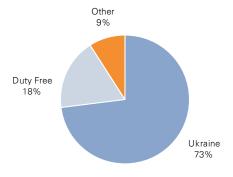
Source: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006

# Total Hungarian consumption – 18.8bn 2006<sup>(1)(2)</sup>



# Non-domestic by origin (ND(L) and C&C) $\,$ – 3.4bn 2006 $^{(1)}$





#### **Market context**

Hungary has the least affordable cigarettes in the EU relative to disposable income and was the first 2004 accession country to align its excise tax levels with EU regulations



#### **Pricing**

- Prices have risen significantly in recent years, with the first major tax rises occurring in 2002
  - between 2002 and 2004, excise taxes increased 93.5% translating into a 63% price increase
- Average prices in Hungary are approximately three times that in neighbouring Ukraine, hence the significant cross border trade (€1.80 vs. €0.55)
- Hungary has the least affordable cigarettes in the EU when comparing average pack price to disposable income

#### **Market segmentation**

- Cheap segment has gained significant legal share of the market since 2002, mostly at the expense of the Medium and Low segments
  - between 2002 and 2006, the Cheap segment increased from 21.3% to 40.8% of the market
  - Cheap segment has also gained share with the recent decline in non-domestic
- Priluki, a brand not legally sold in Hungary, accounts for approximately 8% of consumption in 2006, down from 14% in 2005
- Other tobacco products, such as roll-your-own, have gained significant share since 2003, equating to approximately 2.4bn sticks in 2006

#### **Enforcement**

- In 2006, increased levels of enforcement caused a significant drop in the non-domestic share in the market
- Some of the new measures include:
  - tightened border controls
  - confiscating vehicles used in smuggling operations
  - additional sniffer dogs
  - additional administrative burden for bringing cigarettes in from Romania

#### Social and legal

- The Hungarian government has started publicising the illicit tobacco problem with widespread media coverage, particularly of seizures
- PMI Hungary management believe that Romanian accession to the EU will have a marked impact on the Hungarian market as difficulties will arise with controlling an intra-EU border

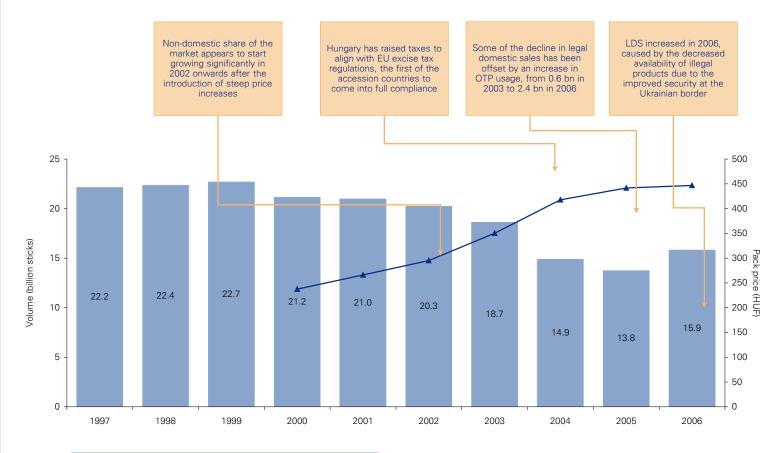


# **Historic sales and pricing trends**

Sales have fallen since 2000, with a likely increase in non-domestic share

This trend was reversed in 2006 with increased measures taken by the customs authorities

Historic cigarette prices and legal domestic sales 1997 – 2006



CAGR (%)	2000-2005	2005-2006
Legal domestic sales <sup>(1)</sup>	(8.2)%	15.1%
- Average pack price(2)	13.2%	1.2%

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PM management

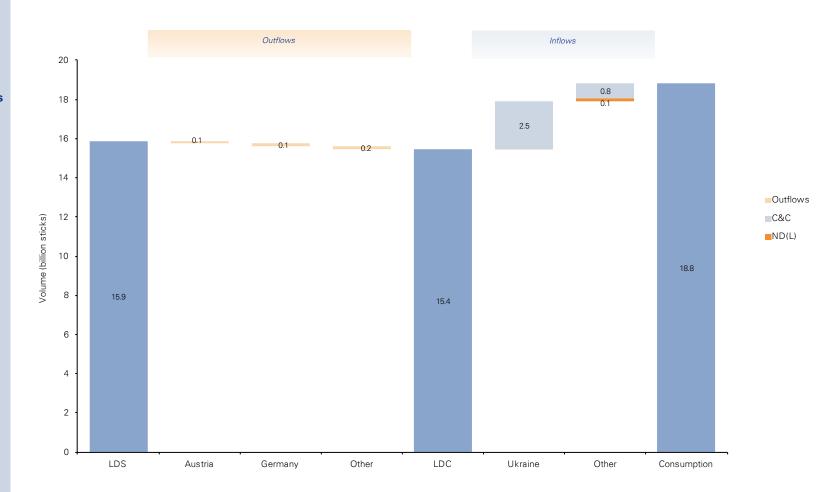


# Inflows and outflows

Hungarian consumption is estimated at 18.8bn sticks versus legal sales of 15.9bn, a net inflow of 2.9bn sticks

Ukraine is the key source of non-domestic cigarettes into Hungary

# Consumption breakdown 2006<sup>(a)(b)(1)(2)</sup>



Notes: (a) LDS – Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

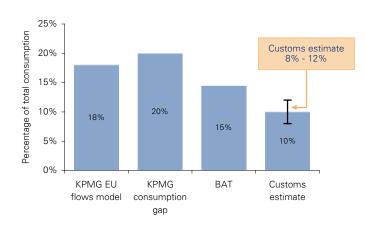
(2) AC Nielsen ND(L) research, December 2006



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

KPMG's estimates of the non-domestic share are largely consistent with other sources available in the market

# Non-domestic market share estimates 2006 unless otherwise stated (1)(2)(3)(4)



# Consumption modelling 1997 – 2006



#### KPMG's estimates are reasonably in line with other estimates

- KPMG estimates that non-domestic accounts for 17% of consumption, slightly higher than the BAT pack swap survey and Customs estimates and slightly lower than that forecast by the consumption modelling
- In June 2006, VPOP, the Hungarian Customs and Finance Guards, introduced new measures allowing them to confiscate vehicles being used in any form of smuggling
  - this is believed to have reduced the level of smuggling in the market
- Both PMI Hungary management and VPOP agree that non-domestic share
  of the market is likely to have fallen significantly during the course of 2006
  - the pack swap survey undertaken by BAT was taken in November 2006, and is therefore likely to fully include any decline in nondomestic share that occurred during the summer and may therefore understate the full year picture
- The customs estimate of 10% is a snapshot taken in September 2006, and is unlikely to incorporate the changes throughout the year

# Consumption modelling helps to corroborate that Hungary is a significant inflow country

- Consumption modelling suggests inflows of 3.8bn versus 2.8bn from the KPMG EU Flows Model
- The consumption modelling also supports the hypothesis that there was a significant drop in non-domestic consumption between 2005 and 2006
- VPOP have stated that there were some outflows to Austria in the mid to late 1990s which are no longer present
  - this would bring the consumption modelling even more closely in line with the KPMG estimate of non-domestic

Source: (1) KPMG EU Flows Model

(2) KPMG Consumption Index Model

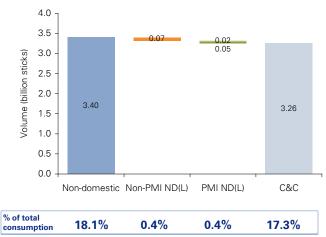
- (3) BAT EPS Survey, Results quoted from interview with Hungarian Association of the Tobacco Industry
- (4) Interview with VPOP, the Hungarian Customs and Finance Guards, 30 November 2006
- 5) In Market Sales supplied by PMI management



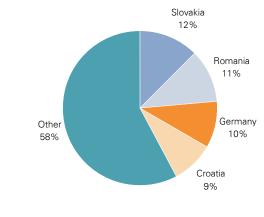
# Non-domestic (legal) breakdown

ND(L) accounts for less than 1% of Hungarian consumption

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

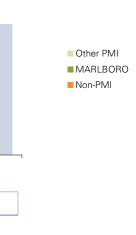


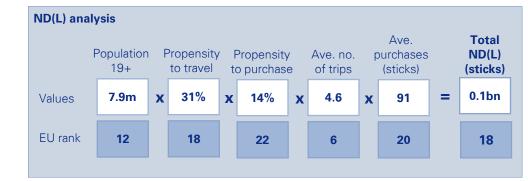
# Non-domestic legal by origin 2006<sup>(2)</sup>



Source: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research, December 2006



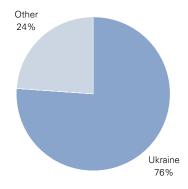




# Counterfeit and contraband breakdown

Three quarters of C&C is from the Ukraine

# C&C by origin (excluding PMI counterfeit) 2006



Source: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006



# **Contents – country detail**

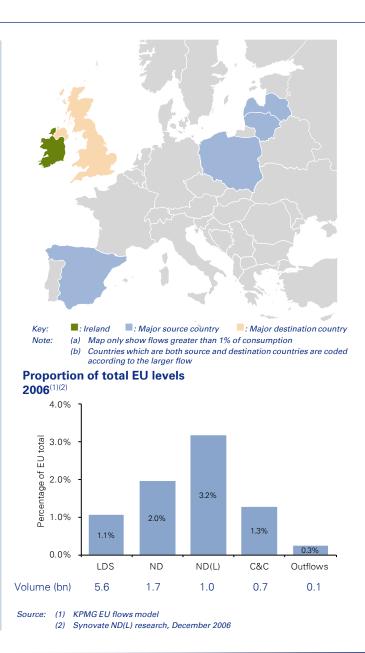
- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

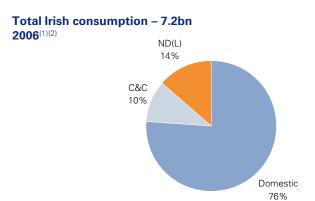
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
- UK



# **Overview**

Almost a quarter of Irish cigarette consumption is non-domestic





# Non-domestic by origin (ND(L) and C&C) – 1.7bn $2006^{(1)}$





#### **Market context**

Ireland has a substantial, and growing, population of Eastern European migrants



#### **Pricing**

- Ireland introduced minimum pricing legislation in 1978 and sets the minimum price at 97% of the market average, currently €6.00
  - the Irish Government intends to fight a legal challenge by the European Commission
- The 2006 budget raised cigarette excise taxes by €0.50 per pack from December
  - prices remain lower than those in the UK, including Northern Ireland

#### Market segmentation

- Minimum pricing has prevented the use of price as a key competitive factor and resulted in a high concentration of the market between a small number of brands
  - only 2% of smokers switch brand in a year, compared to 25% in the UK
- Independent retailers are an important distribution channel; 45% of the market is distributed through symbol retailers and CTNs (confectioners, tobacconists and newsagents)
  - the share of vending has fallen from 16% to 10% following the smoking ban

#### **Enforcement**

- The nature of seizures made by Customs has changed since the early 2000s with an increased number of small seizures
  - in 2000 96 million cigarettes were seized in 403 seizures, compared to 44 million cigarettes in 13,000 seizures in the first 11 months of 2006
- Customs attributes its success in stopping street selling of illicit cigarettes to the introduction of tax stamps
  - a new stamp with holographic security features was introduced in 2006 following the discovery of counterfeit tax stamps

#### Social and legal

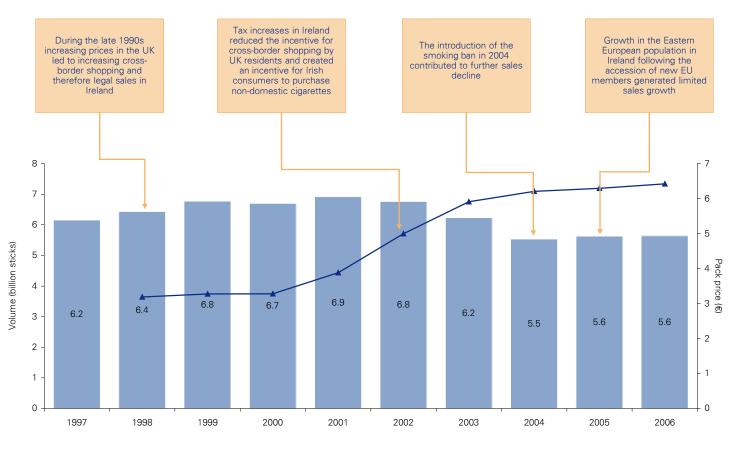
- Ireland was the first EU country to introduce a workplace smoking ban, including restaurants and pubs, in March 2004
  - legislation has continued, with moves to introduce a ban on the sale of cigarettes in packs of 10 from the end of May 2007
- Since the accession of new EU countries in 2004 Ireland has experienced an influx of migrant workers, boosting cigarette consumption and both the legal and illegal markets



# Historic sales and pricing trends

Rapidly increased prices, and a well enforced smoking ban, have resulted in a drop in legal cigarette sales, although this has subsequently stabilised

Historic cigarette prices and legal domestic sales 1997 - 2006



CAGR (%)	1997-2001 <sup>(a)</sup>	2001-2006
Legal domestic sales <sup>(1)</sup>	2.9%	(4.0)%
- Average pack price <sup>(2)</sup>	6.8%	10.6%

(a) Average pack price CAGR is from 1998 to 2001

Source: (1) In Market Sales supplied by PMI

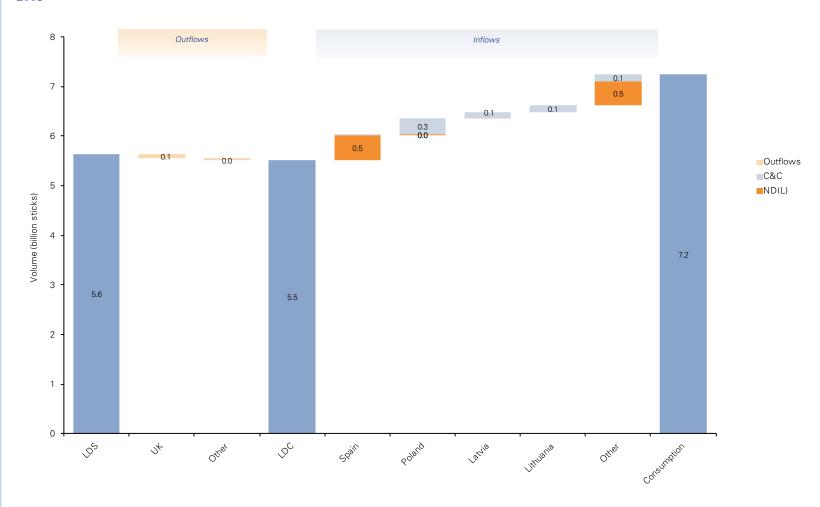
(2) Weighted average pack price supplied by PM Ireland management



# Inflows and outflows

Irish consumption is estimated at 7.2 billion sticks versus legal sales of 5.6 billion, a net inflow of 1.6 billion sticks

# Consumption breakdown 2006<sup>(a)(b)(1)(2)</sup>



Notes: (a) LDS – Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

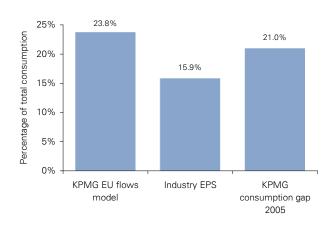
(2) Synovate ND(L) research, December 2006



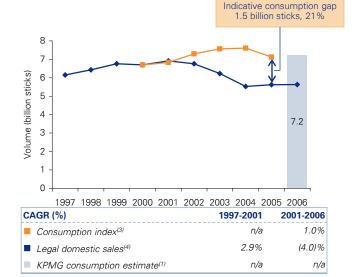
#### Comparison of sources for non-domestic estimates

Our estimate of the nondomestic market share is well supported by consumption modelling

# Non-domestic market share estimates 2006 unless otherwise stated (1)(2)(3)



# Consumption modelling 1997 – 2006



# The most recent pack survey performed by the tobacco industry implies a non-domestic market share substantially below our own but is not believed to be a robust estimate

- We understand from Customs that the latest pack survey performed by the tobacco industry indicated that 15.9% of packs were non-domestic
  - however, we understand from PMI management that this study was based on pack collections at three sporting events and may therefore misrepresent the population
  - we also understand that the calculation of the non-domestic percentage may not have been performed correctly

# Our estimate is supported by modelling of the gap between legal sales and indicative consumption, which is likely to underestimate the non-domestic share

- Survey data show that during the period 2002 to 2004, when cigarette sales were in steep decline, consumption actually increased
  - over this period Ireland experienced rising disposable incomes and a steadily increasing population
- Although we do not have access to survey data for 2006, the gap implied for 2005, of 1.5 billion sticks, indicates an increase in the non-domestic market share equivalent to 21% of consumption since 2000
  - this is likely to underestimate the non-domestic share as it is unlikely that the market was entirely domestic in 2000

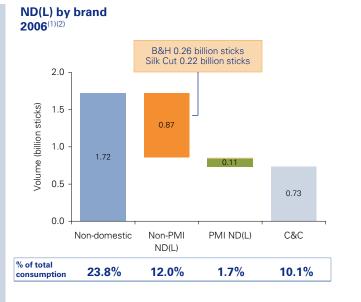
Sources: (1) KPMG EU flows model

- (2) Interview with Irish Customs
- (3) KPMG consumption index model
- (4) In Market Sales provided by PMI

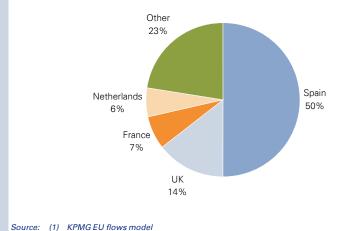


# Non-domestic (legal) results

The primary source of ND(L) purchases is Spain, where UK and Irish brands are readily available



# **ND(L)** by origin **2006**<sup>(2)</sup>



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





Other PMI

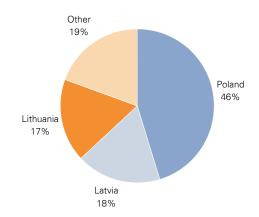
■ Non-PMI ■ Total

■ MARLBORO

# **Counterfeit and contraband breakdown**

The majority of C&C originates in Eastern Europe

# C&C by origin (excluding PMI counterfeit) 2006 $^{(1)(2)}$



Source: (1) KPMG EU flows model

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



# **Contents – country detail**

- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

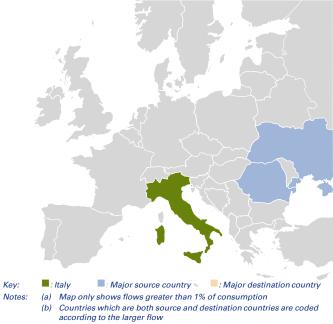
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- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
- UK



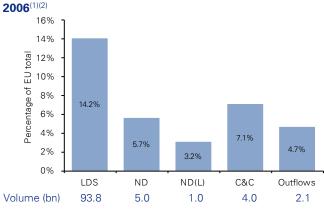
#### **Overview**

**Domestic sales account for** 95% of consumption

**Duty Free is the leading** non-domestic channel followed by Romania

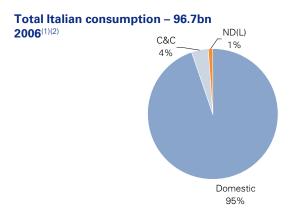


#### **Proportion of total EU levels**

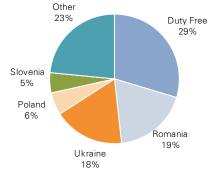


Sources: (1) KPMG EU flows model

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



Non-domestic by origin (ND(L) and C&C) - 5.0bn 2006(1)



#### **Market context**

The Guardia Finanza has been successful in combating illegal product flows in recent years



#### **Pricing**

- In 2002, Italy converted from the Lira to the Euro currency
- In 2004, the government introduced fiscal measures such as the minimum excise tax and current excise methodology
- In 2005, the government introduced a minimum reference price for cigarettes with the purpose of protecting public health and discouraging young people from smoking
- In February 2007, cigarette price levels reached €1.40 per 20's pack for 'low' and 'super low' brands and €3.40 per 20's pack for 'premium' brands

#### Market segmentation

- Logista is the main distributor of cigarettes
  - Italy has over 55,000 tobacconists, over 9,000 other points of resale and approximately 15,000 cigarette vending machines
- Internet sales in Italy are a growing phenomenon
  - Italy's Ministry of Finance and the Guardia di Finanza have set up a special unit to combat online sales of contraband cigarettes, a business they believe is now worth €80 million per year

#### **Enforcement**

- The Guardia di Finanza has been successful in addressing contraband and counterfeit tobacco issues by increasing levels of border control
  - it is now widely believed that organised crime gangs have moved to other areas where government control is less stringent
- Seizures in port regions increased in 2006, although the majority of seized product was not intended for the Italian market

#### Social and legal

- Medium smoking incidence and average daily consumption around 20% and 14 sticks respectively
- A law banning smoking in enclosed public places came into force in Italy in January 2005
  - all enclosed places open to the public are prohibited from allowing smoking on their premises, unless a dedicated smoking area responding to stringent technical requirements is provided
- High levels of immigration to Italy from Eastern Europe, Africa and Latin America helped sales in 2006

