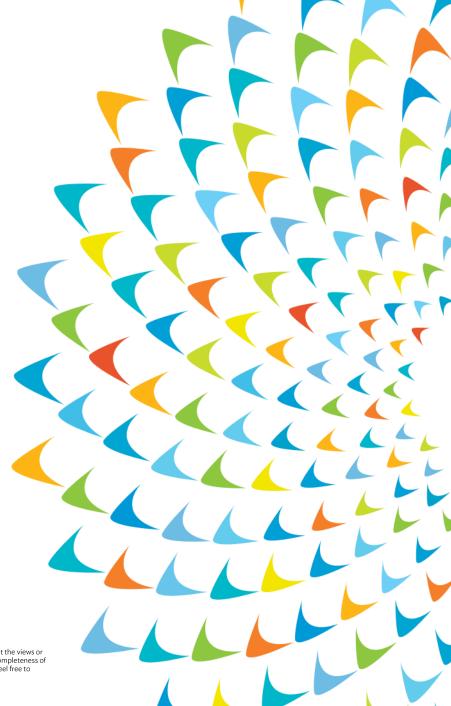


Excise Tax Policy and Cigarette Use in Five Highburden Asian Countries:

China, India, the Philippines, Thailand, and Vietnam



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- The reason for the country selection: high burden
 - There are about 1.3 billion adult (15+ years) tobacco users globally and 75% of them are smokers
 - About 41% of all smokers world-wide, or 401 million, live in China, India, the Philippines, Thailand, and Vietnam
 - The smoking prevalence ranges from 23% in China to 8% in India.
 - Although India's smoking prevalence is low, it has a high tobacco use prevalence at > 27% (since >21% use smokeless tobacco (SLT))
 - India is second only to China in the number of smokers.



- Cigarette Tax and Tax Burden
 - All five countries increased their excise and total cigarette taxes during 2010-2020
 - Largest increase in excise tax: The Philippines; lowest: Vietnam
 - Highest tax burden in 2020 was in Thailand, lowest in Vietnam

Excise and total tax per pack of the most sold brand of cigarettes, 2010-2020 (constant 2010 prices)

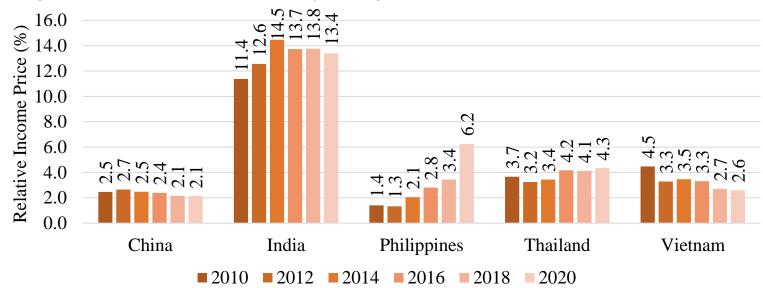
		(in Local cur	rency units)	(in \$PPP)		
Country	Tax	2010	2020	Percent Change	2010	2020
China	Excise	2.2	4.3	95.0%	0.67	1.04
	Total	3.7	6.5	75.2%	1.11	1.56
India	Excise	19.4	32.2	66.3%	1.33	1.47
	Total	31.6	59.8	89.1%	2.17	2.72
Philippines	Excise	2.5	33.9	1272.7%	0.14	1.74
	Total	4.0	42.0	958.8%	0.22	2.15
Thailand	Excise	33.9	49.6	46.5%	2.78	4.03
	Total	39.9	66.5	66.8%	3.27	5.40
Vietnam	Excise	3549.0	3865.9	8.9%	0.61	0.52
	Total	4449.9	4948.3	11.2%	0.77	0.66

Notes: The most sold brand (MSB) in Thailand has changed in the WHO reporting starting in 2018, but we kept the original brand (*Krongthip*) to allow comparison.





