

# Evidence on excise tax systems and their challenges



# Introduction

- There is a wide range of excise systems that countries have adopted for tobacco products. These systems vary from the simplest to the most complex ones offering scope for relating outcomes in terms of price, consumption and revenue to the tax systems.
- This presentation deals with the empirical evidence on the types of tobacco excise systems and their implications for tax administration and expected outcomes.

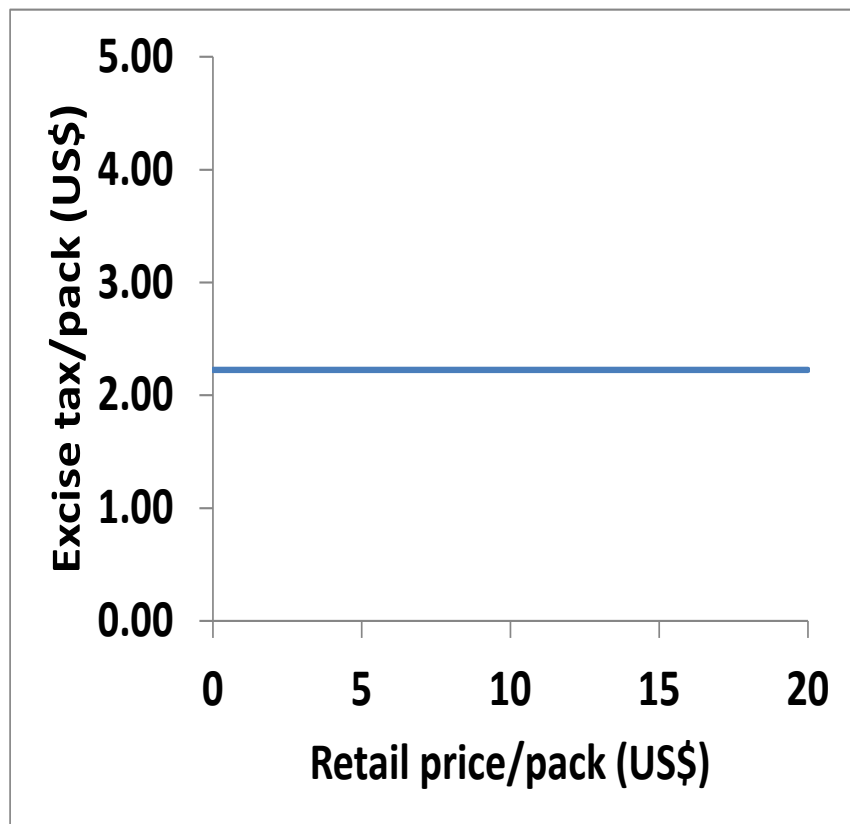


# Outline

- Country-level evidence on different excise systems
- Administrative requirements of different tax systems
- Undervaluation in different tax systems
- Impact on product quality under different tax systems
- Problems with complex excise systems
- Well-designed tax system
- Price gap between cigarette brands under different tax systems
- Tobacco excise tax policy goal



# Uniform specific excise



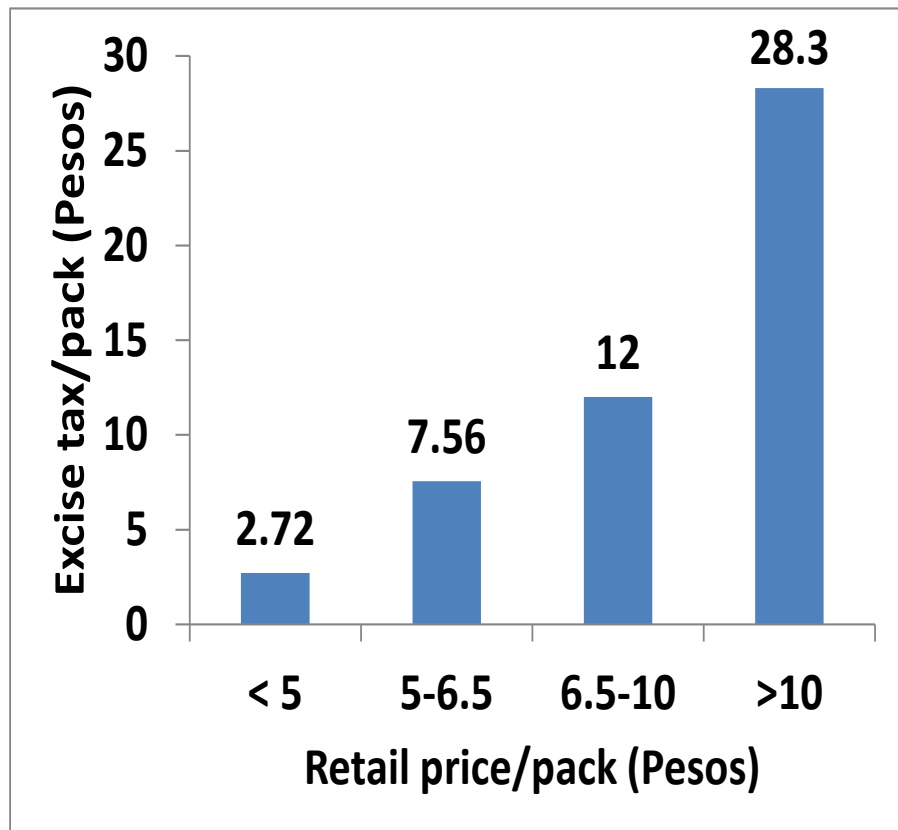
## USA, 2012

USA Federal cigarette tax rate: \$1.01 per pack.

USA state cigarette excise tax varies by states. In 2011, it ranged from \$0.17 per pack in Missouri to \$4.35 per pack in New York, with a weighted average state excise tax of \$1.215 per pack.



