



Tobacco taxation policy in the Republic of Moldova



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ABSTRACT

This report on tobacco taxation in the Republic of Moldova gives an overview of tobacco taxation policy in the country for the period 2007–2016, estimates the impact of tobacco taxation policy on the country's tobacco consumption and excise revenues, and proposes options for tobacco taxation policies. Over the period 2007–2016, three main stages of tobacco excise policy can be identified in the Republic of Moldova: (i) from 2007 to 2009 excise rates were very low and hardly increased at all; (ii) from 2010 to July 2013 all excise rates increased sharply (the specific rates increased more than fourfold and the *ad valorem* rates increased 10-fold); and (iii) from the second half of 2013 until 2016 specific rates for filter cigarettes increased 10-fold, while the *ad valorem* rate decreased by more than half.

The Republic of Moldova had a very beneficial experience with tobacco excise policy in 2010–2013. As a result the country has registered an eightfold revenue increase in four years; substantial decline in cigarette smuggling out of the country; and reduction of tobacco affordability and tobacco consumption. However, when the country changed its excise policy (July 2013) and adopted only very moderate excise increases (2014–2015), there was almost no revenue growth, while cigarette smuggling and tobacco affordability ceased to decline. If the Republic of Moldova maintains an excise policy of such minimal increases, the real (inflation-adjusted) excise revenue can only grow if tobacco consumption increases within the country. The Republic of Moldova could revive the aforementioned beneficial excise policy, which was in effect during 2010–2013. Such a policy can provide both the desired revenue increase and the required tobacco consumption decline, if it follows both the WHO Framework Convention on Tobacco Control guidelines and the provisions of European Union Directive EU 2011/64.

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INTRODUCTION

In 2005, in response to the globalization of the tobacco epidemic, the WHO Framework Convention on Tobacco Control (FCTC) was endorsed. Article 6 of the FCTC, entitled “Price and tax measures to reduce the demand for tobacco”, presents the Parties’ recognition that price and tax measures are an effective and important means of reducing tobacco consumption in various segments of the population, in particular in young people. Each party to the FCTC should implement **taxation and price policies** on tobacco products in order to contribute to the health objectives aimed at **reducing tobacco consumption**. In 2014 the FCTC Conference of the Parties adopted the *Guidelines for implementation of Article 6 of the WHO FCTC (1)*.

The Republic of Moldova joined the FCTC in 2009 and has committed to the implementation of the cross-sectoral measures outlined in the Convention to protect people from tobacco use.

The aims of this paper are: (a) to estimate the impact of tobacco taxation policy in the Republic of Moldova in 2007–2015 on the country’s tobacco consumption and excise revenues; and (b) to propose options for tobacco taxation policies in 2017–2025, in terms of increasing their impact on tobacco consumption and revenues.

Data sources

Data on tobacco excise revenues were taken from Ministry of Finance reports. Data on cigarette production, import and export for 2002–2010 were taken from a 2011 WHO Regional Office for Europe health policy paper on tobacco control strategies in the Republic of Moldova (2). Data on cigarette production, prices, income and other indices were taken from the National Bureau of Statistics, and data on maximum retail prices (MRPs) were taken from the announcements published in the official newspaper *Monitorul Oficial* (3).

RESULTS

Tobacco tax changes in the Republic of Moldova in 2008–2016

The vast majority of smokers (99%) in the Republic of Moldova smoke manufactured cigarettes (4); therefore, only cigarette tax is discussed here.

According to Article 123-1 of the Tax Code, since 1 January 2008 the excise tax for filter cigarettes has been defined as comprising two components: a specific tax (set as a monetary value per 1000 cigarettes) and an *ad valorem* excise value (set as percentage of the MRP). The MRP is set by cigarette producers and importers, and retail sellers can be punished if they sell cigarettes at prices that exceed the MRP (reinforced by Article 262-1 of the Tax Code). However, a specific tax only is applied to the sale of non-filter cigarettes. Applied or proposed excise rates for cigarettes over a 9-year period are presented in Table 1.

Effective since	Law	Filter cigarettes			Non-filter cigarettes
		Specific tax, Moldovan lei (MDL) per 1000 cigarettes	<i>Ad valorem</i> excise (% of MRP)	Minimum excise, MDL per 1000 cigarettes*	Specific tax, MDL per 1000 cigarettes
2007	-	6.5	3.0	8.5	-
1 January 2008	N 177-XVI of 20 July 2007	6.0	3.0	Not applied	4.4
13 January 2009	N 296-XVI of 25 December 2008	6.6	3.0	Not applied	4.8
1 January 2010	N 108-XVIII of 17 December 2009	6.6	12.0	Not applied	7.0
4 April 2011	N 48 of 26 March 2011	10.0	18.0	Not applied	10.5
13 January 2012	N 267 of 23 December 2011	20.0	24.0	Not applied	20.0
1 January 2013	N 178 of 11 July 2012	30.0	30.0	Not applied	30.0
12 July 2013	N 172 of 12 July 2013	45.0	24.0	Not applied	30.0
1 January 2014	N 324 of 23 December 2013	75.0	24.0	Not applied	50.0
2015	Proposal	80.0	32.0	Not applied	80.0
1 May 2015	N 71 of 12 April 2015	200.0	18.0	Not applied	50.0
1 July 2016	N 138 of 17 June 2016	300.0	12.0	400.0	60.0

* Minimum specific tax floor is applied if the sum of the specific and *ad valorem* tax is lower than the minimum floor.

TABLE 1.
Excise tax rates for cigarettes in the Republic of Moldova, 2007/2008–2016

Source: author's own compilation based on analysis of the relevant legislative acts.

There were three main stages to the tobacco excise policy.

1. 2007–2009: excise rates were very low and hardly increased at all.
2. 2010–July 2013: all excise rates increased sharply. In three years, the specific rates increased more than fourfold and the *ad valorem* rates increased 10-fold (from 3% to 30%).
3. July 2013–2016: specific rates for filter cigarettes increased 10-fold (from MDL 30 to MDL 300 per 1000 cigarettes), while the *ad valorem* rate decreased by more than half (from 30% to 12%).

In 2007, a minimum specific tax floor was used (MDL 8.5 per 1000 cigarettes), then it was cancelled, but from July 2016 it was set again as MDL 400 per 1000 cigarettes (a 47-fold increase over nine years).

The *Guidelines for implementation of Article 6 of the WHO FCTC* recommend as follows (1): “Parties should consider implementing specific or mixed excise systems with a minimum specific tax floor, as these systems have considerable advantages over purely *ad valorem* systems”.

European Union (EU) countries use mixed excise systems and, over recent years, some (Denmark, Ireland, Romania, Slovenia, Sweden and others) have increased specific excise rates and decreased *ad valorem* rates. In all those countries, the excise yield for average-priced cigarettes increased. However, this was not the case in the Republic of Moldova in July 2013, when the increase in the specific rate was too small (see Table 1) to compensate for the decrease in the *ad valorem* rate, and for cigarettes priced at over MDL 5 per pack the excise per pack actually dropped (see Fig. 1).

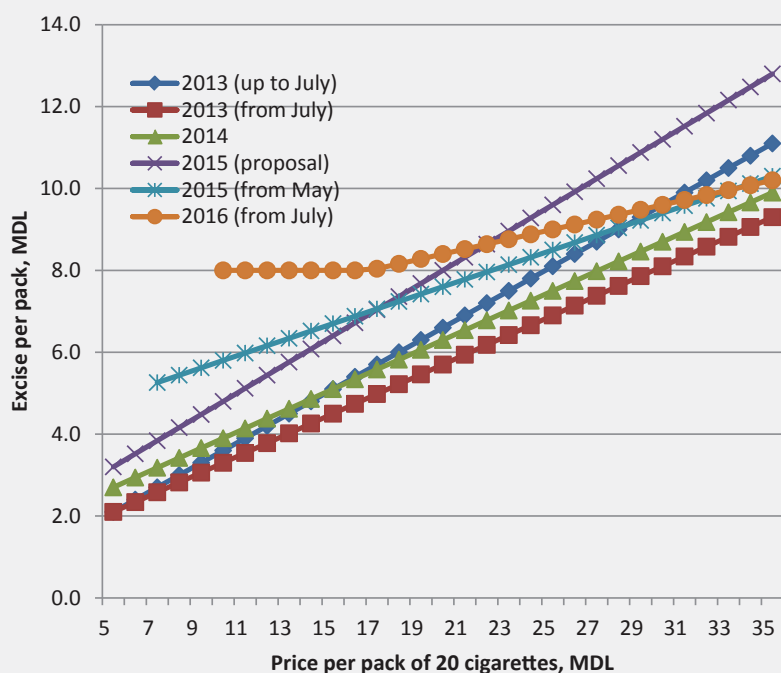


FIG. 1.
Excise per pack of cigarettes at various prices, with applied or proposed tax rates, 2013–2016

Source: author's own calculations.

