

# Taxation of tobacco products in the WHO European Region: practices and challenges



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## ABSTRACT

The publication "Taxation of tobacco products in the WHO European Region: practices and challenges" aims to provide guidelines and support to the Member States of the WHO European Region in strengthening their price and tax measures to reduce the consumption and prevalence of the use of tobacco products. It is the second publication in the series of policy documents following the adoption of the European Strategy for Tobacco Control.

The document describes how an increase in the price of tobacco through a rise in tax rates induces smokers to quit and prevents others from starting. At the same time, it leads to significant increases in state revenues.

The document also addresses the regressivity and equity issues related to the taxation of tobacco products, the negative consequences of a fall in the tax rate increase and the need for effective international cooperation in coordinating taxation measures and combating smuggling.

## Keywords

SMOKING – prevention and control  
TOBACCO – economics – supply and distribution  
TOBACCO INDUSTRY – legislation  
TAXES  
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# Executive summary

This document aims to provide guidelines and support to the Member States of the WHO European Region in strengthening their price and tax measures to reduce the consumption and prevalence of the use of tobacco products. The document was prepared as part of a series of policy documents envisaged by the European Strategy for Tobacco Control (ESTC) and at the request of the European network of national counterparts for the ESTC.

The policy paper covers the key issues faced when thinking about taxing tobacco products: the impact on prevalence, state revenues, smuggling, regressivity and equity. The document also addresses the negative consequences of a fall in the tax rate increase and the need for effective international cooperation in coordinating taxation measures and combating smuggling.

Evidence from countries of all income levels shows that an increase in the price of cigarettes through raising excise duties is the most cost-effective measure to induce smokers to quit and prevent others from starting. According to the World Bank, an average price increase of 10% on a pack of cigarettes would reduce consumption by about 4% in high-income countries and about 8% in low- and middle-income countries. Tax increases, even though they lead to significant reductions in consumption, will, at the same time, lead to significant increases in tax revenues. A tobacco tax increase of 10% will raise tax revenues by about 7%. In general, the potential to generate additional revenue will be highest where taxes as a percentage of prices are currently relatively low (which is the case in many countries of the eastern part of the Region), giving ample room for raising prices and generating additional revenues.

A frequently-used argument opposed to tax increases is that many jobs would be lost due to a declining demand for tobacco products. The available evidence shows that the resources spent on tobacco products would be spent on other goods and services, generating jobs to replace those lost from tobacco sales.

Development of smuggling and other forms of illegal trade is a serious problem. Smuggling occurs in many parts of the Region, even in countries where taxes are low. The extent of smuggling appears to be determined at least as much by the overall level of corruption as by the tax rate and tax increases. There is also growing concern about possible tobacco industry involvement in such illegal trade. The experiences from countries with different levels of price clearly indicate that by adopting appropriate policies, the scale of smuggling can be reduced significantly at the same time as taxes continue to be increased.

When a government announces tobacco tax increases, the tobacco industry tends to respond by significant lobbying. The approaches developed and coordinated throughout the Region by transnational companies include denying scientific evidence, exerting influence on the public, corruption, and unfair pricing practices. When facing a tax increase, the tobacco industry might introduce inexpensive brands, drop the price of most popular brands or reduce the number of cigarettes by pack in order to maintain and even enlarge the market for its products.

Tobacco tax increases are an effective measure to protect children and young people from consuming cigarettes. Several studies have concluded that lower socioeconomic groups could be more sensitive to price increases than the highest, particularly in low- and middle-income countries. In the high-income countries of the Region where smoking is being substantially reduced among upper-income groups, lower-income households spend a relatively higher proportion of income due to tax increases. In terms of policy implications, support to quit in the form of accessible and affordable smoking cessation services should be made available for the lowest income groups and most deprived families. Social policies should also address the socioeconomic issues linked to the settling into the smoking habit. Earmarking tobacco taxes should be considered as an important instrument to offset the potential regressivity of tobacco taxes and to provide funds for public health measures and tobacco control.

As young people are particularly sensitive to price changes, a small decrease in the real price of cigarettes would lead to an increase in smoking prevalence. Lowering the real price can result from a tax decrease or tax increases that are inadequate to the rate of inflation.

The evidence indicates that lowering the real price of cigarettes with the intention of combating the smuggling problem does not stimulate additional revenue.

Since national tobacco price policy can be undermined if transnational dimensions are not properly addressed, the WHO Framework Convention on Tobacco Control has included specific obligations regarding pricing and taxation (*Article 6 and Article 15*). The European Strategy for Tobacco Control has outlined the action needed in the field of taxation policy and combating illicit trade, emphasizing the need for strengthening cooperation between national, integrational and relevant intergovernmental organizations.





# 1

## Introduction

This document aims to provide guidelines and support to the Member States of the WHO European Region in strengthening their price and tax measures to reduce the consumption and prevalence of use of tobacco products. Price and tax increases are one of the most effective components of a comprehensive tobacco control policy which, as emphasized by the Warsaw Declaration for a Tobacco-free Europe (1) and the European Strategy for Tobacco Control (ESTC) (2), strongly contribute to a decrease in smoking prevalence. The WHO Framework Convention on Tobacco Control sets out general obligations to implement tax and price policies contributing to health objectives aimed at reducing tobacco consumption (3).

The document was prepared as part of a series of policy documents envisaged by the ESTC, and at the request of the European network of national counterparts for the ESTC.

The overall objective of the document is to provide national policy-makers, health system administrators, professionals and NGOs with easily accessible technical arguments in favour of sustainable and expanded taxation policies aimed at increasing and maintaining high prices for tobacco products.