# Tiered specific excise



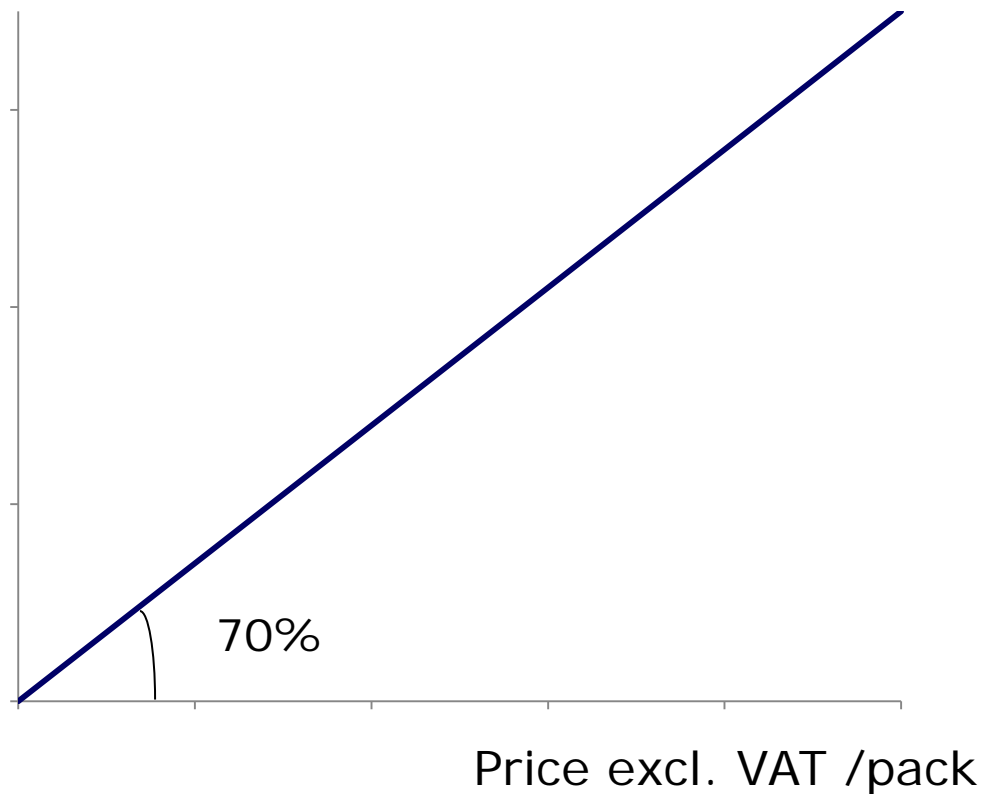
## Philippines, 2012

Net retail price per pack (Peso)	Tax per pack of 20 (Pesos)
< 5	2.72
5-6.5	7.56
6.5-10	12.00
>10	28.30



# Uniform ad valorem excise

Tax/pack



**Venezuela, 2012**

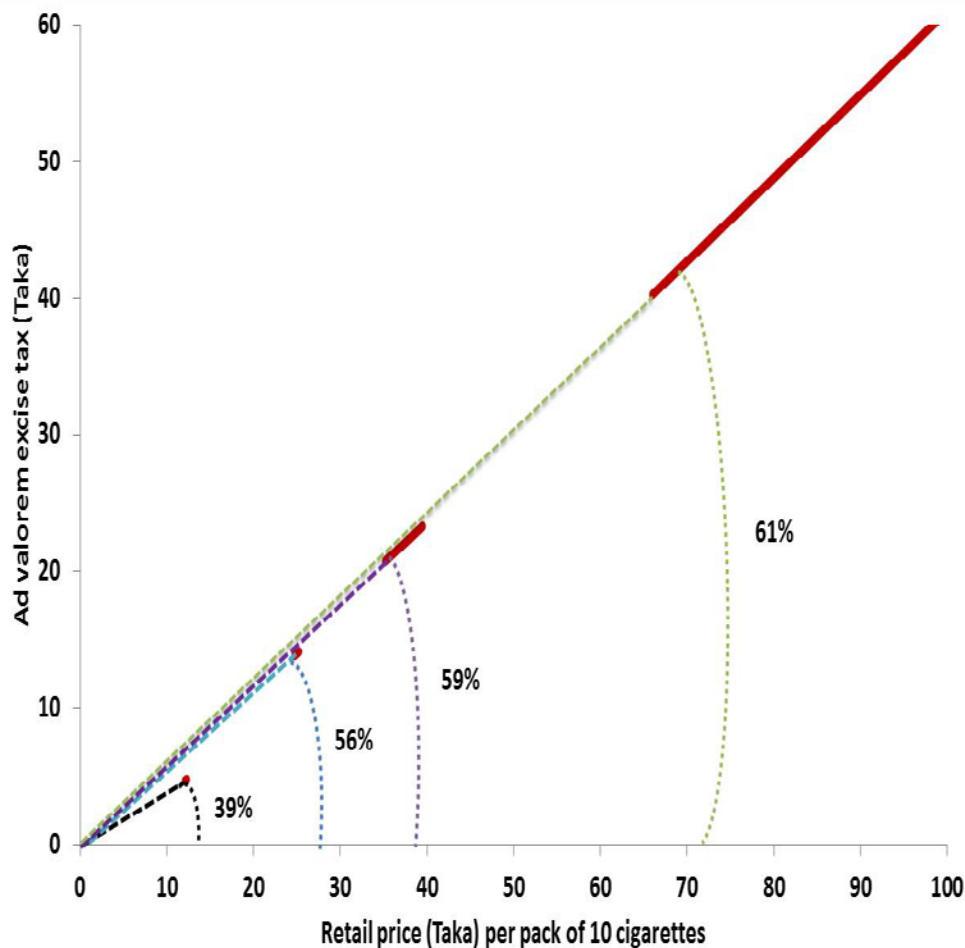
*Ad valorem tax:*

70% of retail price exclusive of VAT.



World Health  
Organization

# Tiered *ad valorem* excise



## Bangladesh, 2012

Retail price/pack (Taka)	Tax rate (% of retail price)
12.10 – 12.30	39%
24.75 – 25.25	56%
35.20 – 39.50	59%
66.00+	61%