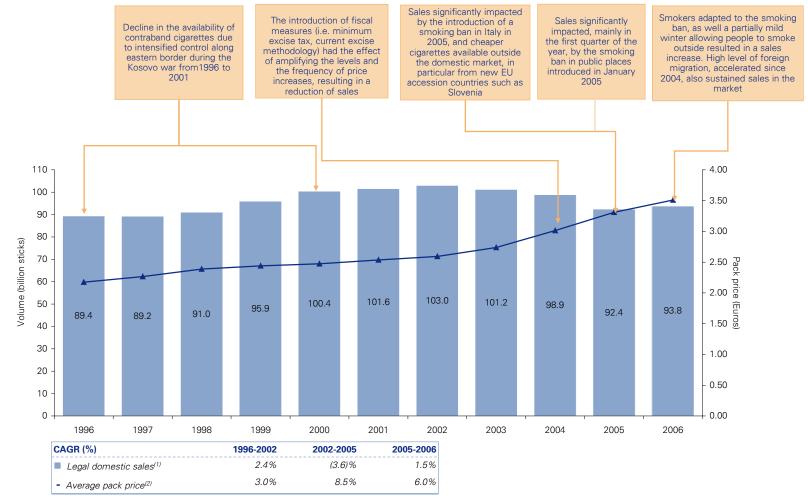


#### Historic sales and pricing trends

Historically, legal sales showed steady growth from 1996 to 2002

From 2003 to 2005, price increases and a fall in cigarette consumption drove a decline in sales

However, in 2006, despite the introduction of a new smoking ban and price increases, sales increased slightly Historic cigarette prices and legal domestic sales 1996 – 2006



Sources: (1) In Market Sales supplied by PMI

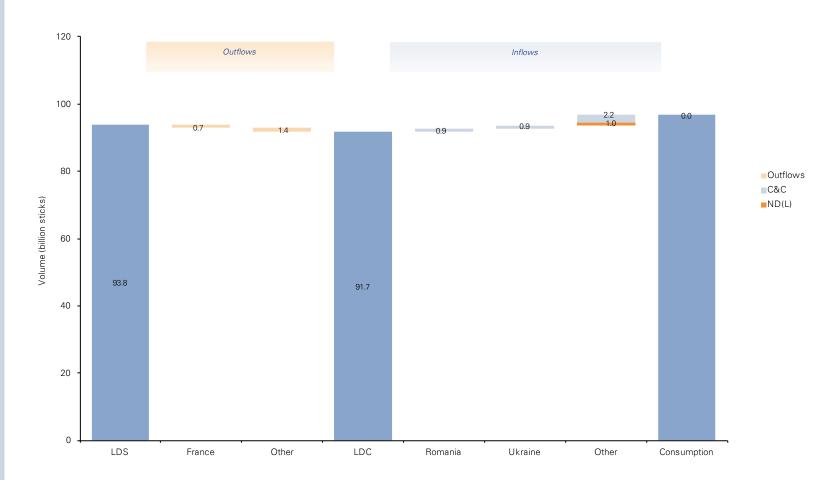
(2) Weighted average pack price supplied by PMI Italy management



# Inflows and outflows

Italian consumption is estimated at 96.7bn sticks versus legal sales of 93.8bn sticks, a net inflow of 2.9bn sticks

# Consumption breakdown 2006 (1)(2)(a)(b)



Notes: (a) LDS - Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

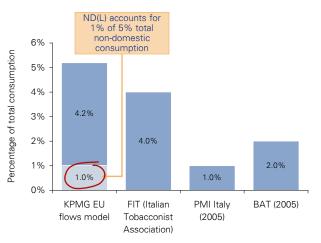
(2) Synovate ND(L) research, December 2006



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

KPMG's estimates of the non-domestic share are largely consistent with the FIT's estimate but are above other market estimates

# Non-domestic market share estimates 2006 unless otherwise stated (1)(2)(3)(4)



# KPMG estimates are broadly in line with an FIT's estimate but higher than 2005 estimates by BAT and PMI Italy

- KPMG estimates from the EU flows model are reasonably close to an estimate by the FIT (Italian Tobacconist Association)
- BAT's non-domestic estimates of 2% of consumption is a 2005 estimate and only accounts for contraband cigarettes
  - it is likely that BAT's estimate is understated as it does not account for either legal flows or counterfeit product entering the market
- PMI Italy's 2005 estimate is for cross border purchases only and does not appear to include either duty free flows or counterfeit and contraband cigarettes coming into the country
  - KPMG estimates the total non-domestic market at 5%, of which 1% is ND(L) and the remainder is C&C
  - PMI Italy estimate for 2005 of 1% non-domestic tallies with our ND(L) result of 1%

Sources: (1) KPMG EU flows model

(2) Interview with Italian Tobacconist Association

(3) 'Italy consumes 2 billion contraband cigarettes a year', BAT, June 2005

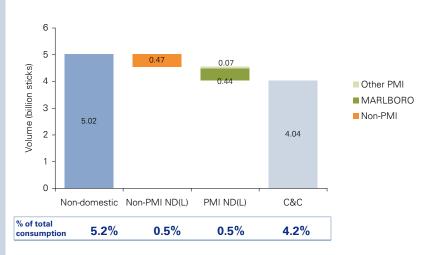
(4) PMI management Italy



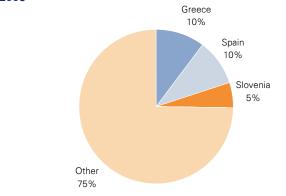
# Non-domestic (legal) results

PMI product accounts for half of ND(L), with Greece and Spain the key source markets





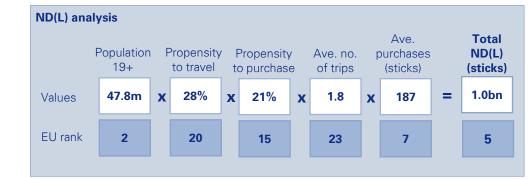




Note: (a) 'Other' includes Duty Free and likely to also include non-PMI counterfeit

and worldwide duty free variant and non-EU nationals
Sources: (1) KPMG EU flows model

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

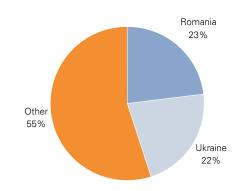




# Contraband and counterfeit breakdown

Romania and the Ukraine are the key sources of illicit products

#### **C&C** by origin (excluding PMI counterfeit) 2006<sup>(a)</sup>



(a) 'Other' includes Duty Free and likely to also include non-PMI counterfeit and worldwide duty free variant and non-EU nationals

Sources: (1) KPMG EU flows model



# **Contents – country detail**

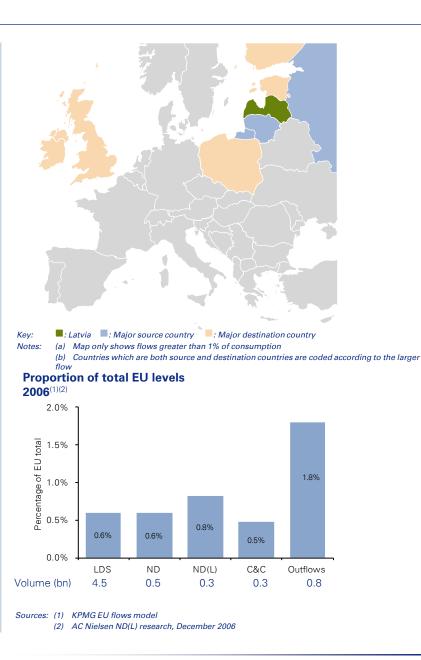
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- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
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- Malta
- Netherlands
- Poland
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- Slovakia
- Slovenia
- Spain
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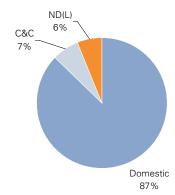


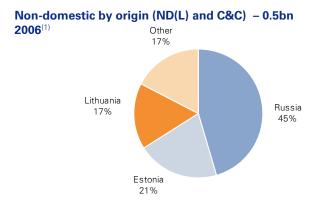
#### **Overview**

Russia is the most significant source for nondomestic product, followed by Estonia and Lithuania











#### **Market context**

Latvia has the lowest prices in the EU and also the lowest tax yield



#### **Pricing**

- Latvia has the lowest prices in the EU (0.53 LVL / €0.76), as well as the lowest tax yield (€18 / 1000 sticks)
- Latvia has a very high specific tax component, therefore although cheaper brands are roughly the same price in Latvia as Estonia, Marlboro is approximately two-thirds the price
  - Marlboro price is approximately €1.18 in Latvia and €1.73 in Estonia
- Significant tax increases have been announced, with a 22% rise in January 2007, a further 33% rise in July, and then an 88% rise in January 2008
  - this will impact retail prices later due to loading

#### Market segmentation

- A further polarisation of the Latvian market has occurred in 2006, with the Cheap and Premium segments both growing share
  - the Cheap segment increased by 4.4 times in 2006
  - the Premium segment grew by 18%
  - the Medium segment declined by 10%

#### **Enforcement**

- One counterfeit factory has been found in Latvia manufacturing PM branded products for sale to the German market (2005)
- Sales of cigarettes through the open markets have been banned, which was previously a major channel for illicit products
- Latvia is seen as an easier transit route to Western Europe from Russia than Estonia or Lithuania

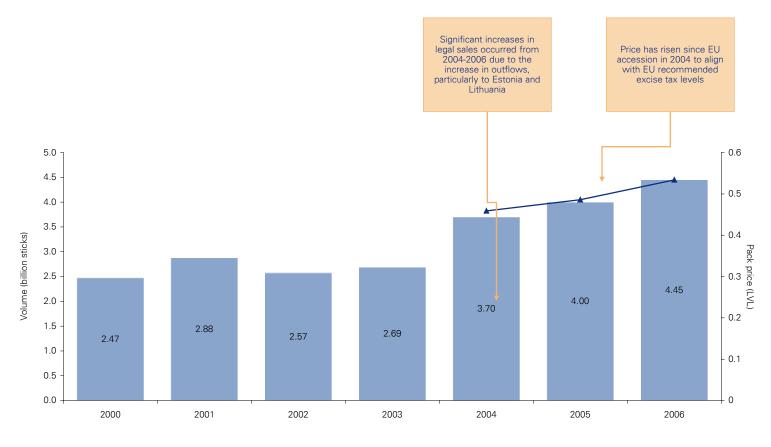
#### Social and legal

- Riga has a significant Russian population, most of whom are believed to travel to Russia frequently and buy cigarettes, mostly for personal consumption
- The Latvian government have recently announced new anti-smoking measures to be implemented in the next few years
  - smoking is to be banned in educational establishments and restaurants in July 2007
  - colour picture smoking warnings are under discussion for a future introduction



# **Historic sales and pricing trends**

After experiencing a broadly flat market from 2000 until 2003, sales have shown a marked increase since Historic cigarette prices and legal domestic sales 2000 – 2006



CAGR (%)	2000-2003	2003-2006
Legal domestic sales <sup>(1)</sup>	2.8%	18.3%
- Average pack price <sup>(2)</sup>		7.9% <sup>(a)</sup>

Note: (a) Price CAGR calculated from 2004 to 2006 due to availability of data

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PM management

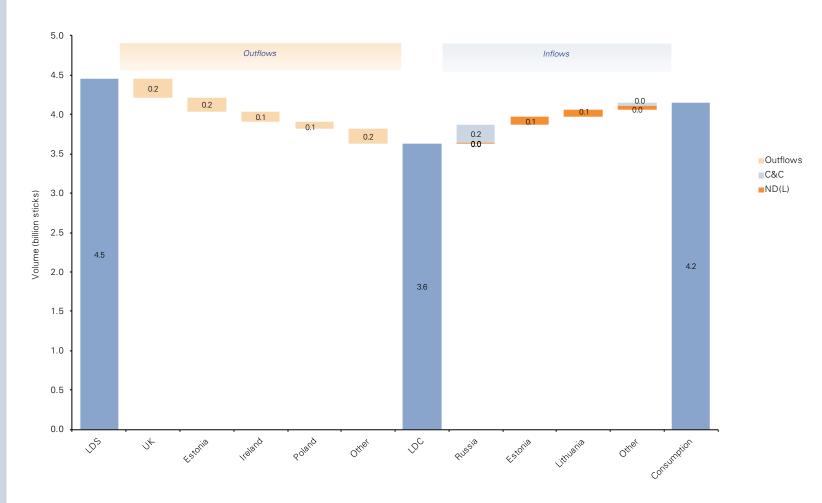


# Inflows and outflows

Latvian consumption is estimated at 4.2bn sticks versus legal sales of 4.5bn sticks

Both inflows and outflows are significant





Notes: (a) LDS – Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

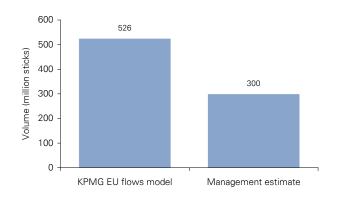
(2) AC Nielsen ND(L) research, December 2006



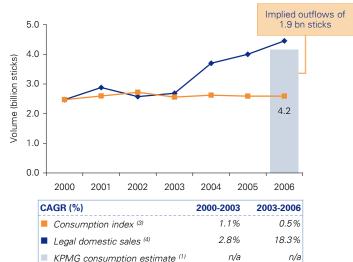
#### Comparison of sources for non-domestic estimates

KPMG's estimate of nondomestic consumption is slightly higher than that of management

# Non-domestic market volume estimates 2006 unless otherwise stated (1)(2)



# Consumption modelling 2000 – 2006



# The KPMG estimate of non-domestic is higher than the estimate from management yet appears reasonable

- Latvia is a difficult market to estimate accurately due to the complex interaction between inflows and outflows
- The management estimate is based on analysis of prevalence, consumption and tourism rates
  - no other external estimates were available
- The KPMG estimate bears comparison with the results for Estonia
  - Estonia, a similar market with both inflows and outflows, shows a higher non-domestic proportion
  - however, the incentive for non-domestic purchasing is higher in Estonia due to higher prices

# The consumption modelling suggests that Latvia is a significant source country for non-domestic

- Consumption modelling shows that consumption remains flat over the analysed period, while sales show a steep increase from 2004
- This suggests substantial outflows, in line with expectations and the results of the flows model
- The consumption model does imply higher outflows than expected, although the very rapid growth in legal sales (18.3% per year over the last three years) makes accurate quantification less likely
- There is likely to have been some non-domestic consumption at the beginning of the analysed period
  - this would bring the consumption modelling more in line with the KPMG estimates

Sources: (1) KPMG EU Flows model

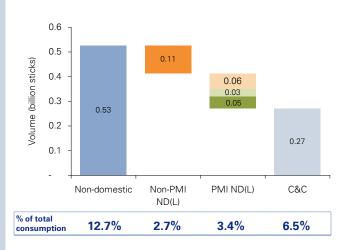
- (2) PMI Latvia Management
- (3) KPMG consumption index model
- (4) In Market Sales supplied by PMI management



# Non-domestic (legal) breakdown

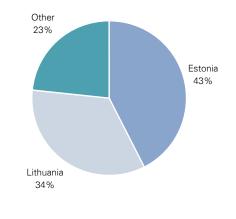
Approximately half of the non-domestic consumption in Latvia is legal, the majority of which are incidental flows from its more expensive neighbours, Estonia and Lithuania

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



# Other PMIL&MMARLBORONon-PMITotal

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





Source: (1) KPMG EU Flows Model

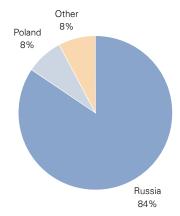
(2) AC Nielsen ND(L) research, December 2006



# **Counterfeit and contraband breakdown**

Over 80% of contraband originated in Russia

# C&C by origin (excluding PMI counterfeit) 2006



Source: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006



# **Contents – country detail**

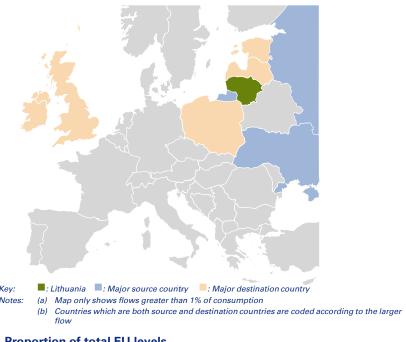
- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

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

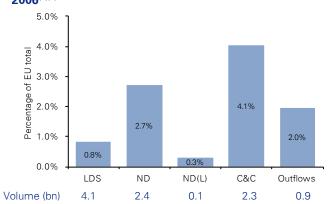


#### **Overview**

Lithuania has the highest proportion of non-domestic consumption in the EU at 43%



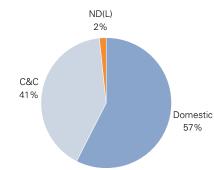
# Proportion of total EU levels **2006**<sup>(1)(2)</sup>



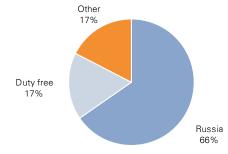
Source:s (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006

# Total Lithuanian consumption – 5.6bn 2006<sup>(1)(2)</sup>



# Non-domestic by origin (ND(L) and C&C) – 2.4bn 2006<sup>(1)</sup>





#### **Market context**

Although no major price increases have occurred since EU accession in 2004, non-domestic consumption remains high



#### Pricing

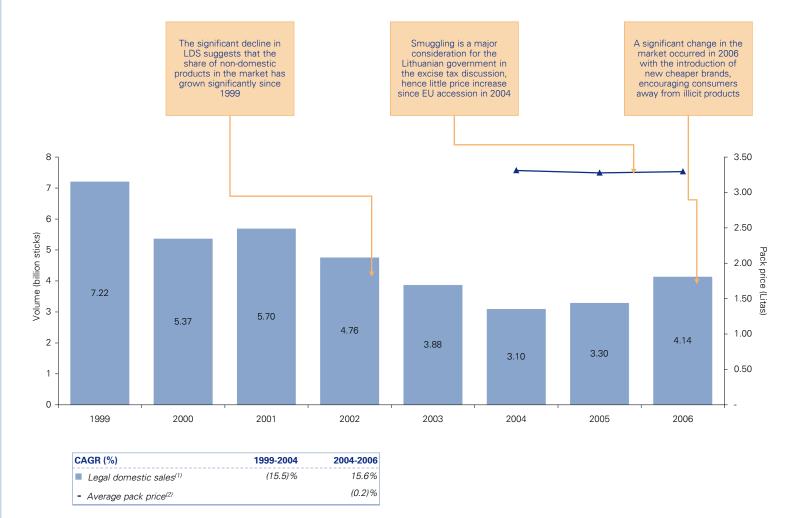
- No increase in tax levels had occurred since January 2004 until a 30% rise was introduce in March 2007
- Prices remain low in comparison to the rest of the EU, but almost twice that available in Kaliningrad
  - Marlboro price is approximately €1.27 in Lithuania versus €0.78 in Kaliningrad

#### **Market segmentation Enforcement** Social and legal • Since Lithuania signed the Schengen • There is a historical culture of consumption of • The market is polarising with both the Premium and Super Cheap segments gaining agreement, additional enforcement has been smuggled goods in Lithuania with a very high installed on the external EU borders tolerance of the illicit trade share • St. George, historically a major non-domestic • Two counterfeit raids took place in 2006, one According to a study undertaken by the brand, was launched as a domestic brand in making filters, the other capable of the full Lithuanian Free Market Institute, 44% of April 2005 and rapidly production cycle from blending to pack people that live in the Kaliningrad border region buy smuggled goods production the second most popular reason for not buying more smuggled goods was "I don't know where to buy them"



### Historic sales and pricing trends

A significant drop in legal sales occurred between 1999 and 2004, although the trend has reversed for the last two years Historic cigarette prices and legal domestic sales 1999 - 2006



Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PM management

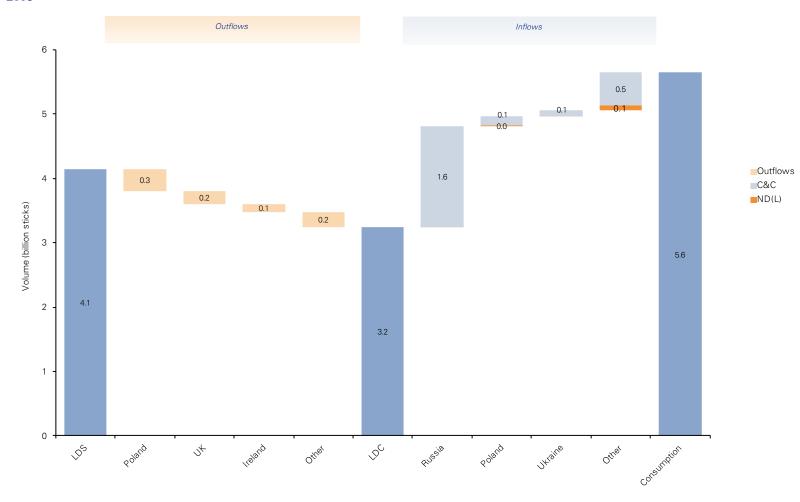


#### Inflows and outflows

Lithuanian consumption is estimated to be 5.6bn sticks versus legal sales of 4.1bn, a net inflow of 1.5bn

Illicit Russian products account for two-thirds of total inflows





Notes: (a) LDS – Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

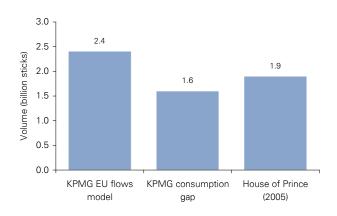
(2) AC Nielsen ND(L) research, December 2006



