



tobaccotaxation

**Economic Research Informing
Tobacco Taxation Policy**

Evidence-based Tobacco Taxation Policy in Serbia

Research findings and recommendations



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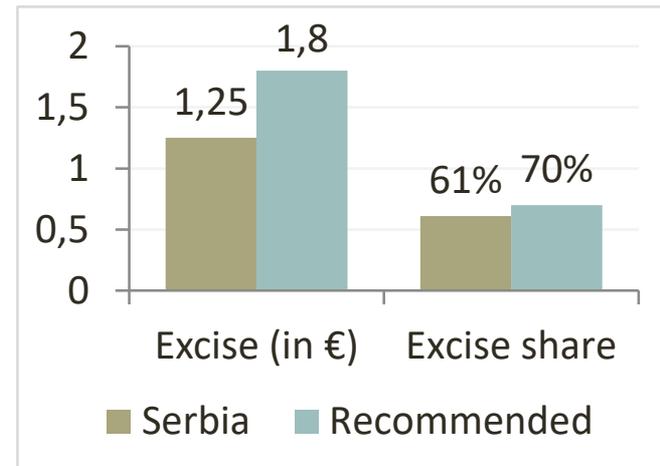
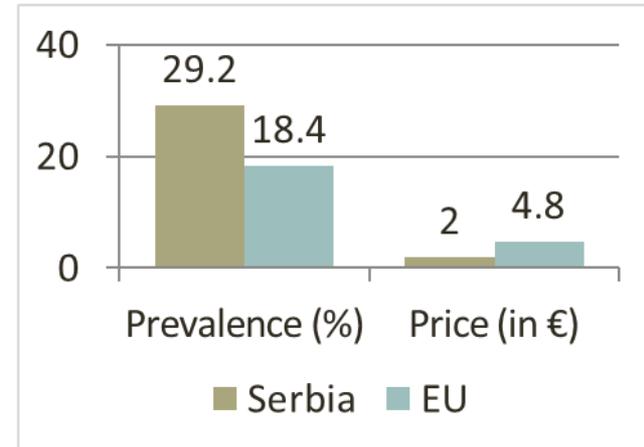
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Serbia - Prevalence, prices and excises

- Smoking prevalence in Serbia decreasing, but is still one of the highest in Europe
- Prices of cigarettes are low
- Excise duties are low
- Gradual increase of specific tax (4% per year), **prices grew about 2 times faster** (about 9% per year, 2015/18)
- **Price increase is at the expense of consumers, while profits of tobacco companies are increasing**



Tobacco industry is perceived as an important stakeholder

- three major privatizations one Greenfield investment within the last 15 years
- export of cigarettes increased by ten-fold since 2007 (4th largest producer in Europe), but raw tobacco import grew at the same rate
- Employment in the sector decreased by three times since 2004 and currently stands at 0.06% (~1.500 employees)
- **Tobacco companies argue:** increasing excise will
 - **Decrease the government revenue** from tobacco consumption
 - **Have the largest effect on the poor**