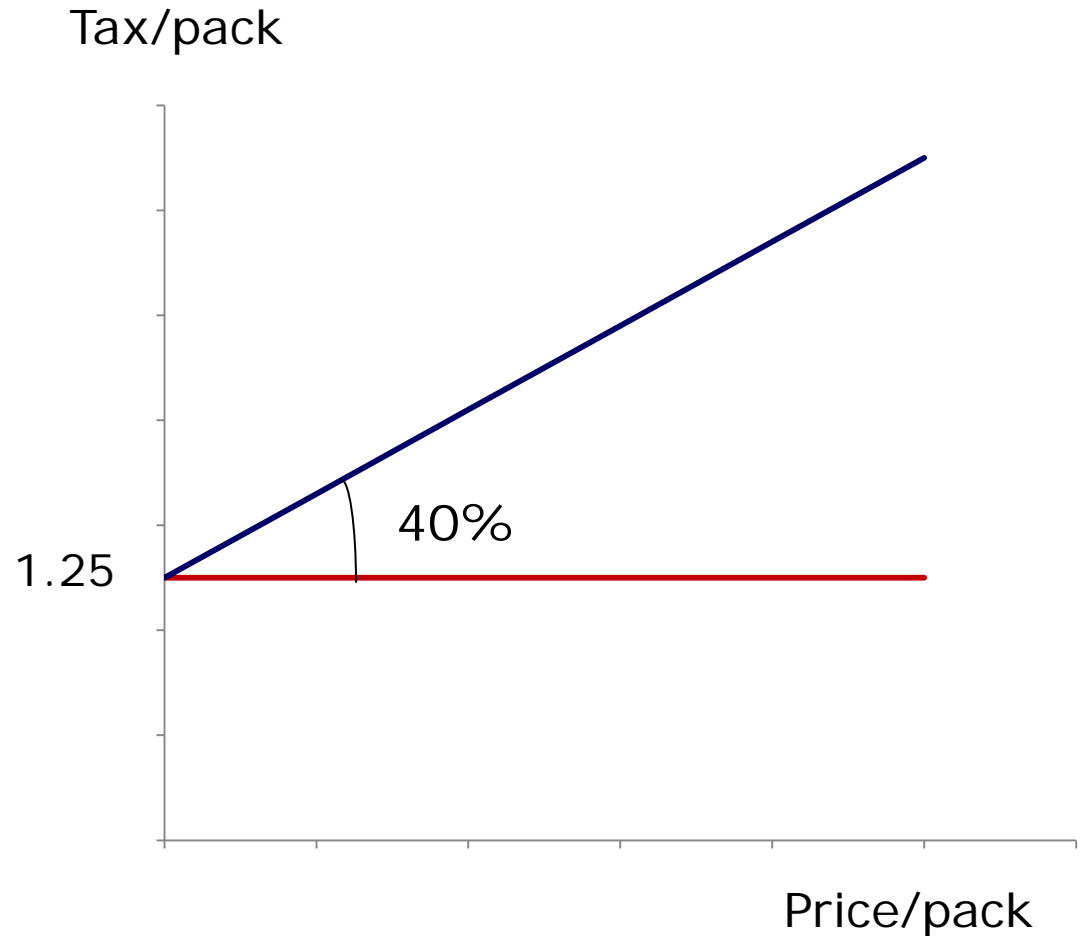


# Mixture of uniform specific and uniform *ad valorem* excise

## Egypt, 2010

Ad valorem: 40% of retail price

Specific: EP 1.25/pack

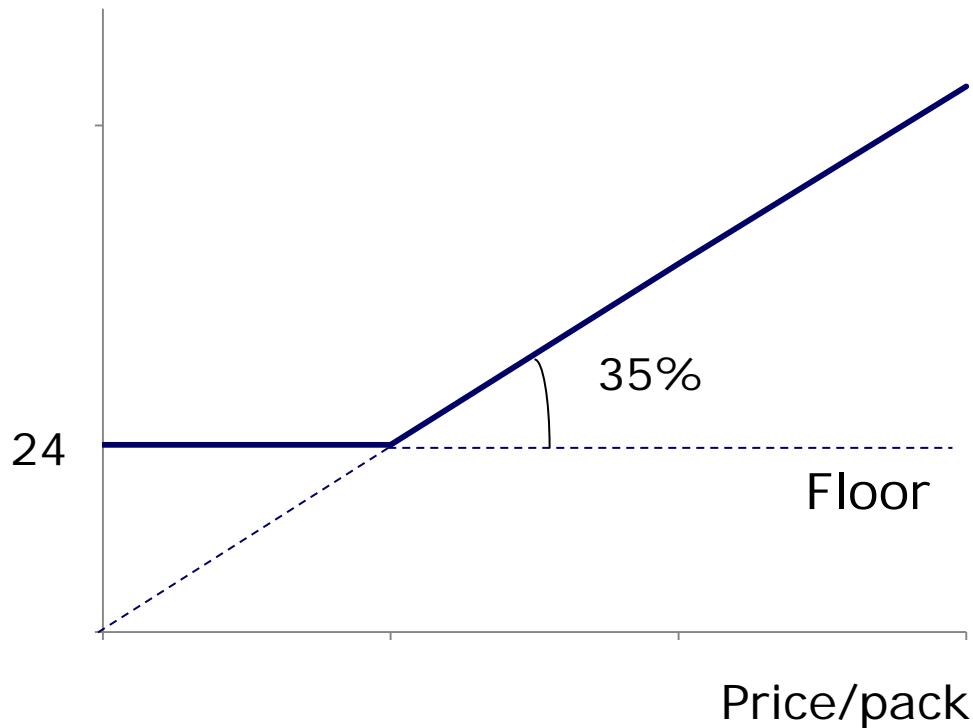


World Health  
Organization



# *Ad valorem* with a minimum specific floor

Tax/pack



## Kenya 2012

*Ad valorem* tax: 35% of retail price

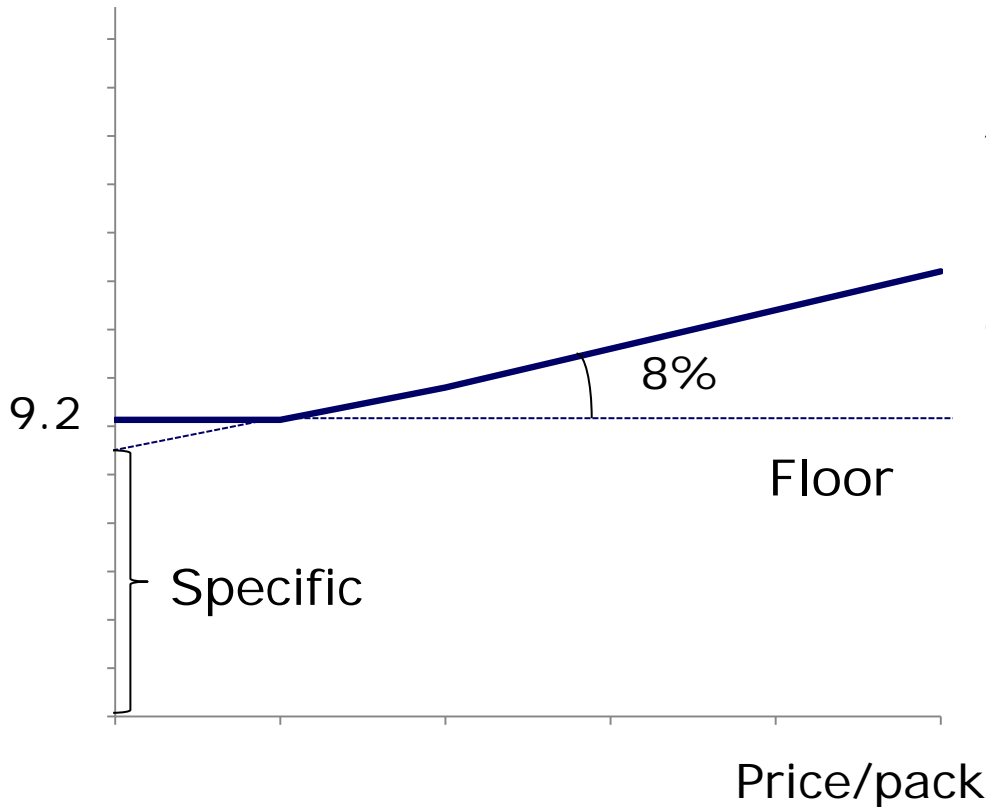
Specific floor: 24 Kenyan Shillings per pack of 20 cigarettes