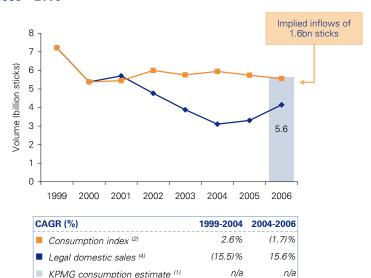
### Comparison of sources for non-domestic estimates

Although slightly higher, the KPMG estimate of non-domestic seems reasonable compared to other available sources

# Non-domestic market volume estimates 2006 unless otherwise stated (1)(2)(3)



# Consumption modelling 1999 – 2006



# The KPMG estimate of non-domestic consumption is broadly comparable with an estimate by House of Prince

- KPMG estimates that 2.4bn sticks of consumption in Lithuania is nondomestic, while House of Prince estimates 1.9bn in 2005 and the consumption modelling estimates 1.6bn
  - it is unclear what methodology was used by House of Prince to come to their estimate
- PMI Lithuania management estimates a non-domestic figure inline with the House of Prince estimate based on trade patterns and changes in legal sales
  - this estimate, however, does not include an estimate of outflows

# The consumption modelling confirms the position of Lithuania as a major market for non-domestic products

- The consumption modelling suggests inflows of 1.6bn sticks versus 2.4bn from the KPMG EU Flows Model
  - however, the KPMG EU Flows Model estimates 1.5bn net inflows, absolutely consistent with the consumption index
- The consumption modelling also suggests that there was a significant drop in non-domestic consumption between 2004 and 2006

Sources: (1) KPMG EU Flows Model

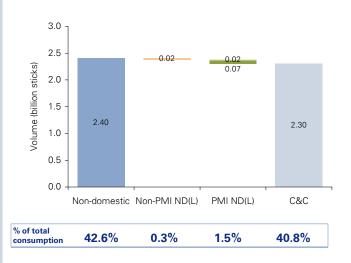
- (2) KPMG Consumption Index Model
- (3) House of Prince, quoted from "Appearance of Cheap cigarettes facilitates growth of tobacco market", ELTA, 30 March 2006
- (4) In Market Sales supplied by PMI management



### Non-domestic (legal) breakdown

ND(L) accounts for less than 2% of Lithuanian consumption

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



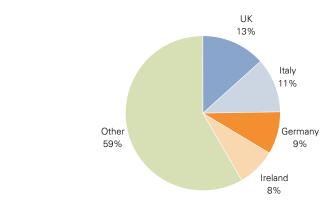
■ Non-PMI

■ Other PMI ■ MARLBORO

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

Source: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) research, December 2006



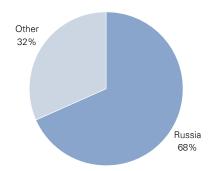




### Counterfeit and contraband breakdown

Russia is the key source market for C&C in Lithuania

# C&C by origin (excluding PMI counterfeit) 2006



Source: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006



### **Contents – country detail**

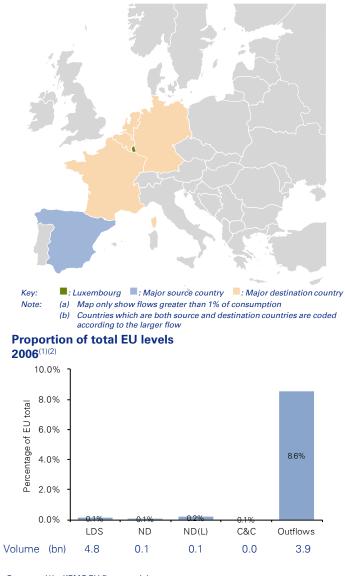
- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

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

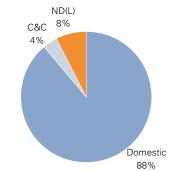


#### **Overview**

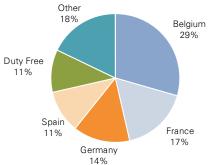
Cigarette prices are lower in Luxembourg than surrounding countries and, as a result, the market is characterised by significant outflows and very low legal inflows







# Non-domestic by origin (ND(L) and C&C) – 0.1bn 2006 $^{(1)}$



Sources: (1) KPMG EU flows model



#### **Market context**

Luxembourg has a high proportion of non-resident workers



#### **Pricing**

- Luxembourg offers a significant price discount over all of its neighbours
  - Marlboro prices are 20% to 40% cheaper than in neighbouring countries
- Prices have steadily increased, with a €0.20 per pack tax increase implemented in January 2006

#### **Market segmentation**

- Rolling tobacco is an important segment of the tobacco market with approximately four billion stick equivalents sold in 2006
- The low-priced segment has gained share of the market and continues to drive down prices
  - much of this growth has been driven by increased demand form French consumers for low-priced brands
- Sales of UK brands peaked at 18% of the market in 2000 but have declined to represent only 6% in 2006

#### **Enforcement**

- With no ports or extra-EU borders cigarette smuggling has not been a priority for Customs
  - seizures of illicit cigarettes are rare in Luxembourg
- Cigarette outflows from Luxembourg are on a much greater scale than inflows
  - 4.8 billion sticks were legally sold in 2006, compared to estimated consumption of approximately 1 billion
  - major outflows are to Belgium, Germany and France

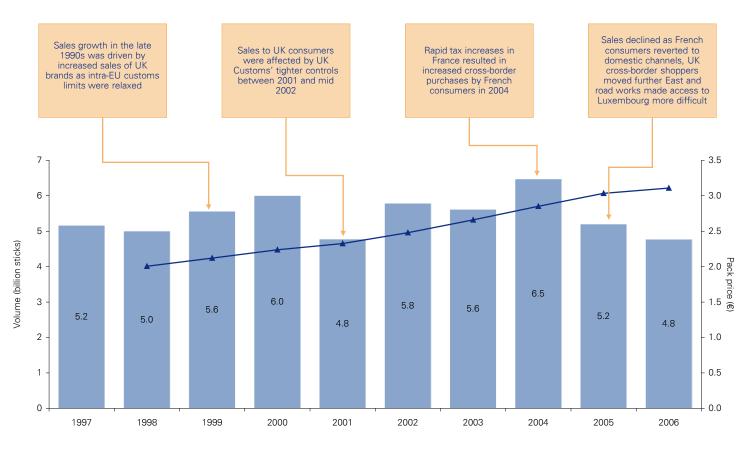
#### Social and legal

- Anti-smoking legislation covering restaurants and cafes was introduced in September 2006
- Luxembourg has a relatively large population of foreign nationals, representing almost 40% of the total resident population
  - Portuguese nationals account for the largest single group at 14% of the total population
  - in addition, approximately 120,000 nonresidents commute into Luxembourg from surrounding countries



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

Although prices in Luxembourg have increased consistently over the last 10 years, external factors affecting neighbouring countries have driven fluctuations in domestic sales Historic cigarette prices and legal domestic sales 1997 - 2006



CAGR (%)	1997-2000 <sup>(a)</sup>	2000-2006
Legal domestic sales <sup>(1)</sup>	5.2%	(3.8)%
- Average pack price <sup>(2)</sup>	5.6%	5.6%

lote: (a) Average pack price CAGR is from 1998 to 2000

Source: (1) Tax stamp data supplied by PM Benelux management

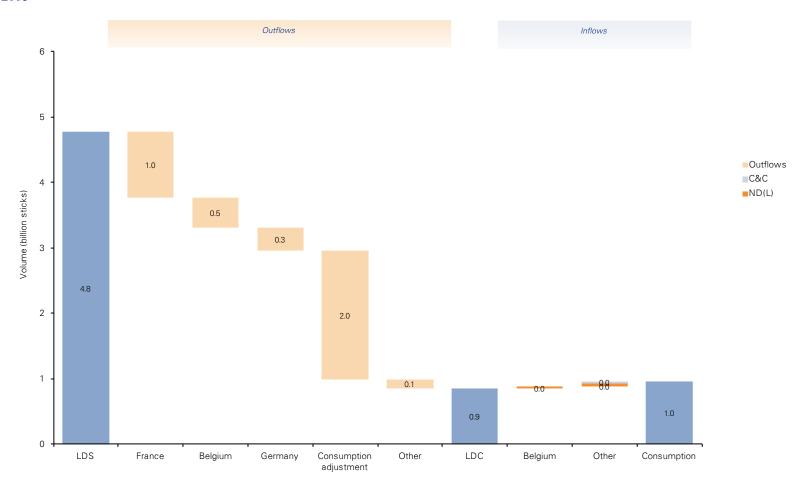


### Inflows and outflows

Approximately 80% of domestic sales in Luxembourg are consumed outside of the country

We have adjusted outflows to account for under-reporting of these relatively small volumes in neighbouring countries





Notes: (a) LDS – Legal Domestic Sales

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

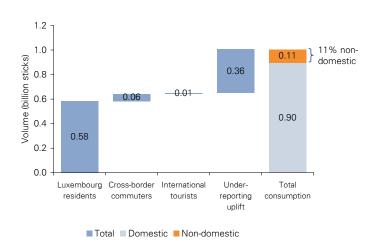
Sources: (1) KPMG EU flows model



# **Estimation of consumption**

Our estimate of total consumption in Luxembourg is based on survey data and the non-domestic share of the market relative to neighbouring countries is consistent with the different market dynamics of these countries

# Consumption estimate 2006<sup>(1)(2)(3)</sup>



Consumption calculation				
	Luxembourg	Belgium	Netherlands	
Population 18+ (million) <sup>(1)</sup>	0.4	8.6	13.2	
Smoking incidence <sup>(1)</sup>	29%	20%	19%	
Avg daily consumption <sup>(1)</sup>	15.4	14.7	13.8	
Implied consumption (billion sticks)(a)(2)	0.7	8.7	12.0	
KPMG consumption (billion sticks) <sup>(3)</sup>	n/a	13.2	19.0	
Implied understatement	36%	37%	35%	
Consumption estimate (billion sticks)	1.01	n/a	n/a	

# The scale of outflows from Luxembourg and the small size of the domestic market make an exact measurement of domestic consumption very challenging

- The estimation of outflows from Luxembourg requires the measurement of flows from Luxembourg into all other countries
  - these inflows are particularly difficult to measure as they are likely to be concentrated geographically within markets and are relatively small compared to the domestic markets of the destination countries
- As a result, this approach is likely to underestimate the volume of flows out of Luxembourg and hence overstate consumption

# We have used consumer survey data to adjust our estimate of consumption

- We have used consumer survey data to estimate domestic consumption by residents, commuters and visitors to Luxembourg
  - we estimated the extent of under-reporting in the survey data at 40% by performing the same calculation for Belgium and the Netherlands, and comparing the result to our own consumption estimates
- Applying an uplift for under-reporting implies total consumption of 1.01 billion sticks

# We have applied the results of the empty pack survey in Luxembourg to our revised consumption estimate

- The empty pack survey results for Luxembourg imply a non-domestic market share of 11%, equivalent to 110 million sticks
- There are no external estimates of the size of the non-domestic market in Luxembourg
  - however, this figure is substantially below that for Belgium and the Netherlands, which is consistent with having no cheaper neighbours and being a low priority target for smugglers, who are likely to favour larger markets

Note: (a) Implied consumption for Luxembourg includes 0.07 billion sticks attributed to international commuters and tourists

Sources: (1) Attitudes of Europeans towards tobacco, Eurobarometer, 2006

(2) http://ec.europa.eu

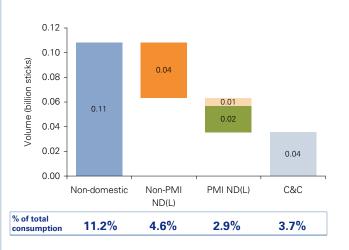
(3) KPMG EU flows model



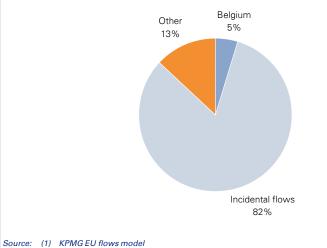
# Non-domestic (legal) results

The majority of ND(L) in Luxembourg consists of incidental flows as a result of the high number of visitors received from neighbouring countries





# **ND(L)** by origin **2006**<sup>(2)</sup>



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





Other PMI
MARLBORO

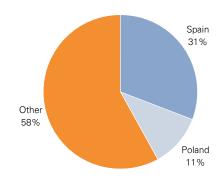
Non-PMI

■ Total

### Counterfeit and contraband breakdown

C&C accounts for a relatively low percentage of consumption in Luxembourg

# C&C by origin (excluding PMI counterfeit) 2006 $^{(1)(2)}$



Source: (1) KPMG EU flows model



### **Contents – country detail**

- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

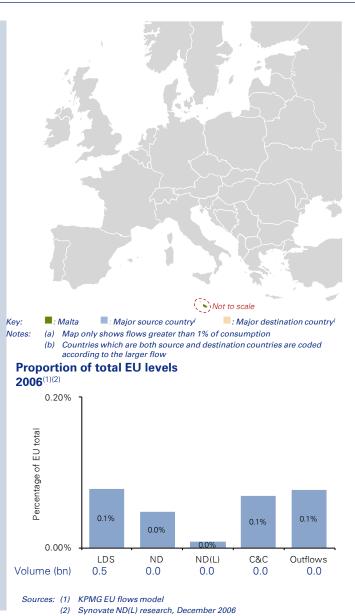
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

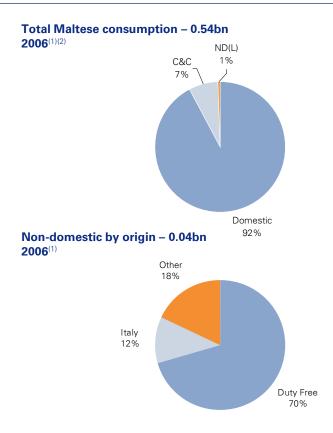


#### **Overview**

Domestic sales account for 92% of consumption, and legal inflows are minimal

Non-domestic inflows are predominately from Duty Free channels







#### **Market context**

Malta is the smallest cigarette market in the EU



#### Pricing

- Prior to EU accession in May 2004 the excise tax system was discriminatory for imported brands (higher taxation) versus locally produced brands
- Post EU accession, the excise tax system was aligned to EU requirements. However, the government increased excise tax levels, which was one of the factors that led to price increases
- BAT, the only local manufacturer, ceased production of cigarettes in Malta in mid 2006, and all products are now imported from EU factories

#### **Market segmentation Enforcement** Social and legal Malta smoking prevalence is 25% and average • Cigarettes are sold through many sales Reportedly, in the past Malta was a key transit cigarette consumption is 20 sticks per day channels but mainly through vending point for illegal cigarette trafficking from China, machines and small shops Africa destined towards other European (pure estimates provided by the distributor of markets where cigarette prices are higher PMI) The high ad valorem excise component provides an incentive for the launch of many New anti-smoking legislation was introduced in recent years, Maltese customs have low priced brands since 2004 increased the number of boat checks which in 2005 that requires bars, restaurants and has led to an increase in seizures of illegal cafes to allocate designated smoking areas on • In Malta there are only two brand segments cigarettes their premises premium and low priced cigarettes • The most significant seizure in 2006 was A decline in tourist visitors in recent years is approximately 8.5 million cigarettes found at believed to be a key driver of the decline in Freeport by customs officials in a container sales that was declared to be carrying household goods that had arrived from Asia

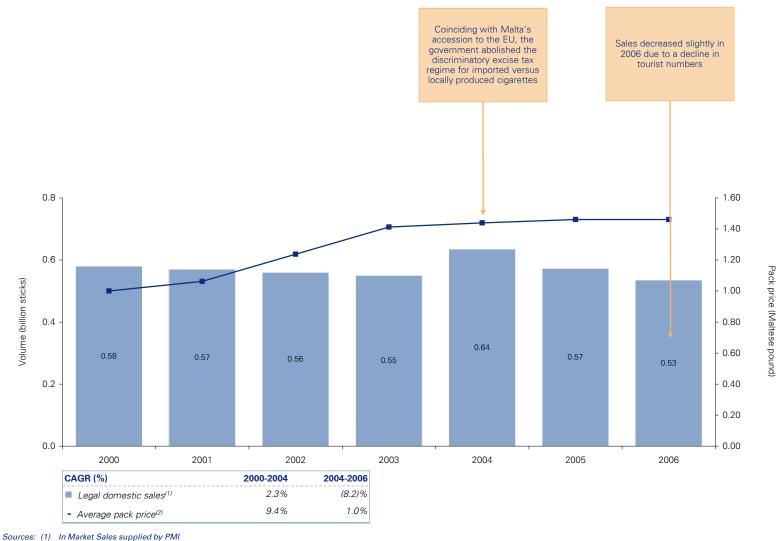


### Historic sales and pricing trends

Cigarette total market has remained relatively flat in Malta apart from a slight peak in 2004

Sales fell marginally in 2006 due to a decline in tourist numbers





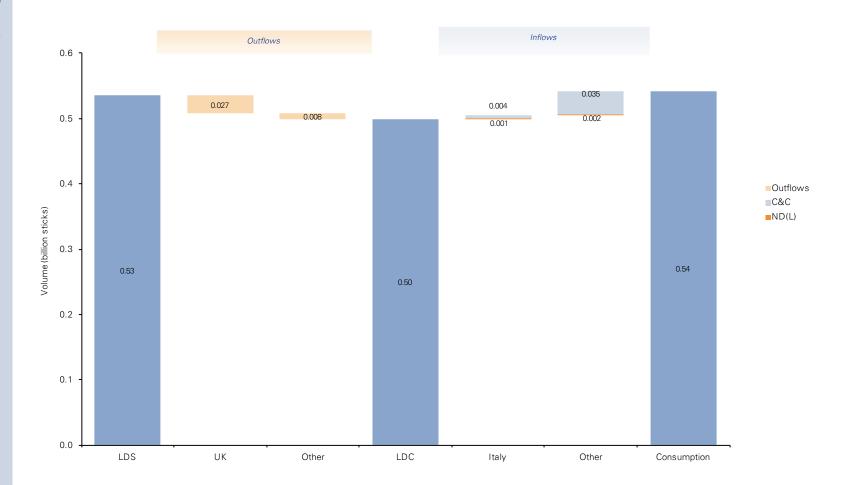
(2) Average pack price supplied by PMI Greece management - based on PMI distributor's data



### Inflows and outflows

Maltese consumption is estimated at 0.56bn sticks versus legal sales of 0.53bn sticks, a net inflow of 0.03bn sticks

# Consumption breakdown 2006 (1)(2)(a)(b)



(a) LDS – Legal Domestic Sales

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

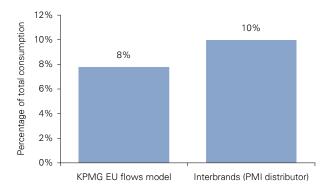
Sources: (1) KPMG EU flows model



### Comparison of sources for non-domestic estimates

KPMG's estimate of nondomestic consumption in Malta is consistent with that of Interbrands (PMI Malta distributor)

Percentage of total consumption
Non-domestic market estimates
2006 unless otherwise stated (1)(2)



# KPMG estimate of non-domestic consumption in Malta is broadly in line with that of Interbrands

- No other estimates are available to corroborate our findings from external research or interviews
- Consumption index modelling in Malta is not possible due to the absence of historic GCTS data

Sources: (1) KPMG EU flows model

(2) Interview with Interbrands (PMI distributor)

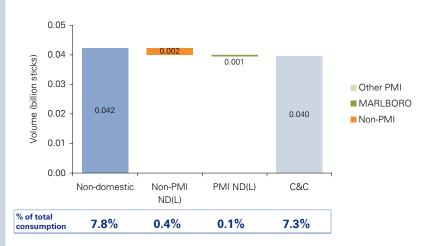


### Non-domestic (legal) results

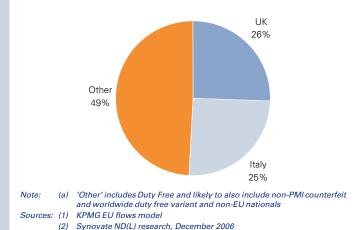
The majority of nondomestic legal flows into Malta are from the UK and Italy

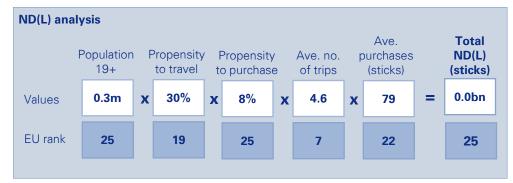
Non-domestic consumption in Malta is dominated by illicit products, with less than 7% of the non-domestic consumption being legal

# **ND(L)** by brand **2006**<sup>(1)(2)</sup>



# **ND(L)** by origin **2006**<sup>(2)</sup>

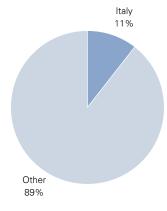






### Contraband and counterfeit breakdown

# C&C by origin (excluding PMI counterfeit) 2006 $^{(1)(a)}$



(a) 'Other' includes Duty Free and likely to also include non-PMI counterfeit and worldwide duty free variant and non-EU nationals

