

# Raising Taxes on Tobacco

## Global Best Practices

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World Health  
Organization

# Best Practices for taxing tobacco products

- **Tobacco taxation is the most cost-effective yet least implemented tobacco control (MPOWER) measure**
  - Only 10% of the world's population was covered by the WHO-recommended total tax share of 75% in 2016
  - There has been little change since 2014
- **In 2016, the global weighted average price for a pack of cigarettes was PPP\$ 4.87**
  - the average total tax share at 56.2% of the retail price
- **Between 2008-2016, cigarettes became less affordable in only 80 out of 194 Member States**
  - 23 countries saw cigarettes become more affordable

# Best Practices for taxing tobacco products

## 1. Rely on excises

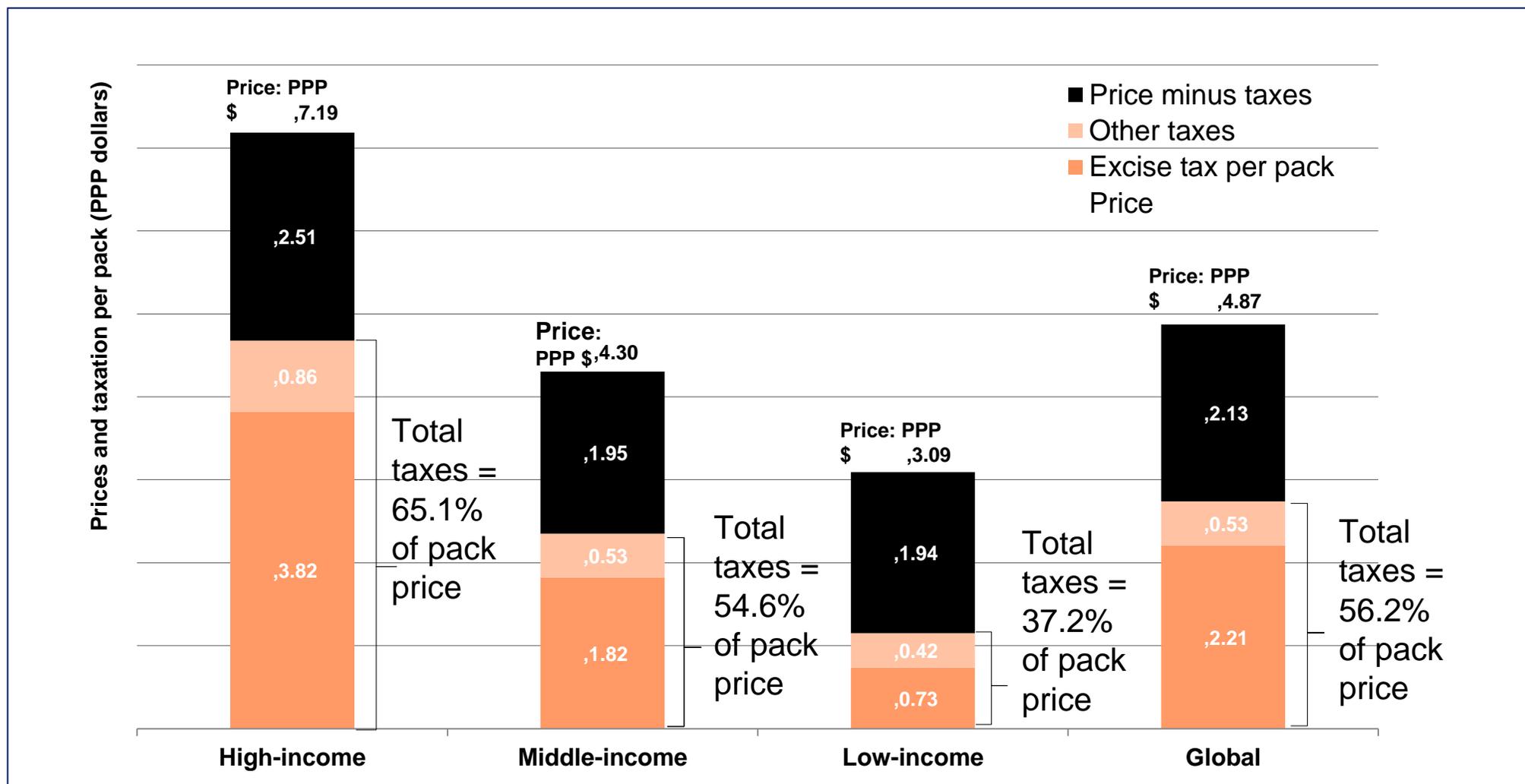
- **Excise is the most effective type of tax on tobacco tax policy**
  - **We want to increase taxes and prices on cigarettes more than on other goods**
    - **Sales and VAT taxes all goods**
    - **Import duties tax all imports**
  - **This recommendation is consistent with the Guidelines for the implementation of the Article 6 of the WHO FCTC on price and tax policies**