The policy paper covers the key issues faced when thinking about taxing tobacco products: the impact on prevalence, state revenues, smuggling, regressivity and equity. The document also addresses the negative consequences of a fall in the tax rate increase and the need for effective international cooperation in coordinating taxation measures and combating smuggling.

The document takes into consideration existing knowledge based on scientific evidence and best practices and the latest developments in the field:

- the provisions of the WHO Framework Convention on Tobacco Control (3);

- the recommendations of the European Strategy for Tobacco Control (2);
- the recommendations produced by the World Bank. The publication *Curbing the Epidemic: Governments and the Economics of Tobacco Control* has been a special asset (4);
- the latest review on the best available evidence issued by the Health Evidence Network (5); and
- the recommended strategies to reduce risk to health presented in *The World Health Report 2002* (6).

## **THE PROCESS OF DEVELOPMENT**

The WHO Collaborating Centre at the Deutsches Krebsforschungszentrum (German Cancer Research Centre) in Heidelberg, Germany, based on a publication of the Center about tax increases (7), and the WHO Regional Office for Europe developed the first draft. A group of well-known experts in the field (Ms Margaretha Haglund, Sweden; Mr Luk Joossens, Belgium; Ms Anne-Marie Perucic, Tobacco-free Initiative, WHO headquarters; Dr Olli Simonen, Finland; Professor Joy Townsend, United Kingdom; Professor Kennett Warner, United States and a World Bank consultant) have reviewed the draft and made valuable comments. The second draft has been reviewed by the network of WHO European national counterparts acting as an international advisory body to the European Strategy for Tobacco Control. The orientation and development process has been under the general auspices of the Tobacco-free Europe programme of the WHO Regional Office for Europe.

## **THE RATIONALE FOR INCREASING TAXES ON TOBACCO PRODUCTS**

The WHO European Region, with only 15% of the world's population, faces nearly one third of the worldwide burden of tobacco-related diseases. *The World Health Report 2002* (6) has presented new figures by attributing 1.6 million deaths to tobacco for the year 2000 and showing a substantial increase in recent years. The vast majority of projected deaths caused by tobacco use in the next quarter century will be among people who are currently smoking or using tobacco

products. According to Peto and Lopez (8), halving global cigarette consumption per adult by the year 2020 would prevent about one third of tobacco-related deaths in 2020 and would almost halve tobacco-related deaths in the second quarter of the century. Such changes could avoid between seven and ten million tobacco-related deaths by 2025 in the European Region. Rising quit rates in adults is critically important to improving public health in the short to medium term.

A huge, international body of research shows that increasing tobacco taxes is one of the most effective and cost-effective measures to reduce tobacco consumption and smoking prevalence. According to the data produced by the World Bank, it can be estimated that with a price increase of 10%, nearly 2% of all smokers will quit in the western part of the European Region and nearly 4% in the central and eastern part avoiding, respectively, 1.5% and 3% of all smoking-attributable deaths. The greatest relative impact of a price increase on deaths averted is among younger age cohorts. Moreover, given the relative inelasticity of the demand for tobacco products, increases in tobacco taxes will result in sizable increases in tobacco tax revenues; a tobacco tax increases of 10% will raise tax revenues by about 7% (4).

## 2

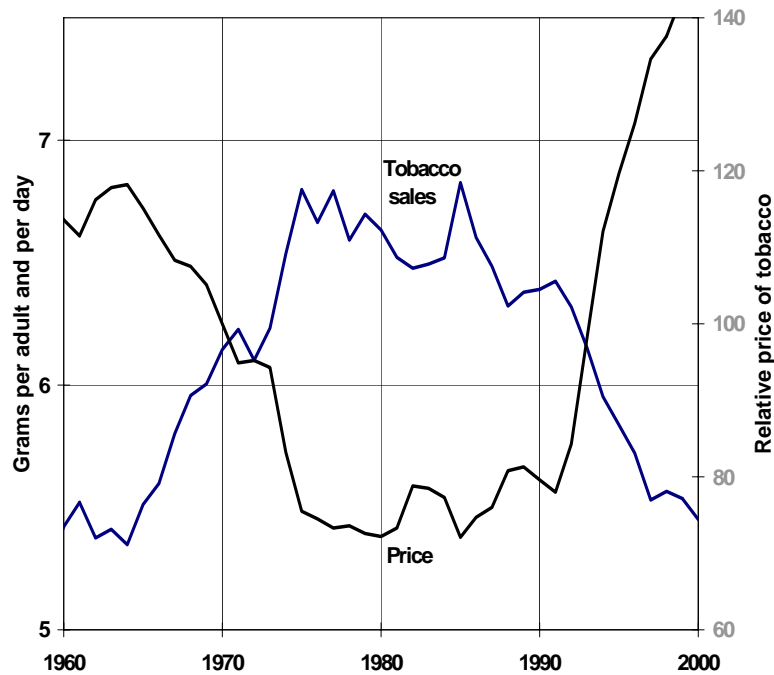
# The impact of tobacco tax increases

Evidence from countries of all income levels shows that an increase in the price of cigarettes through raising excise duties is the most cost-effective measure to induce smokers to quit and prevent others from starting. According to the World Bank, an average price increase of 10% on a pack of cigarettes would reduce consumption by about 4% in high-income countries and about 8% in low- and middle-income countries. Tax increases, even though they lead to significant reductions in consumption, will, at the same time, lead to significant increases in tax revenues. In general, the potential to generate additional revenue will be highest where taxes as a percentage of prices are currently relatively low (which is the case in many countries of the eastern part of the Region), giving ample room for raising prices and generating additional revenues. A frequently-used argument opposed to tax increases is that many jobs would be lost due to a declining demand for tobacco products. The available evidence shows that the resources spent on tobacco products would be spent on other goods and services, generating jobs to replace those lost from tobacco sales.