Sources: (1) KPMG EU flows model



### **Contents – country detail**

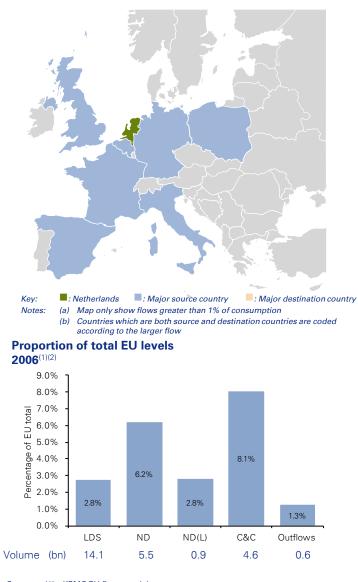
- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

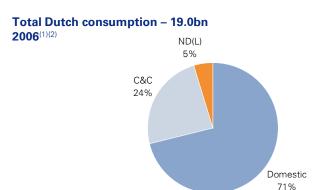
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
- UK



### **Overview**

The Netherlands has a relatively high non-domestic market share, with significant volumes coming from several different source countries









Sources: (1) KPMG EU flows model



#### **Market context**

As a major international shipping hub, the Netherlands is a key route into the EU for non-domestic cigarettes



#### **Pricing**

- Cigarette prices are similar to Belgium and offer a small discount to Germany
- Taxes were increased by €0.55 in February 2004, resulting in a €0.80 per pack price increase on the MPPC
  - subsequent price increases have been in the region of €0.10 to €0.20 and this trend is expected to continue
  - tax increases have not been reflected in the weighted average price due to a change in the mix towards low priced brands

#### **Enforcement**

- The Netherlands is a key route into the EU for cigarettes from the Far East, which enter through the major ports
  - Customs has focused on controlling containers passing through Rotterdam, which has resulted in an increase
- Customs raided a counterfeit factory in 2005
  - the factory was operated by a Lithuanian and Romanian workforce

#### Social and legal

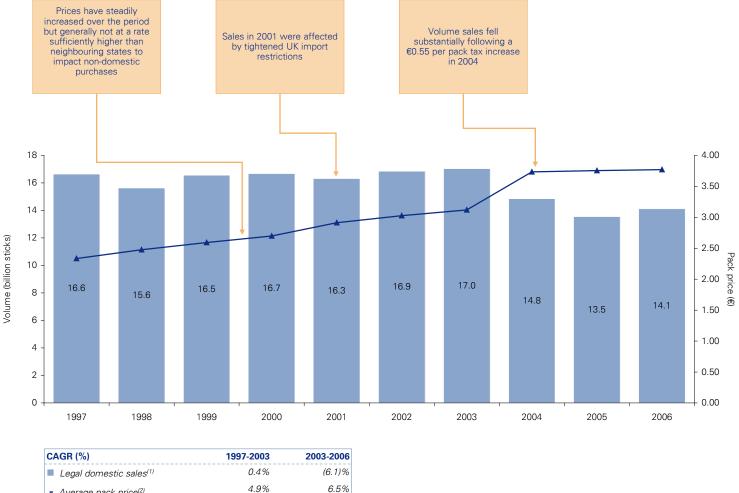
- In January 2004 the Netherlands introduced a law granting the right to a smoke-free workplace
  - this excludes restaurants and bars, which have been asked to phase in smoke-free areas by January 2009



### Historic sales and pricing trends

A major price increase in 2004 resulted in a significant drop in domestic cigarette sales, implying an increase in the non-domestic market share

#### Historic cigarette prices and legal domestic sales 1997 - 2006



4.9% Average pack price<sup>(2)</sup>

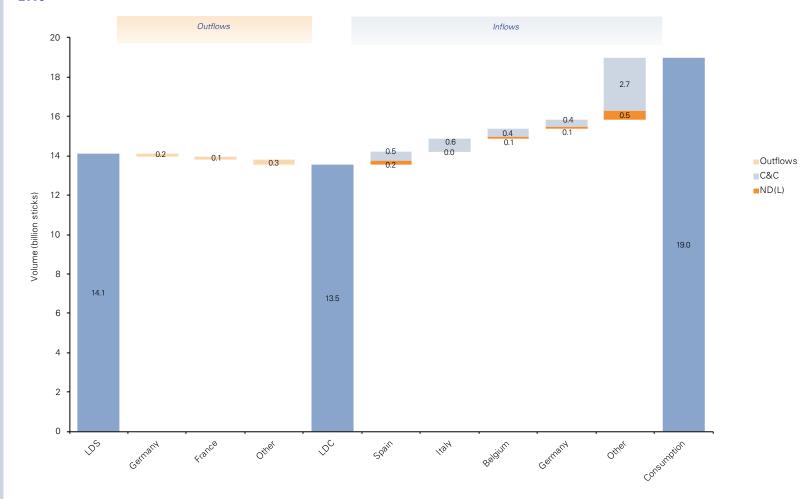
Source: (1) Tax stamp data supplied by PM Benelux management



#### Inflows and outflows

Consumption in the
Netherlands is estimated
at 19 billion sticks versus
legal sales of 14 billion, a
net inflow of
approximately 5 billion
sticks





Notes: (a) LDS – Legal Domestic Sales

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

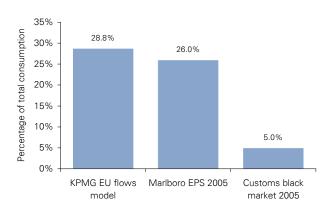
Sources: (1) KPMG EU flows model



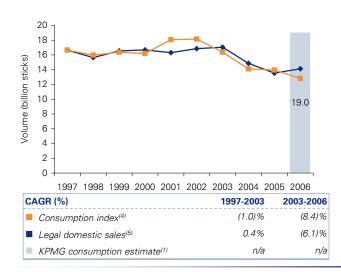
#### Comparison of sources for non-domestic estimates

Although relatively high, our estimate of the nondomestic share of consumption is consistent with an empty pack study from 2005

# Non-domestic market share estimates 2006 unless otherwise stated (1)(2)(3)



# Consumption modelling 1997 – 2006



#### Our estimate of the non-domestic market share is consistent with the empty pack survey performed in 2005

- The 2005 EPS was limited by a small sample size of 1,197 packs and was restricted to Marlboro only, of which 26.0% were non-domestic
  - our results for 2006 included 2,762 Marlboro packs, of which 21.3% were non-domestic
- The reduced non-domestic share of Marlboro packs is likely to result partly from the small sample size in 2005 and may also reflect the increase in domestic sales seen in 2006
- The total non-domestic market share has been increased by the inclusion of brands such as Camel, L&M, Lucky Strike and Philip Morris (with nondomestic market shares up to 70%)

#### Customs' estimate appears very low

- The estimate of the black market from Dutch Customs excludes legal non-domestic inflows
  - however, legal inflows account for less than 20% of the total
- Customs' estimate would place the Netherlands among the bottom three countries in terms of its non-domestic share and is significantly different to empty pack surveys

# Consumption modelling implies that the non-domestic share of the market has not changed substantially during the review period

- Although legal sales declined between 2003 and 2005, this appears to have reflected a decline in consumption rather than a shift towards nondomestic products
  - this may result from switching from cigarettes to hand rolled products

Source: (1) KPMG EU flows model

(2) Marlboro empty pack study, provided by PMI

(3) Interview with Netherlands Customs

(4) KPMG consumption index model

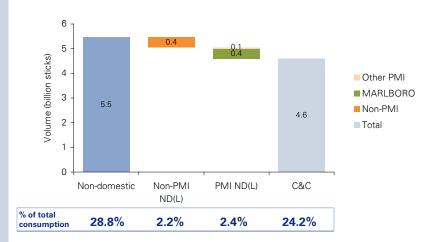
(5) Tax stamp data provided by PM Benelux management



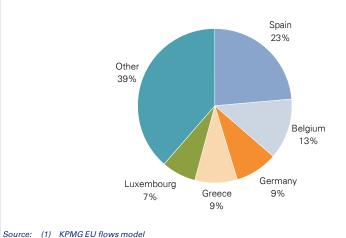
### Non-domestic (legal) results

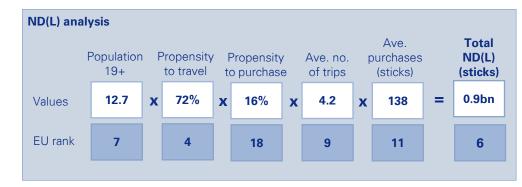
ND(L) accounts for a small proportion of nondomestic consumption and originates in neighbouring countries and holiday destinations





# **ND(L)** by origin **2006**<sup>(2)</sup>



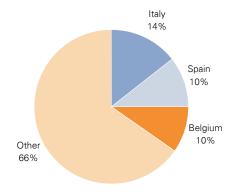




### Counterfeit and contraband breakdown

The Netherlands has the second highest penetration of C&C in the EU

# C&C by origin (excluding PMI counterfeit) 2006 $^{(1)(2)}$



Source: (1) KPMG EU flows model



### **Contents – country detail**

- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

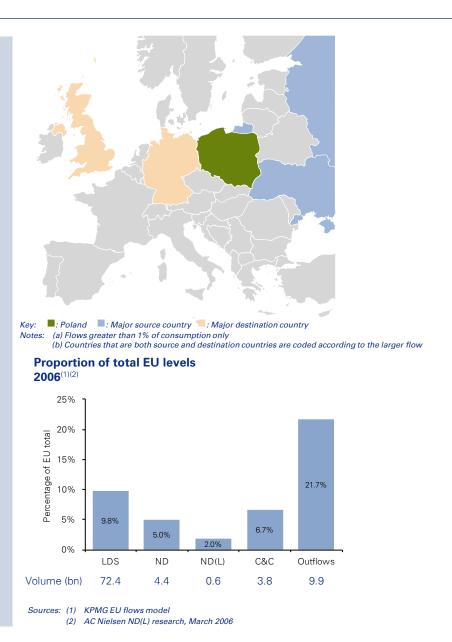
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

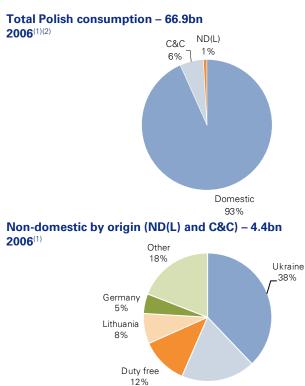


#### **Overview**

Non-domestic products account for 7% of Polish consumption

Ukraine and Russia are responsible for 63% of cigarette inflows





Russia 19%



#### **Market context**

Manufacturers have launched low-priced discount brands in an attempt to stem the inflow of non-domestic products following tax increases



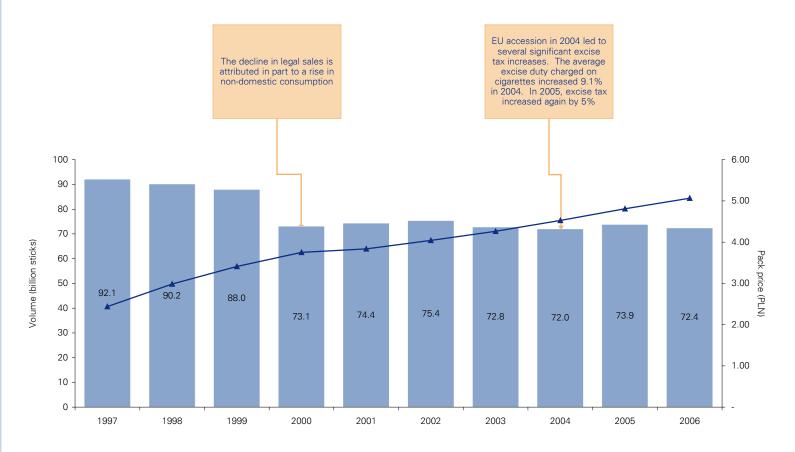
#### **Pricing**

- Excise taxes on cigarettes have been increased several times following Poland's entry into the EU in 2004
  - tobacco taxes rose by 16% and 13% in January 2006 and January 2007 respectively from €19.7 to €21.2 per 1,000 sticks
- Further tax rises will be necessary to meet the required EU minimum
  - prices are due to double from their current level to meet the imposed minimum of €64 per 1,000 sticks by 2008

#### **Market segmentation Enforcement** Social and legal Smoking prevalence is relatively high in Poland at A sharp rise in excise taxes has led to increased • Cheap cigarette inflows from new EU Member States has had a negative impact on domestic sales around 32% but has been declining price competition • Following accession in 2004, the Bryne Directive on • The low-price, branded segment has grown share in There is significant organised small scale smuggling along the Eastern border known as 'ant' activity recent years in response to local discount brands health warnings, tar, nicotine and carbon monoxide content was implemented in Poland and the health emerging A 200 stick limit is in place but cross border trade is warning size on packs increased these were relatively uncommon in 2003 a widely accepted practice The marginal decline in 2006 sales volumes is There is believed to be a lower incidence of attributable to falling demand as a result of rising counterfeit due to accessibility of low-priced prices following tax increases genuine product and police crackdown on known counterfeit distribution locations (e.g. Gubin stadium Excise increases have mostly impacted low-price in Warsaw) branded products however, domestic production of counterfeit it has been reported that less affluent product destined for UK and Germany is rising consumers have switched to smuggled products Smuggled goods requisitioned by customs have in the past been labelled with a customs excise band and re-sold by customs offices

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

Legal domestic sales have fallen significantly from 1997 but have remained relatively stable since 2000 Historic cigarette prices and legal domestic sales 1997 – 2006  $^{(1)(2)}$ 



CAGR (%)	1997-2000	2000-2006
Legal domestic sales <sup>(1)</sup>	(7.4)%	(0.2)%
- Average pack price <sup>(2)</sup>	15.5%	5.1%

Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PMI Poland management



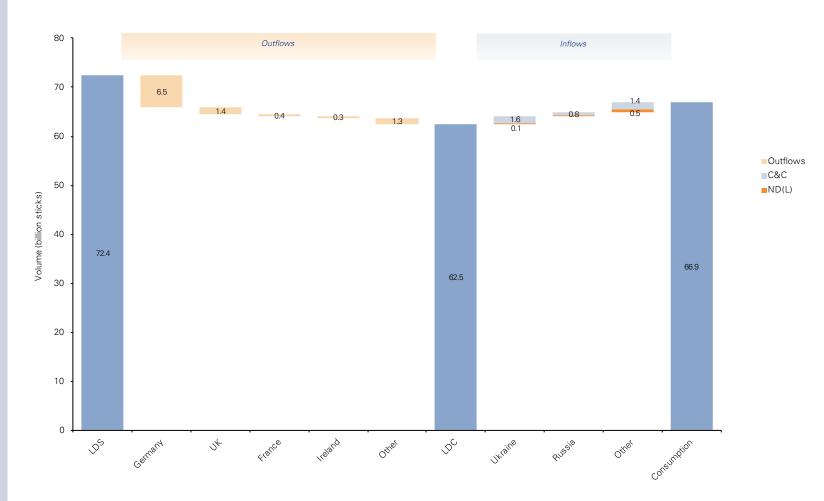
#### Inflows and outflows

Polish consumption is estimated at 66.9bn sticks versus legal sales of 72.4bn sticks, a net outflow of 5.5bn sticks

Poland is a major outflow market, with the majority of product destined for higher priced German and UK markets

The majority of nondomestic inflow comes from Ukraine and Russia

# Consumption breakdown 2006 (1)(2)(a)(b)



Notes: (a) LDS – Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

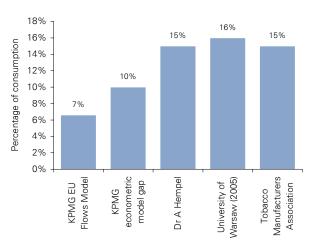
(2) GfK ND(L) research, March 2006



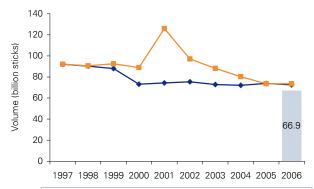
### Comparison of sources for non-domestic estimates (1 of 2)

Although implied KPMG non-domestic incidence is lower than external estimates, these estimates are likely to include product outflows to other countries

## Non-domestic market share estimates 2006 unless otherwise stated (1)(3)(4)(5)



## Consumption modelling 1997 – 2006 (1)(2)



CAGR (%)	1997-2000	2000-2006
Consumption index	(1.2)%	(3.1)%
Legal domestic sales	(7.4)%	(0.2)%
KPMG consumption estimate	n/a	n/a

## Other external estimates appear higher as they will include both product inflow intended for transit to other markets and outflows of Polish product

- Other external estimates range from 15% to 20% of consumption
- Nearly all estimates infer that the majority of non-domestic consumption is contraband
- Non-domestic consumption in Poland is perceived to be high given the extent of 'ant' activity along the Eastern border
  - University of Warsaw estimate that smuggled cigarettes represent approximately 11 billion cigarettes
  - Tobacco Merchants Association estimated 14 billion non-domestic cigarettes in 2004, although consumption modelling suggests this is likely to have declined since then
- We might expect slightly lower results than external sources as these may include flow of product destined for other countries in their estimates
  - "50% of smuggled product is intended for local consumption and the remaining 50% for re-sale in higher markets." (4)
- It is reasonable to expect lower ND(L) in Poland compared to other Western countries due to comparatively low Polish pricing, extensive non-EU borders and less foreign travel incidence
- Multiple interview sources have cited tighter policing of C&C by authorities in recent years and that the share of non-domestic consumption may be reducing

## Our consumption index also supports the existence of a consumption gap in Poland over the test period but that this gap has narrowed in recent years

- The significant rise in the consumption index in 2001 suggests that an anomaly occurred in the GCTS in that year
  - however, implied consumption has exceeded legal domestic sales over the test period suggesting significant inflow of non-domestic product
- Consumption modelling only estimates the change in flows over the period.
   Narrowing of the gap suggests that the current non-domestic gap is lower than in previous years and potentially broadly comparable with levels in the late 1990s

Sources: (1) KPMG EU flows model

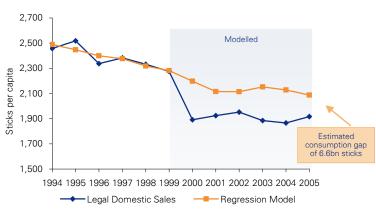
- (2) KPMG consumption index model
- (3) Poland Ministry of Finance
- (4) University of Warsaw, the market for Legal and Illegal Cigarettes, December 2005
- (5) Tobacco Merchants Association, Smuggling Trends, 2006

### Comparison of sources for non-domestic estimates (2 of 2)

Macroeconomic regression analysis was added into the methodology during the pilot to provide a means of corroborating the consumption gap

The analysis in Poland provided good collateral for our overall consumption estimate

## Legal domestic sales per capita vs. regression model 1994-2005<sup>(1)</sup>



- A regression model was developed to identify the relationship between key econometric variables (average price per stick, legal sales by product category, population and disposable income per capita)
- These correlations were then used to project legal sales forward
- We were able to model the projected consumption gap in Poland effectively to derive at an approximate and comparable consumption estimate in Poland
- However, the model is more applicable for purposes of corroboration than estimation
  - the viability of the econometric model approach is limited in the fact that it does not take into consideration all factors at play in driving total cigarette consumption, for example social legislation etc.
    - the GCTS consumption index will include these factors
  - the econometric approach is also only viable in a market where legal domestic sales are declining and there is an inverse relationship between prices and legal domestic sales
  - Price increases in 2006 imply that, as with consumption modelling, the consumption gap derived from econometric analysis will have declined further since 2005

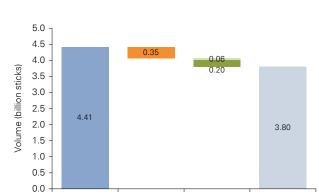
Source: (1) PMI In-market Sales, Volumes – Poland, 1994–2005,
Population data – National statistical offices/UN/Euromonitor International
Regression model – KPMG calculations



## Non-domestic (legal) results

ND(L) in Poland is low at 1% of consumption

Lithuania, Belarus and Ukraine are the main sources of ND(L)



% of total consumption 6.6% 0.5% 0.4% 5.7%

PMI ND(L)

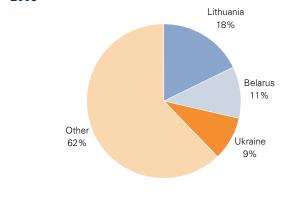
C&C

Non-domestic Non-PMI ND(L)

## **ND(L)** by origin **2006**<sup>(2)</sup>

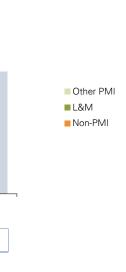
ND(L) by brand

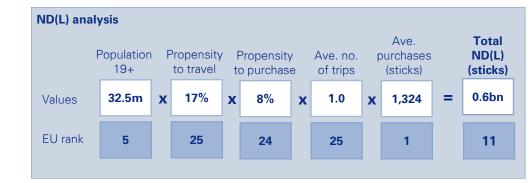
2006(1)(2)



Source: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) Research, March 2006