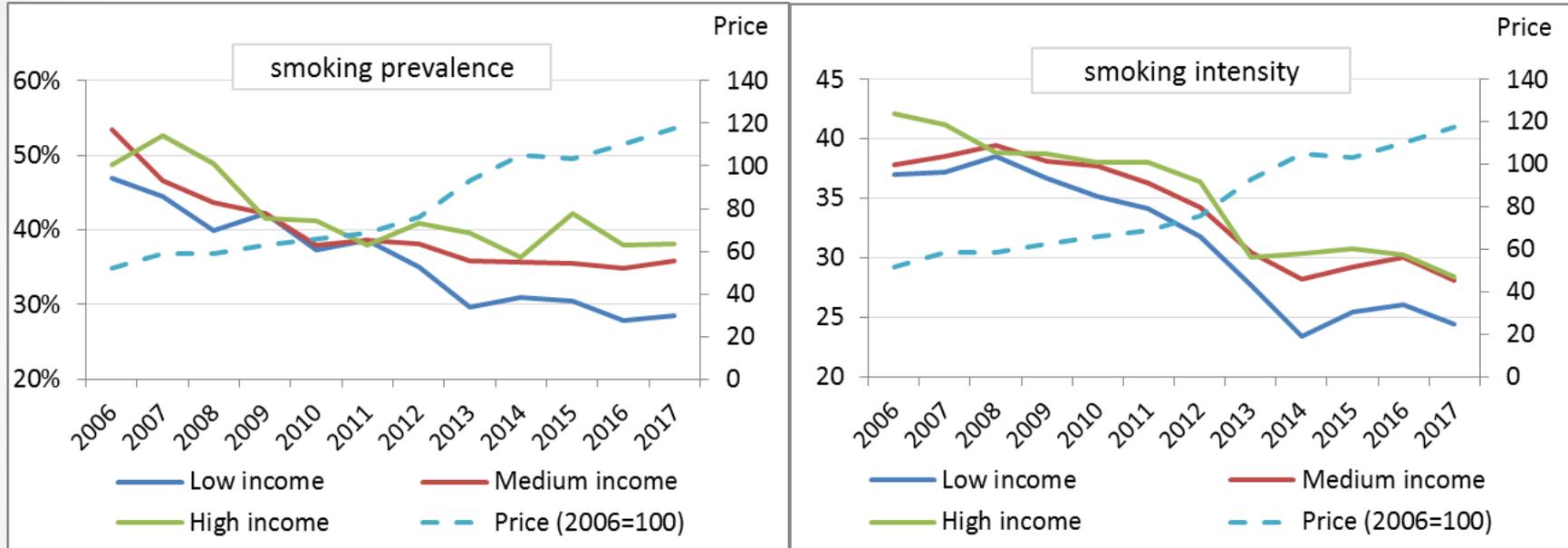
We wanted to empirically test these assertions



Research

- We use Household Budget Survey (2006 - 2017)
 - Nationally representative sample; 65.000 households
- **We calculate price elasticity** – consumers response to price increase
 - **What happens to consumption when the price increases?**
 - *Is the number of smokers lower, and by how much?*
 - *Is the number of cigarettes smoked lower, and by how much?*
 - We use econometric methods – statistically control for the effects of income and household characteristics (educational level, region, etc.); relevant legislative changes as well as cut tobacco consumption (1.7% of households)
- We calculate the price elasticity for **different income groups**

Price and consumption trends (2006 – 2017)



