



PHILIPPINES

# Cigarette Tax and Price:

## Affordability and Impacts on Consumption and Revenue

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This policy paper is based on the research paper “Cigarette Affordability and the Impact of Tobacco Taxation on Health and Revenues” by Mr. Filomeno Sta. Ana III and Ms. Jo-Ann J. Latuja.

Written and edited for SITT by Ms. Mary Jocelyn Alampay and Dr. Ulysses Dorotheo  
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Southeast Asia Initiative on Tobacco Tax (SITT)

## FACT SHEET

### High smoking prevalence

The Philippines has among the highest smoking prevalence rates in the world, ranking ninth for adult males (47.7%) and sixteenth for adult females (9%). According to the 2009 Global Adult Tobacco Survey (GATS), around 17.3 million Filipinos aged 15 years old and over are smokers, equivalent to an overall adult smoking prevalence of 28.3%.

Moreover, the 2007 Global Youth Tobacco Survey (GYTS) shows that more than one in four (27.3%) Filipino students aged 13 to 15 years old are smokers. This is almost a 40% increase in the youth smoking prevalence within just four years.

### Large socio-economic losses from tobacco use

Recent estimates on economic costs, which include healthcare costs and productivity losses from death and disease related to four smoking-related diseases in 2003, ranged from USD 2.86 billion to USD 6.05 billion, or PhP 148.47 billion to PhP 314.38 billion (USD 1=PhP 52 in 2003), an amount equivalent to seven to fifteen times the tobacco tax revenue for that same year. The same study also reveals that at least 10 Filipinos die every hour from tobacco-related diseases.

### Flawed tobacco tax system victimizes the government

While tobacco excise tax revenues have increased in nominal terms over the past ten years, in real terms, they have actually decreased by 12% for the same period. In contrast, the total government tax revenues in real terms have increased by 36%, indicating further the diminishing contribution of the tobacco excise tax to total government revenue from 1999 to 2009 (Figure 2).

Three major weaknesses of the current Philippine tobacco tax system have rendered the tobacco tax ineffective in both reducing tobacco consumption and improving tax effort in the Philippines: the absence of indexation of the specific tax to inflation, a price classification freeze, and a multi-tiered tax system.

The price classification freeze keeps the price of old cigarette brands fixed according to each brand's net retail price (NRP) in 1996. This implies that even if the actual net retail price (ANRP) of a cigarette brand has increased and exceeded the NRP range corresponding to its original price class, this brand will still remain in its original price class and, worse, will be taxed at a rate lower than if it were taxed according to its ANRP. Over time, as market-determined ANRPs increase while NRPs, on which excise taxes are based, remain fixed by law, the share of the excise tax to gross retail price decreases (Figure 3).

The combination of the price classification freeze and the absence of a yearly adjustment to inflation have diminished the real value of tobacco taxes over time. Automatic inflation adjustment is necessary to ensure the robustness of revenues from the specific tax for tobacco.

Lastly, a multi-level tax structure provides different specific tax rates for each price classification, such that lower priced cigarettes are taxed low while higher priced cigarettes are taxed high, thus widening the price gap between higher and lower price classes of cigarettes and effectively inducing smokers to consume low-priced brands. In addition, the multi-level structure violates a cardinal principle of taxation, that of simplicity and ease of administration. A complex structure in conjunction with the price classification freeze leads to the misclassification of brands, resulting in huge foregone revenues.

### Increasing affordability of cigarettes

Over the past decade in the Philippines, cigarettes have become more affordable relative to other goods and services. Nominal prices of cigarettes in the Philippines have increased over time, but between 2000 and 2010, real prices for the most popular cigarette brands of each price class have actually decreased by 9%, at the minimum, and 18%, at the maximum.

### Positive fiscal and health impacts of increasing taxes

Among the various tobacco tax bills in the 15th Congress, House Bill (HB) 3465 and HB 3489 are the most comprehensive in terms of achieving both health and revenue goals. Increasing the excise tax by 215% will increase the average cigarette price per pack by 73%, equivalent to PhP8.79 (from PhP24.59 to PhP33.38), generate at least PhP26 billion additional excise tax revenues, reduce smoking prevalence to at least 27%, and save at least 310,000 lives.

