By ratifying the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC) in 2005, the Republic of Serbia has recognized the role of tobacco taxes in reducing the health, social, environmental and economic consequences of tobacco consumption. Research has shown that raising tobacco prices through increased tobacco taxes can reduce tobacco consumption. The research findings indicate that the price elasticity of demand for tobacco products in low and middle-income countries ranges between -0.2 and -0.8. In other words, a 10% increase in tobacco prices in low and middle-income countries would decrease tobacco consumption between 2-8%. Similarly, a 50% increase in tobacco prices would result in reducing tobacco consumption between 10% and 40%. An increase in price of tobacco resulting from higher taxes would have a positive impact both on the health of the nation and the health of public finances.

Research conducted by the Institute of Economic Sciences (IES) in Serbia showed that a 10% increase in tobacco prices would reduce demand between 4.5 and 7.6% and also raise revenues. This is based on a price elasticity of demand of between -0.45 and -0.76, depending on the research methodology.

Smoking prevalence in Serbia is still relatively high. Excise revenues from tobacco have recorded slight growth over a previous couple of years, as a result of the gradual increase in prices. Findings of the IES research team suggest that improving existing taxation policy would reduce the number of smokers and the total consumption of tobacco products. A significant increase in tobacco taxes would reduce consumption and bring many positive health and economic outcomes.

A gradual tax increase has already shown a decline in consumption of tobacco products since 2004 (Graph 1), though the number of smokers has only slightly declined.

Despite the observed decline, particularly among the male population, smoking prevalence in Serbia is still much higher when compared to the European Union (EU). A European Health Survey report shows the rate of daily smokers in the EU at 18.4%, compared to 29.2% in Serbia.

Research conducted by the Institute of Public Health “Batut” shows that 34.7% of Serbian adults (over 15 years) are permanent or occasional users of tobacco products. As shown in Graph 2, World Bank data estimates age-adjusted prevalence of tobacco use at 38.9%. Of particular worry is the fact that the consumption of tobacco products is widespread among the young population. The prevalence of tobacco use among 13 to 15 year old’s is over 16%. Tobacco use in this population may have gone up during 2013-2017, which should be a subject of additional research.
The recorded price of cigarettes in Serbia increased by 17.45% during 2015-2018. In the EU-28 countries, prices went up by 8% over the same period. Given the relatively lower starting price in Serbia, the price increase was insufficient to catch-up with all 28 EU members, and the Central and Eastern European (CEE) countries in particular. Weighted average price per 1,000 cigarettes in Serbia amounts to €95.76 or €1.92 per pack, which is considerably lower when compared to the EU-11 (€3.27) and the EU-28 average (€4.80). Despite the increase in excise taxes, the net-of-tax cost is growing over time, as shown in Graph 3.

**TOBACCO PRICES IN SERBIA**

The recorded price of cigarettes in Serbia increased by 17.45% during 2015-2018. In the EU-28 countries, prices went up by 8% over the same period. Given the relatively lower starting price in Serbia, the price increase was insufficient to catch-up with all 28 EU members, and the Central and Eastern European (CEE) countries in particular. Weighted average price per 1,000 cigarettes in Serbia amounts to €95.76 or €1.92 per pack, which is considerably lower when compared to the EU-11 (€3.27) and the EU-28 average (€4.80). Despite the increase in excise taxes, the net-of-tax cost is growing over time, as shown in Graph 3.

**TOBACCO TAX STRUCTURE IN SERBIA**

Taxation of tobacco products is under the authority of the Ministry of Finance which applies a mixed tax system. The excise policy defined by the Excise Law foresees only a gradual increase in specific excise rates (less than 2% per annum).

Considering the institutional framework, the Ministry of Finance has sole responsibility for tobacco taxation, applying a combination of *ad valorem* and the specific excise component. Tobacco products are subject to a proportional (*ad valorem*) rate of 33%, and specific excise duty (absolute value in local currency - RSD) applied in accordance with the Excise Tax Act.

Given the current excise burden of €62.42 or 61.03% of the weighted average retail price, future alignment with EU regulations will have to follow a significant increase in taxes in order to reach a minimum amount of excise duty of €90 per 1000 cigarettes.