# Best Practices for taxing tobacco products

## 2. Set high excise rates

- WHO recommends aiming for total tax levels higher than 75% of retail price
- Excise tax policy should aim to increase tobacco prices more than inflation and income growth
  - *To decrease affordability*
- Excise tax policy should aim to increase prices enough to reduce smoking prevalence and tobacco consumption

# Weighted average retail prices and taxation (excise and total) of most sold brand of cigarettes, by income group, 2016



Note: Averages are weighted by WHO estimates of number of current cigarette smokers ages 15+ in each country in 2016.

Prices are expressed in Purchasing Power Parity (PPP) adjusted dollars or international dollars to account for differences in the purchasing power across countries.

Based on 53 high-income, 100 middle-income and 27 low-income countries with data on prices of most sold brand, excise and other taxes, and PPP conversion factors.

# What type of excise tax?

## Specific tax

Based on quantity  
e.g. €1.50 per pack or  
€90 per 1000 sticks

## Ad valorem tax

Based on value  
e.g. 42% of  
import, production or  
retail prices

## Mixed

Based on both quantity  
and value  
e.g. €1.50 per pack  
+ 42 % of  
the retail price

# Single Specific Taxes

- A specific tax increase brings up the price of the cheapest cigarettes relatively more
  - So reduces the likelihood of substitution to cheaper brands
- Lower administration costs
- But, regular adjustments are needed to keep cigarettes from becoming less expensive compared to other goods (more affordable)
  - The tax should increase faster than nominal incomes (inflation + real income growth rate)

# Ad Valorem Taxes

- **Taxes increase proportionally**
  - Revenues increase along with prices/inflation, but
  - Greater potential for “switching down” to cheaper brands
- **More complex to administer**
  - Based on value, so increased potential for fraud with falsified invoices
  - Choice of base, import, production or retail price, has a large impact on effective tax levels
- **If combined with a minimum tax floor, can avoid underpricing**

# Mixed Systems

- **Achieves some of the benefits of both excises**
  - But also some of the problems
  - Limits downward substitution, but
  - Potential for undervaluation on ad valorem component
  - Regular adjustment needed to adjust specific component for inflation
- **More complex administratively**