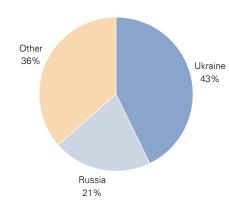


### **Counterfeit and contraband breakdown**

C&C accounts for 3.8bn sticks, equivalent to 6% of consumption

Ukraine and Russia are the major sources of C&C

## C&C by origin (excluding PMI counterfeit) 2006 $^{(1)(2)}$



Source: (1) KPMG EU Flows Model

(2) AC Nielsen ND(L) Research, March 2006



## **Contents – country detail**

- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
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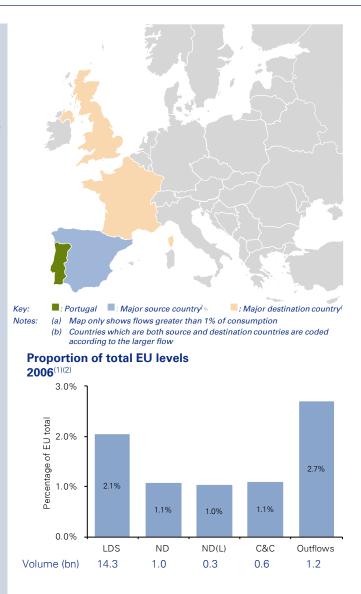


#### **Overview**

Non-domestic inflows into Portugal account for approximately 6% of total consumption

The majority of inflows are from Spain

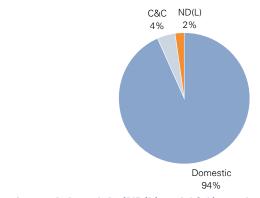
The majority of nondomestic cigarettes are non-PMI brands



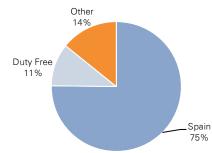
Sources: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006

## Total Portuguese consumption – 14.0bn 2006(1)(2)



## Non-domestic by origin (ND(L) and C&C) – 0.9bn 2006 $^{(1)}$



#### **Market context**

The Portuguese market is highly fragmented with many distributors and point of sale outlets

Significant price increases post 2004 have affected the stability of legal sales in the market, with people opting instead to purchase cheaper cigarettes from Spain

An influx of cheaper brands into the market in response to the higher tax and price levels appears to be levelling out now that only 35 cents separates the 'premium' and 'low' categories



#### **Pricing**

- Prices of cigarettes in Portugal have increased significantly since 2004
  - consumption tax rose by 4.7% in 2004, 8.8% in 2005, 12.9% in 2005 a further 11.5% in 2006
- By year end 2006 there was a price gap of €0.40 between the super low (€2.50) and premium brand (€2.90) categories
- Prices in Portugal are more expensive than in neighbouring Spain
  - the cheapest price for cigarettes in Portugal is
     €2.50 compared to €1.85 in Spain

#### Market segmentation

- The distribution and retail channels for cigarettes are highly fragmented with over 200 distributors and over 80,000 points of sales
  - cigarettes are predominately sold in tobacco shops and gas stations. Retail outlets do not require a licence sell tobacco in Portugal
- Since 2005, cheaper brands have been introduced into the market as a way to respond to the decreasing affordability following price increases resulting in some repositioning of existing brands
  - for example, Chesterfield moved from a medium brand to a medium-lower brand
  - most brands have introduced price increases that only partially reflect the tax increases and over an extended period of time
  - other tobacco products (RYO namely) are growing rapidly although from a low base

#### **Enforcement**

- Seizures increased in 2006 due to more capacity and resource in Customs and also an increase in staff competency training
- Portugal is currently piloting a project investigating the development of special stamps to increase cigarette packet security
  - the new stamps will offer three different levels of security and will be trialled in 2007
- The Portuguese government has regular communication with other countries, in particular Spain but also the EU commission, to discuss ways of combating illegal trade

#### Social and legal

- Portuguese smoking incidence and average daily consumption from GCTS are high at 29% and 18.1 sticks respectively (although MoH figures indicate a lower smoking incidence)
- Portugal will adopt new anti-smoking laws in mid 2007 (implementation in mid 2008) which will place further restrictions on smoking in public places, restrict media advertising and limit access of minors to vending machines
- The Ministry of Finance believes that the numbers of Portuguese smokers choosing to purchase their cigarettes at border shops on the Portugal / Spanish border increased by 40% in 2006

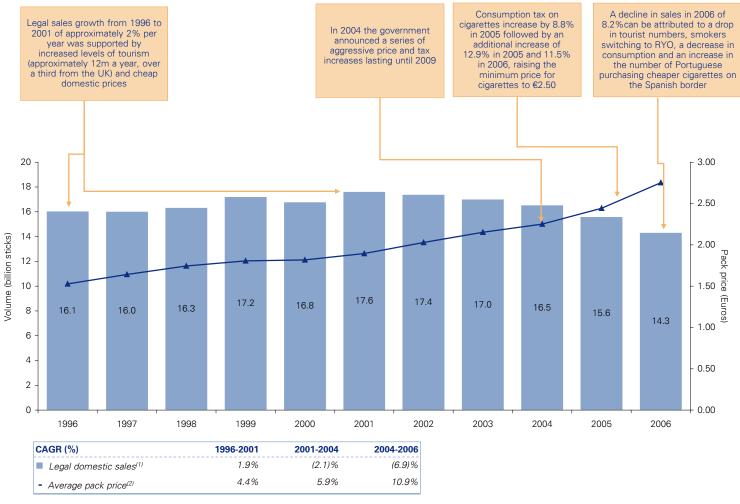


### Historic sales and pricing trends

Legal sales in Portugal were relatively stable up to 2004

The government's decision to implement significant price and excise tax increases have reduced legal sales post 2004

The amount of nondomestic purchasing, predominately from Spain has increased over the same period Historic cigarette prices and legal domestic sales  $1996 - 2006^{(1)(2)}$ 



Sources: (1) In Market Sales supplied by PMI

(2) Average pack price supplied by PMI Portugal management

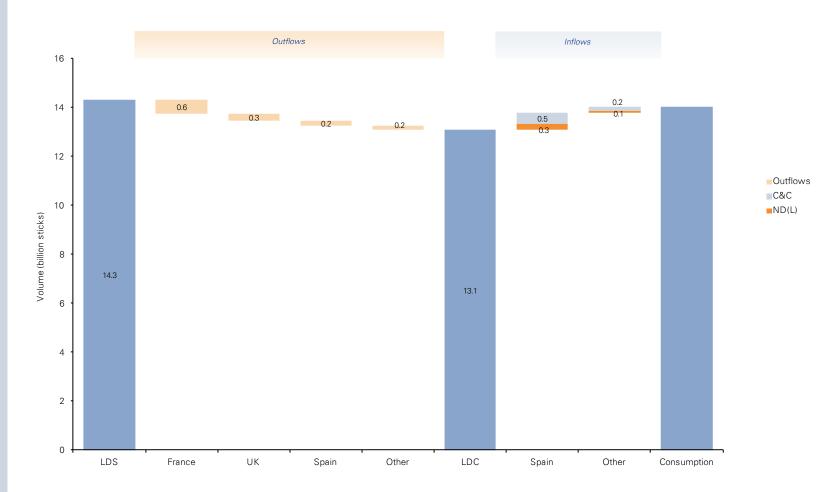


### Inflows and outflows

Overall Portuguese consumption for 2006 was estimated to be 14bn sticks versus legal sales of 14.3bn, leaving a net outflow of 0.3bn sticks

The main flows of cigarettes were to Spain, France and the UK

## Consumption breakdown 2006<sup>(1)(2)(a)(b)</sup>



tes: (a) LDS – Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

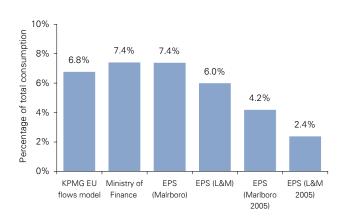
(2) AC Nielsen ND(L) research, December 2006

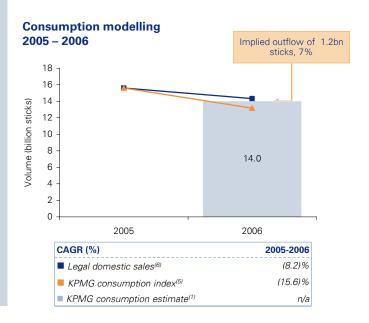


### Comparison of sources for non-domestic estimates

KPMG estimate of nondomestic share is in line with the Ministry of Finance and similar to results obtained in the EPS

## Non-domestic market volume estimates 2006 unless otherwise stated (1)(2)(3)(4)





## KPMG estimates of non-domestic consumption in Portugal are comparable to the Ministry of Finance estimate

 The Ministry of Finance estimate non-domestic at roughly 1 billion sticks (equivalent to 7% of consumption), however this an approximation only and is not based on a defined methodology (2)

#### KPMG estimates are also in line with 2006 EPS results for nondomestic share of Marlboro and L&M

- EPS brand level results in 2006 for Marlboro and L&M estimate the level of non-domestic packs of domestic packs at 7% and 6% respectively
  - 2005 EPS results for Marlboro and L&M estimates are lower than 2006 estimates, suggesting an increase in the non-domestic share in Portugal
  - an increase in non-domestic share is consistent with the growing number of Portuguese purchasing cheaper cigarettes from Spain

# The consumption model confirms that Portugal is an outflow country, however limited consumption data may restrict the reliability of the model

- The consumption model highlights the difference in legal sales and consumption, which suggest that Portugal is an outflow country
- Net outflow status is consistent with Portugal being a popular tourist destination for European travellers
- Consumption modelling suggests outflows of 1.2bn versus 0.8bn from the KPMG EU Flows Model (and net outflows of 0.3bn), however there is a lack of comparable historic consumption data for Portugal prior to 2005 (a)

Note: (a) A change in consumption methodology occurred in 2005. Prior to 2005 information was collected via phone interviews on a monthly basis. Post 2005, the supplier changed and interviews were conducted on a quarterly wave period and via face-to-face interviews. Data prior to 2005 is believed to be less reliable and hence has not been used in the model

Sources: (1) KPMG EU flows model

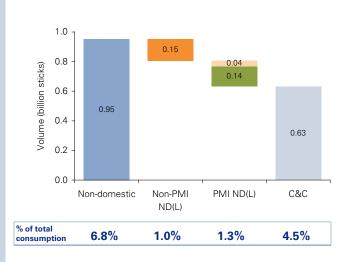
- (2) Interview with Ministry of Finance
- (3) EPS 2006, PMI Management
- (4) EPS (Marlboro and L&M only) 2005, PMI Management
- (5) KPMG consumption index model
- (6) In Market Sales supplied by PMI



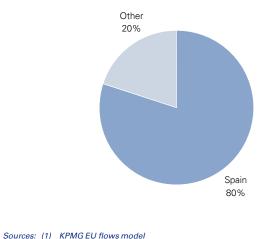
## Non-domestic (legal) results

Spain is the key source market for ND(L)





**ND(L)** by origin **2006**<sup>(1)</sup>



(2) AC Nielsen ND(L) research, December 2006

ND(L) analysis **Total** Ave. Population Propensity Propensity Ave. no. purchases ND(L) 19+ (sticks) to travel to purchase of trips (sticks) **25**% 0.3bn 8.3m **29**% Values 131 EU rank 9 24 9 11 14 12



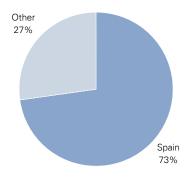
Other PMI
MARLBORO

Non-PMI

## Contraband and counterfeit breakdown

#### **Primarily from Spain**

## C&C by origin (excluding PMI counterfeit) 2006



Sources: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006



## **Contents – country detail**

- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

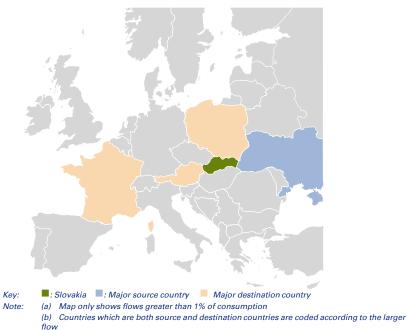
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
- UK



### **Overview**

Domestic consumption accounts for 92% of the Slovakian market

Half of the non-domestic product comes from Ukraine



### Proportion of total EU levels

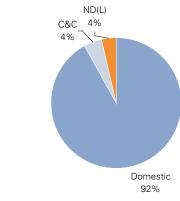
2006(1)(2)

1.5% Percentage of EU total %0.0 %0.1 1.2% 1.0% 0.8% 0.6% 0.6% 0.0% LDS ND ND(L) C&C Outflows Volume (bn) 7.0 0.6 0.3 0.3 0.5

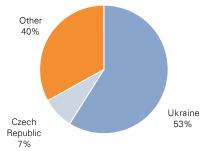
Source: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006

## Total Slovakian consumption – 7.0bn 2006<sup>(1)(2)</sup>



## Non-domestic by origin (ND(L) and C&C) – 0.6bn 2006 $^{(1)}$





#### **Market context**

The market for cigarettes in Slovakia is now dominated by the Super-Low price segment, which has gained significant share in the last three years



#### Pricing

- Since the marked price increase in 2003, the appearance of reduced stick packs has caused a stable gross average retail price in the market
- An import limit of 25 sticks exists on the Ukrainian border which helps to dampen the non-domestic purchases
  - average Marlboro price in Slovakia is approximately €1.80 versus €0.55

#### Market segmentation

- The Super Low segment is growing rapidly, primarily at the expense of the Medium segment
  - In 2005, Imperial and Philip Morris introduced Superlow brands, and the share of this segment increased from 5% to 30%
- Due to a favourable tax regime, Slovakia previously had a high propensity for smoking 70mm cigarettes, this has largely disappeared since bringing taxes in line with EU legislation

#### Enforcement

 A number of significant seizures took place in Slovakia in 2006, although it is believed that none of them were intended for Slovakian consumption

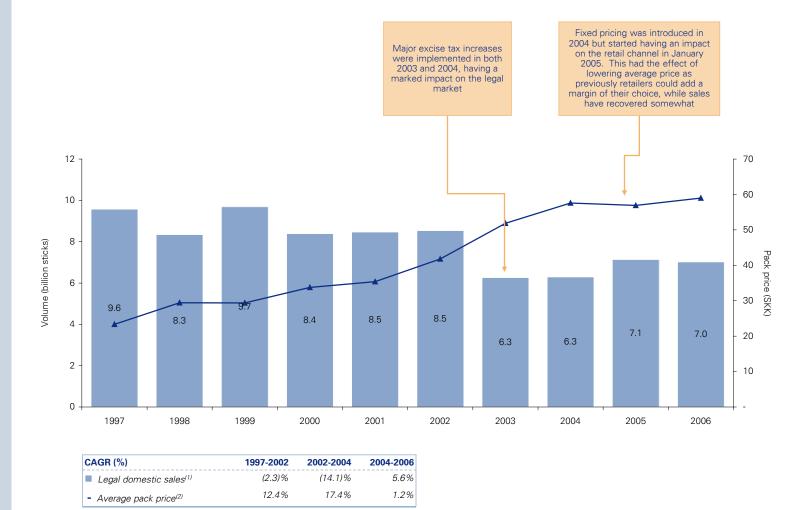
#### Social and legal

- Smoking incidence is stable at 34%, whilst average daily consumption is in decline, currently measured at 13.5 sticks per person per day
- A 1997 law requires employers to impose bans on smoking in workplaces frequented by non-smokers



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

Significant price increases in 2003 and 2004 drove a sharp decline in the legal market, which has partially recovered in subsequent years Historic cigarette prices and legal domestic sales 1997 – 2006



Sources: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PM management

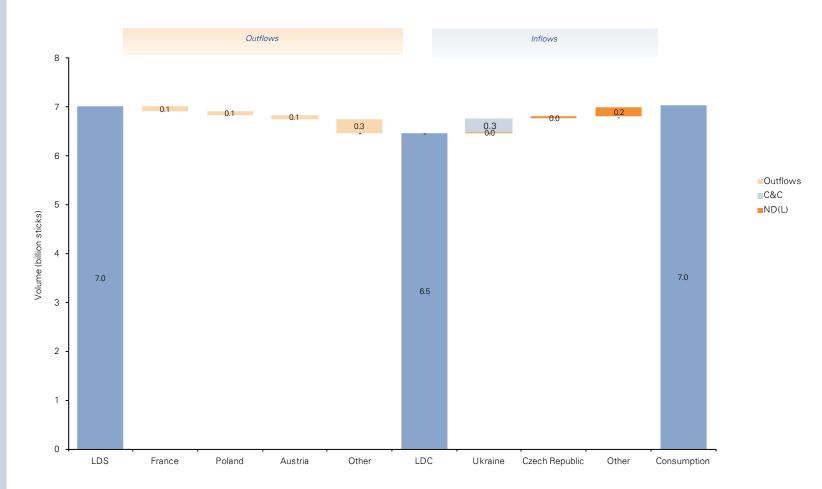


### Inflows and outflows

Slovakian consumption is estimated at 7bn sticks, in line with legal sales

Ukraine is the dominant source country for nondomestic (and illicit) product in Slovakia

## Consumption breakdown 2006<sup>(a)(b)(1)(2)</sup>



Notes: (a) LDS – Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

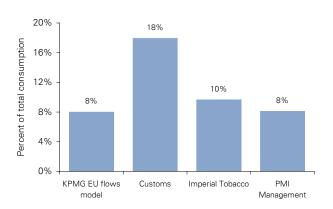
(2) AC Nielsen ND(L) research, December 2006



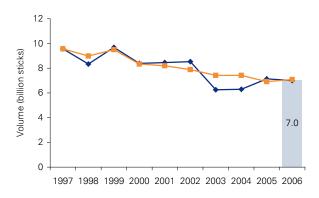
### Comparison of sources for non-domestic estimates

The KPMG estimate for non-domestic is in line with most other available estimates

## Non-domestic market share estimates 2006 unless otherwise stated (1)(2)(3)



## Consumption modelling 1997 – 2006



CAGR (%)	1998-2002	2002-2006
Consumption index (4)	(1.5)%	(3.3)%
Legal domestic sales (5)	(8.8)%	(1.3)%
■ KPMG consumption estimate (1)	n/a	n/a

## KPMG estimates are in line with Imperial and PMI management estimates, although lower than estimates from Slovakian Customs

- The methodology for the estimates from Customs are based on volumes of imported, produced and distributed cigarettes
  - Lubomir Kovacik of the Customs Criminal Bureau believes that a better source for non-domestic share is the Imperial Tobacco EPS
- The Imperial Tobacco EPS from April 2006 estimates that 9.7% of packs are non-domestic
  - PMI management have suggested that the weighting of the Imperial study is not totally reliable, but can be used for long-term trend analysis
- PMI management estimates are based on internal estimates using industry knowledge and a combination of PMI and Imperial EPS results

## Consumption modelling confirms Slovakia's status of having broadly balanced inflows and outflows

- It suggests that, although there are likely to have been significant nondomestic inflows in 2004 and 2005 in response to tax increases, these have decreased as prices have stabilised since
- The consumption index result is highly consistent with the balanced inflows and outflows from the EU Flows model

Source: (1) KPMG EU Flows Model

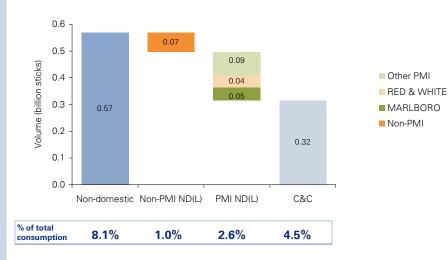
- (2) Interviews with Slovakian Customs
- (3) Imperial Tobacco Pack Count Study, April 2006
- (4) KPMG Consumption Index Modelling
- (5) In Market Sales supplied by PMI management



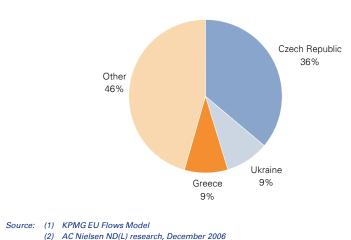
## Non-domestic (legal) breakdown

Approximately half of the non-domestic consumption in Slovakia is legal, a third of which comes from the Czech Republic

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



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







## Counterfeit and contraband breakdown

Ukraine is the source of Slovakian C&C

C&C by origin (excluding PMI counterfeit) 2006

Ukraine 100%

Source: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006



## **Contents – country detail**

- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

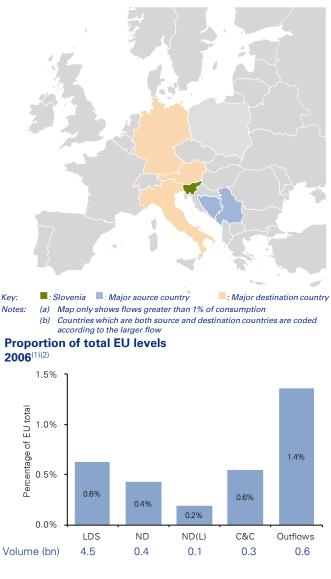
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

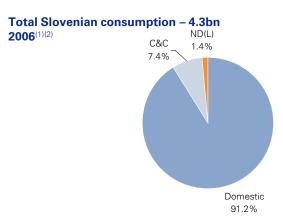


### **Overview**

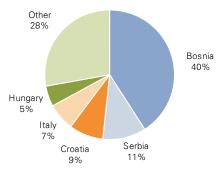
Domestic sales account for over 92% of Slovenian consumption

Over half of total nondomestic flows are from Bosnia and Serbia





Non-domestic by origin (ND(L) and C&C) – 0.4bn 2006 $^{(1)}$ 



Sources: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006



#### **Market context**

Since EU accession in 2004, Slovenia has steadily increased cigarette prices to meet the required EU minimum excise tax level