In 2014, only the specific rate was increased, and only very slightly (by MDL 0.6 per pack). On 25 March 2014 the Constitutional Court of Moldova issued an order (5) stating that the excise tax increase on filter cigarettes introduced in January 2014 was adopted in the Moldovan Parliament in contravention of the rules of the Constitution, and returned the previous rates. For a short period, these lower excise rates were in place for filter cigarettes, but the Parliament (re-)adopted the same rates again on 24 April 2014.

Later the Government of the Republic of Moldova proposed for the first time an increase in both the specific and *ad valorem* rates, to enter into force in 2015 (6) (see Table 1). The proposed rate would increase the excise burden for cheap cigarettes by MDL 0.5 per pack, while for expensive brands the increase could exceed MDL 2 per pack (see Fig. 1). The transnational tobacco companies, which sell mostly expensive cigarettes, tried to prevent the increase and arranged so-called price wars. As a result, in early 2015 the prices for most international brands were decreased by up to MDL 7 per pack (7). As the *ad valorem* rate was already rather high, these price wars resulted in a loss of government revenue. The Government thus reached an agreement with the tobacco companies (8) and new rates were introduced on 1 May 2015 (see Table 1).

The specific rate was significantly increased, but the *ad valorem* rate was decreased. The new law has actually increased the excise burden for all filter cigarettes; for expensive cigarettes the excise increased by MDL 1, while for cheap cigarettes it increased by MDL 2. Compared with the initial government proposals, the new tax rates are higher for cheap cigarettes, but lower for cigarettes priced higher than MDL 17 per pack (see Fig. 1).

In March 2016 the Government proposed to increase the specific excise rate from MDL 200 to MDL 220 per 1000 filter cigarettes, while decreasing the *ad valorem* rate from 18% to 17%. However, the Moldovan Parliament adopted different rates in June 2016: the specific rate was increased by 50% (to MDL 300 per 1000 filter cigarettes), while the *ad valorem* excise was decreased by six percentage points (from 18% to 12%). In addition, a new minimum specific excise tax (MDL 400) was introduced. The minimum specific excise tax is paid when the sum of the specific excise plus the *ad valorem* excise is lower than the minimum excise. This means that since July 2016 all cigarettes with prices below MDL 16.5 per pack will be taxed at the same excise rate of MDL 8 per pack (see Fig. 1). For the cheapest filter cigarettes (MDL 7 per pack), the excise burden increased by almost MDL 3 per pack, while for the most expensive cigarettes (MDL 35 per pack) the excise burden decreased. For average-priced filter cigarettes (MDL 14 per pack) the excise increased by MDL 1.5 per pack (23%).

The excise rate for non-filter cigarettes was increased by only MDL 0.2 per pack (20%). Since July 2016 this excise rate has been more than sixfold lower than the rate for the cheapest filter cigarettes.

Share of excise tax in the cigarette retail price

The share of excise tax in the retail price in 2009 was about 8% for cheap cigarettes and about 4% for the more expensive cigarettes. After the excise increases in 2011–2015, the share gradually increased to about 60% for cheap filter cigarettes and about 35% for the more expensive cigarettes (see Table 2).

	Price	Excise tax			VAT	Non-tax part of the price	Excise share (%)
		Specific	<i>Ad valorem</i>	Total			
Marlboro							
2016, June	25.00	4.00	4.50	8.50	4.17	12.33	34.0
2015, September	22.00	4.00	3.96	7.96	3.67	10.37	36.2
2015, February	16.00	1.50	3.84	5.34	2.67	7.99	33.4
2014, October	23.00	1.50	5.52	7.02	3.83	12.15	30.5
2013, from July	22.00	0.90	5.28	6.18	3.67	12.15	28.1
2013	22.00	0.60	6.60	7.20	3.67	11.13	32.7
2012	19.00	0.40	4.56	4.96	3.17	10.87	26.1
2011	17.00	0.20	3.06	3.26	2.83	10.91	19.2
2010	16.00	0.13	1.92	2.05	2.67	11.28	12.8
2009	14.00	0.13	0.42	0.55	2.33	11.11	3.9
Winston							
2016, June	22.00	4.00	4.50	8.50	4.17	12.33	34.0
2015, September	20.00	4.00	3.96	7.96	3.67	10.37	36.2
2015, February	14.00	1.50	3.36	4.86	2.33	6.81	34.7
2014, August	18.00	1.50	4.32	5.82	3.00	9.18	32.3
2013, from July	14.00	0.90	3.36	4.26	2.33	7.41	30.4
2013	13.00	0.60	3.90	4.50	2.17	6.33	34.6
2012	11.00	0.40	2.64	3.04	1.83	6.13	27.6
2011	10.00	0.20	1.8	2.00	1.67	6.33	20.0
2010	9.00	0.13	1.08	1.21	1.50	6.29	13.5
2009	7.50	0.13	0.22	0.35	1.25	5.89	4.8

TABLE 2.
Prices and taxes for cigarettes in the Republic of Moldova in 2009–2016, MDL per pack of 20 cigarettes

Table 2 cont.

Monte Carlo							
2016, June	16.00	4.00	2.88	6.88	2.67	6.45	43.0
2015, September	15.00	4.00	2.70	6.70	2.50	5.80	44.7
2014, December	13.00	1.50	3.12	4.62	2.17	6.21	35.5
2014, August	14.00	1.50	3.36	4.86	2.33	6.81	34.7
2013, from July	11.00	0.90	2.64	3.54	1.83	5.63	32.2
2013	11.00	0.60	3.30	3.90	1.83	5.27	35.5
2012	9.00	0.40	2.16	2.56	1.50	4.94	28.4
2011	7.50	0.20	1.35	1.55	1.25	4.70	20.7
2010	6.50	0.13	0.78	0.91	1.08	4.50	14.0
2009	5.50	0.13	0.16	0.29	0.92	4.29	5.4
Doina – soft pack							
2015, June	10.50	4.00	1.89	5.89	1.75	2.86	56.1
2015, January	8.25	1.50	1.98	3.48	1.38	3.40	42.2
2014	6.50	1.50	1.56	3.06	1.08	2.36	47.1
2013, from July	5.00	0.90	1.20	2.10	0.83	2.07	42.0
2013	5.00	0.60	1.50	2.10	0.83	2.07	42.0
2012	4.00	0.40	0.96	1.36	0.67	1.97	34.0
2011	3.50	0.20	0.63	0.83	0.58	2.09	23.7
2010	3.00	0.13	0.36	0.49	0.50	2.01	16.4
2009	2.50	0.13	0.07	0.20	0.42	1.88	8.3
Astru (non-filter)							
2015	4.00	1.00	0	1.00	0.67	2.33	25.0
2014	3.50	1.00	0	1.00	0.58	1.92	28.6
2013	3.00	0.60	0	0.60	0.50	1.90	20.0
2012	2.50	0.40	0	0.40	0.42	1.68	16.0
2011	2.00	0.21	0	0.21	0.33	1.46	10.5
2010	1.75	0.14	0	0.14	0.29	1.32	8.0
2009	1.40	0.09	0	0.09	0.23	1.07	6.9

Note. MRPs for filter cigarette brands in 2014–2016.

Sources: cigarette prices in 2009–2013 were taken from an unpublished report by the National Bureau of Statistics on average prices for the respective brands; MRPs for brands of filter cigarettes in 2014–2016 were taken from various issues of *Monitorul Oficial* (3).

The excise share of the cigarette price depends upon not only the tax rate, but also the tobacco industry price policy. In early 2015 the tobacco industry decreased prices for such brands as Marlboro and Winston; and the excise share increased, while the excise rates did not change.

According to Article 123-1 of the Tax Code, filter cigarette producers and importers have to set the MRPs of their cigarettes and it is prohibited to sell cigarettes priced higher than the MRP. The MRP is used to calculate the *ad valorem* excise tax, but this system allows the tobacco industry to keep prices low and to arrange price wars, such as those which took place in Republic of Moldova between December 2014 and February 2015: the industry decreased the prices of expensive cigarette brands by MDL 3–7 per pack and the excise share increased by 2–3% without any increase in the excise rate (see Table 2), while excise revenue in the first quarter of 2015 decreased (see Table 3). In the first half of 2016, the excise rate was not increased, but the industry increased cigarette prices for some brands, so the share of excise in their price dropped.

