



- **Tobacco-attributable diseases, which are among the top causes of premature death in Moldova, undermine human capital development, and pose a significant economic cost to the country.**
- **Taxes on tobacco are effective tool to reduce its use and associated health risks, increase revenue, and protect the population from the impoverishment effect of high medical care expenses and work absenteeism due to work days lost.**
- **Looking forward not only tobacco tax rates could be further increased but the tax structure should also be simplified by adopting a uniform tax rates for both filter and non-filter cigarettes to preempt smokers' switching to cheaper cigarette brands after a tax-rate hike on the brands they previously smoked.**

An Ominous Public Health Challenge

Tobacco use is a leading cause of the growing burden of noncommunicable diseases globally (NCDs), harming and killing prematurely almost one-half of its long-term consumers, and hindering human capital development (Jha, P. and Peto, R. 2014). Tobacco smoking acts in a number of direct and indirect ways to cause damage to blood vessels, heart and brain. Over time, these injuries raise blood pressure, reduce ability to tolerate exercise, and increase risk for blood clots and cancer. In Moldova, non-communicable diseases (NCDs), such as ischemic heart disease, cerebrovascular diseases, lung cancer, and chronic respiratory diseases, which are tobacco-attributable diseases, are among the top 10 causes of death (IHME, 2017).

Smoking starts early in life in Moldova: the average age of starting smoking is 17 years old. Tobacco smoking prevalence in Moldova in 2016 was 30.0% among men and 3.3% among women While in Moldova the rate of tobacco smoking in 2017 was lower than in other CIS countries, such as Russia (49.5% among men and 14.4% among women) and Ukraine (39.7% among men and 7.0% among women), it was among the highest in Europe. No surprisingly, life expectancy for males at 68 years is 8 years less than women in Moldova, with greatest relative years of life lost at the working age. Although the WBG Human Capital Index (HCI) value for Moldova increased from 0.56 to 0.58 from 2012 to 2017, is still lower than the average for the region, reflecting higher rates of premature mortality among men due to NCDs compared to the regional average (WBG HCI 2018 <http://pubdocs.worldbank.org/en/834031539204432182/HCI-Data-October-2018.xlsx>; WHO 2016).

Besides the negative public health impact, the rising burden of tobacco-related diseases impose a heavy cost on public health expenditures and household budgets. The direct cost of treating smoking-attributable diseases is estimated to represent 6.7% of total health expenditures, and when indirect costs, such the cost of work absenteeism, are added, the total economic cost of smoking-attributable diseases is estimated at 3.8% of GDP in Moldova (Goodchild, Nargis, and Tursan d'Espaignet, 2016).

The Benefits of Taxing Tobacco: Lower Consumption and Increased Tax Revenue

Taxes on tobacco are the least expensive, least implemented, and most effective tool in the fight to reduce its use. As noted in a recent IMF report (2016), in many countries, raising tobacco taxes can offer a "win-win": higher revenue and positive health outcomes. In many cases, however, current tax rates are evidently far below of what is feasible in terms of revenue potential. Thus, tax increases could serve revenue purposes as well as health and other objectives. Of course, countries putting more weight on health objectives could raise taxes even further.

The results of the excise tax increases on tobacco adopted in Moldova since 2016 illustrate the positive impact of this policy measure, while also showing the need to further modify the tax structure. Total volume of cigarettes sales taxed (billion pieces), used as a proxy of consumption, decreased by about 10% to 5.55 billion pieces in 2017 compared to 6.19 billion pieces in 2016 (Box 1). While such a reduction is positive as it would contribute to improving public health outcomes, there was a noticeable shift in consumption to lower cost non-filter cigarettes. This consumer response reflects a tax differential on filter and non-filter cigarettes in Moldova, further demonstrating that the structure of cigarette excise is critical in determining the relative prices of different tobacco products and brands across the price spectrum and thereby influencing the behavior of consumers within a country.