World Health  
Organization

# Mixture of uniform *ad valorem* with uniform specific and a minimum specific floor

Tax/pack



Russian Federation 2012

*Ad valorem* tax: 8% of retail price

Specific tax: 7.8 Rubles per pack of 20 cigarettes

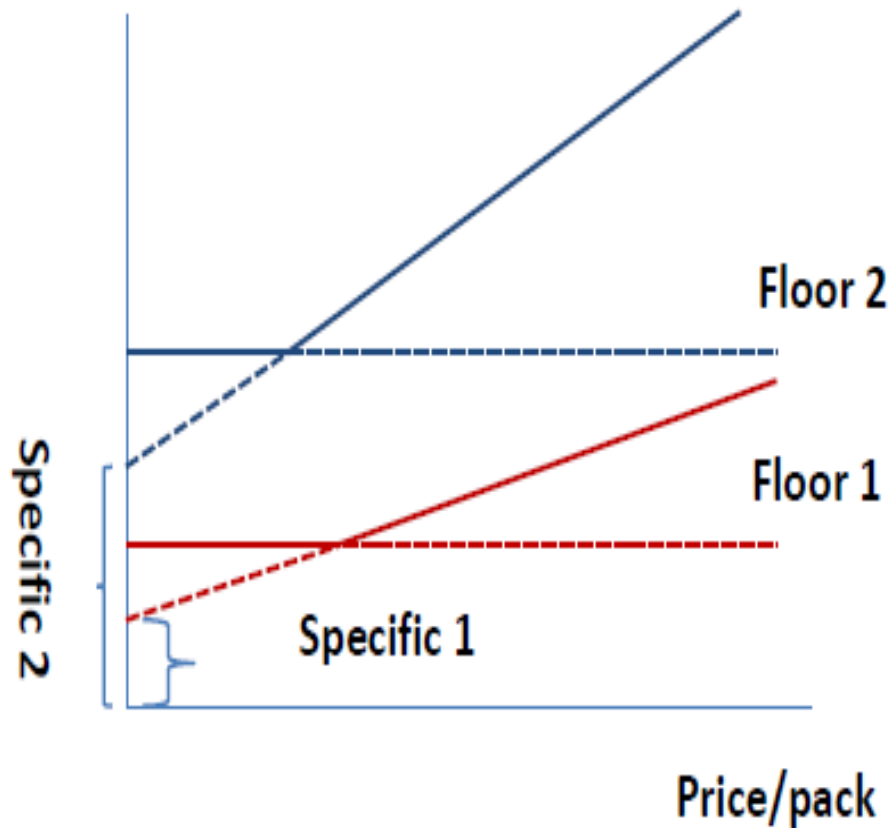
Specific floor: 9.2 Rubles per pack of 20 cigarettes



World Health  
Organization

# Mixture of tiered specific with tiered *ad valorem* and a minimum specific floor

Tax/pack



## Ukraine 2012

	Filter	Non-filter
Specific tax(UAH/pack)	2.21	0.99
<i>Ad valorem</i> tax (% of retail price)	25%	20%
Specific floor (UAH/pack)	3.69	1.41



World Health Organization

# Administrative requirements of different tax systems

Tax systems	Administrative requirements
Specific excise	Low as only the volume of the products has to be ascertained.
Ad valorem excise	Requires strong tax administration with technical capacity. Otherwise, the administrative burden can be high.
Ad valorem with specific floor	Requires strong tax administration with technical capacity. Otherwise, the administrative burden can be high as with a pure ad valorem regime.
Mixed specific and ad valorem excise	Requires strong tax administration with technical capacity. Otherwise, the administrative burden can be high as it requires assessing and collecting both ad valorem and specific excises.
Mixed specific and ad valorem excise with a minimum specific tax floor	Requires strong tax administration with technical capacity. Otherwise, the administrative burden can be high as it requires assessing and collecting both ad valorem and specific excises, as well as minimum floor compliance.



# Undervaluation in different tax systems

Tax systems	Undervaluation
Specific excise	Not an issue.
Ad valorem excise	Susceptible to undervaluation, but this can be overcome by establishing a minimum <b>retail sale price</b> .
Ad valorem with specific floor	This provides an easy tool to prevent undervaluation of low-priced brands subject to the specific floor.
Mixed specific and ad valorem excise	The ad valorem part of the excise collection may be susceptible to undervaluation depending on the choice of tax base.
Mixed specific and ad valorem excise with a minimum specific tax floor	The specific floor prevents possible ad valorem tax base undervaluation of low-priced brands.



# Impact on product quality under different tax systems

Tax systems	Undervaluation
Specific excise	Incentive for the industry to upgrade their product. Upgrading effect (leading to higher prices) tends to reduce the relative tax on higher-priced brands (because the tax is the same regardless of the price level).
Ad valorem excise	Multiplier effect provides a disincentive to costly “quality” improvement.
Ad valorem with specific floor	No incentive for the industry to upgrade their product.
Mixed specific and ad valorem excise	No incentive for the industry to upgrade their product.
Mixed specific and ad valorem excise with a minimum specific tax floor	Eliminates incentives to upgrade products while at the same time provides such an incentive for lower-prices brands.