If, later in 2016 (when the new excise rates applied), the industry had increased prices in the Republic of Moldova, for example twofold, this would have meant that the tax share from a cigarette pack priced at MDL 14 per pack (in June 2016) would have decreased from 47% to 39%, despite the increase in the excise rate. In spite of the drop in tax share, such a price change would be beneficial for public health, increasing the price from MDL 14 to MDL 22 (57%), reducing affordability and leading to a subsequent decline in tobacco consumption.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2013	17	37	86	88	90	104	91	105	77	87	123	175	1 080
2014	16	25	58	53	90	123	93	121	94	85	95	120	974
2015	29	88	78	171	39	95	210	167	98	118	125	148	1 366

TABLE 3.
Tobacco excise revenues (million MDL) in the Republic of Moldova, 2013–2015

Source: author's own compilation based on data from various reports by the Ministry of Finance.

Tobacco prices and affordability in the Republic of Moldova

The *Guidelines for implementation of Article 6 of the WHO FCTC* state that “tax rates should be monitored, increased or adjusted on a regular basis, potentially annually, taking into account inflation and income growth developments in order to reduce consumption of tobacco products” (1).

Tax rates in Moldova are adjusted annually, but the impact of these adjustments on tobacco consumption depends on the inflation and income growth.

Since 2009, tobacco prices have been increasing faster than inflation (see Fig. 2), until 2015, when the price growth for tobacco products was below inflation. The changes in average tobacco prices are determined not only by the tobacco excise rates, but also by the price policies of cigarette producers and changes in the cigarette market (cheap domestic cigarettes are being gradually replaced by more expensive imported cigarettes, so the average price is increasing).

During 2001–2008, real (inflation-adjusted) cigarette prices decreased, which is understood to potentially encourage smoking. Only later, in 2010 and 2012, was the tobacco price increase substantially above inflation, which could reduce consumption of tobacco products. However, such a reduction is only possible if tobacco products become less affordable.

The *Guidelines for implementation of Article 6 of the WHO FCTC (1)* state that “without price increases above the growth in income, tobacco products will inevitably become more affordable over time. This increase in affordability will generally result in growing consumption.” They recommend, “when establishing or increasing their national levels of taxation Parties should take into account – among other things – ... changes in household income, to make tobacco products less affordable over time in order to reduce consumption and prevalence”. In this context, affordability means the price relative to per-capita income.

For this analysis, the modified Tobacco Affordability Index (TAI) (9) is used to estimate the changes in tobacco affordability in 2007–2015. TAI is calculated as the disposable income per-capita annual change divided by the tobacco price increase (consumer price index (CPI) for tobacco) minus 1 and multiplied by 100.

$$\text{TAI} = (\text{Income increase} / \text{CPI for tobacco} - 1) \times 100$$

If the TAI has negative values, it means that tobacco became less affordable, and tobacco consumption is expected to decrease. Calculations of the TAI in Moldova are presented in Table 4.

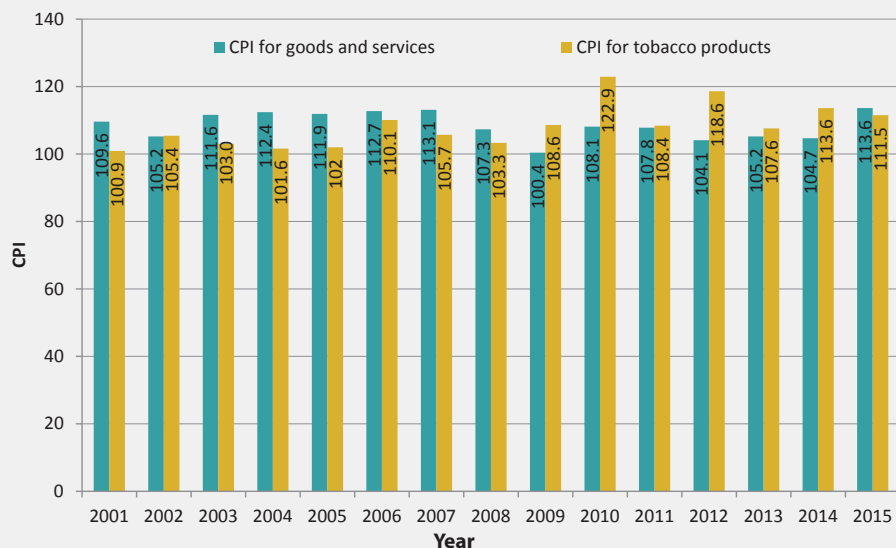


FIG. 2.

Changes in tobacco product prices and inflation in the Republic of Moldova, 2001-2015

Source: author's own compilation based on data from the National Bureau of Statistics.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
CPI for tobacco products	110.1	105.7	103.3	108.6	122.9	108.4	118.6	107.6	113.6	111.5
Monthly disposable income average, MDL per capita	840	1 019	1 189	1 166	1 273	1 445	1 509	1 681	1 766	1 957
Annual income change	147.7	121.3	116.7	98.1	109.2	113.5	104.4	111.4	105.0	110.8
TAI	34.1	14.8	13.0	-9.7	-11.2	4.7	-11.9	3.6	-7.6	-0.6

TABLE 4.

Tobacco affordability in the Republic of Moldova, 2006-2015

Source: author's own calculations.

While tobacco products became less affordable in Moldova in 2009, 2010, 2012 and 2014, they became more affordable in other years. Some reduction in tobacco consumption can therefore be expected in the period 2009-2012, but not in the other periods. However, changes in tobacco consumption are not always reflected in the changes in cigarette sales, as the sales volumes also depend on the trends in cigarette smuggling, including both into and out of the country.

Cigarette sales

Cigarette sales in the Republic of Moldova were calculated in the following way from the available statistical data, which are presented in Fig. 3.

$$\text{Sales} = \text{Production} + \text{Import} - \text{Export}$$

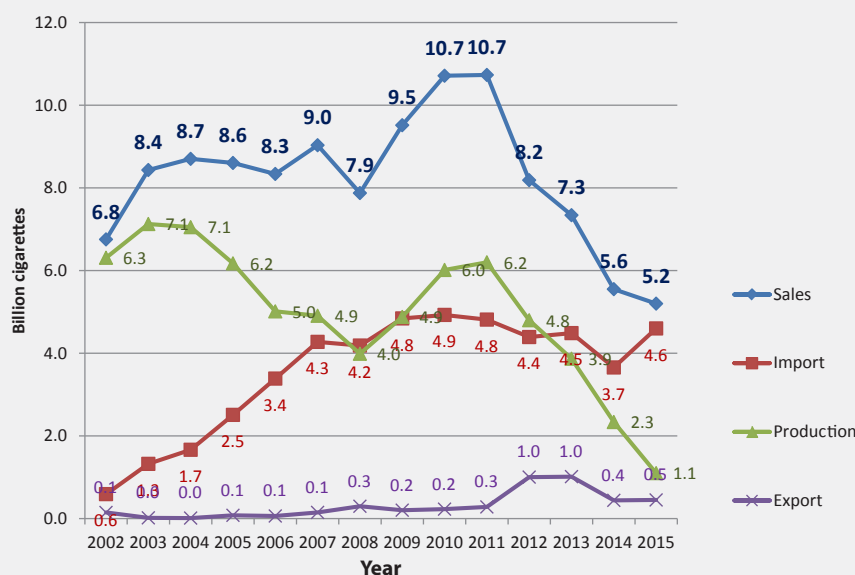


FIG. 3.

Cigarette production, import, export, and sales in the Republic of Moldova, 2002-2015

Source: author's own compilation based on data from the National Bureau of Statistics.

In 2003–2008, the total quantity of cigarettes sold annually was relatively stable (at 8–9 billion cigarettes), but domestic cigarettes were gradually replaced by imported ones and in 2008 the number of imported cigarettes exceeded that of domestic ones. In 2009–2010, cigarette sales substantially increased and in 2010–2011, 10.7 billion cigarettes were sold in the Republic of Moldova annually. Since 2012, a rapid decline in cigarette sales has been observed. Domestic cigarette production decreased from 6.2 billion cigarettes in 2011 to 1.1 billion in 2015. It was reported that the tobacco factory in Chisinau did not work for seven months during 2014–2015 owing to the decline in cigarette sales (10).