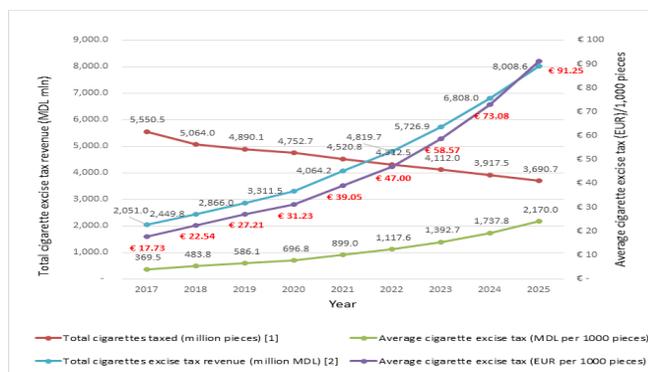
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Box 1: Moldova Cigarettes Taxed Trend 2014-2017.

CIGARETTES	2015	2016	2017
Total cigarettes taxed with filter (billion pieces)	4.55	4.42	3.66
Total cigarettes taxed without filter (billion pieces)	1.36	1.77	1.89
Total cigarettes taxed (billion pieces)	5.91	6.19	5.55

Source: National Bureau of Statistics, Ministry of Finance (MoF) and Customs.

Figure 1: Moldova - Cigarette Market Trends 2017 - 2025 and Minimum EU excise tax rates (Projections)



Source: WBG staff estimates; excise tax revenue and total cigarettes taxed data from MoF & Customs.

Cigarettes are cheap to make and highly addictive, which allows for fat profits.² Despite the sales volume reduction, additional tax revenue was collected given the relatively price inelastic demand due to cigarette addiction and low cost of production relative to the average retail price: cigarette excise tax revenue increased from MDL 1.73 billion in 2016, to MDL 2.04 billion in 2017 (about 1.16% of GDP). As shown in Figure 1, the tobacco tax increases adopted by Parliament for 2018-2020, are projected to further augment excise tax revenue to MDL 2.45 billion in 2018 (US\$145 million) or about 1.27% of GDP in 2018; 2.87 billion MDL (US\$169 million) or 1.37% of GDP in 2019; and 3.31 billion MDL (US\$194 million) or 1.45% of GDP in 2020. If a uniform tax structure were to be adopted in Moldova for both filter and non-filter cigarettes, and tax rates were increased by about 25% per year over 2021-2025, Moldova could benefit from reduced health risks due to lower consumption, collect additional tax revenue to expand fiscal space for priority programs and investments that benefit the population as a whole, and reach the European Union (EU) tobacco tax directive minimum rate of 90 EUR/1,000 pieces as contemplated under the current Association Agreement with the EU. The increase in cigarette excise taxes may require increased coordination with neighboring countries (particularly Belarus and Ukraine) to reduce potential illicit trade in tobacco products that take advantage of price differences. Controls over the distribution chain and improved “track and trace” technologies can help improve customs administration and complement tobacco tax reforms. In the long-run, the additional positive fiscal impact should come from lower health expenditures.

Tobacco Taxation could benefit poor. Tobacco taxes are deemed to be regressive because it is argued that low-income smokers spend a greater share of their income on tobacco, more so when facing higher prices due to higher taxes. However, research by the World Bank in Moldova using data from household budget surveys, shows that the poor tend to be more responsive to price increases by reducing tobacco use more than the rich (the price elasticity of demand for the lowest income group was estimated at -0.53 and -0.13 for the highest income group).³ Because of higher price elasticity of demand and a lower income base, the poorer groups in the population benefit more from the reduction in medical expenses associated with the treatment of tobacco-attributable diseases that outweigh the effects of the price increase.

Moving Forward

The recent experience in Moldova shows that government could discourage smoking not only by making its risks widely known, but also by adopting higher tobacco taxes to help hike up cigarette prices and implementing other tobacco control measures such as banning smoking in public places. Tobacco tax rates should also be unified for both filter and non-filter cigarettes to preempt smokers’ switching to cheaper cigarette brands after a tax-rate hike on the brands they previously smoked. In a mix-excise tax system as the one used in Moldova, specific rates require to be adjusted over time to keep pace with inflation and, preferably, at a faster rate so that affordability is reduced over time. The adoption of a framework/instrument to allow for annual increases over time (such as the United Kingdom’s tobacco duty escalator) should be considered. This way, tax hikes raise prices by the same large amount on all brands at once, pushing smokers to quit or reduce use, rather than make the switch.

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² Credit Suisse. 2015. Global Investment Returns Yearbook 2015. Zurich: Research Institute, Credit Suisse.

³ Fuchs, A., and Meneses, F. 2018. Tobacco price elasticity and tax progressivity in Moldova. Washington, D.C.: World Bank Group.