### Policy recommendations

Appropriate tobacco tax and price laws and regulations should be swiftly enacted to reduce cigarette affordability and effectively curb the growth of tobacco use.

The government's tax efforts need to be increased and strengthened, including the reform of sin taxes. Essential features of the needed tobacco tax reforms are indexation of the specific tax to inflation, removal of the price classification freeze, and a shift from the multi-tiered to a unitary tax system. Further, the increase in tax rates will be unavoidably steep to correct weaknesses in the existing law and to address health objectives, and realize revenue goals.

Strong legislation is needed to support tax increase, such as House Bills (HB) 3465 and 3489, to ensure the country attains both health and revenue goals: reducing smoking prevalence to at least 27%, generating at least PhP26 billion additional excise tax revenues, and saving at least 310,000 lives.

## I. Introduction and background

The Philippines has among the highest smoking prevalence rates in the world, ranking ninth for adult males (47.7%) and sixteenth for adult females (9%). According to the 2009 Global Adult Tobacco Survey (GATS) around 17.3 million Filipinos aged 15 years old and over are smokers, equivalent to an overall adult smoking prevalence of 28.3%. Out of this smoking population, 14.6 million are males while 2.8 million are females.

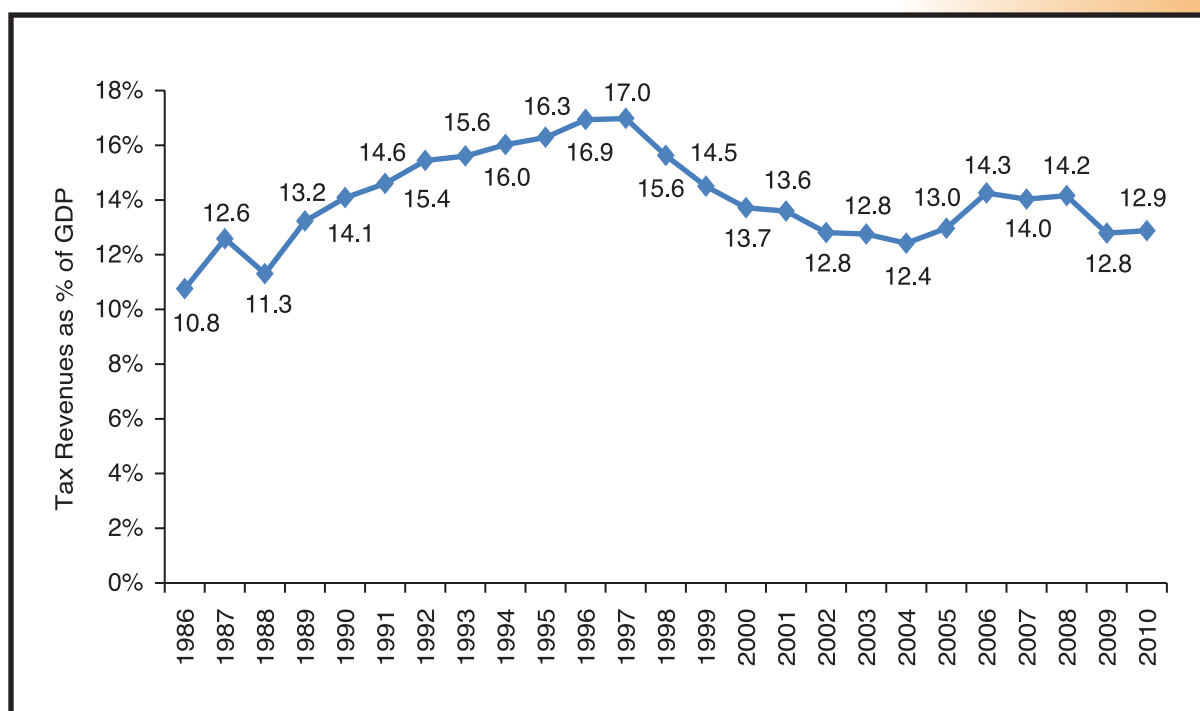
Moreover, cigarette smoking among the Filipino youth is on the rise. The 2007 Global Youth Tobacco Survey (GYTS) shows that more than one in four (27.3%) Filipino students smoke aged 13 to 15 years old are smokers. This is almost a 40% increase in the youth smoking prevalence within a span of four years.