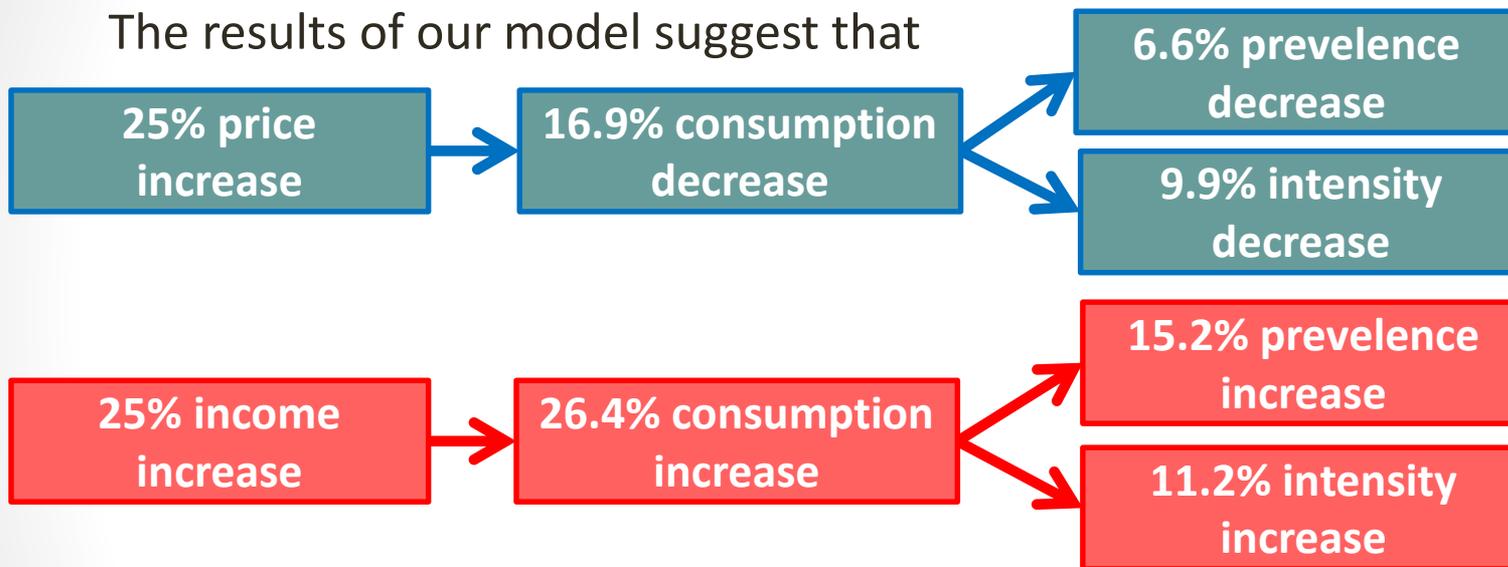
Budget share spent on cigarettes

Year	Low income	Middle income	High income
2006	3.3%	3.0%	2.4%
2017	2.9%	3.4%	3.2%

Main findings

1. Price increase lowers tobacco consumption

The results of our model suggest that



- Excise increase is a successful measure of reducing tobacco consumption, if the prices rise at least twice as fast as income
- For prevalence at least three times faster

Main findings

2. Higher excises (prices) lead to revenue increase

	Current	
Average weighted price (€)	1.87	
<i>Price structure</i>		% of total price
Specific excise	0.53	28.5%
Ad valorem excise	0.62	33.0%
Total excise	1.15	61.5%
VAT	0.31	16.7%
<i>Total tax (per pack)</i>	1.46	78.2%
Net-of-tax price	0.41	21.8%

What would happen if the specific excise increases by 43% (0.53 => 0.77 €) and price increases by 25%?

Main findings

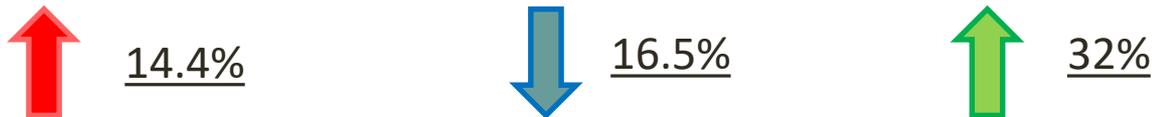
2. Higher excises (prices) lead to revenue increase

	Current		Reform (25% price increase)		
Average weighted price (€)	1.87		2.06		 <u>25%</u>
<i>Price structure</i>		% of total price		% of total price	
Specific excise	0.53	28.5%	0.77	32.9%	 <u>44%</u>
Ad valorem excise	0.62	33.0%	0.77	33.0%	
Total excise	1.15	61.5%	1.54	65.9%	
VAT	0.31	16.7%	0.39	16.7%	
<i>Total tax (per pack)</i>	1.46	78.2%	1.93	82.6%	 <u>32%</u>
Net-of-tax price	0.41	21.8%	0.41	17.4%	

Main findings

2. Higher excises (prices) lead to revenue increase

- Finding 1 suggests that **decrease of consumption is less fast than the increase in prices**
- Price increase of 25% lowers consumption by 16.5%
- What does this mean for government revenues?
- Government revenues = Consumption * Total tax per pack