The increase in cigarette sales in 2009–2010 and later decline could not be explained by changes in tobacco affordability or other internal factors. The most probable factor in this change in cigarette sales was smuggling of cigarettes out of the Republic of Moldova, mainly to the neighbouring countries Ukraine and Romania.

Cigarette smuggling

Because cigarette smuggling is encouraged by the difference in cigarette prices between the countries and discouraged by the anti-smuggling measures, it is a significant factor in the changes in cigarette prices that took place in both the Republic of Moldova and the neighbouring countries.

Ukraine increased its average excise rates almost sixfold in 2008–2010 (11), which was followed swiftly by a decline in cigarette sales from 124 billion cigarettes in 2008 to 96 billion in 2010. Romania increased excise yield twofold in 2008–2010 and cigarette sales declined from 35 billion cigarettes to 21 billion (12). While tobacco consumption declined in both countries, this was partly offset by cigarette smuggling from other countries, including the Republic of Moldova.

According to the Global Adult Tobacco Survey (GATS) for Ukraine conducted in 2009–2010 (13), 0.9% of surveyed Ukrainian smokers were in possession of packs containing a Moldovan health warning. This translates to an estimated annual consumption of Moldovan cigarettes in Ukraine of about 0.7 billion. According to the surveys conducted by the Kiev International Institute of Sociology (KIIS), in 2014 (14) 0.5% of surveyed Ukrainian smokers were in possession of packs containing a Moldovan health warning, so it is believed that the consumption level at that time was about 0.25 billion Moldovan cigarettes. However, two other KIIS surveys, conducted in 2013 and 2015, did not indicate the presence of any Moldovan packs.

According to a study carried out by Novel Research, the share of Moldovan cigarettes among all cigarettes smuggled onto the Romanian market increased from 17.6% in 2008 to 36.0% in January–February 2010 (15). In 2012 the reported share decreased to 28.7% (16) and again to 22.8% in 2013 (17). In May 2015, this share was 23% (18). It is worth noting that the reported percentage of smuggled cigarettes (from all countries) onto the Romanian market decreased from 28% in 2010 to 15% in 2011, 13% in 2012 (19) and 12% in 2013; however, it increased again to 16% in 2014 (20) (but dropped back to 15% in 2015 (21)).

The KPMG studies commissioned by Philip Morris International and other tobacco corporations (22) estimated that the outflow of cigarettes from the Republic of Moldova to Romania increased from 0.6 billion cigarettes in 2007 to 2.0 billion in 2009 and 1.9 billion in 2010, and then gradually declined to 0.76 billion cigarettes in 2013 (and did not change much in 2014–2015). It can therefore be deduced that cigarette smuggling out of the Republic of Moldova increased significantly during 2009–2010 to at least 3 billion cigarettes a year, and then declined to a relatively stable level in 2014–2015.

The decline in the outflow of smuggled cigarettes was partly the result of anti-smuggling measures. In October 2015, the Republic of Moldova's "Strategy of the Customs Service in the Fight against the Smuggling and Illegal Trade in Tobacco Products for 2015–2018" was launched (23). The strategy was signed by the Head of the Customs Service, the Director-General of the European Anti-Fraud Office (OLAF) and the Head of the European Union Border Assistance Mission (EUBAM)'s Operations Office. The strategy was elaborated in cooperation with EUBAM and in coordination with the representatives of tobacco product producers and OLAF.

However, the main factor influencing the decrease in the outflow of smuggled cigarettes was the substantial increase in the excise tax rates in the Republic of Moldova in 2010–2013 (about fivefold on average), while in Romania the rates were increased by only 17% across those years, and in Ukraine by 30%. The cigarette price difference between the countries became smaller and smuggling cigarettes out of the Republic of Moldova therefore became less profitable.

The Moldovan border police reported that in the first half of 2015, 175 000 packs of cigarettes were seized, which represents 18% more than a year earlier (24). This could mean that in 2015, smuggling out of the Republic of Moldova started to increase again. The main brands smuggled were those imported into the country.

Moldovan cigarettes are not only smuggled to Romania and Ukraine. In 2015 it was reported that Moldovan cigarettes were seized in Ireland, Luxembourg and Italy (25–27). In the United Kingdom, journalists from The Sun newspaper bought five cartons of cigarettes from an illicit dealer. The cigarettes arrived by Royal Mail registered delivery in plain black packaging, with Moldovan stamps on them (28). The main factor in the outflow of smuggled cigarettes is still the difference in prices determined by the excise taxes. For example, in Ireland and the United Kingdom the excise per cigarette pack is about €6, while in the Republic of Moldova the minimum excise is MDL 8 per pack (less than €0.40).

Tobacco excise revenues

The tobacco excise revenues in the Republic of Moldova did not increase in 2007–2008 (see Fig. 4) as both excise rates and sales volumes did not change much. There was a small revenue increase in 2009, mainly caused by the sales growth (see Fig. 3) and then in 2010–2013 a sharp revenue increase was observed (see Fig. 4). Real (inflation-adjusted) revenues increased 6.5-fold in four years. The main factor in the revenue increase was the rise in excise rates in 2010–2013, as the sales declined from 10.7 billion cigarettes in 2010 to 6.8 billion in 2013. In 2014 the excise increase was too small to compensate for the decline in sales, and the revenue decreased. In 2015 the revenue increased, but in real terms it was just 3% higher than in 2013.

The average excise yield per 1000 cigarettes (calculated as revenue/sales) increased from MDL 13 in 2008 to MDL 260 (20-fold) in 2015 (see Table 5). This was partly caused by the replacement of cheap domestic cigarettes with more expensive cigarette brands. As the *ad valorem* proportion of the total excise was much greater than the proportion of specific excise up to the year 2015, the increase in average prices meant that the average excise yield also increased (although the excise rates themselves did not), and, subsequently, more revenue was created for the Government.

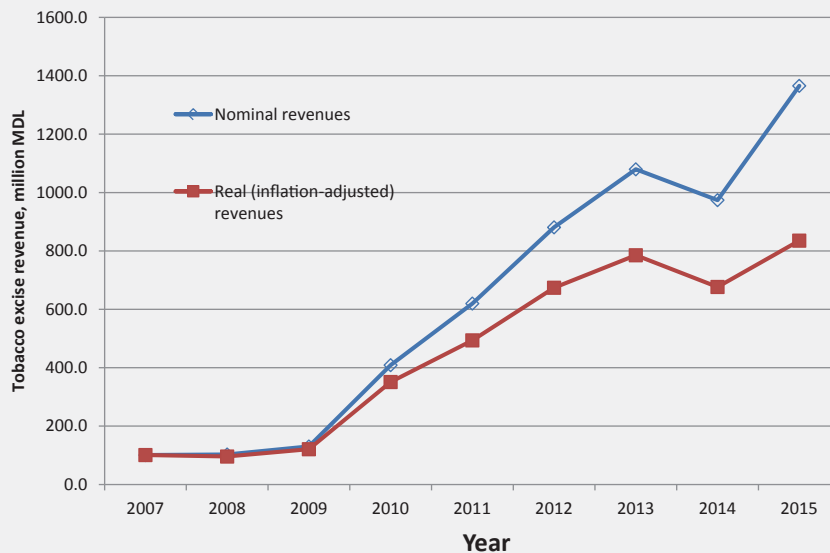


FIG. 4.

Tobacco excise revenue (million MDL) in the Republic of Moldova, 2007-2015

Source: author's own compilation based on data from various reports by the Ministry of Finance.

The *Guidelines for implementation of Article 6 of the WHO FCTC* state (1), "in anticipation of tax increases, manufacturers or importers may attempt to take advantage of the current or lower tax and increase production or stock of products (known as forestalling)." In the Republic of Moldova, the tobacco companies imported large volumes of cigarettes at the end of 2013, anticipating the tax increase. In November–December 2013, tobacco excise revenues were almost MDL 300 million, while in January–February 2014 the revenue decreased to MDL 41 million (see Table 3), despite the increase in the excise rate since 1 January 2014.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Revenue, million MDL	58	65	71	101	103	130	409	620	881	1 080	974	1 366
Sales, billion cigarettes	8.70	8.60	8.30	9.00	7.90	9.50	10.70	10.70	8.20	7.30	5.60	5.25
Average excise yield per 1000 cigarettes	7	8	9	11	13	14	38	58	107	147	176	260

TABLE 5.

Tobacco excise revenue, sales and estimated average excise, 2004-2015

Source: author's own calculations, based on data from the National Bureau of Statistics and various reports by the Ministry of Finance.