# Best Practices for taxing tobacco products

## 3. Rely on specific excises (1)

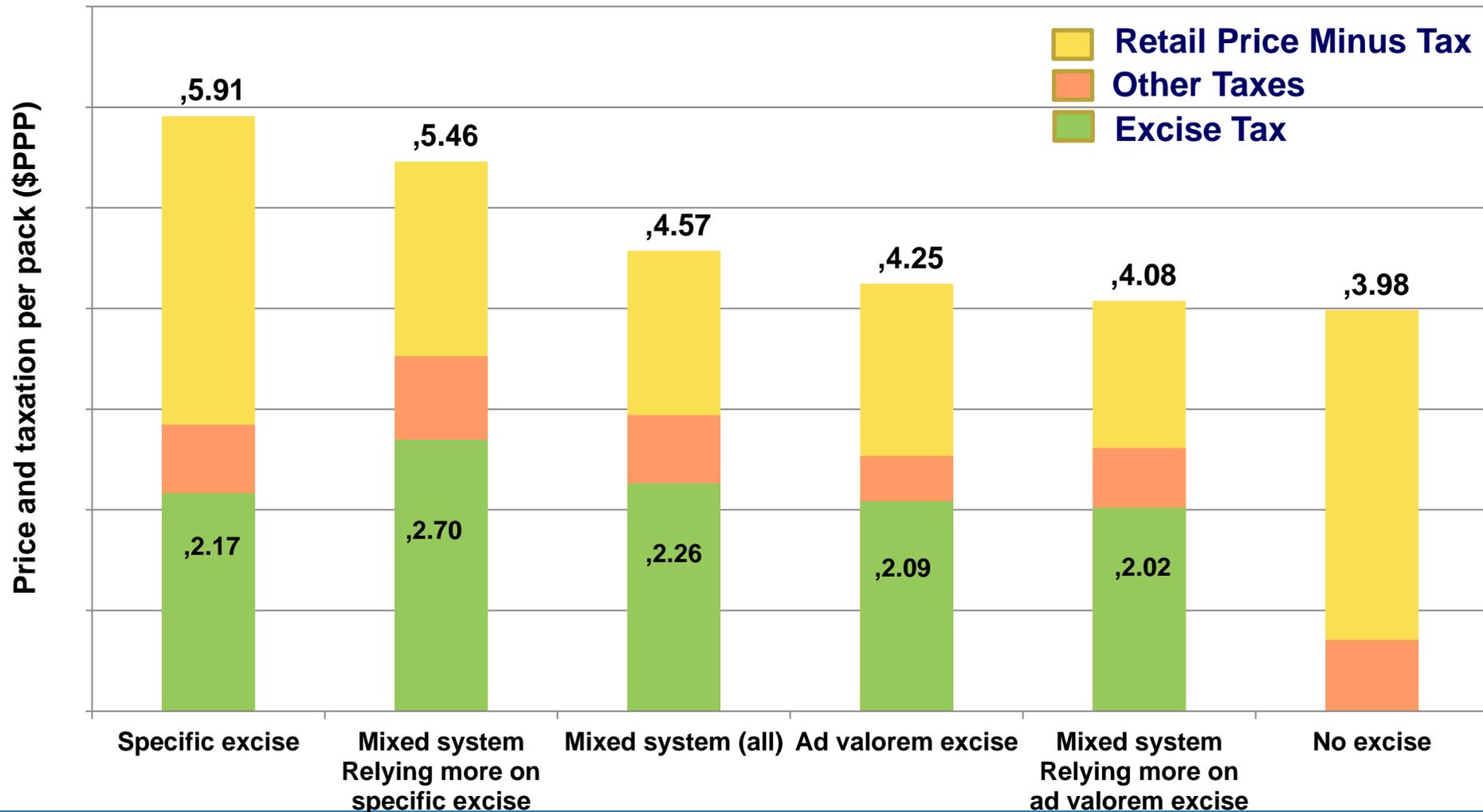
- **Greater reliance on specific excise taxes is important to achieve public health goals**
  - A unit of tobacco product is equally harmful despite its price
- **Producers of cigarettes respond differently to specific and ad valorem taxes**
  - Both theory and practice show that, in markets where firms have some degree of market power
    - **Specific excises lead to a relatively higher consumer price** than ad valorem taxation, for a given level of tax (WHO Technical Manual on Tobacco Tax Administration, 2010)

# Best Practices for taxing tobacco products

## 3. Rely on specific excises (2)

- It is easier to measure quantity than value
- Ad valorem taxes are more complex to implement and may weaken tax policy impact
  - Producers and importers can understate the wholesale value of the product