### **THE IMPACT OF TOBACCO TAX INCREASES ON THE DEMAND FOR TOBACCO PRODUCTS**

Research shows that an increase in tobacco taxes results in higher prices. Smokers' responsiveness to changes in tobacco prices has been estimated over several decades in many studies from different countries and over widely varying time periods. The vast majority of the studies report a strong inverse relationship between changes in price and changes in consumption. The price elasticity of demand is the proportion by which the demand for goods changes in response to a 1% change in price. The quantity demanded will fall when the price rises. The quantity demanded will rise when the price decreases. This is apparent from the simple descriptive data presented in Fig. 1.

Fig. 1. Relative tobacco prices corrected for inflation and daily per capita tobacco consumption among adults, France 1960–2000



Source: (9,21).

Using quarterly data on tobacco products consumed in France between 1976 and 1995, Anguis and Devaux (1997) estimated price elasticity of  $-0.3$  over a period of 3 years (9). For high-income countries, many studies estimate a demand reduction of about 4% when cigarette prices rise 10%, which corresponds to an elasticity of  $-0.4$  (10,11,12,13,14,15).

In middle- and low-income countries the price elasticity of demand is estimated to be greater than in high-income countries, ranging between about  $-0.6$  and  $-1.0$ . For these countries a reasonable estimate of the average elasticity of demand would be  $-0.8$  as provided by recent studies of the World Bank in Bulgaria (16).

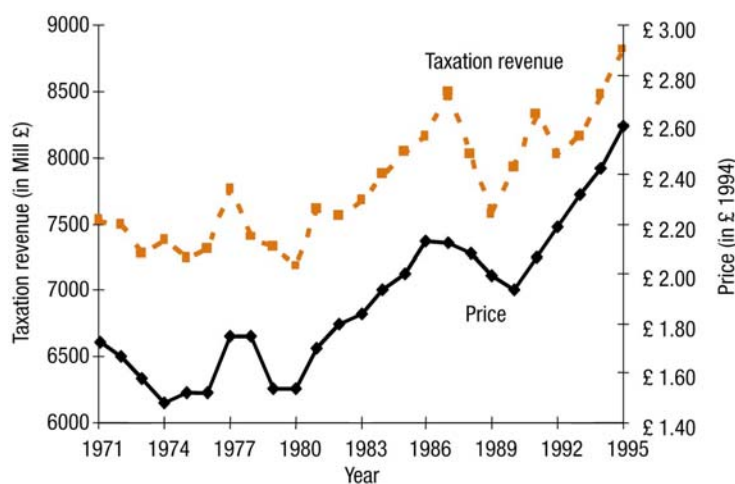
Research has shown that some cigarette consumers react to price increases by shifting consumption to cheaper tobacco products (17,18,19). To achieve a reduction in overall tobacco consumption, taxes would have to be raised at the same time and in a comparable

amount for all tobacco products (20). More or less equivalent prices for all tobacco products would reduce the problem of shifting from one product to another. The World Bank therefore recommends imposing similar levels of taxation on all types of tobacco products – cigarettes, cigars, pipe tobacco, hand-rolling tobacco, snuff and chewing tobacco (10). The discussion on the taxation of fine cut products must be viewed in this context. Fine cut products should be taxed at the same rate as cigarettes. For example, since around 1500 cigarettes can be produced from one kilogram of fine cut then that amount of fine cut should be taxed at a level equal to 75 packages of cigarettes. The European Council Directive 2002/10/EC has recently introduced new minimum rates or amounts of excise duties to be levied on fine cut smoking tobacco and other smoking tobacco.

### THE IMPACT OF TOBACCO TAX INCREASES ON STATE REVENUES

Given the relative inelasticity of demand for tobacco products, even though tax increases lead to a significant reduction in consumption, they will, at the same time, lead to a significant increase in tax revenues. Fig. 2 shows how the real value of tobacco tax revenues has risen and fallen with real changes in cigarette prices (determined mostly by changes in taxes) in the United Kingdom from 1971–1995.

Fig. 2. Growing public revenues with continuously rising tobacco taxes in the United Kingdom (1971–1995)



Source: Townsend 1998 (11).

In France, where taxes account for around 78% of the retail selling price (*Table 1*), when tobacco prices increased by an average annual rate of 12% during the period 1992–1997, state revenues also increased two-fold and cigarette sales decreased by 14.5% (*21*).

In general, the revenue generated from tobacco products will be highest where taxes, as a percentage of prices, are currently relatively low, giving ample room for raising prices and generating additional revenues. The potential is particularly important for most NIS countries where taxes represented less than 40% of the cigarette price in 1999: Armenia (18%), Russian Federation (29%), Kyrgyzstan (30%), Kazakhstan (33%), Georgia (34%), Ukraine (36%), Belarus (38%) (*10*).



Table 1. Tax rates and current price of cigarettes most in demand in the European Union (EU-15), former acceding countries and candidate countries in 2003