The guidelines recommend implementing anti-forestalling measures, such as levying the new tax on products already produced or kept in stock, and not yet supplied to the end consumer. Such policies were introduced in the Republic of Moldova in 2014 (via Article 125-1 of the Tax Code): all cigarettes kept in stock for 45 days after the latest excise increase should be taxed at the new, higher excise rates. However, the tobacco industry employed forestalling techniques again in April 2015, just before the excise tax increase (see Table 3).

Tobacco growing

Tobacco growing has substantially declined in the Republic of Moldova since the early 1990s. While 133 000 tonnes of tobacco leaves were grown in 1986, in 2000 this quantity had decreased to 25 000 tonnes and in 2015 to 1200 tonnes. Areas sown with tobacco declined from 77 000 hectares in 1985 to 900 hectares in 2014 (see Fig. 5).

Most of the grown tobacco was fermented in the country; however, since 2008 the production of fermented tobacco was much greater than the production of tobacco leaves, which means that some raw tobacco was imported to the Republic of Moldova for fermentation.

In 2001 the Tobacco Law (No. 386-XV of 19 July 2001) was adopted (29), including Article 18 on support for tobacco growing. It stated that 10–15% of tobacco excise revenues should be used by the Agency for Tobacco Industry Development of the Republic of Moldova's Ministry of Agriculture

and Food Industry to fund research on tobacco and other related issues. These provisions were cancelled by the Tobacco Law (No. 278-XVI of 14 December 2007) (30), but they helped to slow down the decline in tobacco growing during the period 2002–2008. Raw tobacco production increased in 2009–2010 (see Fig. 5) possibly owing to the increase in domestic cigarette production (see Fig. 3), but it subsequently declined again.

Currently the tobacco growing industry in the Republic of Moldova has almost no prospects. This is a typical situation for the European region; tobacco growing has declined in all European countries over recent decades, as the transnational tobacco industry now prefers to import raw tobacco from other regions of the world.

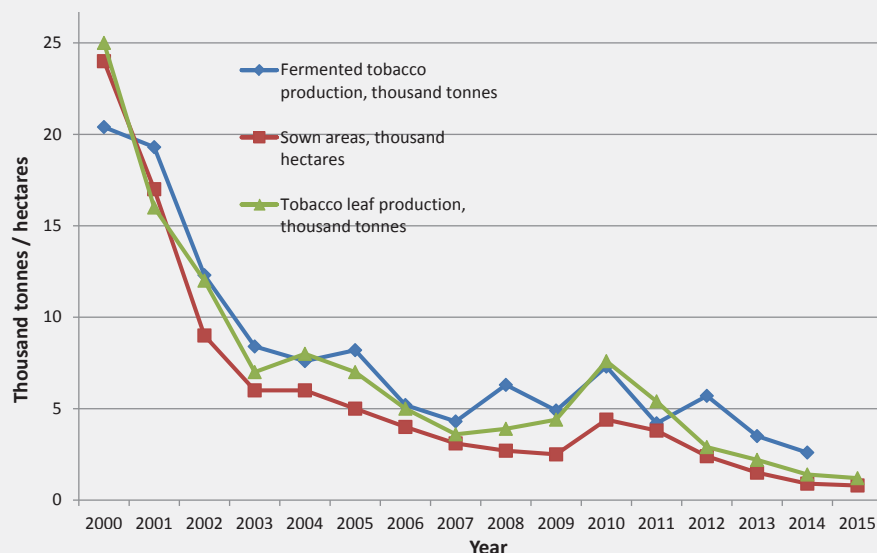


FIG. 5.
Tobacco production (sown areas, tobacco leaves and fermentation) in the Republic of Moldova, 2000–2015

Source: author's own compilation based on data from the National Bureau of Statistics.

External tobacco trade balance

Since 2003, the export of tobacco and tobacco products (tobacco leaves, cigarettes and other products) from the Republic of Moldova has been lower than the import level (see Table 6). This negative trade balance gradually increased from around US\$ 14 million in 2003 to US\$ 73 million in 2009. In 2010–2012 it decreased, but stabilized later at about US\$ 50 million annually.

Over the period 2003–2015, the total negative tobacco trade balance was US\$ 598 million. This means that almost US\$ 600 million was paid from the pockets of Moldovan smokers to support the economies of other countries.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Export	9.5	8.9	11.9	10.2	15.4	18.8	15.7	27.2	28.7	34.2	25.5	16.7	12.7
Import	23.2	27.5	38.9	47.8	66.1	77.9	88.1	91.4	92.9	83.0	76.2	60.2	59.7
Balance	-13.7	-18.6	-27.0	-37.6	-50.7	-59.1	-72.5	-64.3	-64.2	-48.8	-50.7	-43.5	-47.0

TABLE 6.
Export and import (million US\$) of tobacco and tobacco products in the Republic of Moldova, 2003–2015

Source: author's own compilation based on data from the National Bureau of Statistics.

Smoking prevalence and estimated cigarette consumption

Several surveys have assessed tobacco use in the Republic of Moldova, but as they were conducted among different age groups, and with different sets of questions, it is difficult to estimate smoking trends in the country over recent years.

The results of the 2005 Moldova Demographic and Health Survey showed that 51.1% of men (aged 15–59 years) and 7.1% of women (aged 15–49 years) were current smokers (31). According to the Multiple Indicator Cluster Survey (MICS) conducted in the Republic of Moldova in 2012, among the population aged 15–49 years 48.5% of men and 8.2% of women were current smokers (32).

According to the 2001 Living Standards, Lifestyles, and Health surveys, and the 2010 Health in Times of Transition surveys (conducted among people aged 18 years and over), the prevalence of current smoking among men in the Republic of Moldova decreased from 43.3% to 39.3% during the period 2001–2011, while it increased among women from 3.9% to 4.5% (33).

In 2012, a household survey among people aged 15 years and over was conducted by the National Bureau of Statistics (34). It revealed that 27.2% of males and 2.3% of females were daily smokers. The respective figures for current smoking were 33.0% and 3.4%. The highest proportion of daily smokers was among men aged 45–54 years (43%), while among older men the smoking prevalence declined to 4% among men aged over 75 years.

A national cross-sectional survey on risk factors for noncommunicable diseases was conducted in the Republic of Moldova between September 2013 and May 2014 (4). A total of 4807 subjects aged 18–69 years participated in the survey. The percentage of current users of all tobacco products (including daily and non-daily smokers) among all respondents was 25.3% (95% confidence interval: 23.4–27.2). More males were smokers (43.6%; daily smokers 40.6%) than females (5.6%; daily smokers 4.6%). There was also a notably higher proportion of smokers in younger age groups than on average, observed in both male and female respondents. According to the survey, the mean number of cigarettes smoked by daily smokers was 17.2 cigarettes among men and 11.4 among women.

Over recent years the prevalence of daily smoking (which is lower than the prevalence of current smoking) in the Republic of Moldova was about 35% among men aged 15 years and over and 5% among women of the same age. According to the national statistics, there were about 1.40 million men and 1.55 million women the country aged 15 years and over in the year 2015. With this in mind, it is estimated that Moldovan smokers would not have smoked more than 3.4 billion cigarettes a year, while more than 5 billion cigarettes were sold and taxed in the country in 2015, implying that a large amount of cigarettes were smuggled out of the country.

European integration

The Republic of Moldova signed the Association Agreement with the European Union in 2014. According to Article 55 of the Agreement, the Parties shall “develop their cooperation and harmonise policies in counteracting and fighting fraud and the smuggling of excisable products.” It stated that such cooperation would include “the gradual approximation of excise rates on tobacco products ... in line with the WHO FCTC” (35).

According to Annex VI to Chapter 8 (Taxation) of the Association Agreement, the Republic of Moldova should implement all provisions of EU Directive 2011/64 by 2025, including a gradual increase in cigarette excise rates: eventually excise duty should be not less than €90 per 1000 cigarettes, with a weighted average retail price of €1.80 per pack of 20 cigarettes. In 2015, the rate in the Republic of Moldova was about MDL 6 per pack (or less than €0.30).

The excise increase implemented in 2016 (see Table 1) will increase the excise for average-priced filter cigarettes by MDL 2 (see Fig. 1), or €0.09. If the country continues with such annual excise rises, it will take 17 years to reach the minimum EU excise rate.

As set out in Article 6.2 of the WHO FCTC, the Parties have the sovereign right to determine and establish their taxation policies, which means that the Republic of Moldova has various options to establish excise rates in line with both the WHO FCTC and EU Directive (2011/64).