# Cigarette Taxes and Prices Tend to be Higher in Countries That Rely More On Specific Excise Taxes

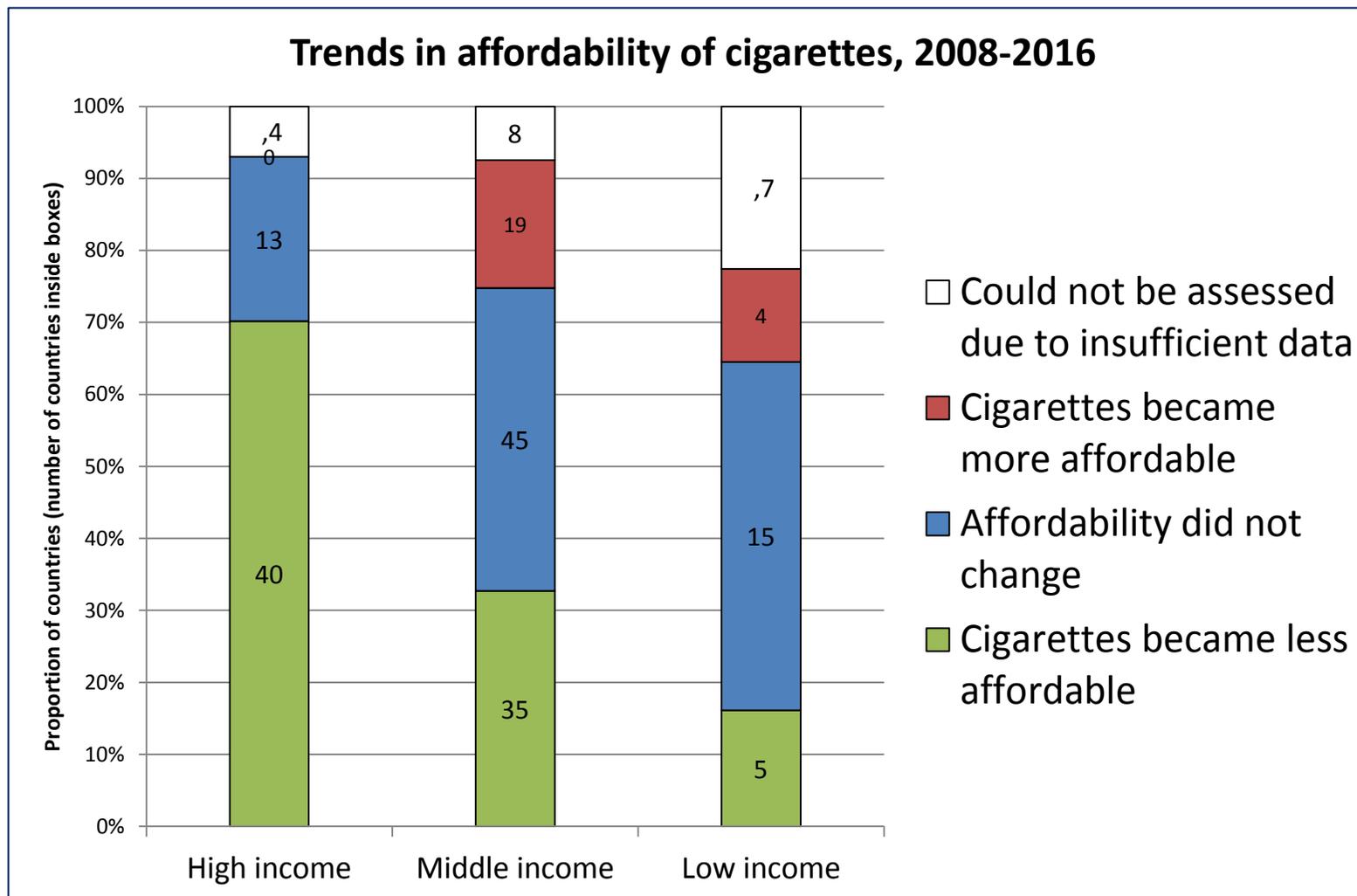


# Best Practices for taxing tobacco products

## 4. Adjust specific excises regularly

- Specific excise taxes need to be adjusted for inflation to remain effective
  - UK example: excise increase = inflation + 2%
- They should be also adjusted by income growth to *reduce affordability* of tobacco products

