

# Abstract

The paper addresses the impact of smoking in the Czech Republic in 2009.

The aim is to describe the current facts and trends of tobacco consumption, assess the mortality attributable to smoking, compute its financial impact on the Czech state budget, evaluate the transmission of tax changes into the retail price of cigarettes, assess consumer price elasticity for cigarettes, and compute a fair excise tax on cigarettes for the Czech Republic as well as the tax which would maximise the benefits of smoking for the state budget. For our purposes, we define *öfairness* as a situation in which there is no net redistribution of state budget funds between two groups of citizens: non-smokers and smokers. Smokers create benefits (for example, savings on pensions due to their earlier deaths) and costs (for instance, increased health care costs) for the state budget. We search for a tax rate that would balance smoking-associated costs and benefits. Furthermore, we also compute the tax which would maximise net revenues from smoking to the government.

We realised these findings for the Czech Republic, 2009: we observed that there were 22,013 deaths attributable to smoking. About 2.281 billion cigarettes were sold illegally. The costs to the state budget caused by smoking were estimated to 30,547 million CZK, whereas the benefits to 77,915 million CZK. The consumer price own elasticity, controlled for income, was evaluated to be -0.51. Based on these findings and regarding the size of black market, the specific excise tax rate for a cigarette piece to attain the fair taxation should be -0.54 or 4.31 CZK. The specific excise tax rate for a cigarette piece to attain the maximum revenues for state budget is 1.88 CZK (the current specific excise tax rate per piece is 1.07 CZK).

This work is original in many ways. Among others, it adds the effect of second-hand smoke to the evaluation of mortality caused by smoking. Next, to the best of our knowledge, there has been no prior work evaluating *öfair* tax for cigarettes as we define it. Last but not least, the work critically describes the pitfalls of other similar studies previously conducted for the Czech Republic.