One of the options available to the Republic of Moldova to enable the country to meet its obligations according to the Association Agreement with the European Union is to annually increase both specific excise rates (specific and minimum specific) for cigarettes by 20%, and the *ad valorem* rate by 1%.

The preliminary forecast of such proposed excise increases is presented in Table 7.

The forecast is based on the following assumptions.

1. The proposed excise rates will be introduced from 1 January 2017 and the same date of subsequent years.
2. Excise rates for filter and non-filter cigarettes will be the same from 1 January 2017.
3. The net-of-tax part of the cigarette prices will increase annually by 7% on average, in line with expected inflation.
4. The average annual increase of nominal disposable income per capita will be 9% (as it was in 2010–2015).
5. TAI values are calculated using the estimated change in average cigarette prices; for example, if the price increases by 15%, and income increases by 9%, the TAI is $(109/115 - 1) \times 100 = -5.2$.
6. Cigarette sales decline parallel with the decline of tobacco affordability. Sales are expected to change to the same extent as the affordability (income-adjusted cigarette price), taking into account both the decline in tobacco consumption within the country and the decline in outflow of cigarettes from the country. Therefore, if the TAI is -10, the sales decline by 10% (for example).
7. The excise revenues are estimated as: revenue = cigarette sales x average excise rate.

When both specific and *ad valorem* rates increase, the cigarette price – for which minimum specific excise starts to work – gradually increases. In late 2016, all cigarettes priced below MDL 16.5 per pack had to be taxed with the minimum specific excise (MDL 8 per pack). With the proposed excise rates in 2017, the minimum specific excise applies to cigarettes priced below MDL 18 per pack. In 2025, the respective proposed price will reach MDL 49 per pack.

If the proposed excise policy were to be implemented, in 2025 the excise duty in the Republic of Moldova would be above €90 per 1000 cigarettes (the minimum level according to EU Directive 2011/64) provided that the exchange rate of euro to MDL (currently €1 = MDL 22.5) does not change much. Nominal cigarette prices would annually increase by 15–31%, which would ensure that such increases exceed both inflation and income growth, as well as reducing tobacco affordability. Annual cigarette sales would decline by about 5–17%. Within such a scenario, cigarette sales in 2016–2025 would decline by 55% across the 10-year period, and the revenue could increase almost fourfold (see Table 7). The additional revenue for the 9-year period (2017–2025) would be about MDL 17 billion.

There is little threat of smuggling into the Republic of Moldova. Romania's excise rates are already above the EU level. Ukraine also signed the Association Agreement with the European Union and promised (through Article 352 of the Association Agreement between the EU and Ukraine (36)) to gradually harmonize its excises with EU requirements. In 2015 the price differences for the same cigarette brands in Ukraine and the Republic of Moldova were very small. Since January 2016, Ukraine has increased specific cigarette tax rates by 40% and *ad valorem* rates from 10% to 12%.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Specific rate, MDL per 1000 cigarettes	200	300	360	432	518	622	746	896	1 075	1 290	1 548
Minimum specific rate, MDL per 1000 cigarettes	0	400	480	576	691	829	995	1 194	1 433	1 720	2 064
Ad valorem rate, %	18.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0
Expected average nominal price of a pack of 20 cigarettes, MDL	11.0	13.0	17.0	19.5	22.5	26.0	31.0	36.0	42.0	50.0	59.0
Increase in nominal price, %	–	18.0	31.0	15.0	15.0	16.0	19.0	16.0	17.0	19.0	18.0
Average annual excise per pack, MDL	5.2	6.5	9.8	11.7	14.0	16.6	20.5	24.5	29.0	35.0	42.0
VAT per pack, MDL	1.8	2.2	2.8	3.3	3.8	4.3	5.2	6.0	7.0	8.3	9.8
Net-of-tax price per pack, MDL	4.0	4.2	4.4	4.6	4.8	5.1	5.3	5.5	6.0	6.7	7.2
TAI	-0.6	-7.6	-16.8	-5.2	-5.2	-6.0	-8.4	-6.0	-6.8	-8.4	-7.6
Expected cigarette sales, billion	5.25	5.00	4.16	3.94	3.74	3.51	3.22	3.02	2.82	2.58	2.38
Expected revenue, billion MDL	1.37	1.50	2.04	2.31	2.62	2.92	3.30	3.70	4.08	4.51	5.00

Cigarette smuggling through the Transnistria Region might be a challenge, but should not be over-estimated. Between January and August 2014 more than 11 billion cigarettes and 2300 tonnes of raw tobacco were delivered to the Transnistrian Region, which has a population of approximately 0.5 million inhabitants. Analysis by the EUBAM to the Republic of Moldova and Ukraine suggested such cigarettes were being diverted illegally to Ukraine. Between August and October 2014, EUBAM together with Ukrainian partners carried out a number of activities aimed at strengthening measures to curb cigarette smuggling, and between November and December 2014 the transit of cigarettes from Odessa and Chornomorsk (formerly Ilyichevsk) ports to the Transnistria Region dropped to zero (37). With EUBAM support, the Ukrainian authorities also stepped up their control of the transit of excise goods and especially tobacco to Transnistria, leading to the decline of cigarette deliveries to the Transnistria Region via Ukraine to zero. Furthermore, following a government resolution in Ukraine, from May 2015 tobacco products can only be delivered to Transnistria through Chisinau-controlled territory or three other designated border crossing points (38).

In early 2016, prices of some cigarette brands were actually equal across both parts of the Nistru River and some smuggling was even reported out of the Republic of Moldova to the Transnistria Region (39). Therefore the threat of cigarette smuggling from the Transnistria Region to the Republic of Moldova may not be used as an excuse for not implementing a sharp excise increase in the Republic of Moldova from 2017. However, additional action is needed, in coordination with the EUBAM.

According to Article 7(2) of EU Directive 2011/64, “the rate of the *ad valorem* excise duty and the amount of the specific excise duty must be the same for all cigarettes” (40). Excise rates for filter and non-filter cigarettes should therefore be at the same level. All EU countries, as well as Ukraine, the Russian Federation, Kazakhstan and Uzbekistan have equal excise rates for both filter and non-filter cigarettes.

Currently, the excise rate for cheapest filter cigarettes in the Republic of Moldova is more than five times higher than the excise rate for non-filter cigarettes. Non-filter cigarettes are not very popular in the country: they are not available in most cigarette shops in Chisinau. Some non-filter cigarettes are smuggled to other countries; for example, 15 000 packs of Moldovan non-filter cigarettes were seized in Ukraine in March 2016 (41).

TABLE 7.
Forecast of cigarette prices, sales and revenues with (actual and) proposed excise tax rates, 2015/2016–2025

Note. VAT: value-added tax.

Source: author’s own calculations.

The Republic of Moldova could set the same excise rates for both filter and non-filter cigarettes in 2017.

It would also be recommended to increase excise rates for cigars, tobacco for roll-your-own cigarettes and other tobacco products to the same level as the excise rates for manufactured cigarettes, to prevent smokers from switching to such products.

Outcomes and perspectives of tobacco excise taxation policies in the Republic of Moldova

Over the analysed period, three types of tobacco excise policy were practised in Moldova:

1. in 2007–2009 the excise rates were very low and were not sufficiently increased;
2. in 2010–2013 a sharp increase in both specific and *ad valorem* excise rates was introduced;
3. in July 2013–2015 specific rates for filter cigarettes were increased, while *ad valorem* rates were decreased.

These three policies produced very different results, as summarized in Table 8.

As shown, the excise policy in effect from 2010 to the first half of 2013 was the most successful, as it:

1. tangibly increased government revenues
2. reduced cigarette smuggling out of the Republic of Moldova
3. reduced the negative tobacco trade balance
4. decreased tobacco affordability, which discourages tobacco consumption.

	Policy 1 (2007–2009)	Policy 2 (2010–2013)	Policy 3 (2013–2015)
Annual average nominal excise rate increase, %	11	243	38
Annual real revenue change, %	+ 10	+ 152	+ 3
Smuggling out of the country (trend)	Increased	Decreased	Stable
Negative tobacco trade balance (million US\$)	Increased	Decreased	Stable
TAI for 3 years	+17	-18	-5
Probable tobacco consumption (trend)	Increased	Decreased	Stable

TABLE 8.