In 1999, the World Health Organization (WHO) estimated that about 200,000 Filipino men and women would develop smoking-related diseases in their productive years of age. In 2002, the WHO estimated that healthcare for smoking-related diseases and productivity losses cost Filipino taxpayers around PhP 43 billion. A more recent estimate on economic costs, which include healthcare costs and productivity losses from death and disease related to four smoking-related diseases in 2003, ranged from USD 2.86 billion to USD 6.05 billion or PhP 148.47 billion to PhP 314.38 billion (USD 1=PhP 52 in 2003), an amount equivalent to seven to fifteen times the tobacco tax revenue for that same year. The same study also reveals that at least 10 Filipinos die every hour from tobacco-related diseases.

The heavy burden of tobacco consumption, the high smoking prevalence in the Philippines and the attendant costs to society should compel policy makers to implement regulations that will effectively curb tobacco use in the Philippines. Price and tax measures are undeniably effective in reducing tobacco consumption.

Tax effort—the amount of taxes collected as a proportion of gross domestic product (GDP)—has alarmingly dropped over the years to a dismal low of 12.8% in 2009. With the popular Noynoy Aquino assuming the presidency in the second half of 2010, tax effort inched up to 12.9% by year-end, hardly making a dent on revenue enhancement (Figure 1).

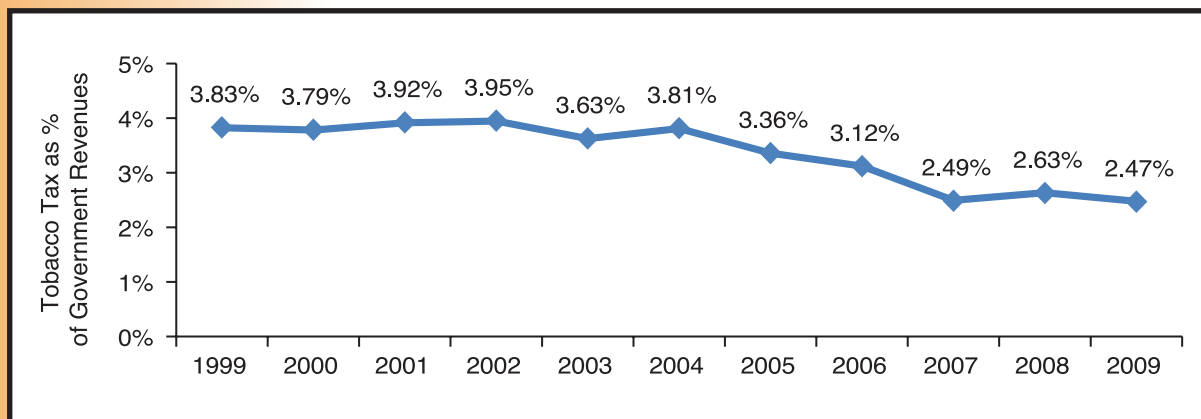
**Figure 1. Philippine Tax Effort, 1986-2010**



Source: Department of Finance

There has been a declining trend in the contribution of tobacco taxes to government revenues in the Philippines for the past ten years. While revenues from tobacco excise tax have increased in nominal terms, in real terms they have actually decreased by 12% for the same period. In contrast, the total government tax revenues in real terms have increased by 36%, indicating further the diminishing contribution of the tobacco excise tax to total government revenue from 1999 to 2009 (Figure 2).