Country	Specific excise %	Ad Valorem excise %	Total excise %	VAT %	Total tax %	Price of most popular cigarettes in euros
Austria	14.25	42.00	56.25	16.67	72.92	3
Belgium	11.16	45.84	57.00	17.36	74.35	3.36
Bulgaria <sup>(1)</sup>	3.33	40.00	43.33	16.67	56.67	0.62
Cyprus	60.95		60.95	13.04	74.01	2.22
Czech Rep	18.00	22.00	40.00	18.03	58.03	1.32
Denmark	32.61	21.22	53.83	20.00	73.83	4.03
Estonia	25.45	24.00	49.45	15.25	64.70	1.05
Finland	7.56	50.00	57.56	18.03	75.60	4
France	3.35	58.05	61.40	16.39	77.79	5 <sup>(2)</sup>
Germany	36.63	24.23	60.87	13.79	74.65	3.37
Greece	3.64	53.86	57.50	15.25	72.75	2.5
Ireland	43.59	18.32	61.91	17.36	79.27	6.12
Italy	3.73	54.26	58.00	16.67	74.67	2.07
Latvia <sup>(1)</sup>	37.42		37.42	15.25	52.67	0.52
Lithuania	32.15	10.00	42.15	15.25	57.41	0.77
Luxembourg	10.25	46.84	57.09	10.71	67.81	2.32
Malta	6.16	53.10	59.26	13.04	72.30	3.03
Netherlands	36.49	20.51	57.00	15.97	72.97	3.04
Poland	31.67	25.00	56.67	18.03	74.70	0.88
Portugal	38.75	23.00	61.75	15.97	77.72	2.1
Romania	16.05	32.00	48.05	19.00	67.04	0.64
Slovakia	42.22		42.22	16.70	58.89	1.08
Slovenia	13.94	39.07	53.00	16.67	69.67	1.49
Spain	4.01	54.00	58.01	13.79	71.80	1.95
Sweden	10.67	39.20	49.87	20.00	69.87	4.11
United Kingdom	42.96	22.00	64.96	14.89	79.86	7.18

Source: EC Directorate General Taxation and Customs Union; December 2003 for the EU-15 Member States, July 2003 for former acceding and candidate countries.

<sup>(1)</sup> data for filtered cigarettes.

<sup>(2)</sup> from January 2004.

In the United States where taxes account for less than half of the price of tobacco products, revenue gains from 1990 through 2000 reflect that all states that have increased their taxes by at least 10 cents have successfully raised revenue (22).

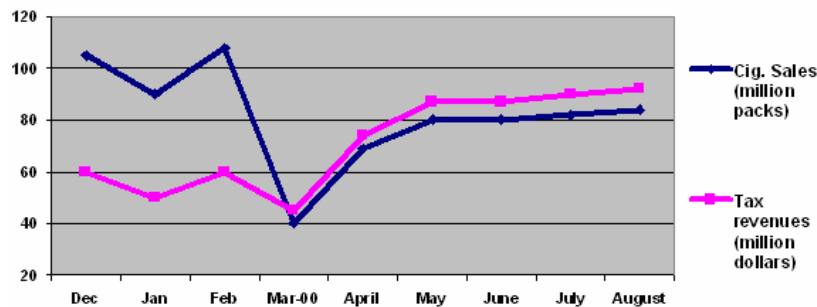
Table 2. US state-level sales and cigarette excise tax revenue in response to tax increases, 1990–2000

State	Date	Tax Increase Per Pack (US\$)	New State Tax Per Pack (US\$)	State Sales decline (%)	Revenue Increase (%)	Revenue Increase (US\$)
Utah	July 1997	0.25	0.52	-20.7	86.2	21 500 000
Maryland	July 1999	0.30	0.66	-15.3	52.6	68 200 000
California	January 1999	0.50	0.87	-18.9	90.7	555 000 000
Michigan	May 1994	0.50	0.75	-20.8	139.9	341 000 000
New York	March 2000	0.55	1.11	-20.2	57.4	365 000 000

Source: (22).

The impact of the March 2000 tax increase in the State of New York shows that while sales plummeted immediately following the tax increase, revenue increased dramatically (Table 2, Fig. 3).

Fig. 3. Impact of March 2000 tax increase on monthly cigarette sales and excise tax revenues in the State of New York



Source: (22).

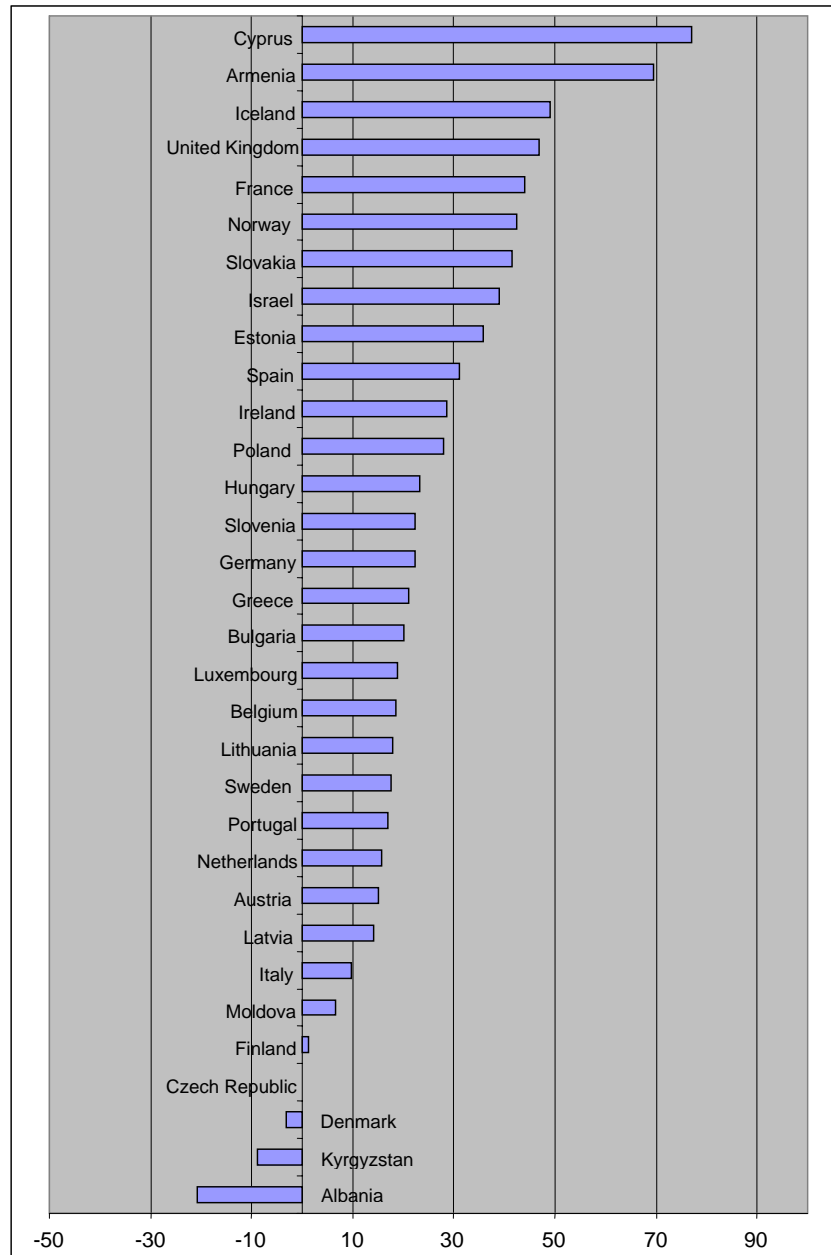
Another example is Germany where, as in many other European countries, substantial additional income can still be generated by tobacco tax increases.