Strict cigarette import restrictions imposed by Italy have affected sales

**Market segmentation** 



#### Pricing

- Since EU accession, Slovenia has had yearly structured tax increases in order to meet the EU cigarette taxations directive
  - in July 2007, the minimum excise yield of €64 per 1,000 sticks will be reached
- In January 2007, Slovenia's currency converted from Tolars to the Euro with no significant price increases reported

Social and legal

additional criteria for "smoking rooms" will be set by the Minister of Health later in 2007

area

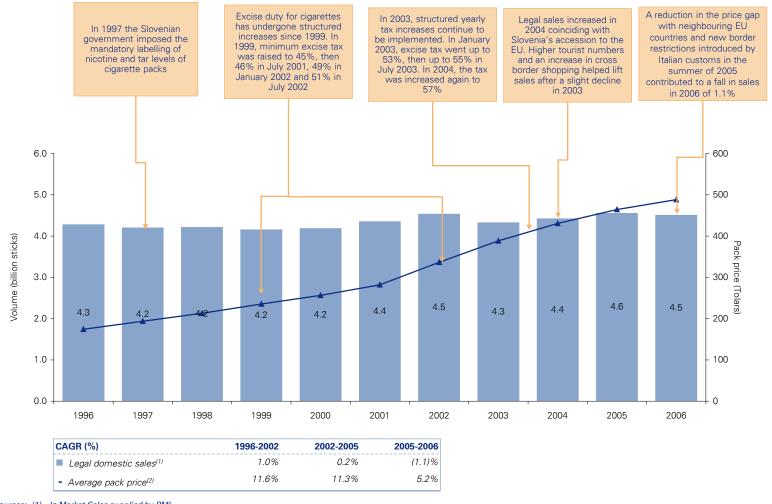
#### Smoking incidence and average daily consumption Supermarkets and grocery stores are the main New border restrictions imposed by Italy in the sources of primary cigarette purchases, with petrol summer of 2005 and Austria limit the number of are high (34% and 18 sticks respectively) cigarette a purchaser can bring into the country from stations an important secondary source Currently, smoking restrictions apply only to Slovenia to only 200 sticks and 25 sticks respectively hospitals and schools. However, in March 2007, the Growing GDP and higher levels of disposable income have increased the affordability of premium The number of seizures has increased in recent Ministry of Health presented the amendments to brands in the market years, up from 17 million sticks in 2003, to 180 the Law on Restrictions on the Use of Tobacco Products to the Government for approval million sticks in 2005 the new amendments ban smoking in closed the increase in seizures is perceived to be primarily driven by customs proactivity rather than public and workplace areas. Smoking will be increased smuggling allowed in "Smoking rooms" that may not exceed 20 % of a total area (previously announced 10%) and drinking and eating won't be allowed in the smoking area. The first draft only restricted serving in separated smoking

**Enforcement** 

### Historic sales and pricing trends

Legal sales in Slovenia have remained relatively stable since 1996

Higher in-market prices and stricter Italian import limits resulted in a slight decline in sales in 2006 Historic cigarette prices and legal domestic sales 1996 - 2006



Sources: (1) In Market Sales supplied by PMI

(2) Average pack price supplied by PMI Slovenia management



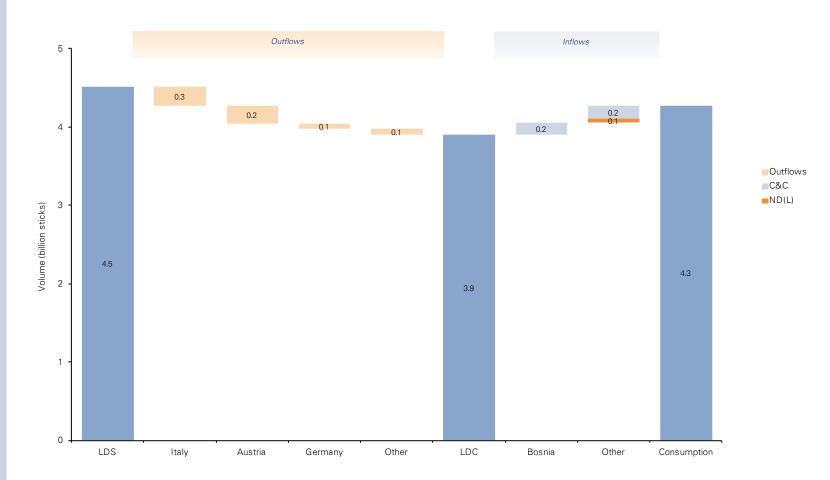
### Inflows and outflows

Slovenian consumption is estimated to be 0.2bn sticks below legal sales at 4.3bn sticks

Main outflows from Slovenia are to Italy and Austria

The principal inflow is from Bosnia

## Consumption breakdown 2006<sup>(1)(2)(a)(b)</sup>



Notes: (a) LDS – Legal Domestic Sales

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

Sources: (1) KPMG EU flows model

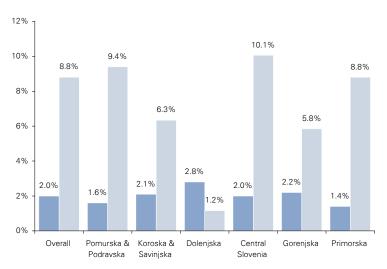
(2) AC Nielsen ND(L) research, December 2006

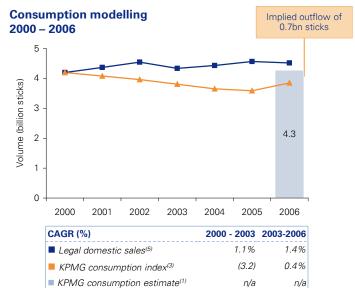


### Comparison of sources for non-domestic estimates

Although 2006 nondomestic estimate is higher than 2005, this is consistent with both increasing prices and improvements in the EPS sample specification

## Non-domestic market volume estimates 2006 unless otherwise stated<sup>(1)(2)</sup>





## KPMG results for non-domestic consumption in Slovenia are higher than EPS results for 2005 but are broadly in line with expectations

- Slovenia has a significant ex-Yugoslavian population, some of whom prefer to smoke brands that are not available in the Slovenian market such as Drina (Bosnian brand)
- Bosnian brands flow into the country from Bosnian workers who travel weekly to Slovenia for work and bring their own supply of local brands with them

#### 2006 non-domestic estimates are consistently higher than 2005

 In five out of the six regions covered in the EPS surveys, 2006 results were higher than those is the 2005 survey, supporting a significant increase in 2006

## The difference in the results can be explained by different methodologies

- Unlike the EPS approach that uses a fully random sample, the collection by GfK in the 2005 survey is not random. The approach uses "sampling points" in each settlement
  - GfK collect from and use those points in each wave of results
- Moreover, GfK collects packs according to quotas by streets (certain cross-roads, certain main streets), restaurants and bars, stores, stations and homes for foreign workers. The empty pack survey does not use a quota approach

#### The consumption model confirms that Slovenia is an outflow country

- The consumption model suggests that Slovenia is an outflow country
- Net outflow is consistent with Slovenia being a cheaper priced market for cigarettes than other EU neighbouring countries
- Consumption modelling suggests outflows of 0.67bn sticks which is in line with both the KPMG EU Flows Model estimate of 0.62bn

Sources: (1) KPMG EU Flows model

(2) EPS results, Illicit Cigarette market 2005, GfK

(3) KPMG consumption index model

(4) 'Slovenia market size evolution', PMI Slovenia, 2006

(5) In Market Sales provided by PMI



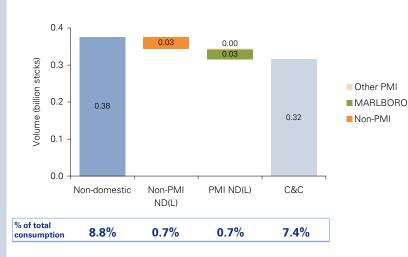
2005

2006

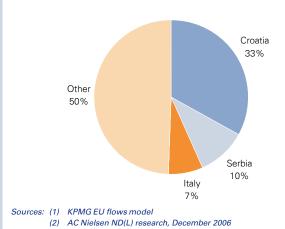
### Non-domestic (legal) results

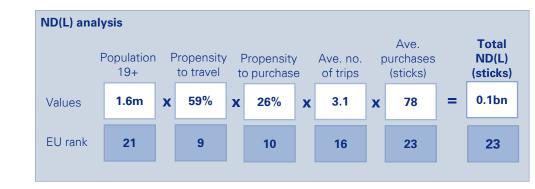
PMI products account for half of ND(L), with Croatia and Serbia the key source markets





## **ND(L)** by origin **2006**<sup>(2)</sup>



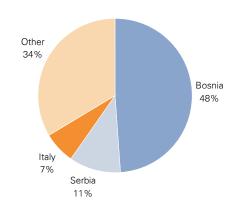




## Contraband and counterfeit breakdown

Bosnian product represents almost half of total C&C

## C&C by origin (excluding PMI counterfeit) 2006<sup>(1)</sup>



Sources: (1) KPMG EU flows model



## **Contents – country detail**

- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

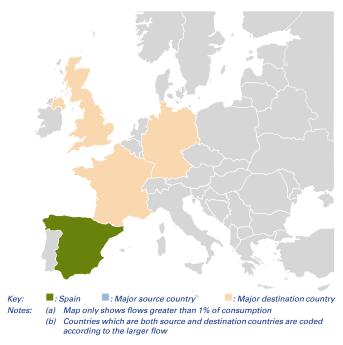
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
- UK



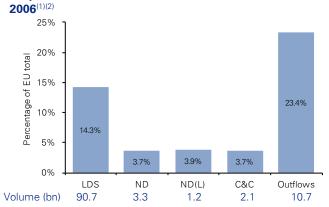
#### **Overview**

Domestic sales account for 96% of consumption

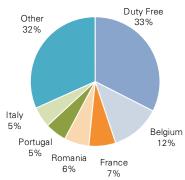
Duty Free is the leading channels for non-domestic cigarettes







Non-domestic by origin (ND(L) and C&C) – 3.3bn 2006  $^{(1)}$ 



 $Notes: \hspace{0.5cm} \textit{(c)} \hspace{0.5cm} \textit{ND(L) includes EU visitor outflow and non-EU national Duty Free volumes estimated at 0.55bn sticks for a superior of the property of the p$ 

Spain based on 3.6bn stick total EU volume Sources: (1) KPMG EU flows model

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



#### **Market context**

Spanish authorities have been successful in reducing illicit inflows



#### **Pricing**

- In November 2006, the government raised the minimum tax on 1,000 cigarettes to €70, up from a previous level of €55
- Cigarette prices are lower than border price comparison: Portugal 105%, and France 182%

#### **Market segmentation**

- Logista is the sole distributor of cigarettes
  - Spain's 14,000 tobacconists account for 65% of sales with the remainder points of resale (bars, cafes, restaurants and vending machines)
  - restaurants, bars and tobacconists now require a licence to own a vending machine and all machines must now be remotely controlled by the owner
- Cheap brands have recently gained market share. For example, in 2006 Ducados blonde cigarettes increased market share by over 10% points

#### Enforcement

- Illegal flow of cigarettes into Spain have decreased since the early 1990s due to cooperation between customs, the government, working with different public agencies and cigarette manufacturers to combat the illegal trade
- Seizures increased significantly in 2006 from 10 million sticks in 2005 to 17 million sticks in 2006. The most significant seizure increases were in Barcelona (up 124%), and Alicante (up 220%)
- The government and customs are currently investing in scanners for port regions and advanced risk analysis systems
  - three scanners were purchased in 2006 and six more are scheduled for purchase in 2007

#### Social and legal

- Spain has relatively high cigarette prevalence (27%) and high cigarette consumption (16.3 sticks per day)
- New smoking restrictions were introduced in January 2006
  - smoking is now prohibited in the workplace, public buildings, bars and restaurants that are larger than 100 square metres
- Spain is a major holiday destination, and legal sales have benefited from the 59 million tourists that visit the country each year



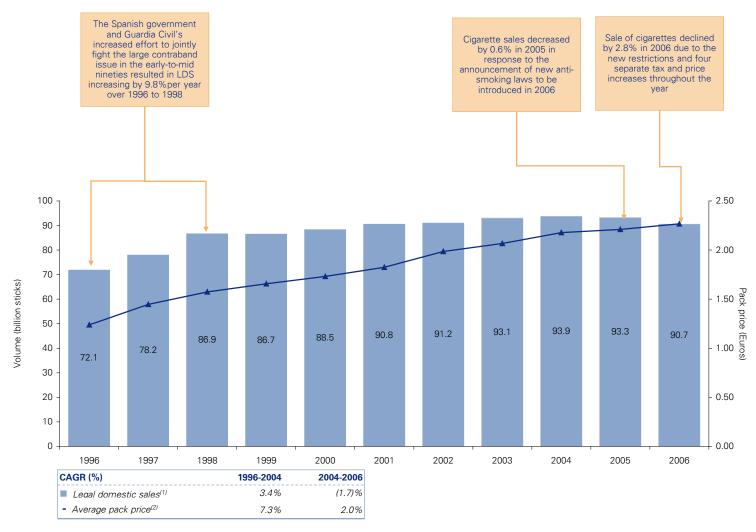
### Historic sales and pricing trends

Historically, sales have benefited from the growing number of tourist visiting Spain, French customers at the border and lower than average EU excise tax on cigarettes Sales since 2005 have decreased marginally in response to slight increases in price, closure of border shops with France and also the introduction of new

smoking restrictions in

**Spain** 

Historic cigarette prices and legal domestic sales 1996 – 2006



Sources: (1) In Market Sales supplied by PMI

(2) Average pack price supplied by PMI Spain management

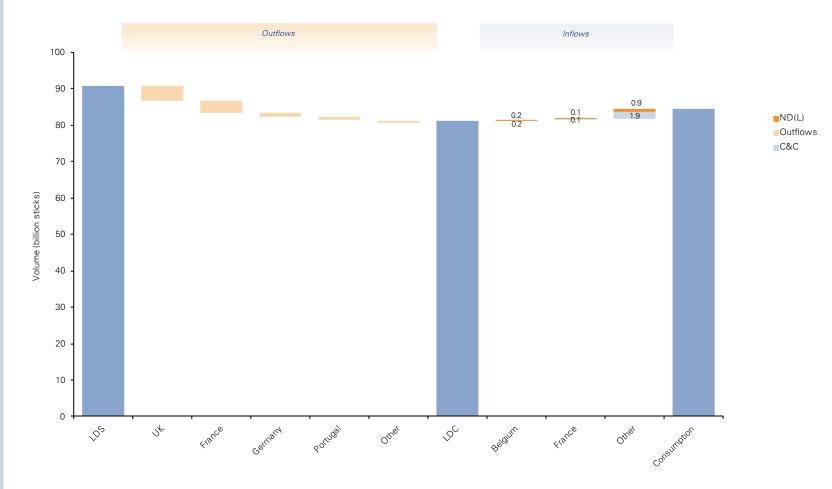


### Inflows and outflows

Spanish consumption is estimated at 84.4bn sticks versus legal sales of 90.7bn sticks, a net outflow of 6.3bn sticks

UK, France and Germany are major outflow countries

## Consumption breakdown 2006<sup>(1)(2)(a)(b)(c)</sup>



Notes: (a) LDS - Legal Domestic Sales

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

(c) 'Other' outflows from Spain is net of Canary Islands and Andorra adjustment (considered as domestic)

Sources: (1) KPMG EU flows model

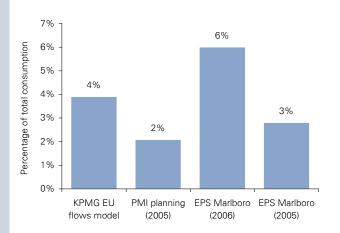
(2) Synovate ND(L) research, December 2006

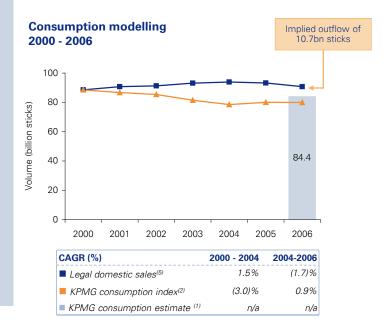


### Comparison of sources for non-domestic estimates (1 of 3)

**KPMG** estimates are broadly in line with EPS results for Marlboro in 2006

#### Non-domestic market volume estimates 2006 unless otherwise stated(1)(2)(3)(4)(a)





#### KPMG estimates are also broadly in line with 2006 EPS results or non-domestic share for Marlboro

- 2006 EPS results for Marlboro estimate the level of non-domestic packs at 6%
- 2005 EPS results for Marlboro and PMI Planning estimates are lower than 2006 results, suggesting an increase in the non-domestic share in Spain over the last year

#### The consumption model confirms that Spain is a significant outflow country

- The consumption model highlights a gap between legal sales and consumption, suggesting that Spain is a net outflow country
- Outflow status is consistent with Spain being a major tourist destination for European holidaymakers
- Consumption modelling suggests outflow of 10.7bn which is relatively consistent with 9.7bn from the KPMG flows model

#### As explained in the source and limitation section, there is potential for empty pack surveys to experience some seasonality impacts

- The EPS survey in Spain was conducted at the end of the summer holiday period in September. This period represents the peak season for visitors to Spain (although this is most pronounced in July and August rather than September). Non-domestic share at this time may therefore be slightly above the average across the year.
- Empty pack surveys for the other EU 24 countries vary over the course of the year. Any variation in timing of surveys may result in differences in flows not being fully captured

The EPS survey for Spain was conducted in September 2006. Due to the post summer timing of the survey, inflows into Spain could potentially be overstated

Sources: (1) KPMG EU flows model

Note:

KPMG consumption index model

European Union Industry Size, PMI planning, Lausanne, 2005

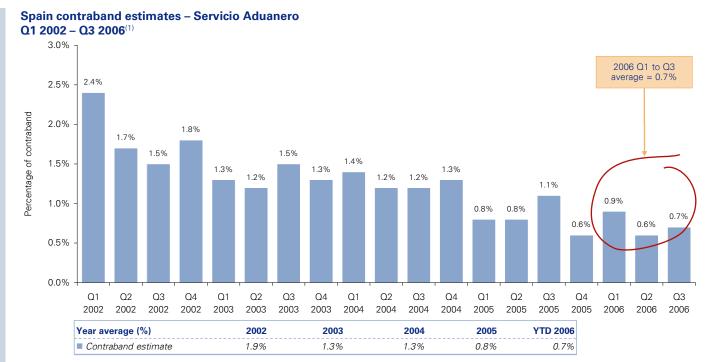
EPS 2005 (Marlboro only), PMI management

In Market Sales provided PMI



### Comparison of sources for non-domestic estimates (2 of 3)

Official Spanish estimates for contraband by Servicio Aduanero in 2006 were approximately 0.7%



#### The Servicio Aduanero estimate for contraband in 2006 was 0.7%

- "Control Coincidental del Consumo de Tabaco Rubio" by Servicio Aduanero estimates contraband levels in Spain of 0.7% for Q1 to Q3 2006. Although slightly lower than our estimate, it appears broadly in line and supports the very low contraband incidence in Spain
  - PMI Spain management perceive this estimate as consistent to what they see in market
  - this estimate for contraband cigarettes appears to focus on large scale organised crime and may exclude both flows of counterfeit cigarettes and small scale bootlegging flowing into Spain, which may account for some of the difference in our estimates
  - the methodology underpinning this estimate is not clear



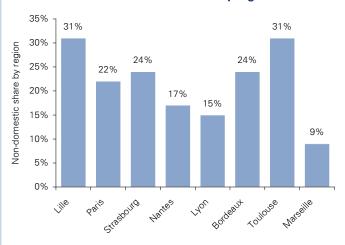
Sources: (1) "Control Coincidental del Consumo de Tabaco Rubio", ASM Grupo, 2006

### Comparison of sources for non-domestic estimates (3 of 3)

KPMG estimate of overall non-domestic consumption is in line with an estimate by BAT

However, estimates differ on origin of non-domestic share due to fundamental differences in the methodologies that underpin each result

#### BAT estimate of non-domestic share by region(1)



Sources:

 'Un Paquet de blondes sur cinq selon BAT / Epsy', Revue des Tabacs nº 540, March 2007

## KPMG's estimate of total non-domestic consumption in France is in line with estimates from BAT

 BAT estimate non-domestic at 16.0bn sticks (22% of consumption) is consistent with our estimate of 16.1bn sticks (22.7% of consumption)

# However when comparing estimates, origin of non-domestic share and regional weighting of results vary due to fundamental differences in methodology

- BAT's sample size and regional coverage is less extensive than EPS
  - BAT's estimate is based on 2,000 customer interviews versus 10,000 packs collected in the EPS. EPS covers 51 French cities whereas BAT's estimate is based on eight cities only
  - we do not have the sample volume broken out by location but the range of 9% – 31% non-domestic share across just eight locations make nationallevel extrapolation indicative at best, especially when moving below total non-domestic to country of origin results
  - difficulty of extrapolating for Spain results from eight cities is supported by the fact that Spanish share of packs in the EPS in Toulouse and Lyon is four to five times higher than in Bordeaux
  - although unspecified, it also appears that BAT's sample has been equally weighted across the eight cities rather than weighted by population
- BAT's estimate is based on customer interviews rather than an 'Empty Pack Survey'
  - using a customer interview approach may potentially understate illegal flows, in particular counterfeit packs, interviewees may be less inclined to discuss illicit purchases or know if packs are counterfeit
  - low non-domestic share in Marseille supports this (21.4% in EPS)
  - PMI counterfeit is significant in France (2% of consumption)