**Figure 2. Excise Tax on Tobacco as Percentage of Total Government Revenues**



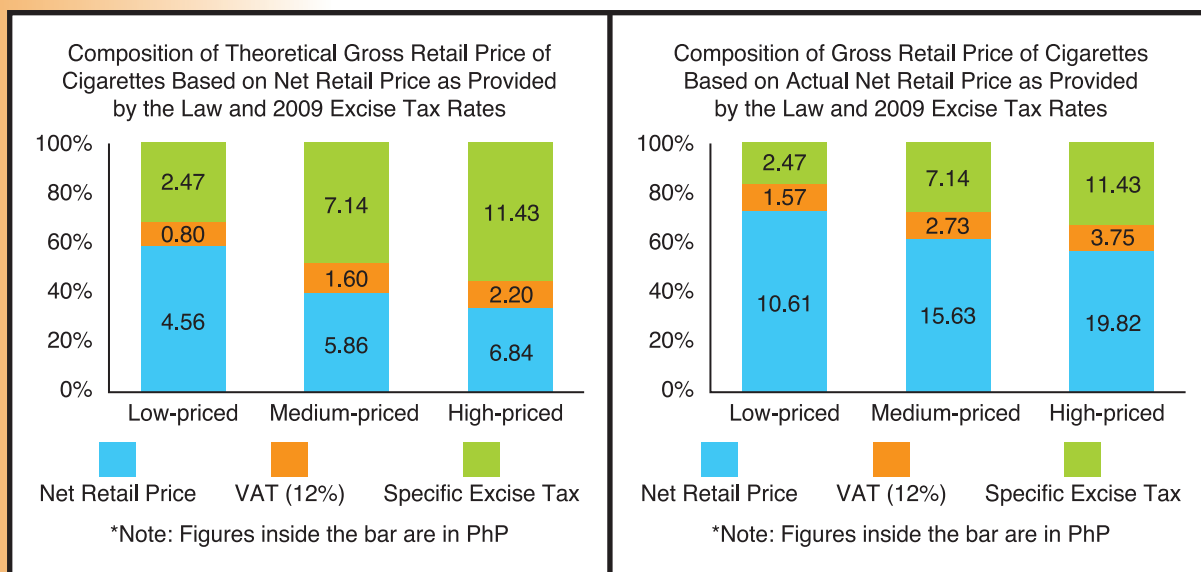
Source: Calculations by authors of original paper, Sta. Ana, F. and Latuja, J.

Three major weaknesses of the current Philippine tobacco tax system have rendered the tobacco tax ineffective in both reducing tobacco consumption and improving tax effort in the Philippines, namely, **the absence of indexation of the specific tax to inflation, the price classification freeze, and a multi-tiered tax system.**

The lack of inflation indexation of tobacco excise tax rates under Republic Act (RA) 9334 manifests itself in two ways. The first is the price classification freeze for old cigarette brands based on 1996 net retail prices. The second is the absence of a yearly upward adjustment on the tax rate to account for the inflation rate. The combination of the price classification freeze and the absence of a yearly adjustment to inflation have diminished the real value of tobacco taxes over time. Automatic inflation adjustment is necessary to ensure the robustness of revenues from the specific tax for tobacco.

Based on an amendment in RA 9334, the price classification freeze, keeps the price classification of old cigarette brands (which make up 90% of the market and include the most popular cigarette brands in the country) fixed according to each brand's net retail price (NRP) as of October 1, 1996. This implies that even as the actual net retail price (ANRP) of a cigarette brand has increased and has exceeded the NRP range corresponding to its original price class, this brand will still remain in its original price class and will be taxed at a rate lower than if it were taxed according to its ANRP. Over time, as market-determined ANRPs increase while NRPs, on which excise taxes are based, remain fixed by law, the share of the excise tax to gross retail price (GRP) decreases; hence, diminishing the effect of an increased excise tax on reducing cigarette consumption and, at the same time, depriving government of significant revenues (Figure 3).

**Figure 3. Effect of Price Classification Freeze on Excise Tax Burden**



Source: Calculations by authors of original paper, Sta. Ana, F. and Latuja, J.