# More countries in the high-income group have seen cigarette affordability go down

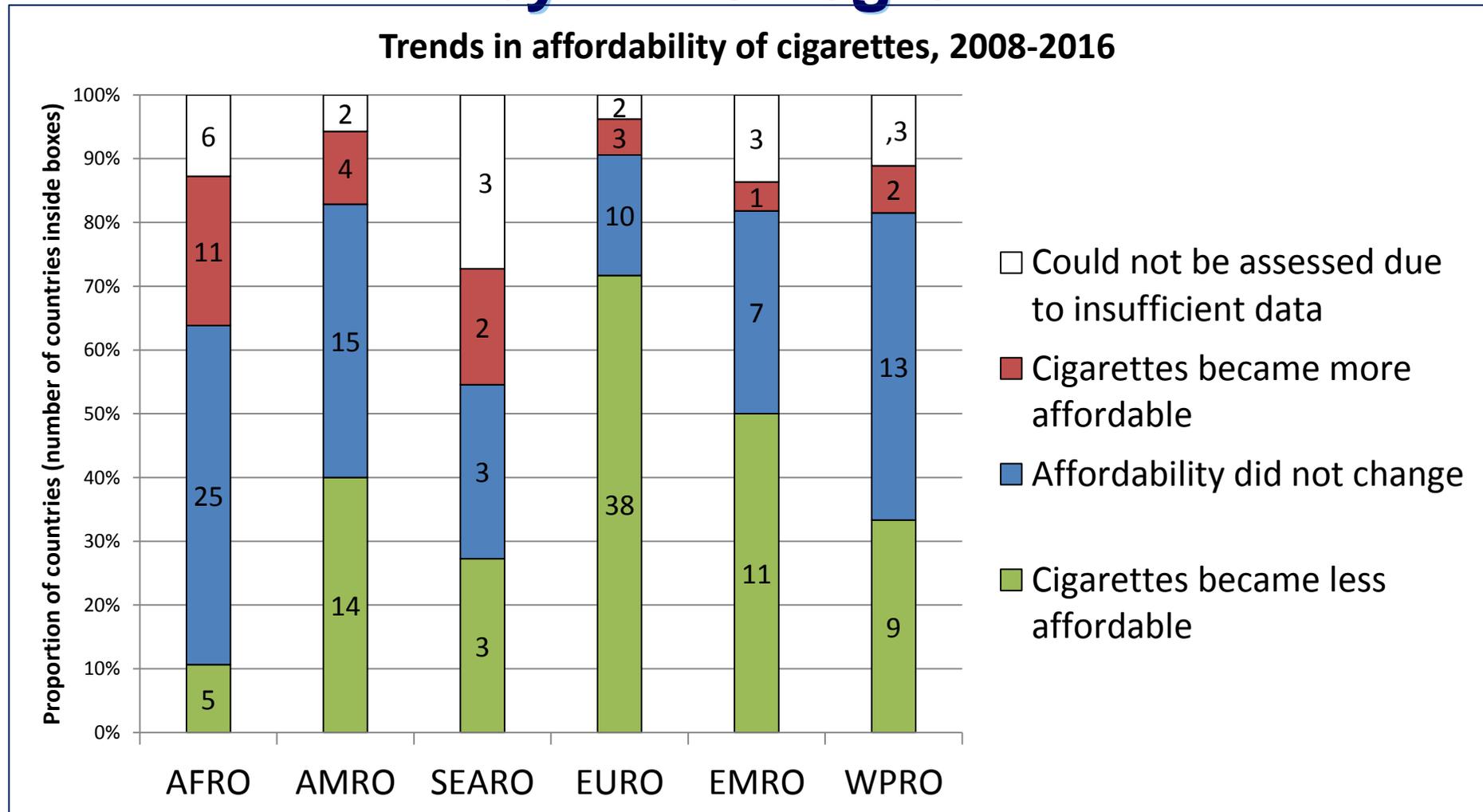


**Note:** Change in affordability computed as the least squares rate of change in the per capita GDP required to purchase 2000 cigarettes of the most sold brand in local currency in any given year.

The trend rate of growth was not computed for countries with less than 3 data points, or without data on either price or GDP in the year 2016.

Affordability was assessed as not having changed if the least squares trend in the per capita GDP required to purchase 2000 cigarettes over the period 2008-2016 was not statistically significant at the 5% level.

# Number of countries with increase/decrease/no change in affordability by WHO region



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# Best Practices for taxing tobacco products

## 4. Measuring Affordability

- **How to decide how much to increase specific taxes?**
  - We need to increase taxes more than consumer prices (inflation) and
  - More than (inflation adjusted) income increases
- **Data needed to calculate tax increases to maintain affordability**
  - For change in incomes, we usually use changes in real (inflation adjusted) GDP (gross domestic product)
    - If populations are increasing, we need to adjust so use real GDP divided by population (real per capita GDP)
  - Changes in consumer prices are used for inflation

# Best Practices for taxing tobacco products

## 4. Measuring Affordability 2

- **Example**
  - Real (inflation adjusted) per capita growth has been 4% between 2016 and 2017
  - Consumer prices rose 9% between 2016 and 2017
  - Excise tax on cigarettes need to increase by more than
    - $4\% + 9\% = 13\%$  in order for cigarette prices to increase more than other goods and to account for income increases
  - So a rule for tax increases could be:
    - Tax increase = real per capita income growth + inflation + 4%
    - Here =  $4\% + 9\% + 4\% = 17\%$

# Best Practices for taxing tobacco products

## 5. Tax simply and *uniformly*

- **Single rate tobacco tax structures are most effective**
  - **Minimize tax avoidance by trading down**
- **Taxing all tobacco products comparably reduces incentives for substitution**
- **Strong tax administration and control of illicit trade maximize the impact of tax increases**