Results of three types of tobacco excise policy in the Republic of Moldova

The country's success in sharply increasing tobacco excise is not unique. Such increases were successfully implemented by many countries, such as Ukraine (11) and the Baltic countries (9), among others. In 2010–2015, the Russian Federation increased annually its minimum specific excise rates

by 40% on average and the *ad valorem* rate increased from 6% in 2009 to 12% in 2016. The revenue increased from 80 billion Russian ruble (RUB) in 2009 to RUB 386 billion in 2015, while cigarette sales decreased by 22%. In Ukraine, owing to the annual excise increases (from 0.5 Ukrainian hryvnia (UAH) per pack in 2007 to UAH 6.0 in 2015), revenues have grown from UAH 2.5 billion in 2007 to UAH 22.3 billion in 2015, while cigarette sales fell by 40%. After Romania joined the EU in 2007, tobacco excise rates in the country were increased substantially. This change in excise policy resulted in the growth of annual tobacco excise revenues from 3.1 billion Romanian lei (RON) in 2007 to RON 8.3 billion in 2014, while cigarette sales decreased from 38 billion cigarettes in 2007 to 22 billion in 2014.

In Ukraine, average annual excise revenues increased 12-fold over nine years (2007–2015); in the Russian Federation, over the same number of years, revenues increased by a factor of 11; in Romania, across the 9-year period 2004–2013 the excise yield increased by more than sevenfold. Thus, the expected excise tax increase in the Republic of Moldova by a factor of eight in nine years (2017–2025) is certainly realistic.

The current tobacco excise policy in the Republic of Moldova (in effect since July 2013) has not been successful.

1. The governmental tobacco excise revenue barely increased in real terms.
2. Cigarette smuggling out of the country has not decreased.
3. The negative tobacco trade balance has not decreased.
4. Tobacco affordability barely changed.

The negative effects of the taxation policy were reinforced by the tobacco industry, which decreased its part of the price in 2015, in order to keep customers. However, the industry can change its pricing policy and increase the net-of-tax part of the price, especially if cigarette sales decline. Industry tactics can also be reacted to by substantial and regular increases in excise rates and implementation of anti-forestalling policies.

CONCLUSIONS

The Republic of Moldova had a very beneficial experience with tobacco excise policy in 2010–2013, when the average tobacco excise rate was increased 10-fold. This policy had the following outcomes: (a) eightfold revenue increase in four years; (b) substantial decline in cigarette smuggling out of the country; and (c) reduction of tobacco affordability and tobacco consumption.

However, since July 2013 the country has changed its excise policy to adopt only very moderate excise increases. As a result, in 2014–2015 there was almost no revenue growth, while cigarette smuggling and tobacco affordability ceased to decline. The excise tax increase in 2016 was also very small. If the Republic of Moldova maintains an excise policy of such minimal increases, the real (inflation-adjusted) excise revenue can only grow if tobacco consumption increases within the country and/or in other countries (owing to the outflow of cigarettes being smuggled).

The Republic of Moldova could revive the beneficial excise policy that was in effect during 2010–2013. Such policy can provide both the desired revenue increase and the required tobacco consumption decline, if it follows both the WHO FCTC guidelines and the provisions of EU Directive 2011/64.

According to the Association Agreement with the European Union, by 2025 the Republic of Moldova should implement all provisions of EU Directive 2011/64, including the EU minimum excise rate (currently €90 per 1000 cigarettes). If in the period 2017–2025, the country were to annually increase the specific excise rate by 20% and the *ad valorem* excise rate by 1%, the minimum EU excise rate could be reached by 2025. Such an increase in excise would provide the following benefits for the Republic of Moldova:

- additional tobacco excise revenue (about €750 million in nine years);
- a substantial decline in cigarette smuggling out of the country (smuggling into the Republic of Moldova is highly unlikely to increase, as neighbouring countries will have similar or higher cigarette prices);
- a decline in tobacco affordability, with a respective decline in tobacco consumption in the country and subsequent population health improvement.

REFERENCES

1. Guidelines for implementation of article 6 of the WHO FCTC. Price and tax measures to reduce the demand for tobacco. Geneva: World Health Organization; 2014 (http://www.who.int/fctc/guidelines/adopted/Guidelines_article_6.pdf, accessed 21 November 2016).
2. Țurcanu G, Obreja G, Șalaru I. Costs, health effects and cost-effectiveness of tobacco control strategies in the Republic of Moldova. Republic of Moldova Health Policy Paper Series No. 2. Copenhagen: WHO Regional Office for Europe; 2011 (<http://www.euro.who.int/en/countries/republic-of-moldova/publications2/health-policy-paper-series-no.-2.-costs,-health-effects-and-cost-effectiveness-of-tobacco-control-strategies-in-the-republic-of-moldova>, accessed 17 November 2016).
3. Legi, hotărâri ale Parlamentului Republicii Moldova, decrete ale Președintelui Republicii Moldova [Laws and decisions of the Moldovan Parliament, decrees of the President of the Republic of Moldova]. Chisinau: Monitorul Oficial; 2016 (<http://monitorul.md/>, accessed 17 November 2016).
4. Prevalence of noncommunicable disease risk factors in the Republic of Moldova. STEPS 2013. Copenhagen: WHO Regional Office for Europe; 2014 (http://www.who.int/chp/steps/Moldova_2013_STEPS_Report.pdf, accessed 17 November 2016).
5. Hotărâre nr.11 din 25.03.2014 pentru controlul constituționalității unor prevederi din Anexa nr. 1 la Titlul IV din Codul fiscal, în redacția Legii nr. 324 din 23 decembrie 2013 [Decision No. 11 of 25.03.2014 for reviewing the constitutionality of certain provisions of the Annex. 1 to Title IV of the Fiscal Code, in the wording of Law no. 324 of December 23, 2013]. Chisinau: Constitutional Court of the Republic of Moldova; 2014 (<http://www.constcourt.md/ccdocview.php?l=ro&tip=hotariri&docid=492>, accessed 21 November 2016).
6. Алкоголь и сигареты могут подорожать в несколько раз [Alcohol and cigarette prices can grow several-fold] [website]. Chisinau: Actualitati.md; 18 March 2015 (<http://actualitati.md/ru/node/20214>, accessed 21 November 2016).
7. В МОЛДОВЕ ПОДЕШЕВЕЮТ СИГАРЕТЫ [Cigarettes in Moldova will be cheaper] [website]. Beltsy City. 17 February 2015 (<http://www.beltsy.md.ru/2015/02/17/daily/v-moldove-podesheveyut-sigarety>, accessed 17 November 2016).
8. Stepanov G. В Молдове подорожают сигареты [Cigarettes in Moldova will be more expensive] [website]. Chisinau: Noi.md; 6 April 2015 (http://www.noi.md/ru/news_id/59091#close, accessed 17 November 2016).
9. Krasovsky K. Tobacco taxation policy in three Baltic countries after the EU accession. Tobacco Control and Public Health in Eastern Europe 2012;2(2):81–98.

10. Кишинёвский табачный комбинат запустил производство после длительного перерыва [Chisinau tobacco factory started production after a long break] [website]. Chisinau: Omega Media Group; 2 June 2015 (<http://omg.md/index.php?newsid=9588>, accessed 17 November 2016).
11. Krasovsky K. The story of Ukraine. In: Article 6: price and tax measures to reduce the demand for tobacco. Case studies of implementation of the WHO Framework Convention on Tobacco Control in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2013:6–15 (http://www.euro.who.int/_data/assets/pdf_file/0007/233368/Tobacco-Control-in-Practice-Article-6.pdf?ua=1, accessed 17 November 2016).
12. European Commission Directorate-General for Taxation and Customs Union. Excise duties: tobacco [website]. Brussels: European Commission; 2016 (http://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-tobacco_en, accessed 21 November 2016).
13. Global Adult Tobacco Survey (GATS). Ukraine 2010. Copenhagen: WHO Regional Office for Europe; 2010 (http://www.who.int/tobacco/surveillance/en_tfi_gats_ukraine_report_2010.pdf?ua=1, accessed 17 November 2016).
14. The results of KIIS survey on tobacco smoking in Ukraine as of 2015 compared to 2013-2014 [website]. Kiev: Kiev International Institute of Sociology; 2015 (<http://kiis.com.ua/?lang=eng&cat=reports&id=587&t=7&page=1>, accessed 17 November 2016).
15. Preaşcă I. How did Moldova become the first player on the Romanian market of cigarette smuggling [website]. Chisinau: Moldova Azi; 2010 (<http://www.azi.md/en/investigation/10074>, accessed 17 November 2016).
16. Cigarette smuggling constant at 13 pct this year says Novel [website]. Business Review. 7 December 2012 (<http://www.business-review.eu/featured/cigarette-smuggling-constant-at-13-pct-this-year-says-novel-36812>, accessed 17 November 2016).
17. Popescu I. Cigarette smuggling goes down to 11% in Romania in July [website]. Romania Insider. 26 August 2013 (<http://www.romania-insider.com/cigarette-smuggling-goes-down-to-11-in-romania-in-july/105350/>, accessed 17 November 2016).
18. Popescu I. Cigarette smuggling goes down in Romania in May [website]. Romania Insider. 14 July 2015 (<http://www.romania-insider.com/cigarette-smuggling-goes-down-in-romania-in-may/152791/>, accessed 17 November 2016).
19. Cigarette smuggling down to less than 13 pc in July [website]. Nine O'Clock The Web Edition. 19 August 2012 (<http://www.nineoclock.ro/cigarette-smuggling-down-to-less-than-13-pc-in-july/>, accessed 17 November 2016).
20. Popescu I. Cigarette smuggling in Romania reaches highest level in four years [website]. Romania Insider. 28 January 2015 (<http://www.romania-insider.com/cigarette-smuggling-in-romania-reaches-highest-level-in-four-years/140812/>, accessed 17 November 2016).
21. Lupu V. Cigarette smuggling up to 15.3 pc of the market [website]. Romania Journal. 16 Semptember 2015 (<http://www.romaniajournal.ro/cigarette-smuggling-up-to-15-3-pc-of-the-market/>, accessed 17 November 2016).