Lastly, having a multi-level tax structure provides different specific tax rates for each price classification. With this system, lower priced cigarettes are taxed low while higher priced cigarettes are taxed high, thus widening the price gap between higher and lower price classes of cigarettes. The effect of this, as the Department of Finance (DOF) argues, is to induce consumers to shift from higher-priced brands to lower-priced brands.

## II. About this research

Towards contributing to the goal of improving tobacco control policies and increasing tax effort, this paper seeks to fortify the proposed legislative reforms to increase tobacco tax in the Philippines. Specifically, this paper aims to:

- A. Present a background on the burden of tobacco, smoking prevalence, cigarette price and tobacco tax revenue trends and cigarette taxation system in the Philippines.
- B. Determine the affordability of tobacco in the Philippines.
- C. Estimate the immediate fiscal and public health impact of proposed tobacco tax increases in the Philippines, particularly on excise tax revenue, tobacco industry revenue, cigarette consumption, smoking prevalence and smoking-related mortality.

In studying tobacco affordability, this research drew from both Blecher and van Walbeek's (2009) and Kan's (2007) cigarette affordability models. This first model uses the concept of the Relative Income Price (RIP), defined as "the percentage of per capita GDP needed to purchase 100 packs of cigarettes". Lower RIPs denote that cigarettes are becoming more affordable, while higher RIPs indicate the opposite. The second model calculates affordability as the percentage of daily minimum wage required to purchase a pack of cigarettes. This is similar to Kan's (2007) model, which uses the average daily income of the seven lowest paid out of fourteen occupations as the income to which cigarette prices are compared. Similar to the RIP, lower values of this measure imply increasing affordability of cigarettes.

The simulation model introduced by van Walbeek was used to study the fiscal and public health impact of tobacco taxes.

## III. Research results and analysis

### A. Cigarettes are becoming more affordable

Over the past decade in the Philippines, cigarettes have become more affordable relative to other goods and services. Nominal prices of cigarettes in the Philippines have increased over time, but between 2000 and 2010, real prices for the most popular cigarette brands of each price class have actually decreased by 9%, at the minimum, and 18%, at the maximum.

From 1999 to 2009, the Relative Income Price (RIP) decreased by 27% to 36%. Despite the regular excise tax increases, cigarette prices have not been catching up with the greater increases in per capita GDP income, resulting in cheaper and more affordable cigarettes. The cigarette affordability trend measured relative to the daily minimum wage all the more confirms that cigarettes have become more affordable, the price of a pack of cigarettes as a percentage of daily minimum wage having declined by 16% to 26% from 1999 to 2009. The downtrend implies that the daily minimum wage has increased more than the increase in the price of a pack of cigarettes.

### B. Impact of raising taxes

All projections for the DOF-endorsed bills currently pending in Congress show that increasing cigarette excise taxes will reduce consumption and boost government revenues.

Among the excise tax increase proposals in the Philippine Congress, HB 3465 and HB 3489 will meet both the short-term and long-term health objectives. These bills, when implemented, could reduce the smoking prevalence by at least 5% in the first year, which is two times greater than the short-term objective for the Philippines to reduce the smoking prevalence by at least 2.5% per year beginning 2011 (World Health Organization, 2009). The provisions of the bills that reform the current tax structure, such as the indexation of taxes to inflation based on the overall consumer price index (CPI), the removal of the price classification freeze, and the transition to a single-level tax structure, will address the long-term objective of further reducing tobacco consumption, catching up with countries with the best tobacco control policies, and reaching the level of excise tax burden recommended by the WHO, i.e. at least 70% of the gross retail price of cigarettes.

Table A shows that for HB 2687, HB 3465, and HB 3489, increasing the cigarette excise tax by 81% to 215% will increase the average cigarette retail price per pack by 28% to 73%, or from PhP24.59 to PhP33.38, respectively. Depending on the elasticity used, this increase will translate to decreases in cigarette consumption by at least 6% and as high as 39% and decreases in smoking prevalence by at least 2% and as high as 19%. The number of lives that may be saved if any of the DOF-endorsed bills is enacted ranges from 140,000 to as much as 1,130,000.