# Complex excise systems with differential rates

- Reasons for adopting such tax structure:
  - protect domestic producers,
  - for electoral and political purposes,
  - concerns for regressivity of tobacco-product taxes (poor pay more of the tax as a proportion of their income),
  - concerns for employment (low-cost manufacturers may operate more labor intensive production).
- Most tiered tax structures apply higher taxes to higher priced products, this leads to a number of problems:
  - raises price gaps between brands increasing opportunities to switch down to cheaper brands in response to tax and price increases.
  - more challenging to administer given the need to determine the relevant tax base for each of the different tiers.
  - creates opportunities for manufacturers to avoid a tax or tax increase by repositioning brands from higher to lower tax tiers.



# Problems with complex excise systems

**Complex excise system induces manufacturers' tax avoidance practices, such as, brand repositioning, leading to loss of government revenue**

## Case of Egypt

Egypt had tiered specific excise system based on 8 price tiers. In 2009, one of the premium brands in Egypt reduced its price and qualified for lower tier tax liability in order to compete with its rival's leading brand at that tax liability. The government worried that this would encourage shifting other brands' liability to lower tiers. In consequence, in 2010, the government eliminated tiered system by imposing a uniform specific and ad valorem excise based on retail prices for all brands of cigarettes.



World Health  
Organization



# Problems with complex excise systems

## Case of Pakistan

Pakistan has three-tiered excise tax system with specific excise at the lowest price tier, mix of specific and ad valorem excise in the middle price tier and ad valorem excise in the upper price tier. Most of the consumed cigarettes are mid-priced brands dominated by Marven Gold and Gold Flake. These two brands are positioned at the lower end of the middle tier such that the ad valorem tax component is minimal and the total tax liability of these brands is almost equivalent to the specific tax which is meant for the lowest price tier. It is remarkable that the tax revenue collected from these two brands contributes to 76% of the total cigarette excise tax. The premium brands' contribution is only 10.35% and there is no brand in the low price tier.



# Problems with complex excise systems

## Case of Senegal

According to WAEMU rules the excise amount may not exceed 45% of the producer price. The excise tax was set at 40% of the producer price or 8 SFr/piece for the premium brands and at 20% of the producer price or 3 SFr/piece for the economy brands.

In November 2011, PMI, the leading premium-brand company, used brand repositioning by reducing the producer price and qualified for the lower tax tier, resulting in loss of revenue to the government.

Two leading brands (98% of the market share) are exercising minimum specific floor tax, not the ad valorem rate.

In January 2013, the ad valorem excise rates for premium and economy brands were raised to 45% and 40% respectively and a minimum base for both premium and economy brands tax rates were proposed. But the proposed floors are not yet being practised.



# Problems with complex excise systems

## Case of India

- In 2009, India had three-tiered specific excise tax system based on length of cigarettes:
  - 1959 Rs/1000 pieces of premium brands (80 mm long)
  - 1473 Rs/1000 pieces of mid-price brands (74 mm long)
  - 969 Rs/1000 pieces of low-price brands (65 mm long)
- One brand was repositioned in the middle tier and one brand in the lowest tier by producing short and long length of the same brand. These two brands constituted 17% and 24% of the market share respectively and accounted for 24% loss of revenue to the government.



# Problems with complex excise systems

## Case of Indonesia

The tobacco tax system in Indonesia consists of tiered specific excise per stick, that varies according to type of tobacco product (kretek, white cigarette etc.), mode of production (machine vs. hand-made), level of production and retail price set by the government for each brand.

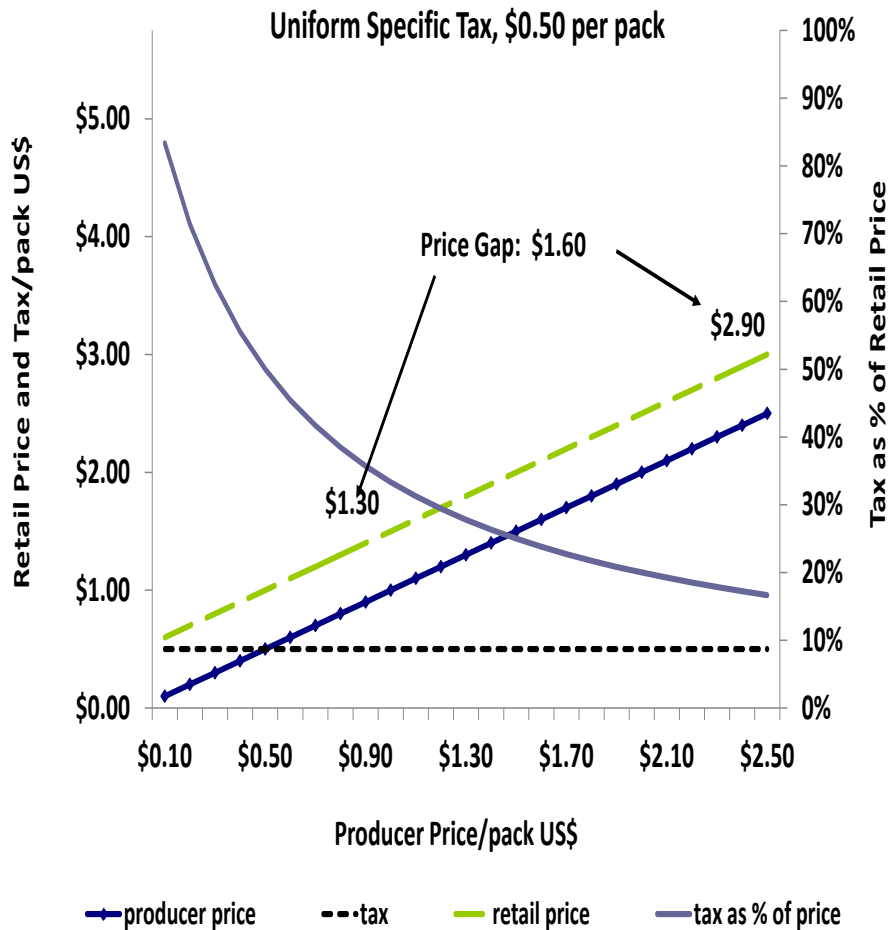
The differential tax system by level of production favors companies with small production systems resulting in mushroom growth of 4,500 small to medium scale companies producing white and kretek cigarettes. In order to eliminate such tax avoidance, the Indonesian government passed legislation banning the establishment of new small to mid-scale companies.