Compared with other EU countries, tobacco taxes in Germany are in the medium range. Since the tax increase in early 2002, the share of tobacco excise taxes in the retail price amounts to 61%. (23,24,25, *Table 1*). The World Bank experts have estimated that, even when considering the possibility of increased smuggling, a tax increase of 10% will lead to a 2.6% increase in government revenues. It has also been estimated that a coordinated increase of 10% in tobacco tax across Europe which is fully reflected in higher retail prices, could result in additional tax income in Germany of about 4.7% (10,26). These calculations clearly show that concerted political action at the European level would be advantageous for both public health and national budgets.

It is apparent from Table 1 and Fig. 4 that the level of tobacco prices and the rate of increases in real prices vary significantly between Member States. During the period 1996–2003, the real price of tobacco increased by more than 60% in Armenia and Cyprus; by more than 30% in Estonia, France, Iceland, Israel, Norway, Slovakia, Spain and the United Kingdom, but by less than 5% in the Czech Republic and Finland and even decreased in Albania, Denmark and Kyrgyzstan.

Another important issue is the impact of tobacco tax increases on inflation. According to the World Bank the impact of tobacco tax increases, even large ones, on inflation is very modest. However to avoid any potential inflationary impact on the cost of living index, WHO (2) and the World Bank (4) have recommended that tobacco prices should not be part of the consumer price index. An alternative that has been chosen by the EC and some EU Member States is to calculate two price indexes, one including tobacco prices, and one excluding them.

Fig. 4. Real price increases of tobacco products (in %) in the European Region, 1996–2003



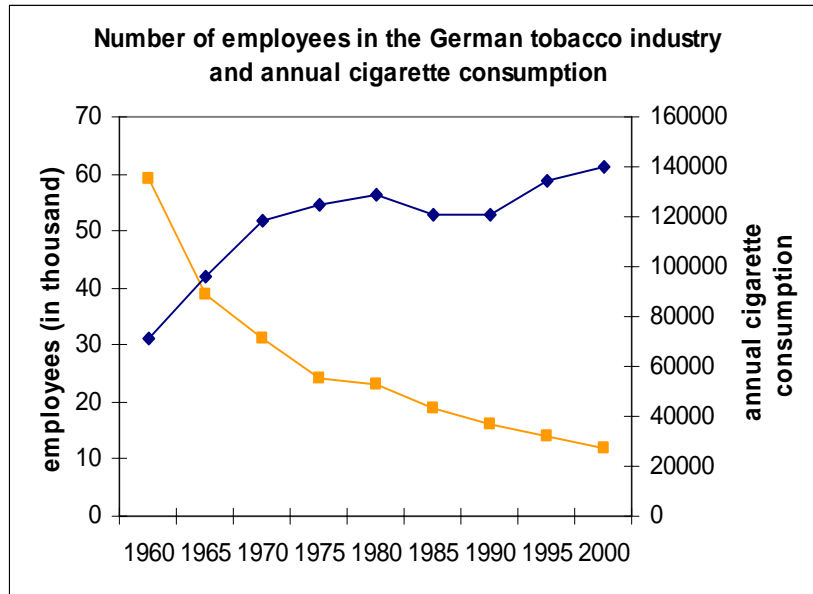
Source: EUROSTAT for EU countries; National Statistical Offices for non-EU countries.

## **THE IMPACT OF TOBACCO TAX INCREASES ON THE LABOUR MARKET**

Another frequently-used argument opposed to tax increases is that many jobs would be lost due to a declining demand for tobacco products (27). This fear is not justified. In general, while it is true that employment in jobs directly related to tobacco manufacturing or growing would decline further as a result of the reductions in tobacco consumption, the World Bank and other experts have shown that money which was previously spent on tobacco products will be spent on other goods and services. The shift of consumption from tobacco products to other goods and services will offset the loss of jobs in the tobacco sector. In the case of Germany, for example, where most other sectors of industry and employment have been mechanized to the same or a lesser degree, this would result in an increase in the number of jobs. At the same time, it would shift jobs into other sectors and away from an environmentally harmful industry that causes damage to the health of the population.

Furthermore, the automation of the tobacco production process itself has resulted in a substantial loss of jobs. Despite a rise in cigarette consumption by almost 100% (from 71 billion cigarettes in 1960 to 140 billion in 2000), the German tobacco industry has cut nearly 50 000 jobs – of around 60 000 employees in 1960, only about 12 000 were left in 2000 (*Fig. 5*).