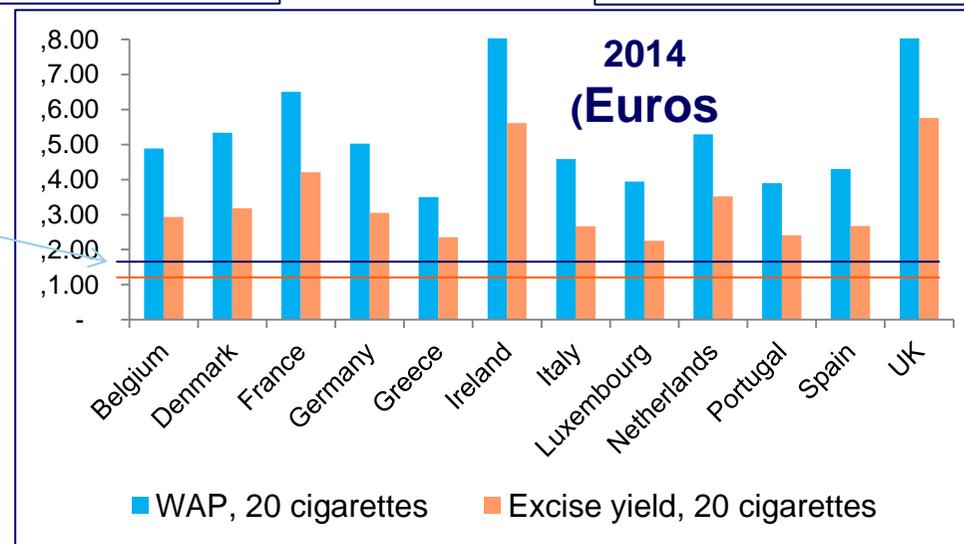
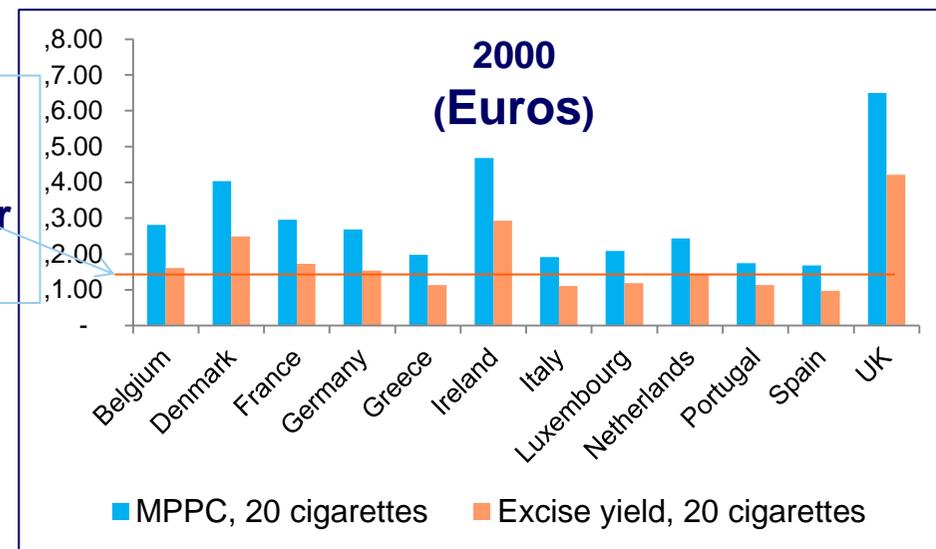
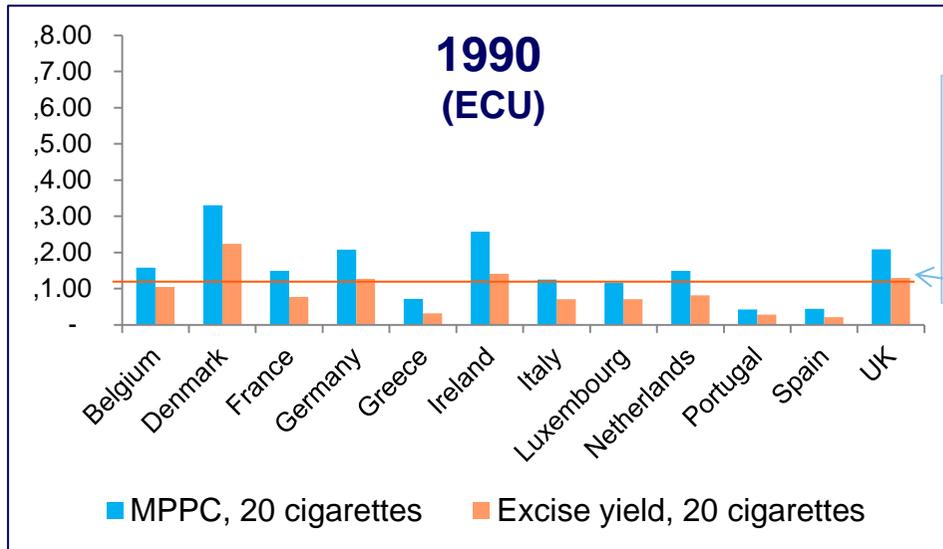


# Examples of best Practices

# The EU uses a Mixed System

- **The EU imposes both specific and ad valorem excise taxes since 2011**
  - **A single ad valorem tax for all cigarettes**
    - Which can vary by country
  - **Total tobacco taxes (specific and ad valorem) of at least 60% of the weighted average retail sales price**
    - Unless the specific portion is greater than €115/1000 cigarettes
  - **Minimum tax of €90 per 1000 cigarettes (€ 1.80/pack)**
    - New member states, Bulgaria, Estonia, Greece, Latvia, Lithuania, Hungary, Poland and Romania, had until 31 December 2017 to reach these levels