In 2011, there were 6 tiers for machine-made kreteks, 7 tiers for hand-made kreteks, and 6 tiers for white cigarettes. The multiplicity of tiers induced brand repositioning for each type of product. Every year the tiers are being merged to simplify the tax system. As of 2013, there are 4 tiers for machine-made kreteks, 6 tiers for hand-made kreteks, and 3 tiers for white cigarettes.



World Health  
Organization

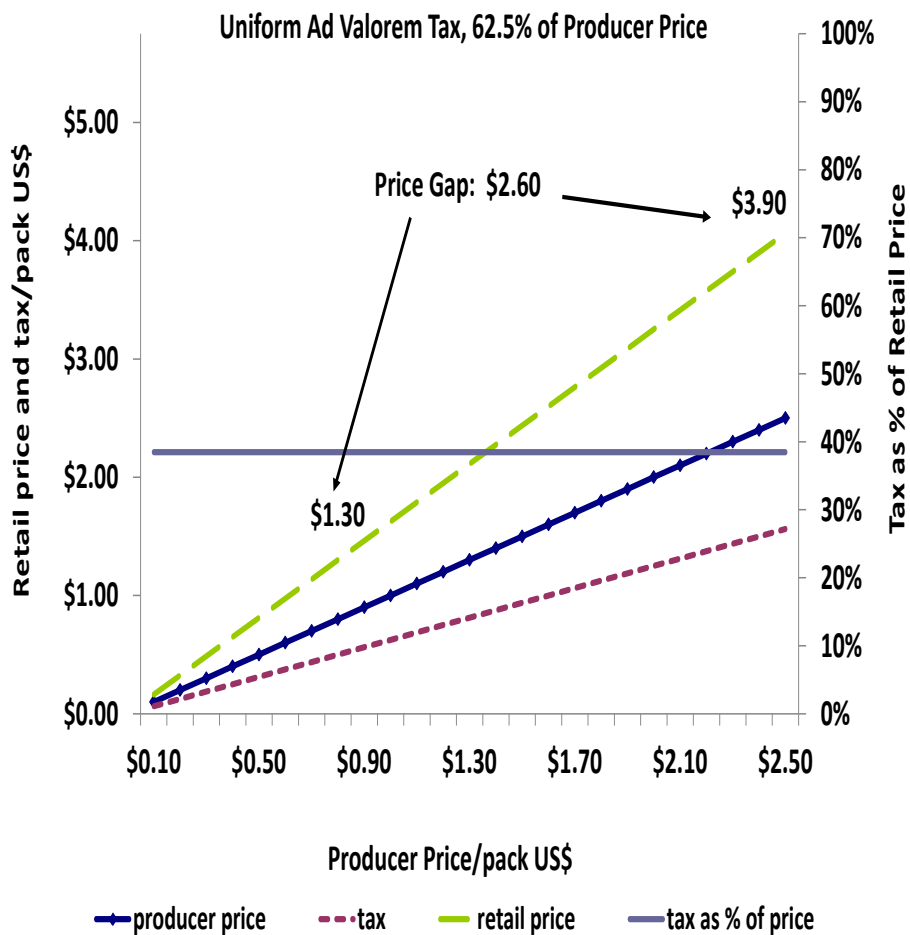
# Well-designed tax system



- A well-designed tax system is a simple and unified excise tax system with all tobacco products taxed at the same level, such as a uniform specific excise tax.
- Uniform specific tax reduces price gaps between brands, minimizing brand repositioning behavior of manufacturers.



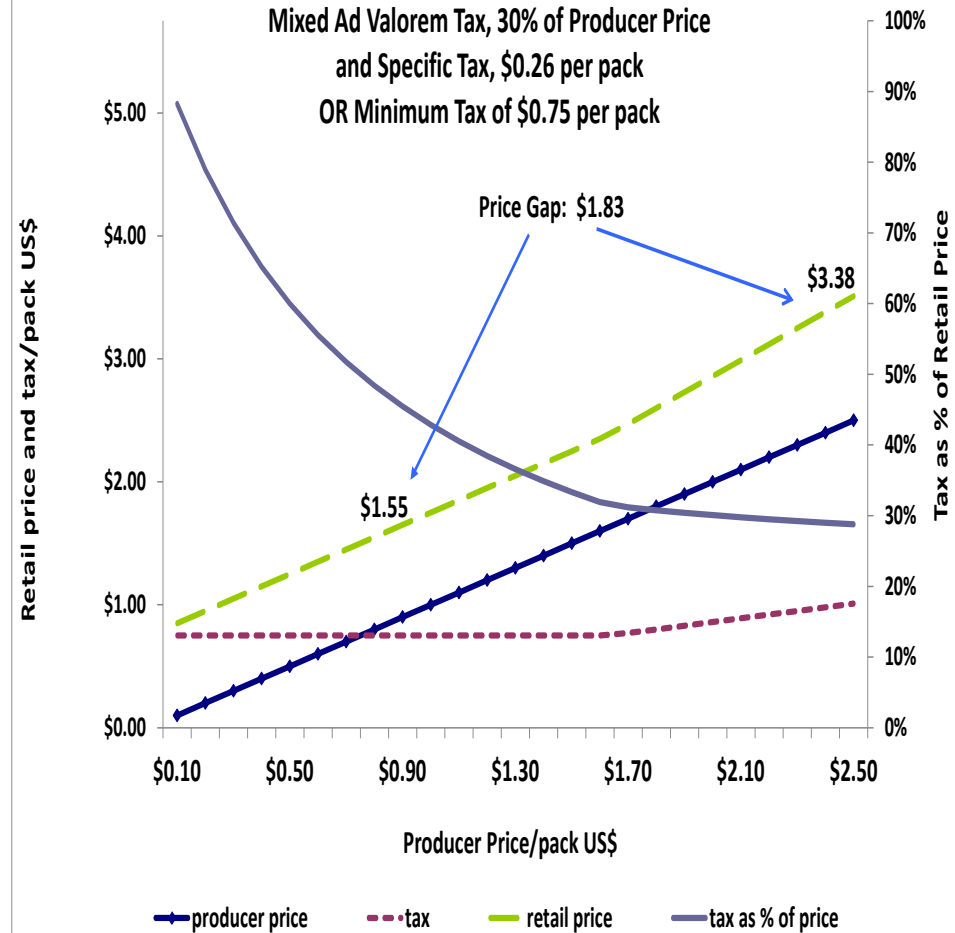
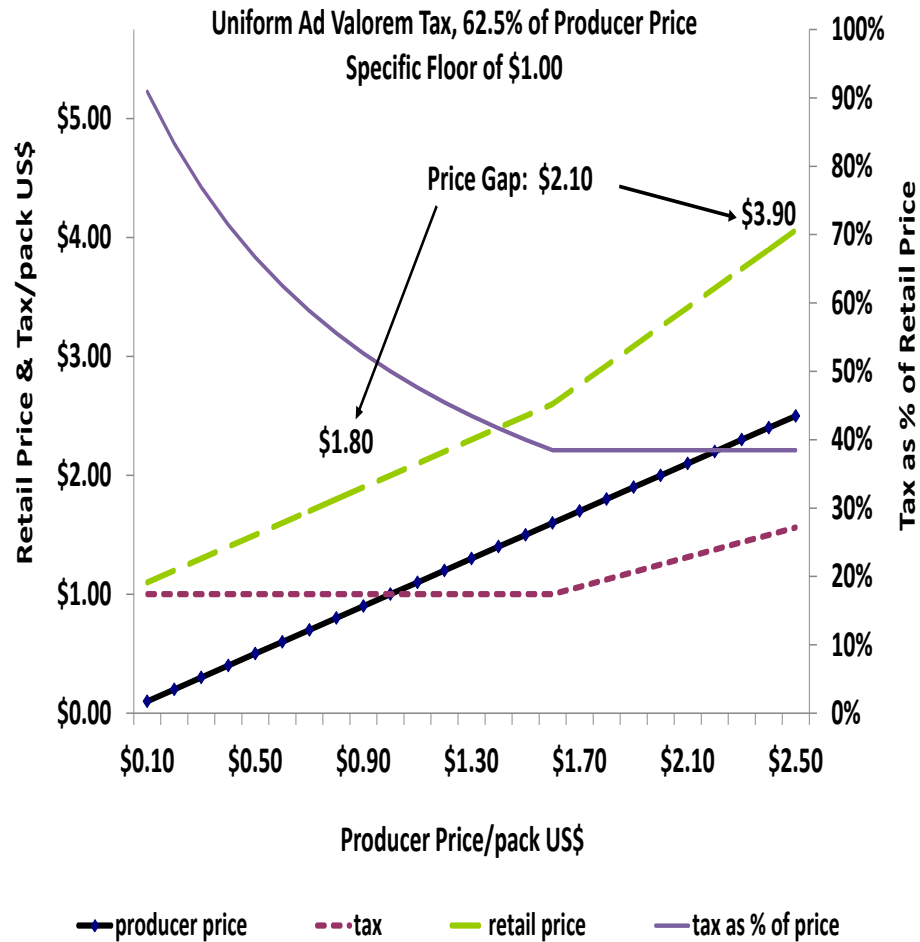
# Uniform ad valorem tax and price gap between cigarette brands