Fig. 5. Number of employees in the German tobacco industry and cigarette consumption



Source: BMF 2003 (28).

According to the World Bank, the net macro-economic impact of higher tobacco taxes is negligible, or positive in all but a very few (low-income tobacco growing) countries (4).

### 3

## **Tobacco tax increases, cross-border shopping and illegal trade**

Development of smuggling and other forms of illegal trade is a serious problem. Smuggling occurs in many parts of the Region, even in countries where taxes are low. The extent of smuggling appears to be determined at least as much by the overall level of corruption as by the tax rate and tax increases. There is also growing concern about possible tobacco industry involvement in such illegal trade. The experiences from countries with different levels of price clearly indicate that by adopting appropriate policies, the scale of smuggling can be reduced significantly at the same time as taxes continue to be increased.

The development of smuggling and other forms of illegal trade are being used as arguments against important increases in cigarette and other tobacco taxes. In fact, smuggling occurs in many parts of the world, even in regions where taxes are low. The extent of smuggling is not caused principally by the size of price differences between the duty- paid and the duty- not paid tobacco products, but by the increase in the development of corruption and criminal organizations (26). There is also growing concern about possible tobacco industry involvement in such illegal trade.

The smuggling of cigarette and other tobacco products has very serious consequences:

- cigarette prices are lower than expected, which results in higher consumption leading to greater smoking-related health consequences;
- state revenues are lower than expected;
- the illegal market can undermine efforts to limit youth access;

- the lack of implementation of appropriate regulations and warnings on smuggled products encourages an increase in consumption.

Large-scale smuggling, involving the illegal transportation, distribution and sale of large consignments of tobacco products and generally avoiding taxes accounts for the vast majority of all forms of illegal trade. This illegal trade can account for up to 80% of total national consumption (29).

Cross-border shopping and bootlegging are relatively small problems compared to large-scale smuggling. However, in some countries such as Finland and Norway, the scale of this problem can be larger. In Norway, the unregistered consumption of tobacco products accounted for about 25% of total consumption in the years 1997–2000; 11% was purchased in Sweden, 5% in Denmark, 9% in other foreign countries and 1% was smuggled (30). Article 6 of the WHO FCTC, which is related to *Price and tax measures to reduce the demand for tobacco*, requests the Parties to adopt measures prohibiting or restricting, as appropriate, sales to and/or importations by international travellers of tax- and duty-free tobacco products.

The experiences from countries with different levels of price clearly indicate that by adopting appropriate policies, the scale of smuggling can be reduced significantly at the same time as taxes continue to be increased.

Spain, with tobacco prices well below the EU average, was exposed to large-scale smuggling during the mid-1990s. According to estimates of the European Anti-Fraud Office, smuggled cigarettes accounted for 14.5% of the total Spanish market in 1994. A combined set of measures, including the implementation of new legislation by Andorra and tighter controls by neighbouring countries, have led to a significant reduction in the level of smuggling to nearly 2%. From 1994 to 2002 tobacco prices increased twofold and tax revenues by 155% (31).

In the case of France, taxes were increased several times between September 1991 and December 1996 and more recently between 2002 and 2003. During the first period (1991–1996) state revenues increased twofold while tobacco consumption decreased by 14.5%.



During the second period (2002–2003) when the price increased by an average of 31%, government revenues increased by some 2 billion euros. At the same time, consumption decreased by 13.5% without any real increase in smuggling. In 2003, according to the French Customs Office, the share of smuggling, bootlegging and cross-border trade was estimated at less than 3% of the tobacco market (half of the tobacco seized was in transit to the United Kingdom) (32). In order to combat smuggling, France requires a licence for most companies involved in tobacco manufacturing, import/export, distribution and retailing.

In the United Kingdom, with tobacco prices among the highest in the EU, taxes were increased annually by 3% to 5% above the inflation rate between November 1993 and November 1998. While smoking prevalence declined slowly, the revenue from tobacco taxes increased until 1997. In 1998 and 1999, taxes increased by 5% over inflation, but revenues declined because of continuous growth in smuggling. By 1999, the revenue lost through tobacco smuggling was estimated to be about 25% of all tobacco revenue. In March 2000, the Government announced a strategy to tackle the smuggling problem, investing £209 million over three years toward this end. Taxes were increased by 5% above inflation in 2000 and in line with inflation in 2001 and 2002 (33). Since then:

- tobacco smuggling has been stabilized and its growth reversed for the first time in a decade;
- government revenues rose again after late 2000.

## 4

# The reaction of the tobacco industry to tobacco tax increases

When a government announces tobacco tax increases, the tobacco industry tends to respond by significant lobbying. The approaches developed and coordinated throughout the Region by transnational companies include denying scientific evidence, exerting influence on the public, corruption, and unfair pricing practices. When facing a tax increase, the tobacco industry might introduce inexpensive brands, drop the price of most popular brands or reduce the number of cigarettes by pack in order to maintain and even enlarge the market for its products.

When a government announces tobacco tax increases, the tobacco industry tends to respond by significant lobbying such as face-to-face discussions with cabinet members, members of parliament and leading staff members of ministries. Because health ministries are usually in favour of effective strategies to reduce tobacco consumption, the tobacco industry mainly lobbies the economic sector. Very often the tobacco industry is successful in convincing to maintain the status quo with arguments contained in so-called “expert reports” which are paid by and favour the industry.