# Evolution of price and tax levels towards harmonized rates in the EU



Note: MPPC: Most Popular Price Category, WAP: Weighted Average Price

Source: EU



# Turkey – high achiever despite being a large producer and consumer

- Large cigarette producing (7<sup>th</sup> largest) and tobacco growing country (18<sup>th</sup> largest),
- State-owned enterprise TEKEL privatized in 1998
  - Production dominated by multinationals by 2012
    - Philip Morris International 45.7%
    - Japan Tobacco 26.3% and
    - BAT 22% of market in 2012
- ❖ Highest achiever of all MPOWER policies
  - ❖ Reduced prevalence from 31.2% in 2008 to 27.1% in 2012

# Turkey

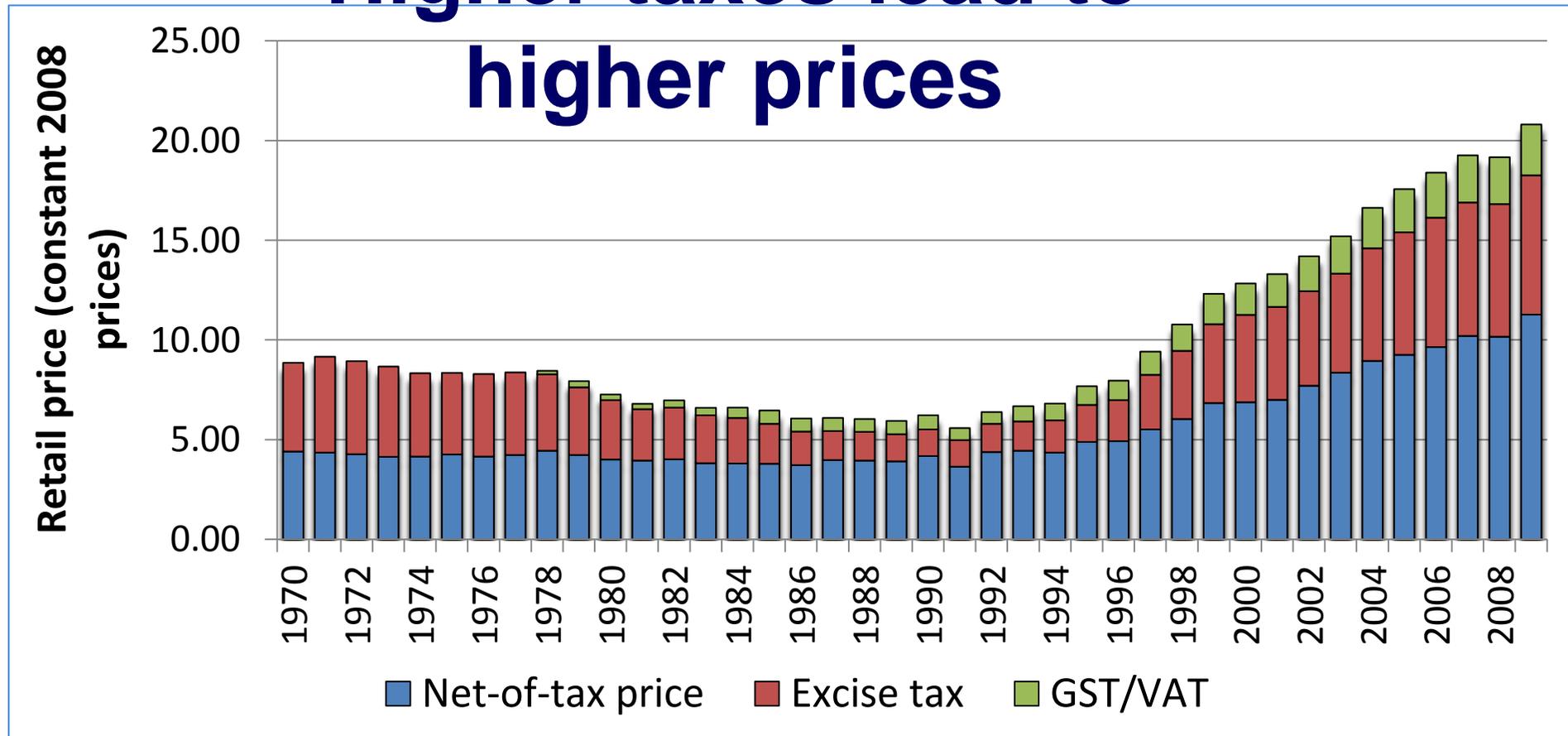
## Monitoring local tobacco production

- **Sophisticated automated system of monitoring production in place since 2007:**
  - **Stamps are applied at manufacture and go through monitoring scanners placed in production facilities**
  - **Scanners provide real time information directly to the Ministry of Finance about brand, quantity and production location**
  - **Costly system but cost spread over quantity produced over 5 years => TL0.06 per pack of cigarettes)**