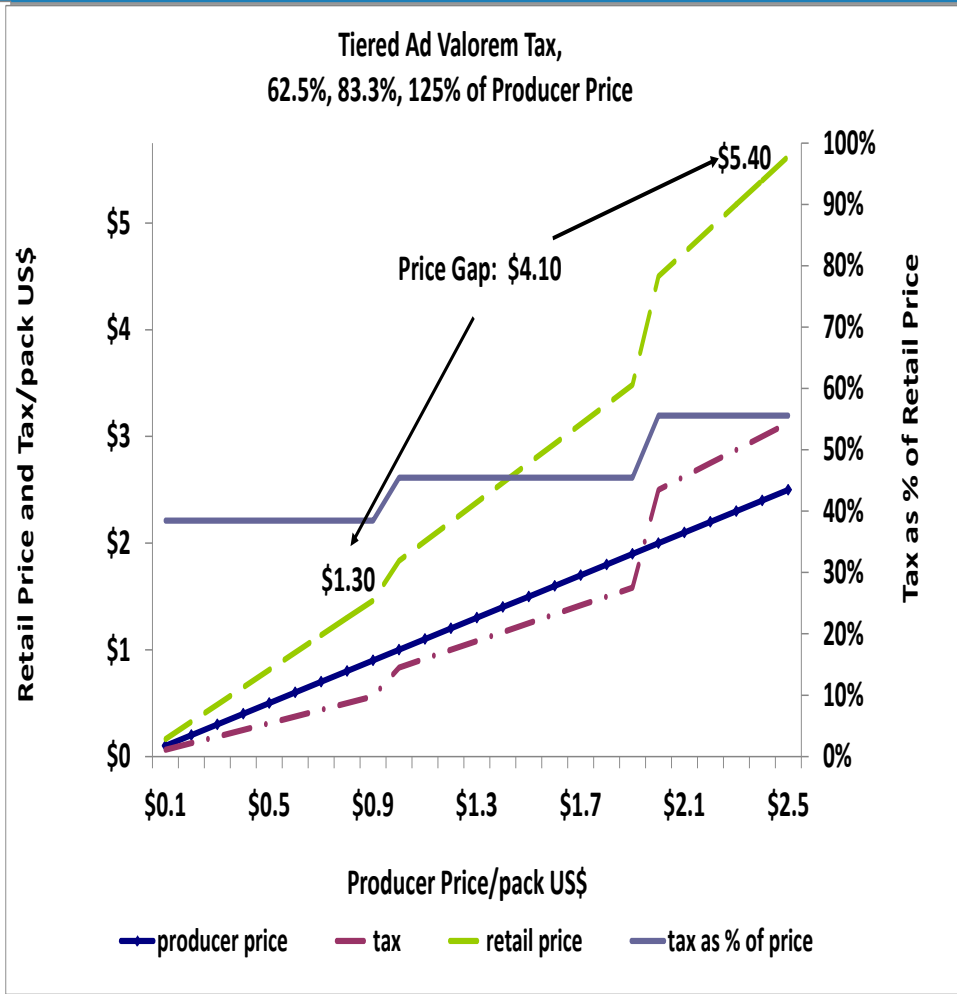
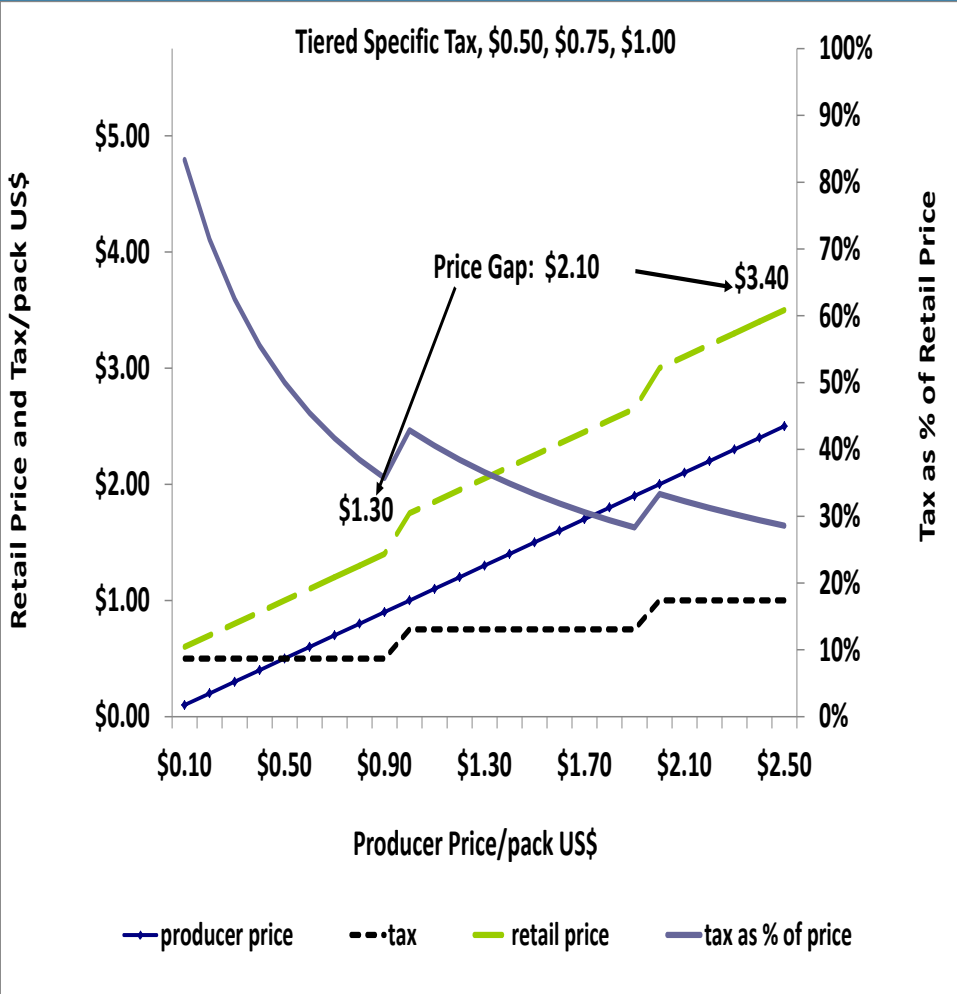
- Under uniform ad valorem tax system, the tax liability is higher for higher-priced brands leading to even larger price differential between lower-priced and higher-priced brands compared to uniform specific excise system.