#### BAT's estimate of Duty free flows from non-EU countries appears low

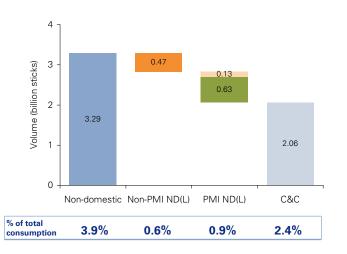
- BAT's estimate of non-EU flows is 2.1bn compared to 5.1bn from the KPMG EU flows model
  - BAT's estimate appears to understate flows from non-EU countries and world wide duty free
- BAT's results appear more comparable with ND(L) results
  - Spanish share of non-domestic is 44% in BAT's estimate. This is more in line with ND(L) results where Spain flows account for 30% of total ND(L)

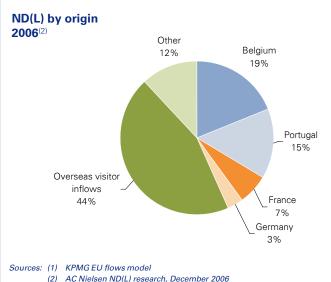


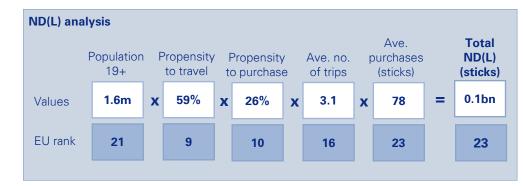
### Non-domestic (legal) results

Legal inflows account for just under half of the non-domestic consumption in Spain











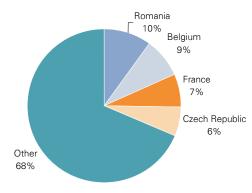
Other PMI

■ Non-PMI

■ MARLBORO

### Contraband and counterfeit breakdown

## C&C by origin (excluding PMI counterfeit) $2006^{(1)}$

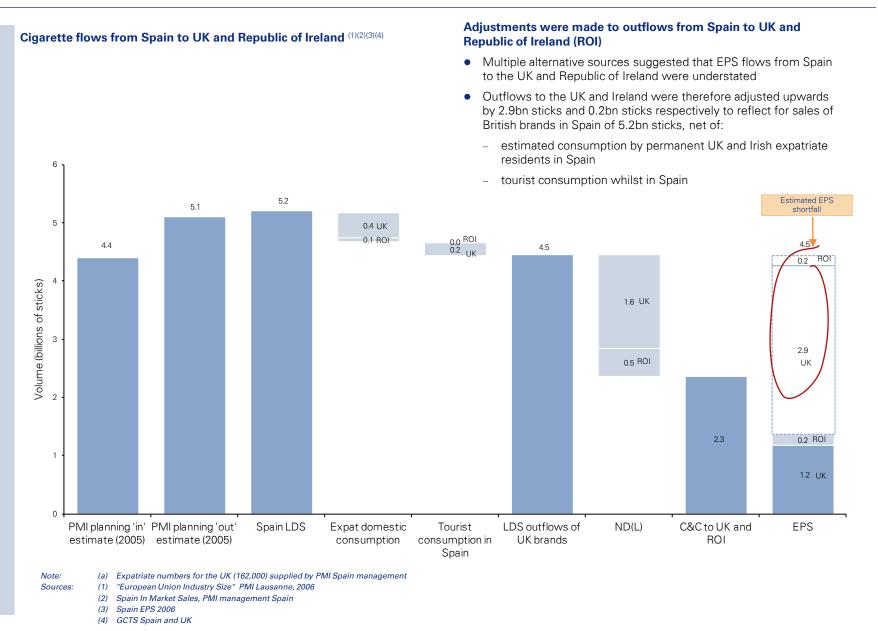


Sources: (1) KPMG EU flows model



### **Country flow refinements (1 of 5)**

Adjustments were made to flows out of Spain to the UK and Republic of Ireland

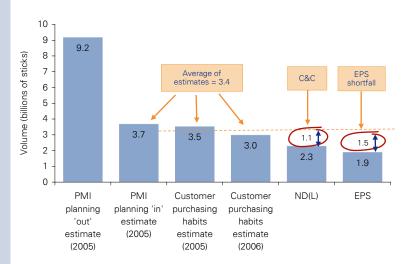




### **Country flow refinements (2 of 5)**

Further analysis identifies a country-to-country shortfall in the EPS outflows to France

#### Cigarette flows from Spain to France (1)(2)(3)



#### Adjustments were made to outflows from Spain to France

- Both PMI France and consumer purchasing habits imply a higher inflow from Spain than EPS results suggest
- Alternative estimates by PMI and Consumer Purchasing Survey results imply an inflow from Spain in the region of 9.2 to 3.0bn sticks, compared to EPS results of 1.9bn sticks and ND(L) results of 2.3bn sticks
- PMI Planning 'in' estimate of 3.7bn sticks in 2005 appears in line with 2005 purchasing habits estimate of 3.5bn sticks
- Reduction in purchasing estimates to 3.0bn sticks in 2006 is in line with market context of closure of border shops
- 3.4bn sticks, which is an average of the three sources, was used as the most credible estimate for 2006 and appears to fit with ND(L) research results

Sources: (1) "E

(1) "European Union Industry Size" PMI Lausanne, 2006

(2) France EPS 2006

AC Nielsen ND(L), December 2006



### **Country flow refinements (3 of 5)**

Analysis of French tourists and French day-trippers to Spain estimates total flows to France ranging from 3.0bn sticks to 4.6bn sticks versus our estimate of 3.4bn sticks

## French tourism and border sales analysis $2006^{(1)(2)(3)(4)(a)}$

Spain to France flows - tourists and border sales	
French tourists to Spain	
French tourists to Spain (million)	9.0
French tourists 19+ year of age to Spain (millions)	7.2
French smoking incidence <sup>(b)</sup>	27%
French tourists to Spain who smoke (millions)	1.9
Average number of sticks purchased (leisure / holidays)	256
Volume (billion sticks)	0.5
French border sales (day-trippers)	
French excursionists to Spain (millions)	32
French tourists 19+ year of age to Spain (millions)	26
French smoking incidence <sup>(b)</sup>	27%
French tourists to Spain who smoke (millions)	6.9
Average number of sticks purchased (shopping)	366
Volume (billion sticks)	2.5
France border sales (based on In Market sales)	
Local consumption (billon sticks)	4.5
Adjusted local consumption (billion sticks) <sup>(a)</sup>	6.3
IMS in France border areas (billions sticks)	10.9
Consumption gap (billion sticks)	4.6

Note:	(a)	Local consumption adjustment for under-reporting calculation: KPMG consumption minus GCTS consumption divided by GCTS consumption figure ((84.4bn – 60.0bn)/60.0bn = 41%)
	(b)	Purchase incidence likely to be higher than smoking incidence due to purchases of cigarettes for family and friends. 3.0bn stick flow is therefore considered to be at the lower end of expectations
Sources:	(1)	Synovate ND(L) research, December 2006
	(2)	GCTS Spain
	(3)	PMI Spain management
	(4)	IIS Census Rureau International

## French tourists to Spain are estimated to purchase 0.5bn cigarette sticks

- We have assumed that of the 9.0 million French tourists to Spain, 80% are aged 19+ years<sup>(4)</sup>
- Of the 19+ age population, we have applied the French smoking prevalence of 27% to estimate smoking tourists to Spain from France
- The average number of sticks purchased (256 sticks) for leisure / holiday trips is based on ND(L) research conducted by Synovate in December 2006

## Purchases by French day-trippers to Spain are estimated at 2.5bn cigarette sticks

- French day-trippers to Spain for shopping are estimated to be 32 million of which we have assumed that 80% are 19+ years
- Of the 19+ age population, we have applied the French smoking prevalence of 27%
- The average number of sticks purchased (366 sticks) for shopping is based on ND(L) research conducted by Synovate in December 2006
- Total volume for French day-trippers to Spain in 2006 is estimated to be 2.5bn sticks

## Border sales to France based on regional In Market Sales data are estimated at up to 4.6bn sticks

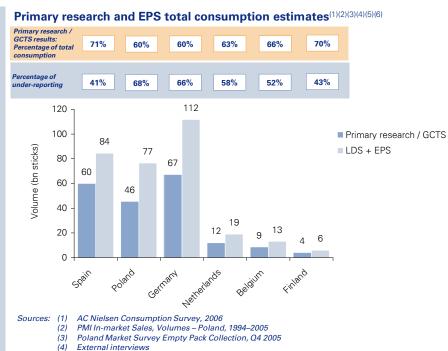
- IMS for French border regions is estimated to be 10.9bn sticks of which 4.5bn sticks is consumed locally
- High level analysis suggests that under-reporting of consumption in Spain of approximately 41%. Due to under-reporting, local consumption has been uplifted to 6.3bn sticks
- This leaves a 'consumption gap' of 4.6bn sticks, which is likely to be met not just by French visitors but also by a combination of Spanish visitors from other regions and other foreign visitors (e.g. German and Belgium nationals driving home from holiday)



### **Country flow refinements (4 of 5)**

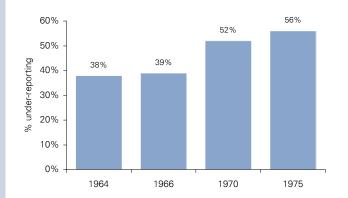
Consumption estimates based on primary research and GCTS data are likely to under report consumption

There is extensive evidence that smokers under-report their consumption levels to a significant degree



## (6) KPMG EU flows model Under-reporting of cigarette smoking (1)(a)

GCTS Spain



## Preliminary research and GCTS estimates for a selection of EU countries highlight under-reporting of consumption

- Without any effective means to quantify under-reporting directly, primary research results and GCTS results for consumption are too low
- Our consumption results are based on In Market Sales data less flows out of a country and net flows into a country based on Empty Pack Survey results and suggest under-reporting in both GCTS and Star Pilot primary research is of the order of 40% - 70%
- This is broadly consistent with other external attempts to quantify under-reporting

## There is extensive evidence that smokers under-report their consumption levels to a significant degree

- "Wasserman et al. (1991) report that there is strong evidence that cigarette smoking is under-reported in surveys. Yet there is little information available on the extent of the under-reporting and how under-reporting is related to consumption." (2)
- A monthly telephone survey of West Virginians showed reported consumption in 1999 of 20.2 cigarettes per day versus 30 cigarettes from an excise tax database, implying under-reporting of nearly 50%<sup>(3)</sup>
- "25% of Mexican-American smokers may be under-reporting consumption by as much as 17 cigarettes per day, and 12% of smokers had cotinine levels inconsistent with reported smoking levels." (4)
- Research suggests that women under-report more than men, with female under-reporting 3.7% above male for consumption of 1-9 cigarettes, 1.5% for 10-19 and 0.7% for 20+ cigarettes<sup>(4)</sup>

Sources: (1) Under-reporting of Cigarette Consumption, K.E Warner, 1978

(2) Impact of Prices & Control Policies on cigarette smoking among college students, Research Paper Series No. 12. Mar 2001

(3) Estimated number of cigarette smokers & cigarette consumption in West Virginia, 1990-1999

(4) Cigarette smoking in minority populations, Eliseo J. Perez-Stable

Notes: (a) Under-reporting calculated as uplift required from self-reported consumption

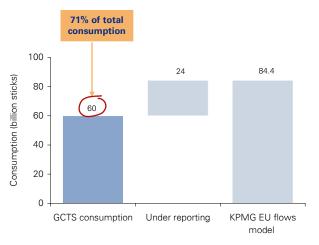


### **Country flow refinements (5 of 5)**

Our consumption result is from an iterative EU flows model that combines in market sales and nondomestic flows but adjusts consumption to allow for flows out of the country

GCTS results in comparison are based on population data, smoking prevalence and consumption and are therefore more likely to under report total consumption

#### Primary research and EPS total consumption estimates(1)(3)



Consumption calculation	
Spain	
Population 18+ (million) (1)	35.0
Smoking incidence (1)	29%
Average daily consumption (1)	16.3 sticks
Implied consumption (billion sticks) (2)(4)	60.0
KPMG consumption (billion sticks) (3)	84.4
GCTS percentage of KPMG consumption	71%
Implied under-reporting <sup>(a)</sup>	41%

#### KPMG consumption estimates are higher than GCTS consumption estimates

- Consumption results from the KPMG EU flows model estimate total Spanish consumption at 84.4bn sticks compared to 60bn sticks from GCTS calculations, hence a 24.4bn stick shortfall
- The GCTS consumption calculation is based on smoking prevalence and consumption.
  - there is extensive evidence to suggest that smokers under report daily consumption amounts and therefore the GCTS calculation is more likely to under represent total consumption

Under-reporting calculation: KPMG consumption minus GCTS consumption divided by GCTS consumption figure ((84.4bn - 60.0bn)/60.0bn = 41%)

Sources: (1) Attitudes of Europeans towards tobacco, Eurobarometer, 2006

- (3) KPMG EU flows model
- (4) GCTS, Spain PMI



### **Contents – country detail**

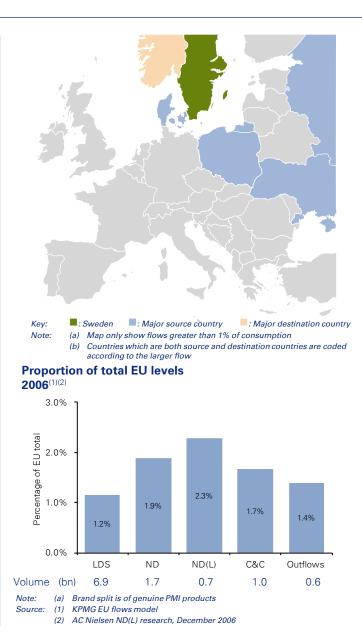
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- Finland
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- Greece
- Hungary
- Ireland
- Italy

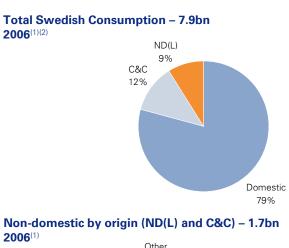
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- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
- UK

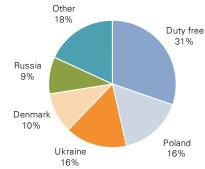


### **Overview**

There are significant flows into Sweden from Eastern Europe, Denmark and duty free







### **Market context**

Sweden is the only EU country where the use of smokeless tobacco products is significant; as a result, it has the lowest smoking prevalence in the EU



#### **Pricing**

- The tax structure was changed in 2001, placing more emphasis on the ad valorem component and allowing low priced brands to gain market share
  - a minimum tax was introduced in 2003 at 90% of the MPPC tax and raised to 100% in January 2006
- A further tax increase in January 2007 increased the specific tax burden by SEK80 per 1,000 cigarettes
- Although Sweden is a relatively high priced market, it offers a significant discount to Norwegian prices

### Market segmentation

- Swedish Match distributes all the major brands, representing 97% of the market
  - distribution is direct to retailers
- Over 70% of smokers smoke premium brands such as Marlboro and Prince
  - however, the low-price and cheap segments have gained market share and now account for 16% of smokers
  - the balance has shifted from the cheap to the low-price segment following the introduction of minimum tax legislation

#### **Enforcement**

- Sweden is a transit country for cigarettes from the Baltic states and Russia bound for the UK and Norway
- Since the accession of the new EU member states in 2004, Sweden has tightened its legislation relating to the import and possession of excise goods
- Swedes travelling on ferries to the Aaland islands, an autonomous province of Finland are able to purchase duty-free cigarettes
- Contraband cigarettes occasionally enter the legitimate retail channel, predominantly in stores close to transit points such as ports

#### Social and legal

- Sweden is the only EU country where the sale of Snus, a moist snuff product, is legal
  - Sweden has the lowest smoking prevalence in the EU at 17% and was the first country in the world to reach the WHO's target of less than 20% of the population being smokers
- Sweden introduced a ban on smoking in bars and restaurants in June 2005

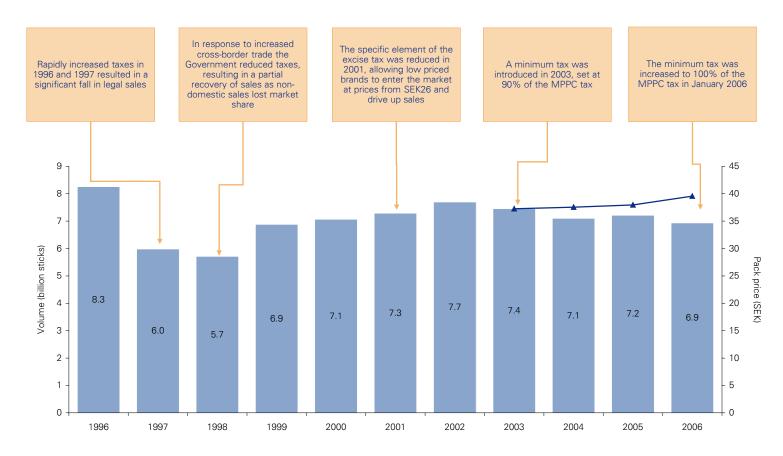


### **Historic sales and pricing trends**

A major tax increase in the late 1990s drove a decline in legal sales and an increase in the non-domestic proportion.

Sales recovered following the reversal of this tax change and have experienced a more measured decline since 2002

Historic cigarette prices and legal domestic sales 1996 - 2006



CAGR (%)	1996-1998	1998-2002	2002-2006 <sup>(a)</sup>
Legal domestic sales <sup>(1)</sup>	(16.8)%	7.7%	(2.6)%
- Average pack price <sup>(2)</sup>	n/a	n/a	2.0%

Note:

(a) Average price CAGR is 2003 to 2006

Source: (1) In Market Sales supplied by PMI

(2) Weighted average pack price supplied by PM Sweden

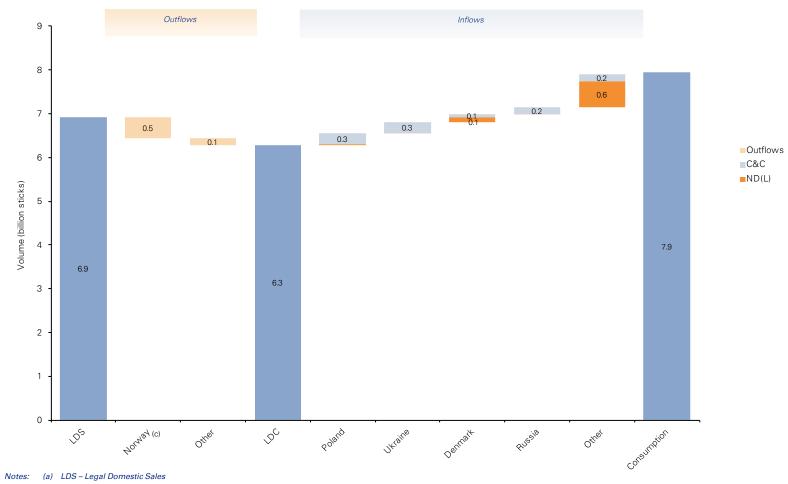


### Inflows and outflows

Swedish consumption is estimated at 7.9bn sticks versus legal sales of 6.9bn sticks, a net inflow of 1.0bn sticks

Sweden experiences both significant outflows and inflows

## Consumption breakdown 2006<sup>(a)(b)(1)(2)</sup>



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

(c) The outflow to Norway is an estimate based on border studies undertaken by PM Sweden

Sources: (1) KPMG EU flows model

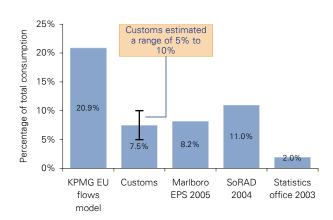
(2) AC Nielsen ND(L) research, December 2006



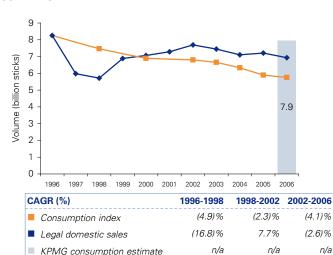
### Comparison of sources for non-domestic estimates

Previous attempts to estimate the non-domestic share of the cigarette market appear to have understated the situation

## Non-domestic market share estimates 2006 unless otherwise stated (1)(2)(3)(4)(5)



## Consumption modelling 1996 – 2006



## Some estimates of non-domestic market share from other sources are not underpinned by a robust methodology

- The estimate we received from Swedish Customs was acknowledged as being approximate, as demonstrated by the wide range provided
- The estimate produced by the Statistics Office for 2003 focused on estimating the value of smuggled goods and used very broad assumptions to estimate volumes

## Our results are significantly higher than the results of a Marlboro-only empty pack study performed in 2005

- Of the 1,200 Marlboro packs collected in 2005, 8.2% were non-domestic or counterfeit variants, compared to 12.8% of the 2006 Marlboro packs, implying an increase in the non-domestic share of Marlboro in 2006
- Moreover, the 2006 results highlight a number of other brands with nondomestic penetration of 70% and above, including L&M, West and Golden American
  - the non-domestic elements of these three brands alone account for over 8% of total consumption