# South Africa

## Increasing excises regularly

### Higher taxes lead to higher prices



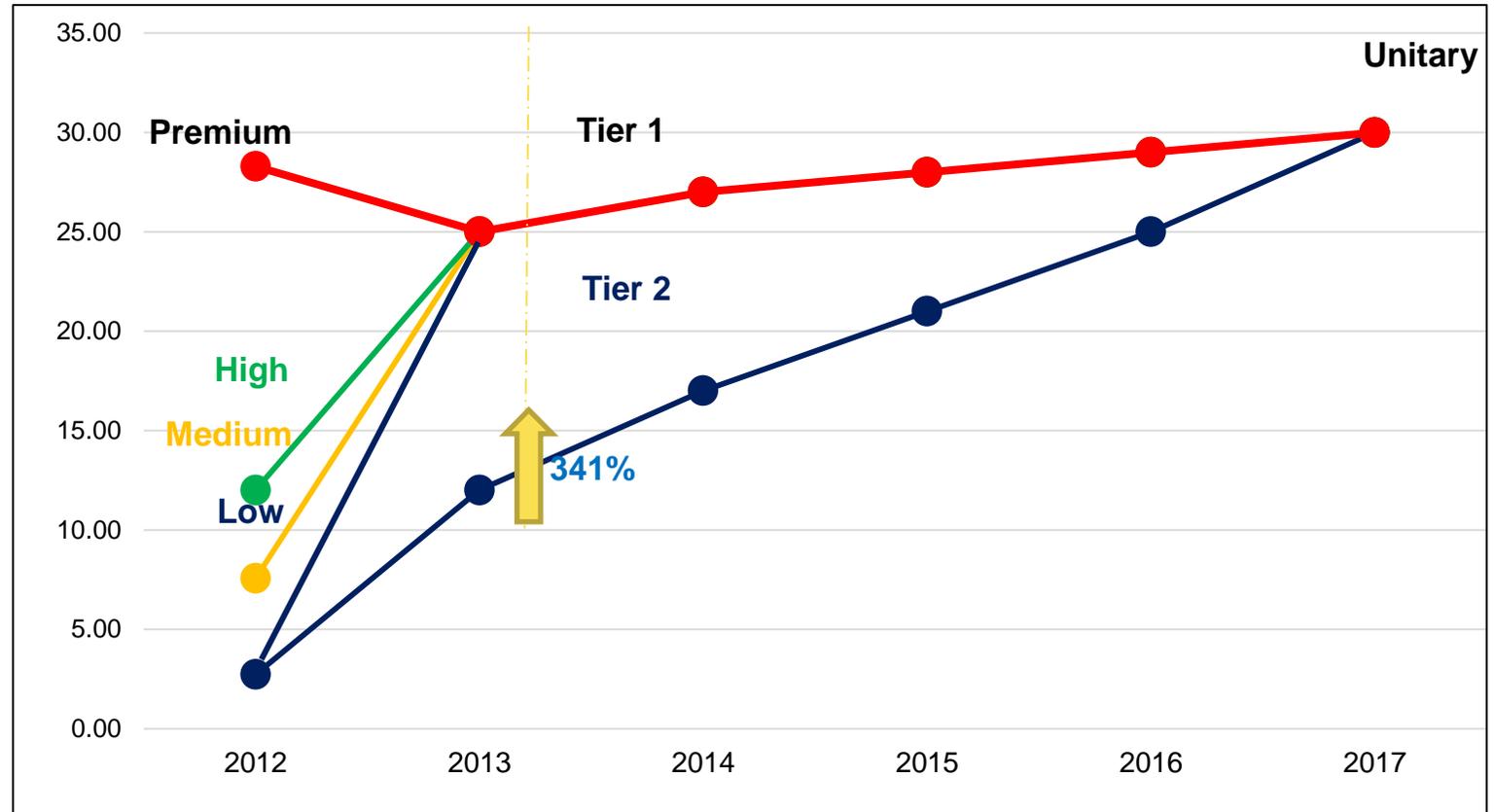
Source: H. Ross, 2015

# Philippine Tobacco Tax Reform

## Making it simpler

### KEY FEATURES

- Removal of price classification freeze and tax advantages of legacy brands
- Unitary tax structure and tax rates indexed to inflation by 2017



# Conclusions

- **Excise taxes are the most important tax policy from a public health perspective**
- **Country experiences show that specific excises (or mixed systems relying more on the specific component) are the most effective in increasing price, reducing price gaps and discouraging consumption**
- ***Regular* and large enough increases in excise lead to increased prices, increased revenues and reduced consumption**
  - **And decreasing affordability**

**Thank you!**