The excise tax policy defined in the Excise Law expects a gradual increase in specific excises resulting in a modest impact on the rise in retail prices. The excise tax share varies depending on the retail price. The share of the excise tax equals 61.03% of the weighted average retail price. WHO’s best practices in tobacco taxes points out that the minimum excise tax should be at least 70% of the retail price.
An increase in the retail prices of tobacco by 50% through higher excise taxes would reduce consumption by 22.5% and raise an additional €135 million in revenues. Research based on household budget survey data (2012-2016) and generally accepted methodology suggests individual demand price elasticity of \(-0.45\) and expenditure elasticity of 0.53. Thus, a 10% increase in prices through an increase in taxes would reduce consumption by 4.5%. Similarly, a 50% increase in prices would reduce consumption by 22.5%. In this case, a 50% increase in the retail price would bring additional excise revenue of around €135 million. This would also help to catch-up with the EU standards of €90 excise taxes per 1000 cigarettes.

Although the responsibility for reducing the prevalence of tobacco use primarily lies with the Ministry of Health and the Council for Tobacco Control, those institutions cannot influence tobacco taxation policy as an effective tool of tobacco control. Consequently, price and consumption of tobacco products largely depends on the Ministry of Finance. This challenge dates back to the years of the National Tobacco Control Strategy (2007-2015), and has continued to exist since 2015. The absence of a Tobacco Control Strategy has also been identified as an institutional deficiency within the EU’s last progress report - Section 28.

**EVIDENCE-BASED FINDINGS ON TOBACCO TAXES IN SERBIA**

- An increase in the retail prices of tobacco by 50% through higher excise taxes would reduce consumption by 22.5% and raise an additional €135 million in revenues.

Research based on household budget survey data (2012-2016) and generally accepted methodology suggests individual demand price elasticity of \(-0.45\) and expenditure elasticity of 0.53. Thus, a 10% increase in prices through an increase in taxes would reduce consumption by 4.5%. Similarly, a 50% increase in prices would reduce consumption by 22.5%. In this case, a 50% increase in the retail price would bring additional excise revenue of around €135 million. This would also help to catch-up with the EU standards of €90 excise taxes per 1000 cigarettes.

- Household income growth could neutralize the effects of price increases since the rise of household expenditures by 20% would increase demand for cigarettes by around 10.6%.

An increase in household expenditures is a sign of rising incomes. As household income goes up, cigarettes become increasingly affordable, even with an increase in prices. Research conducted by IES shows a 50% increase in the retail price of tobacco with a simultaneous household expenditure increase of 10%, as a proxy for living standard improvement, would increase excise revenues by 22.4%. In cash equivalents, this would result in additional €180 mil of excise revenues. But tobacco consumption would not drop at the same rate because tobacco would become more affordable.
The current tobacco tax policy in Serbia does not recognize the adverse health and economic consequences of tobacco consumption. The gradual increases in excise taxes have resulted in a slight rise in the revenues and a relatively modest decrease in demand for tobacco products. There is a lack of a strategic, evidence-based and coordinated approach for tobacco control. Serbia needs a significant increase in tobacco excise taxes aimed at influencing a stronger increase in the price of tobacco and reducing tobacco consumption. Tobacco tax policy should take into account the affordability of tobacco and the impact of tobacco consumption on health costs.

There is a need to create a National Strategic Framework for tobacco control based on continuous dialogue between all relevant stakeholders (Ministry of Finance, Ministry of Health, Tobacco Control Council, Researchers and Civil Society) in order to establish consensus on a tobacco tax policy that is independent of tobacco industry influence. The framework should be based on the recommendations of the WHO, the Institute of Public Health and other research institutions respecting the principles of independent evidence-based policy making, participation and coordination. Effective policy framework has to include publicly available tobacco control data as a basis for future policy relevant research in the field.

Authors - This policy brief has been prepared by the research team of the Institute of Economic Sciences: Dr Jovan Zubović, Dr Isidora Ljumović, Mr Olivera Jovanović, Dr Duško Bodroža, Dr Ivana Domazet, Dr Marko Vladisavljević and Dr Mihajlo Đukić.

Acknowledgement - The Institute of Economic Sciences from Belgrade, The Republic of Serbia, is funded by the University of Illinois at Chicago (UIC) to conduct economic research on tobacco taxation in the Republic of Serbia. UIC is one of the core partners of the Bloomberg Philanthropies’ Initiative to Reduce Tobacco Use. The views expressed in this document cannot be attributed to, nor do they represent the views of UIC, or Bloomberg Philanthropies.