## The Centre for Social Research on Alcohol and Drugs (SoRAD) is likely to underestimate the illegal component of non-domestic consumption

- SoRAD conducted 18,000 consumer interviews in 2004 to estimate both legal and illegal cigarette imports
  - consumers tend to under-report illegal purchases substantially
  - the differences between our results and SoRAD are consistent with this limitation of methodology

## Smoking incidence and average daily consumption data are not robust enough during the early part of the period to allow reliable modelling

- Prior to 2000 consumer research was only undertaken in 1995 and 1998
  - the growth in snus use over this period may make these data unreliable as an indication of cigarette consumption

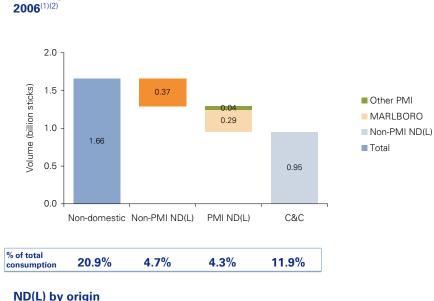
#### Source: (1) KPMG EU flows model

- (2) Interview with Swedish Customs
- (3) Sweden second global market report, PMI, February 2006
- (4) Resandeinforsel och smuggling av cigaretter aren 2003-2004, Centre for Social Research on Alcohol and Drugs, 2005
- Illegal activities experimental calculations of prostitution, narcotics and smuggling of alcohol and tobacco, Statistika Centralbyran, March 2005
- (6) KPMG consumption index model



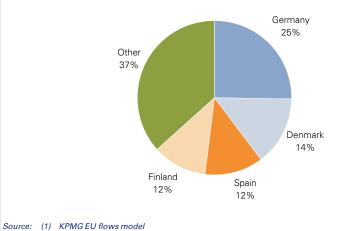
### Non-domestic (legal) results

PMI products account for approximately half of ND(L), with Germany the most significant source country



## **ND(L)** by origin **2006**<sup>(2)</sup>

ND(L) by brand



(2) AC Nielsen ND(L) research, December 2006

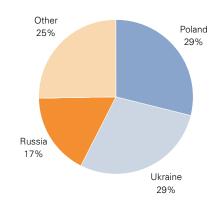




### **Counterfeit and contraband breakdown**

The majority of C&C originates in Eastern Europe

## C&C by origin (excluding PMI counterfeit) 2006 $^{(1)(2)}$



Source: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006



### **Contents – country detail**

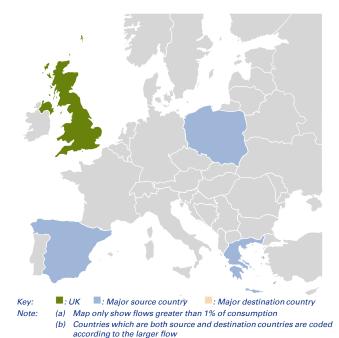
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- Cyprus
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- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Sweden
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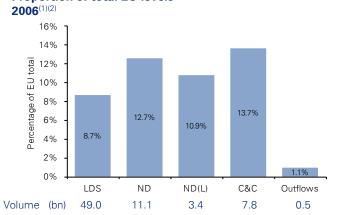


### **Overview**

Major sources of nondomestic cigarettes for the UK include holiday destinations and low priced Eastern European countries



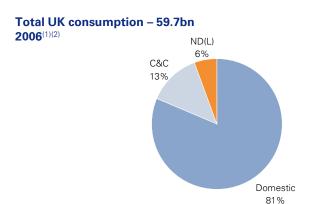
Proportion of total EU levels



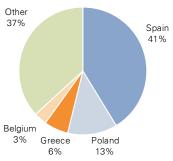
Note: (a) Brand split is of genuine PMI products

Source: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006



Non-domestic by origin (ND(L) and C&C) – 11.1bn 2006  $^{(1)}$ 





### **Market context**

A ban on smoking in bars and restaurants, introduced in Scotland in 2006, is to be extended to the rest of the UK during 2007



#### **Pricing**

- The UK has the highest cigarette prices in the EU following a decade of above inflation tax increases during the 1990s and early 2000s
  - price increases have returned to a level in line with inflation
- The UK does not operate a fixed retail pricing system
  - the actual price is frequently £0.10 to £0.15 below the recommended price

#### **Enforcement**

- Following a legal challenge, HM Revenue & Customs (HMRC) increased the guideline volumes for personal consumption in 2002
  - this raised the guideline quantity from 800 to 3,200 cigarettes per person
- HMRC launched a strategic approach to tackling tobacco smuggling in 2000, investing £200 million in new staff and technology
  - the strategy aimed to reduce the market share of illicit cigarettes to 17% by 2004/05
  - the target was revised in 2006 to 13% by 2007/08

#### Social and legal

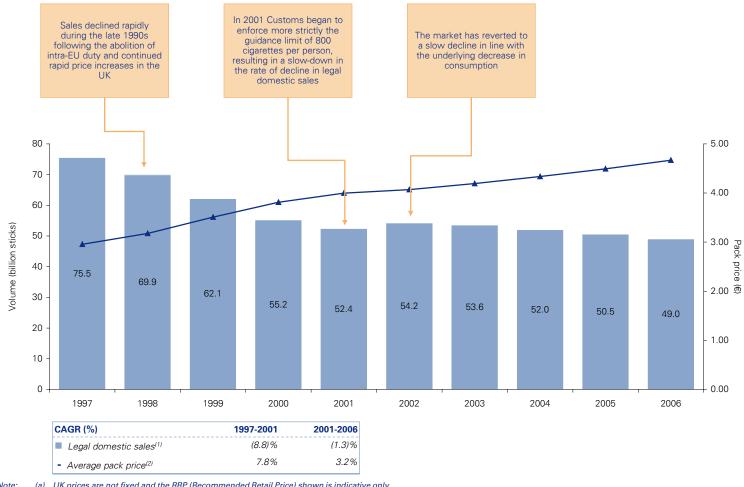
- A ban on smoking in public places, including bars and restaurants, was introduced in Scotland in March 2006
  - a similar ban is expected in Northern Ireland in April 2007 and in England and Wales in July 2007
- Smoking prevalence is relatively low at 22% (21 of EU 25)



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

Following a period of steep decline during the 1990s, the rate of decline in cigarette sales has slowed to reflect the underlying decline in consumption

Historic cigarette prices and legal domestic sales 1997 - 2006



(a) UK prices are not fixed and the RRP (Recommended Retail Price) shown is indicative only

Sources: (1) AC Nielsen Retail Audit supplied by PMI (1997 to 2003)

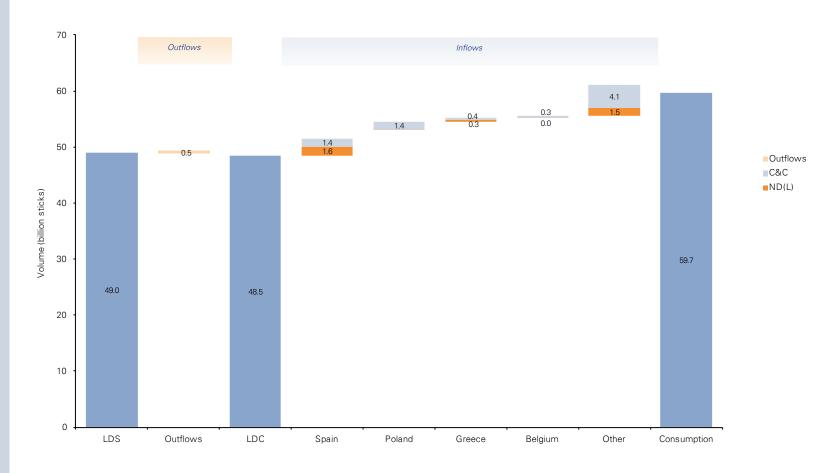
- (2) In Market Sales supplied by PMI (2003 to 2006)
- (3) Weighted average pack price supplied by PM UK management



### Inflows and outflows

UK consumption is estimated at 59.7bn sticks versus legal sales of 49.0bn sticks, a net inflow of 10.7bn sticks

## Consumption breakdown 2006<sup>(a)(b)(1)(2)</sup>



Notes: (a) LDS – Legal Domestic Sales

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

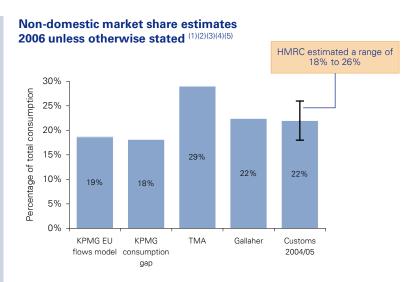
Sources: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006

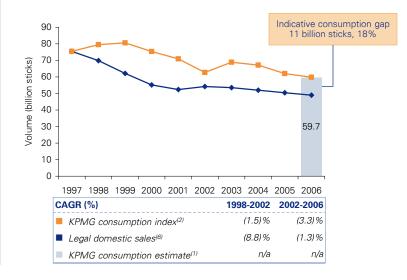


### Comparison of sources for non-domestic estimates

KPMG's estimate of the non-domestic share of the market is consistent with other data-based estimates, although lower than the industry consensus



## Consumption modelling 1997 – 2006



## Our results are consistent with the estimate from customs and with the indicative consumption gap

- Her Majesty's Revenue and Customs (HMRC) estimated that the market share of non-domestic cigarettes was between 18% and 26% in 2004/05
  - KPMG's estimate is within the lower end of this range, which we would expect to be elevated as a result of the political incentive to emphasise the problem of smuggling
- Consumption index modelling implies that the volume of non-domestic cigarettes has increased by 11 billion sticks since 2006, representing 18% of consumption
  - although smoking prevalence and average daily consumption have declined over the period, legal domestic sales declined faster and earlier following tax increases in the 1990s

## Industry estimates suggest a higher proportion of non-domestic consumption

- The most recent industry survey, performed by Gallaher using the pack swap methodology, implies a non-domestic share of 22% in 2006
- In our sample of packs collected in different UK towns and cities there
  was substantial variation in the non-domestic market share, which may
  explain some of the difference between different surveys
  - London, for example, showed a non-domestic penetration of 21.3%, consistent with the pack collection results from Gallaher
- The Tobacco Manufacturers' Association (TMA) produces its own estimate of the share of non-domestic cigarettes, reaching a consensus view among its members of 29% for 2006
  - as is the case for HMRC, Gallaher and other members of the TMA have an incentive to emphasise the impact of high prices on the nondomestic market

#### Sources: (1) KPMG EU flows model

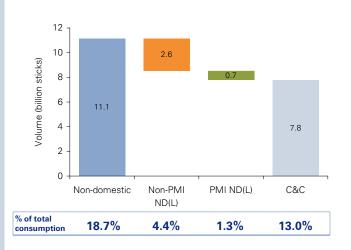
- (2) KPMG consumption index model
  - Estimates of Non-UK duty paid cigarette consumption, Tobacco Manufacturers' Association, 2006
- Estimates of counterfeit and Non-UK duty paid cigarette consumption based on Gallaher monthly pack swap data, Tobacco Manufacturers' Association, February 2006
- (5) Measuring Indirect Tax Losses, HMR&C, December 2006
- (6) In Market Sales supplied by PMI



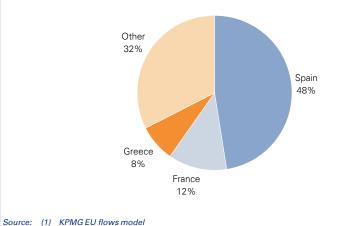
### Non-domestic (legal) results

The primary source of ND(L) is Spain, where UK brands are readily available

## **ND(L)** by brand **2006**<sup>(1)(2)</sup>



## **ND(L)** by origin **2006**<sup>(2)</sup>



(2) AC Nielsen ND(L) research, December 2006





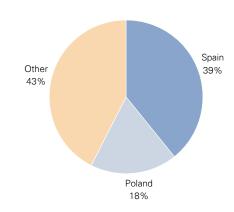
■ MARLBORO ■ Non-PMI

■ Total

### **Counterfeit and contraband breakdown**

Like ND(L), the primary source of C&C is Spain, although Poland also accounts for a significant proportion of the total

## C&C by origin (excluding PMI counterfeit) 2006 $^{(1)(2)}$



Source: (1) KPMG EU flows model

(2) AC Nielsen ND(L) research, December 2006



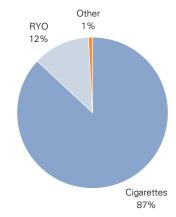
### **Contents**

- Executive summary
- Project overview and timing
- Methodology
- European cigarette market
- 2006 Project Star results
- Appendices
  - country results
  - other tobacco products
  - sources

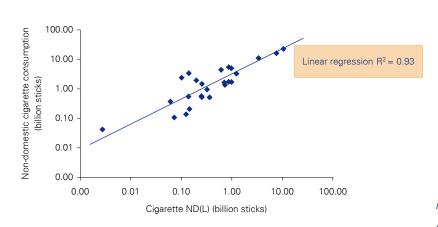
### Category share of ND(L)

RYO is the only noncigarette tobacco product which is likely to contribute significantly to non-domestic consumption





## Cigarette ND(L) versus total non-domestic cigarette volume 2006(1)(2)



#### Roll your own tobacco (RYO) accounts for 12% of ND(L) purchases

- Cigarette ND(L) represents 87% of the total legal overseas purchases by residents of the 22 roll-out countries
  - this total does not include cigar purchases, which were specifically excluded from our research
- RYO accounts for the majority of the remaining ND(L) with 2.0 billion grams, equivalent to 2.6 billion sticks
  - purchases of other tobacco products, including cigarillos, totalled 0.2 billion units

## ND(L) is likely to be indicative of trends in total non-domestic consumption

- The empty pack surveys were commissioned specifically to address cigarette consumption and did not include RYO
  - RYO is less well suited to this methodology as the incidence of its use is lower, and for a given level of consumption the number of packs available for collection is also lower
- However, OTP ND(L) is likely to provide a reasonable guide to trends in total non-domestic consumption
  - an r-squared value of 0.93 implies a strong correlation between ND(L) purchase volume and non-domestic consumption between countries

e: (a) Share calculated by number of units using 0.75g RYO = 1 unit

(b) OTP data was not collected for the three pilot countries

Source: (1) AC Nielsen and Synovate ND(L) research, December 2006

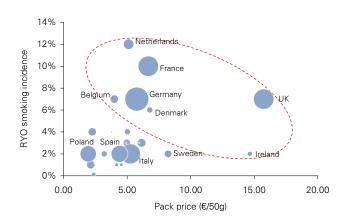
(2) KPMG EU flows model



### Incentive to purchase non-domestic

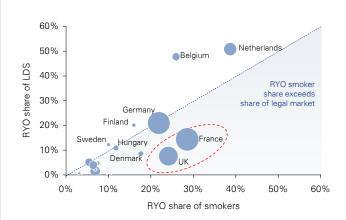
Only the UK and France appear likely to contribute significantly to the consumption of nondomestic RYO

## RYO pack price versus RYO smoking incidence 2006<sup>(1)(2)</sup>



Note: Bubble size corresponds to country population

### RYO share of smokers versus share of legal market sales 2006<sup>(1)(3)</sup>



Note: Bubble size corresponds to the number of RYO smokers

#### Several countries have a significant proportion of RYO smokers and a substantial price incentive to purchase non-domestic RYO

- RYO smoking is most prevalent in Northern European countries, which also tend to have higher pack prices, creating an incentive to purchase non-domestic RYO
  - pack prices are highest in the UK and Ireland, with the UK also having a high incidence of RYO smoking at 7% of the adult population

# However, only the UK and France appear to have both an RYO consumption gap and the level of consumption necessary to contribute significantly to RYO non-domestic consumption

- Where the incentive to purchase non-domestic cigarettes influences buying decisions it is likely to result in a relatively low RYO share of the legal tobacco market compared to the share of smokers
- A significant shortfall in the domestic RYO market is implied in the UK,
   France and Denmark
  - however, the small number of RYO smokers in Denmark suggests that the absolute volume of the shortfall is unlikely to be significant
- Although Germany is likely to account for a significant volume of RYO consumption the majority of this is likely to be legally purchased on the domestic market

urce: (1) Attitudes of Europeans towards tobacco, Eurobarometer, 2006

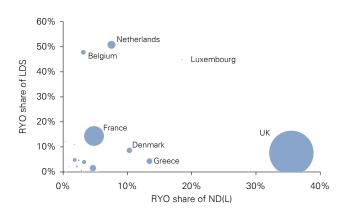
- (2) TMA website, www.the-tma.org.uk
- (3) PMI management from tax stamps and trade sources



### **Country share of ND(L)**

The UK is likely to account for the overwhelming majority of non-domestic RYO consumption

## RYO share of ND(L) versus share of legal market 2006



vote: (

- a) Bubble size corresponds to ND(L) volume of RYO
- (1) PMI management from tax stamps and trade sources
- (2) AC Nielsen and Synovate ND(L) research, December 2006

## Research indicates that the UK and France account for 86% of RYO ND(L) purchases among the roll-out countries

- The UK is the largest contributor to RYO ND(L), with RYO accounting for 36% of ND(L), equivalent to 1.9 billion sticks and 71% of total EU RYO ND(L)
  - although RYO accounts for only 5% of ND(L) in France this is equivalent to 0.4 billion sticks and 15% of total EU RYO ND(L)
- These countries are likely to account for a similar share of the total volume of non-domestic RYO

## Interviews support the view that RYO C&C is not a significant feature of other markets

 Feedback from Customs and PMI management suggests that they do not consider smuggling of RYO to be a major issue



### **UK non-domestic**

Approximately 70% of UK RYO consumption is nondomestic, the majority of which originates in Belgium and Luxembourg

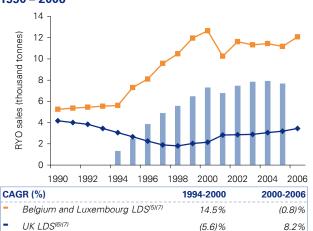




## UK LDS and non-domestic consumption versus Belgium and Luxembourg LDS

1990 - 2006<sup>(1)(5)(6)(7)</sup>

UK non-domestic consumption(1)



32.5%

## Estimates of non-domestic RYO consumption in the UK are relatively consistent

- Customs and the Tobacco Manufacturers' Association (TMA) both estimate non-domestic RYO consumption to be approximately 7 to 8 thousand tonnes
  - the range estimated by Customs is equivalent to 67% to 73% of total consumption
- Our estimate of RYO ND(L) is also consistent with that from Customs, which estimated cross-border shopping of RYO to be between 0.9 and 1.4 thousand tonnes
  - this is equivalent to 9% to 12% of consumption
- Given this consistency between estimates, consumption of C&C RYO in the UK is likely to lie within the range estimated by Customs of 5.0 to 7.2 thousand tonnes
  - this is equivalent to 53% to 64% of consumption

### UK RYO consumption has increased since 1994, despite decreased domestic sales

- Although UK domestic sales fell during the late 1990s, RYO consumption increased rapidly over this period and beyond
  - many cigarette smokers switched to RYO, both domestic and nondomestic over this period
- The majority of this increase in non-domestic consumption in the UK appears to have been met by increased sales in Belgium and Luxembourg
  - from 2004 some of this consumption is likely to have switched to new EU members with lower prices
  - this shift may have been offset by an increase in sales to French consumers, who experienced rapid increases in cigarette prices in 2002 and 2003

Source: (1) TMA website, www.the-tma.org.uk

- (2) Measuring indirect tax losses, HMRC, 2006
- (3) Comparison of HMRC and TMA estimates of the composition of the UK cigarette and HRT markets, HMRC, September 2005
- (4) AC Nielsen ND(L) research, December 2006
- (5) PMI management from tax stamps (1994 2006)
- (6) The tobacco bulletin, HMRC, December 2006 (1994 2006)
- (7) Smuggling and cross-border shopping of tobacco products in the European Union, Luk Joossens, December 1999



1.0%

### **Contents**

- Executive summary
- Project overview and timing
- Methodology
- European cigarette market
- 2006 Project Star results
- Appendices
  - country results
  - other tobacco products
  - sources

### **External data sources**

# Our assessment incorporates analysis from several sources

#### Other sources

- Achats transfrontaliers de cigarettes 1999 2005, OFDT, 2005
- Attitudes of Europeans Towards Tobacco, Eurobarometer, 2006
- Austrian Chamber of Commerce empty pack survey, published April 2006
- BAT EPS Survey
- Comparison of HMRC and TMA estimates of the composition of the UK cigarette and HRT markets, HMRC, September 2005
- Cigarette smoking in minority populations, Eliseo J. Perez-Stable, 1998
- Consumption of and trade in illegal tobacco products in Estonia, Estonian Institute of Economic Research, April 2006
- Control Coincidental del Consumo de Tabaco Rubio, ASM Grupo, 2006
- Customer Purchasing Habits, PMI France, 2006
- Esmerk Finnish News, "In Imatra 58% smoke Russian Cigarettes", 21 November 2006
- European Commission website, <a href="http://ec.europa.eu">http://ec.europa.eu</a>
- European Tourism Insights, European Travel Commission, 2005
- European Union Industry Size, PMI Lausanne, 2006
- Finnish National Statistics
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- Slovenia market size evolution, PMI Slovenia, 2006
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- University of Warsaw, the market for Legal and Illegal Cigarettes, December 2005
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