22. KPMG study on the illicit cigarette consumption in the EU [website]. Lausanne: Phillip Morris International; 2016 (http://www.pmi.com/eng/tobacco_regulation/illicit_trade/Pages/all_previous-kpmg-studies.aspx, accessed 17 November 2016).
23. Together in the fight against tobacco smuggling [website]. Odessa: European Union Border Assistance Mission to Moldova and Ukraine (EUBAM); 2015 (<http://eubam.org/news-room/together-in-the-fight-against-tobacco-smuggling/>, accessed 17 November 2016).
24. В 2015 году на границе было изъято 175 тыс. пачек сигарет [175 000 packs of cigarettes were seized at the border in 2015] [website]. Moldova Inform. 21 August 2015 (<http://moldovainform.md/ru/news/20150821/25315.html>, accessed 17 November 2016).
25. Illegal cigarettes found in suitcases at Dublin airport [website]. UTV Ireland. 23 December 2015 (<http://utv.ie/News/2015/12/23/Illegal-cigarettes-found-in-suitcases-at-Dublin-Airport-51173>, accessed 17 November 2016).
26. 2 smugglers caught with 7,800 cigarettes stuffed in suitcases [website]. Luxembourgier Wort. 3 September 2015 (<http://www.wort.lu/en/luxembourg/luxembourg-2-smugglers-caught-with-27-800-cigarettes-stuffed-in-suitcases-55e8637a0c88b46a8ce5f5d3>, accessed 17 November 2016).
27. В Италии задержали молдавскую фуру с крупной партией контрабандных сигарет [Moldovan truck with a large party of contraband cigarettes detained in Italy] [website]. Chisinau: Publika MD; 14 September 2015 (http://ru.publika.md/v-italii-zaderzhali-moldavskuyu-furu-s-krupnoy-partiey-kontrabandnykh-sigaret_1699821.html, accessed 17 November 2016).
28. Flynn B. Marlboyo country [website]. The Sun. 3 May 2015 (<https://www.thesun.co.uk/archives/news/174908/marlboyo-country/>, accessed 17 November 2016).
29. Parliament of the Republic of Moldova. ЗАКОН РЕСПУБЛИКИ МОЛДОВА о табаке и табачной продукции Nr.386-XV [Law of the Republic of Moldova on tobacco and tobacco products No. 386-XV from 19 July 2001]. Official Gazette of the Republic of Moldova, 3 August 2001: 92–93 (<http://www.law-moldova.com/laws/rus/tabake-i-tabachnoi-productsii-ru.txt>, accessed 17 November 2016).
30. Parliament of the Republic of Moldova. О табаке и табачных изделиях Закон Республики Молдова № 278-XVI от 14 декабря 2007 г [Law of the Republic of Moldova on tobacco and tobacco products No. 278-XVI of 14 December 2007]. Monitorul Oficial, 7 March 2008: 47–48; Art. 139 (http://data.euro.who.int/tobacco/Repository/MD/Republic%20of%20Moldova_Law%20No%20278%20XVI%20on%20Tobacco%20and%20Tobacco%20Products_2007_ov.pdf, accessed 17 November 2016).
31. National Centre of Public Health. Reporting instrument of the WHO Framework Convention on Tobacco Control. Republic of Moldova. Geneva: World Health Organization; 2012 (http://apps.who.int/ftcc/implementation/database/sites/implementation/files/documents/reports/moldova_2012_report.pdf, accessed 17 November 2016).

32. National Centre of Public Health. Monitoring the situation of children and women. Multiple Indicator Cluster Survey 2012. Final report. Chisinau: United Nations Children's Fund (UNICEF); 2014 (<http://cnspl.md/wp-content/uploads/2014/11/MICS.pdf>, accessed 17 November 2016).
33. Roberts B, Gilmore A, Stickley A, Rotman D, Prohoda V, Haerpfer C, et al. Changes in smoking prevalence in 8 countries of the former Soviet Union between 2001 and 2010. *Am J Public Health* 2012;102(7):1320–1328.
34. Accesul populației la serviciile de sănătate. Rezultatele studiului în gospodării. Sinteza [Population access to health services. Results of the households survey. Summary]. Chisinau: National Bureau of Statistics of the Republic of Moldova; 2013 (http://www.ms.gov.md/sites/default/files/proiecte_desfasurare/rezultatele_studiului_bns_in_gospodarii_-_accesul_populatiei_la_servicii_de_sanatate_2012.pdf, accessed 17 November 2016).
35. Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and the Republic of Moldova, of the other part (2014/497/EU). *Official Journal of the European Union* 2014; 57 (L 260/4, 30.8.2014) (<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2014:260:-FULL&from=EN>, accessed 17 November 2016).
36. Association Agreement between the European Union and its Member States, of the one part, and Ukraine, of the other part. *Official Journal of the European Union* 2014; 57 (L 161, 29.5.2014) (<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ%3AL%3A2014%3A161%3ATOC>, accessed 29 November 2016).
37. Transit of cigarettes from Odessa and Illichevsk ports to Transnistria drops to zero [website]. Odesa: European Union Border Assistance Mission to Moldova and Ukraine (EUBAM); 2015 (<http://eubam.org/newsroom/transit-of-cigarettes-from-odessa-and-illichevsk-ports-to-transnistria-drops-to-zero/>, accessed 17 November 2016).
38. Speech by Andrew Tesoriere, Head of Mission, at the SMI Border Security Conference, Rome, 17-18 February 2016 [website]. Odesa: European Union Border Assistance Mission to Moldova and Ukraine (EUBAM); 2016 (<http://eubam.org/newsroom/speech-by-andrew-tesoriere-head-of-mission-at-the-smi-border-security-conference-rome-17-18-february-2016/>, accessed 17 November 2016).
39. БЕНДЕРСКИЕ ТАМОЖЕННИКИ ПРЕСЕКЛИ КОНТРАБАНДУ СИГАРЕТ ИЗ МОЛДОВЫ. ПРОИСШЕСТВИЯ 25/02/16 [Customs officers from Bender stopped cigarette smuggling from Moldova. Main news, 25 February 2016] [website]. Tiraspol: *Novosti Pridnestrovyia*; 2016 (<http://novostipmr.com/ru/news/16-02-25/benderskie-tamozhenni-ki-presekli-kontrabandu-sigaret-iz-moldovy>, accessed 18 November 2016).
40. Council directive 2011/64/EU of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco. *Official Journal of the European Union* 2011; 54 (L 176/24, 5.7.2011): 24–26 (<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011L0064&from=EN>, accessed 21 November 2016).

41. 15 тысяч пачек сигарет без акцизных марок изъяли правоохранители на автодороге «Кишинев – Полтава» [15 000 packs of cigarettes without excise stamps were seized by law enforcement officers on the road “Chisinau–Poltava”] [website]. Odessa: Context-Prichernomorie; 15 March 2016 (<http://www.prichernomorie.com.ua/odessa/news/law/2016-03-15/188550.php>, accessed 18 November 2016).

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