The same bills will also generate the greatest additional revenues for the government. HB 3465 and HB 3489 can help the government generate at least an additional PhP26 billion to PhP48 billion of excise tax revenues, in the first year alone.

Table A. Impact of the Excise Tax Increase Proposals

	2010 Levels	Future Values	
House Bill		HB 3465 & HB 3489	HB 2687
% Increase in Excise Tax		215%	81%
Average Retail Price Per Pack (PHP)	19.27	33.38	24.59
Average Total Tax Per Pack (PHP)	7.92	22.04	13.24
Tax as % of Retail Price	41.1%	66.0%	53.9%
% Increase in Retail Price		73.2%	27.6%
Reduction in Number of Smokers (thousands)			
Price Elasticities -0.235		870	390
-0.87		3,230	1,460
Number of Lives Saved (thousands)			
Price Elasticities -0.235		310	140
-0.87		1,130	510
Total Number of Smokers (thousands)	17,300		
Price Elasticities -0.235		16,430	16,910
-0.87		14,070	15,840
Smoking Prevalence	28.3%		
Price Elasticities -0.235		26.9%	27.7%
-0.87		23.0%	25.9%
% Change in Smoking Prevalence			
Price Elasticities -0.235		-5.0%	-2.3%
-0.87		-18.7%	-8.4%
Additional Excise Revenue (PHP million)			
Price Elasticities -0.235		48,196	19,252
-0.87		26,008	12,604
% Change in Excise Revenue			
Price Elasticities -0.235		177.7%	71.0%
-0.87		95.9%	46.5%
Total Cigarette Tax Revenue (PHP million)	36,683		
Price Elasticities -0.235		89,916	57,897
-0.87		63,429	49,598
% Change in Tax Revenue			
Price Elasticities -0.235		145.1%	57.8%
-0.87		72.9%	35.2%
% Change in Industry Revenue			
Price Elasticities -0.235		-11.9%	-5.5%
-0.87		-37.8%	-19.1%

## IV. Policy recommendations

Due to the addictiveness of tobacco and the inelasticity of demand for cigarettes, high increases in the excise tax rates not only reduce tobacco consumption but also generate additional revenues for the government.

Given the high smoking prevalence in the Philippines, its attendant heavy socio-economic burden, and the declining real prices of cigarettes, arising mainly from a flawed excise tax system, reforming the excise tax policy, including a tax increase, is the key to meeting government health objectives such as reducing smoking prevalence and saving lives and resources. **Appropriate tobacco tax and price laws and regulations should be swiftly enacted to reduce cigarette affordability and effectively curb the growth of tobacco use.**

Despite the government's laudable endeavor to improve tax administration, tax efforts have remained low, suggesting that tax policy, including the reform of sin taxes, is indispensable in meeting revenue objectives, prevent a fiscal crisis, and ensure sustainable growth for the country. **Essential features of the needed tobacco tax reforms are indexation of the specific tax to inflation, removal of the price classification freeze, and a shift from the multi-tiered to a unitary tax system.** Further, the increase in tax rates will be unavoidably steep to correct weaknesses in the existing law and to address health objectives, including the commitment of the Philippines government to meet WHO targets, comply with its obligations under the Framework Convention on Tobacco Control, and realize revenue goals.

**Strong tax reform legislation, such as House Bills (HB) 3465 and 3489, should be passed immediately.** Increasing the excise tax by 215% will increase the average cigarette price by 73%, reduce smoking prevalence to at least 27%, generate at least PHP26 billion additional excise tax revenues, and save at least 310,000 lives.

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*For more information, please contact: Mr. Ralph Emerson Degollacion, SITT Philippines Tax coordinator (Project Coordinator, Health Justice Philippines)  
Email: ralph.degollacion@gmail.com*

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**Mission:**  
**Working together  
to save lives  
by accelerating  
effective implementation  
of the FCTC  
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Thakolsuk Place, Room 2B, 115 Thoddamri Road,  
Dusit, Bangkok 10300, Thailand  
[www.seatca.org](http://www.seatca.org)