- The affordability of cigarettes:
 - It is measured by relative income price (RIP)
 - A measure that combines price and income
 - Defined as the percentage of per capita GDP necessary to purchase 100 packs of cigarettes
 - If RIP increases over time, cigarettes become less affordable
- Figure 1: Trends in affordability of cigarettes, 2010 2020







All five countries experienced a decline in smoking prevalence over the 10-year period from 2010 to 2020

Adult Smoking Prevalence and the Number of Smokers

			China	India*	Philippines	Thailand	Vietnam	Global
2010	Prevalence	Male	47.70	26.50	47.40	42.70	48.00	35.10
	(%)	Female	2.30	3.70	9.20	2.20	1.60	7.10
		Total	25.00	15.10	28.30	22.50	24.80	21.10
	# of Smokers (million)		272.71	129.30	17.54	12.40	16.41	1060.00
	Population (million)		1090.84	856.29	61.99	55.10	66.18	5023.70
2020	Prevalence (%)	Male	45.30	14.60	39.30	37.20	45.40	28.90
		Female	1.70	1.40	6.50	1.60	1.10	5.20
		Total	23.50	8.00	22.90	19.40	23.30	17.00
	# of Smokers (million)		271.84	82.54	17.74	11.64	17.41	991.00
	Population (million)		1156.75	1031.76	77.48	59.99	74.72	5829.41
2010-2020	(% Number of Smokers		-6.00	-47.00	-19.00	-14.00	-6.00	-19.40
(% Change)			-0.30	-36.20	1.10	-6.10	6.10	-6.50

^{*} Includes cigarettes and bidis; cigarette use prevalence is low - only 4% for India in 2016-17



Total and excise tax revenue from cigarettes in billion constant 2010 local currency units and total tax as percentage of GDP

Country	Tax	2010	2020	Growth	
China	excise	255.40	524.43	105.3%	
(RMB)	total	426.70	772.15	81.0%	
	% of GDP	0.91%	0.85%		
India	excise	95.56	128.50	34.5%	
(INR)	total	155.95	238.46	52.9%	
	% of GDP	0.19%	0.18%		
Philippines	excise	31.63	75.35	138.2%	
(PHP)	total	50.77	93.29	83.8%	
	% of GDP	0.45%	0.53%		
Thailand	excise	53.38	56.02	4.9%	
(THB)	total	62.80	75.02	19.5%	
	% of GDP	0.76%	0.73%		
Viet Nam	excise	8916.56	8216.88	-7.8%	
(VND)	total	11180.00	10517.60	-5.9%	
	% of GDP	0.41%	0.21%		

Vietnam is the only country in this study reporting shrinking real excise tax revenue during 2010 – 2020. This is consistent with the country having the lowest excise tax increase (9%) among the 5 countries, while its cigarette sales stay constant. Thailand recorded a dismal revenue increase due to tax avoidance by the Thai Tobacco Monopoly.





Tax simulation model

- We estimate size of one-time increase in excise tax to achieve either 5% or 10% decline in prevalence.
- Methods and Assumptions
 - The models use baseline data from 2020-2022 depending on the data availability in each country. Data captured:
 - Smoking prevalence
 - Size of adult population
 - Volume of cigarettes consumed in a country
 - Cigarette market is divided into three price segments (economy, mid-price and premium brands).
 - The average price of each segment, combined with tax rates and tax structure, allowed a decomposition of retail price into
 - Production costs
 - Tax levied
 - Industry Profit





Summary of the tax simulation

	China		India		Philippines		Thailand		Vietnam	
Prevalence reduction	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%
Reduction in smokers ('000)	15,122	31,436	1,448	3,578	487	1,095	481	1,001	800	1600
Lives saved ('000)	4,537	9,431	434	1,073	146	328	144	300	240	480
Excise tax increase (%)	1500%	3700%	60.0%	132.9%	54.0%	118.8%	45.8%	106.8%	38.3%	84.3%
Price increase (%)	20.3%	49.6%	25.0%	55.8%	29.2%	62.5%	25.0%	67.1%	22.5%	48.8%
Revenue Gained (LCU billion)	165	384	80	191	81	159	20	48	7228	14294





- Over the last 10 years, there has been limited progress in using tobacco tax to control smoking in China, India, Thailand, and Vietnam.
- The Philippines is the only country in the study that has successfully applied tax policy to reduce smoking prevalence, but even in the Philippines, this is not the time to stop, because cigarettes are still relatively cheap.
- Implementing tobacco tax policies aiming at a 10% reduction in cigarette use prevalence in all five countries would collectively reduce the number of smokers by 38.7 million, avert 11.6 million premature deaths and generate USD 67.5 billion in additional tax revenue.
- Significant increases in excise taxes that lead to price increases improve public health as well as the overall economies while generating tax revenue.



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