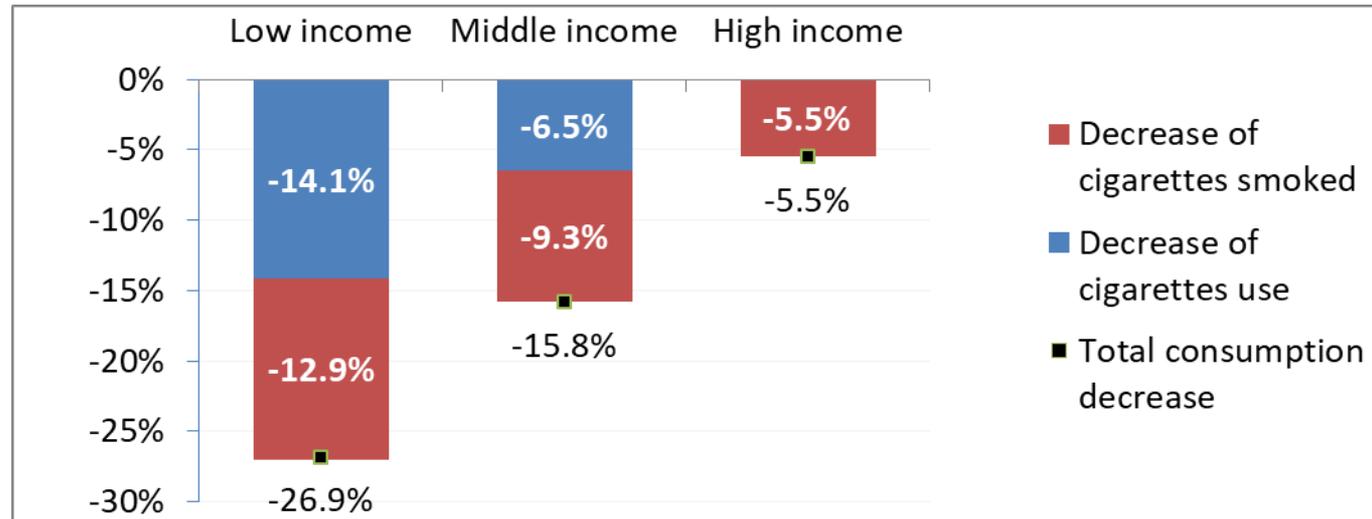


Price increase	10%	25%	50%*
Government revenues	8.9%	14.4%	15.1%

Main findings

3. Higher excises reduce inequality in consumption

- If the prices increase by 25% **the decrease of consumption would be the highest for low-income hhs...**



Main findings

3. Higher excises reduce inequality in consumption

- ... and **would produce lower expenditures on cigarettes**
 - Expenditure = Consumption * Price per cigarette pack



	Demand decrease (25% increase)	Expenditures on cigarettes (mil. €)		
		Current	Price increase 25%	% change
Low income	26.9%	302.9	296.9	-2.0%
Middle income	15.8%	445.8	491.2	10.2%
High income	5.5%	506.8	608.0	20.0%

Findings - summary

Tobacco excise, and the consequent price increase would lead to:

1. Lower tobacco consumption
 - Lower prevalence – number of people who smoke
 - Lower smoking intensity – lower number of cigarettes smoked
2. Increase of government revenues from cigarettes taxation
3. Reducing inequality in consumption
 - Lower expenditures on cigarettes for low-income households,
 - Higher expenditures on cigarettes for mid- and high-income households

Policy recommendations

1. Abandoning the Excise Calendar based on a slow and gradual growth of the excise
 - Instead, adopt a faster and more rapid growth of the specific excise
2. Broadening the tobacco taxation policy objective – „holistic approach“ should be applied, focusing on health and well-being not only on revenues
3. New Tobacco Control Strategy should be adopted (it's prepared!)
4. Coordination of the activities at the national and regional level

- Thank you for your attention!