For example, in Germany during 2003, the tobacco industry initiated a public debate with arguments based on a so-called expert report written by a consulting company with no scientific reputation, but with a well-respected name in German society. Many people in the ministries of finance and economics, as well as the German Parliament, were impressed by these arguments. Only the Ministry of Health reacted with public health arguments provided by independent experts. The lobbying of the tobacco industry in Germany succeeded in reducing planned high tobacco tax increases to a lower level. Other examples of tax decreases, in Canada and Sweden, are presented in Section 6.

Another strategy of the tobacco industry concerns the introduction of cheap cigarettes and of so-called “kiddie packs” before tobacco tax increases can be realized. For the first time in 50 years, German industry is producing these packs with ten cigarettes at a low pack price. It is clear that these packs are made for children, young people and those on low income in an effort to maintain and even enlarge the market for tobacco products. The same phenomenon was observed in France. The French Government reacted immediately by passing a law to protect children from the risks of smoking and prohibiting the sale of cigarette packs with less than 19 cigarettes, as well as the distribution of free samples (21). Article 16 of the WHO FCTC regarding *Sales to and by minors* requests that the sale of cigarettes in small packets which increases the affordability of such products to minors be prohibited.

In order to prevent increases in tobacco taxes resulting in higher prices, the tobacco industry also tries to compensate by an equivalent reduction in the value of the pre-tax component, particularly when the increases in taxes are relatively low and irregular and the tax structure is predominantly ad valorem. In Poland in 2003, the tobacco industry introduced new cheap brands and dropped the price of the most popular brand by 15% in order to offset the Polish Government’s tax rises (34). To avoid unfair pricing practices such as the introduction of cheap cigarettes, the European Commission has taken action by authorising Member States to levy on these products the same minimum amount of excise duty levied on cigarettes of the price category most in demand (Council Directive 2002/10/EC).

## 5

# The effects of tobacco tax increases related to age and socioeconomic status

Tobacco tax increases are an effective measure to protect children and young people from consuming cigarettes. Several studies have concluded that lower socioeconomic groups could be more sensitive to price increases than the highest, particularly in low- and middle-income countries. In the high-income countries of the Region where smoking is being substantially reduced among upper-income groups, lower-income households spend a relatively higher proportion of income due to tax increases. In terms of policy implications, support to quit in the form of accessible and affordable smoking cessation services should be made available for the lowest income groups and most deprived families. Social policies should also address the socioeconomic issues linked to the settling into the smoking habit. Earmarking tobacco taxes should be considered as an important instrument to offset the potential regressivity of tobacco taxes and to provide funds for public health measures and tobacco control.

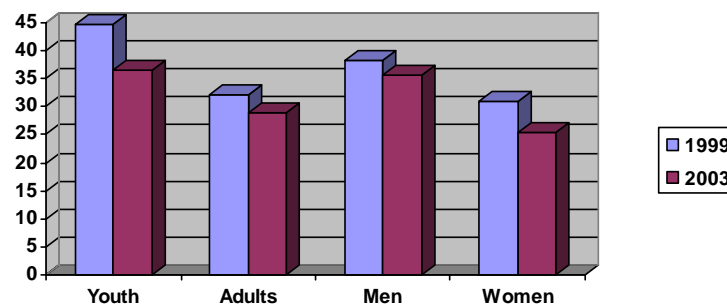
Tobacco dependence starts early: even children and young people may develop tobacco dependence within a few weeks after occasional cigarette consumption (35). In the European Region where adult smoking prevalence has stabilized by smokers either quitting or dying, the tobacco industry has a major objective to recruit new smokers, particularly among children, teenagers and young adults in order to protect its market.

Tobacco tax increases are an effective measure to protect children and young people from consuming cigarettes. Young people have been shown to be more responsive to tobacco tax increases than older people. This is partly because they have less income to spend on tobacco; partly because some may be less heavily addicted to nicotine; partly because of their more present-oriented behaviour; and, partly because they are more susceptible to peer influence. When tobacco

taxes increase, younger smokers are more likely to quit and fewer will take up the habit (36,37).

In France, after a price increase of 31% in 2003, smoking prevalence among those between 15 to 25 years old declined from 44.5% in 1999 to 36.4% in 2003. A similar impact was observed among women (30.8% to 25.3%). It is among the younger population and women that the decrease in smoking prevalence between 1999 and 2003 was the highest when compared with the decrease in adult smoking prevalence (Fig. 6).

Fig. 6. Smoking prevalence among those 15–25 years and 25–75 years in France



Source: (21).

Another important issue is the relation between the impact of tobacco tax increases and the socioeconomic status. In the low- and middle-income European countries there is high smoking prevalence in almost all male social classes, continuous growth among young people and women, and relatively low tobacco prices. In these countries an increase in cigarette taxes could reduce smoking more in low- and middle-income groups than in higher- income groups (10).

In the meantime, in the high-income countries of the European Region smoking is being substantially reduced among upper-income groups and smoking prevalence is highest in lower socioeconomic groups (38,39,40,41). Recent studies from the United Kingdom and France have suggested that tobacco taxes could be regressive and that lower socioeconomic groups possibly spend a higher proportion of income due to tax increases (9,42,43). In terms of policy implications, support to quit, in the form of accessible and affordable smoking cessation

services, should be made available for the lowest income groups and most deprived families. Social policies should also address the socioeconomic issues linked to the settling into the smoking habit.

Earmarking tobacco taxes is also considered to be an important instrument to offset the potential regressivity of tobacco taxes and to provide funds for public health measures and tobacco control. Earmarking of tax revenues for improving medical care, particularly smoking cessation interventions, would produce greater social and health benefits (4). According to available data, nearly 10 countries in the European Region currently earmark tobacco taxes or their increases (44) – Poland and the United Kingdom are notable examples.

When earmarking of revenue is not possible, the allocation of a share of tobacco tax revenue to funding tobacco control measures, or even broader public health activities, could also be discussed and achieved while formulating expenditure policies during the annual budget process.