# Tax system with a minimum specific excise floor and price gap between brands



# Differential excise systems and price gap between cigarette brands



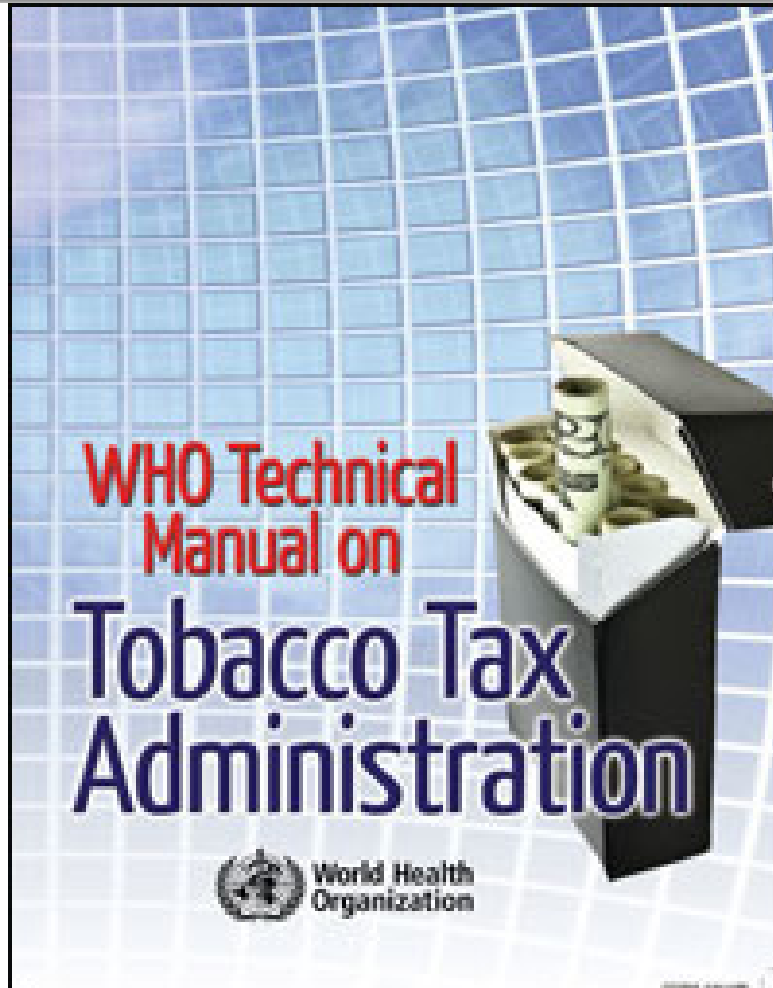


# Tobacco excise policy goal

- In the short term, given economic and political realities, governments have at least two options before reaching a uniform excise system.
  - (1) Reduce tiers gradually and have just one rate in the mid- to long-term, and
  - (2) If there is a wide gap between price bands, adopt a minimum specific floor similar to the European Union system with a mixture of both excises, or with just an ad valorem tax, similar to the Kenyan system, in the short term to reduce price gaps.
- Finally, adopt a uniform specific excise in the long term.



# Theoretical and empirical overview of tobacco tax levels and structures



- For more detailed discussion on the tobacco tax systems and administration:

[http://www.who.int/tobacco/publications/tax\\_administration/en/#](http://www.who.int/tobacco/publications/tax_administration/en/#)



World Health  
Organization

# Summary

- The experiences with the variety of and changes to taxes and tax structures applied to tobacco products around the world provide an extensive evidence-base for identifying best practices in tobacco taxation.
- These best practices include, among others, adoption of a relatively simple tax system that applies equivalent taxes to all tobacco products. This type of tax system will have the greatest public health impact, while at the same time producing a reliable stream of tax revenues.

