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Symposium: Impact of Tobacco Pricing and Taxation: Economic Analysis Using the ITC Project Data

Chair: Frank Chaloupka

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Discussant: Ken Warner

Tax Avoidance and Tax Evasion: Comparison of 15 ITC Project Countries

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Decades of research have produced overwhelming evidence that tobacco taxes can reduce tobacco use, save lives and increase government tax revenue. The aforementioned effectiveness of taxes at reducing tobacco use provides a strong incentive for tobacco users and manufacturers to devise ways to avoid or evade tobacco taxes. As such, tobacco tax avoidance and tax evasion can erode the public health and fiscal benefit of tobacco taxes.

Tax avoidance by tobacco users involves legal purchasing behaviour with objective to pay less or no taxes on tobacco products. Examples include cross-border shopping, tourist shopping, duty free shopping and internet purchases. Tobacco manufacturers can also engage in tax avoidance by changing their products with objective to reduce their tax liability. In many low- and middle-income countries the taxation of tobacco products may be linked to the characteristic of the product (e.g. length or price of cigarettes, filter vs. non-filter), characteristics of the package (e.g., size) and characteristics of the production facility (e.g., size, ownership structure). Unlike tax avoidance that involves legal activities aimed at reducing the amount of taxes paid, tax evasion involves illegal methods of avoiding tobacco taxes. Such illegal activities include illicit trade or production of genuine or counterfeit tobacco products.

Firstly, this study documents, using data from the International Tobacco Control Policy Evaluation Project (ITC) levels and trends in tobacco users' tax avoidance and tax evasion behaviour in a sample of low-, middle- and high-income countries. Secondly, it explores factors associated with tax avoidance and tax evasion.

The Impact of Smoker's Purchasing Behavior on Cigarette Prices and Consumption in China

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This research investigates how Chinese urban adult smokers' cigarette purchase behavior, price-reducing behavior in particular, influence the prices they pay for cigarettes and their cigarette consumption using the data from ITC China survey. The ITC China project is a longitudinal survey that tracks a cohort of approximate 6000 urban adults (about 75% are smokers) in six major cities in China. Three waves of ITC China surveys have been conducted since 2006, which provide detailed information on Chinese urban smokers' quitting behavior, consumption patterns, and other important aspects of smoking behavior. We found that 17% of the smokers reported having purchased cigarettes that are less expensive for economic reasons; 8% of the smokers have purchased cigarettes using the money that was reserved for household essentials like food; and low income and unemployed smokers are more likely to engage in those two purchase behaviors. The most frequent price-reducing behavior among the surveyed smokers is buying in carton, approximately 63% of those who reported buying cheaper cigarette reported buying in carton. Buying cigarettes from tobacco shops reduce the paid cigarette prices by about 1 Yuan per pack, the highest reduction among all price-reducing behaviors. Those who reported buying cheap cigarettes smoke more cigarettes than those who did not. And the former pay on average 0.3 Yuan less per pack than the latter group.

The Price Sensitivity of Cigarette and Bidi Consumption in Bangladesh

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Using a nationally representative household survey data on adult individuals from two waves of International Tobacco Control Survey in Bangladesh conducted in 2009 and 2010, we estimate the impact of a price change on cigarette and bidi consumption. We use a two-part model to estimate the total price elasticity of cigarettes and bidis as the sum of the elasticity of smoking prevalence and the elasticity of average daily consumption conditional on smoking participation. The results indicate that price is a significant factor in individuals' decision to smoke cigarettes and the average daily consumption of cigarettes and/or bidis. Controlling for individual and household specific characteristics, we estimate that the total price elasticity of tobacco demand is -0.66 for cigarettes and -0.22 for bidis. The elasticity of smoking prevalence accounts for two-thirds of the total price elasticity of cigarette demand in Bangladesh. As most of the reduction in tobacco consumption is likely to ensue from reduced smoking prevalence, the public health gain from tax increase is larger than in high-income countries. These results indicate that Bangladesh can significantly benefit from raising tobacco taxes through reduced smoking prevalence and intensity. Besides, given the inelastic demand for cigarette and bidi, a tax and price increase can lead to less than proportionate decrease in cigarette and bidi consumption yielding higher tobacco tax revenue to the government of Bangladesh.

The Effect of Cigarette Prices on Brand-Switching in China

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Several recent studies have found the price elasticity of demand for cigarettes in China to be near zero, far below estimates in other industrialized and developing countries. One possible explanation is that smokers buffer themselves from rising cigarette prices by switching to cheaper brands of cigarettes. This study investigates brand-switching behavior among Chinese consumers using longitudinal data drawn from the first three waves of the ITC China Survey. The survey contains information on primary and secondary brand choice for smokers from six cities in China. The analysis characterizes the degree to which Chinese smokers switch brands and price tiers and uses a discrete choice methodology to understand the correlates of brand choice. In addition to price, the analysis examines the influence on brand-switching of several other choice-specific and person-specific attributes, including socio-economic status and demographic characteristics. The results of the study point to the role that brand-switching can play in undermining tobacco pricing policy and the anticipated impact of future tobacco tax increases on cigarette consumption in China.