## 6

# The impact of tobacco tax decreases

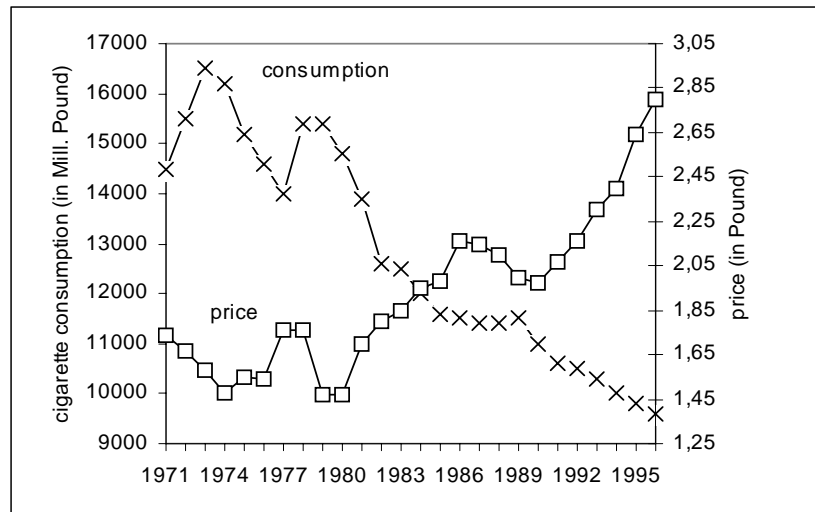
As young people are particularly sensitive to price changes, a small decrease in the real price of cigarettes would lead to an increase in smoking prevalence. Lowering the real price can result from a tax decrease or tax increases that are inadequate to the rate of inflation. The evidence indicates that lowering the real price of cigarettes with the intention of combating the smuggling problem does not stimulate additional revenue.

### **A DECREASE IN TOBACCO TAX INCREASES CONSUMPTION AND SMOKING PREVALENCE AMONG YOUNG PEOPLE AND LOWER SOCIOECONOMIC GROUPS**

As an illustration of the smokers' response to tax decreases, Fig. 7 shows clearly how consumption increased during periods when taxation failed to keep up with rapid inflation as in the United Kingdom during the early and late 1970s when the price of cigarettes fell in real terms. According to Joy Townsend (1988, 1998) lowering the real price of cigarettes during that period increased the smoking level of lower income groups substantially more than that of higher income groups and thus may have been a major factor for the smoking prevalence gradient in the United Kingdom (40,41).

With young people being particularly sensitive to price changes, a small decrease in the real price of cigarettes would lead to an increase in smoking prevalence. Furthermore, for adults, smoking prevalence and the average consumption could both increase (10,36,37,40).

Fig. 7. Cigarette consumption and price in the United Kingdom (1971–1995)



Source: (39).

### TOBACCO TAX DECREASES DO NOT STIMULATE ADDITIONAL REVENUES

In 1994, the Canadian federal cigarette tax and some provincial taxes were reduced with the intention of combating the smuggling problem and raising tax revenues. Average per capita cigarette consumption and smoking prevalence among youth and adults increased sharply in provinces where taxes were significantly reduced, reversing the earlier downward trend associated with past tax increases. Cigarette tax revenues fell at the federal level and sharply in the provinces that cut their taxes. In contrast, tax revenues remained relatively stable in the provinces where taxes remained high (10,31).

In 1998, Sweden had much the same experience as Canada following two significant tax increases in 1996 and in 1997. With the aim of raising additional revenues, tobacco taxes were lowered by 18%. The annual revenue from excise duty decreased by almost 10% (29). Freezing tax rates, as Denmark did in 1997, has also led to a drop in annual government tobacco revenues by almost 15% (23).



# 7

## International cooperation and the role of WHO

Since national tobacco price policy can be undermined if transnational dimensions are not properly addressed, the WHO Framework Convention on Tobacco Control has included specific obligations regarding pricing and taxation (*Article 6 and Article 15*). The European Strategy for Tobacco Control has outlined the action needed in the field of taxation policy and combating illicit trade, emphasizing the need for strengthening cooperation between national, integrational and relevant intergovernmental organizations.

The European Strategy for Tobacco Control, adopted by the WHO Regional Committee for Europe in 2002, provides a strategic framework for action in the Region, to be carried out through national policies and international cooperation. In particular, the strategy outlines the action needed in the field of taxation policy and combating illicit trade, emphasizing the need for strengthening cooperation between national, integrational and relevant intergovernmental organizations (e.g. the European Commission, the World Customs Organization, the World Trade Organization and the World Bank).

Since strong national measures taken in a single country can be undermined if transnational dimensions are not properly addressed, the WHO Framework Convention on Tobacco Control has included specific obligations regarding pricing and taxation (*Article 6. Price and tax measures to reduce the demand for tobacco*) and illicit trade (*Article 15. Illicit trade in tobacco products*). Once the Convention has entered into force, any party may propose a protocol in order to supplement, clarify or qualify the obligations related to price and taxation and to illicit trade.

WHO will continue to provide guidance and support to Member States in strengthening their policies, particularly by facilitating and coordinating the development of tools and mechanisms to support international cooperation on tobacco products taxation and combating

smuggling. Specific international actions, mechanisms, and tools also include:

- facilitating the regular exchange of information and documentation on the technical, policy and legal implications of tobacco products taxation and combating smuggling;
- promoting research on the impact of taxation increases on tobacco use and quitting rates, especially over long periods of time and among young people, women and groups with lower socioeconomic status; and
- promoting best practice and coordinated action, to provide internationally standardized training and to develop evidence-based recommendations for the European Region.

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