

Health taxes:

Tax policy design in times of high inflation

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What are health taxes?

- Excise taxes applied to products that cause health related harms and generate **negative externalities and internalities**
- Most common health taxes are tobacco, alcohol and sugar-sweetened beverages (SSBs)
- Historically called “sin taxes” in some countries but this term has become less common
- More modern term is health or pro-health taxes since it implies that these taxes improve health
- Direct taxes, sales taxes and tariffs are not generally considered health taxes

Economic framework for health taxes

- Negative externalities (harms that accrue to non-users)
- Negative internalities (uninternalized costs)
- Increase prices to ensure that market price account for the economic costs (i.e. corrective taxes)

Influence consumer and firm behaviour to improve population health

- Increase taxes in order to increase prices
- Higher prices results in reduces consumption
- Reduced consumption through increased cessation, reduced initiation, reduced intensity and reduced concentration

Understanding the fiscal policy context

- Reduces government expenditures (e.g. health care costs; policing, justice and corrections; etc)
- Generates additional tax revenue that improves fiscal space



This policy transmission mechanism is affected by a multitude of factors that are mostly exogenous:

- Tax pass through
- Own and cross price elasticity of demand
- Market structures
- Products heterogeneity

The most important factors that affects the policy transmission mechanism that is not exogenous is the tax structure:

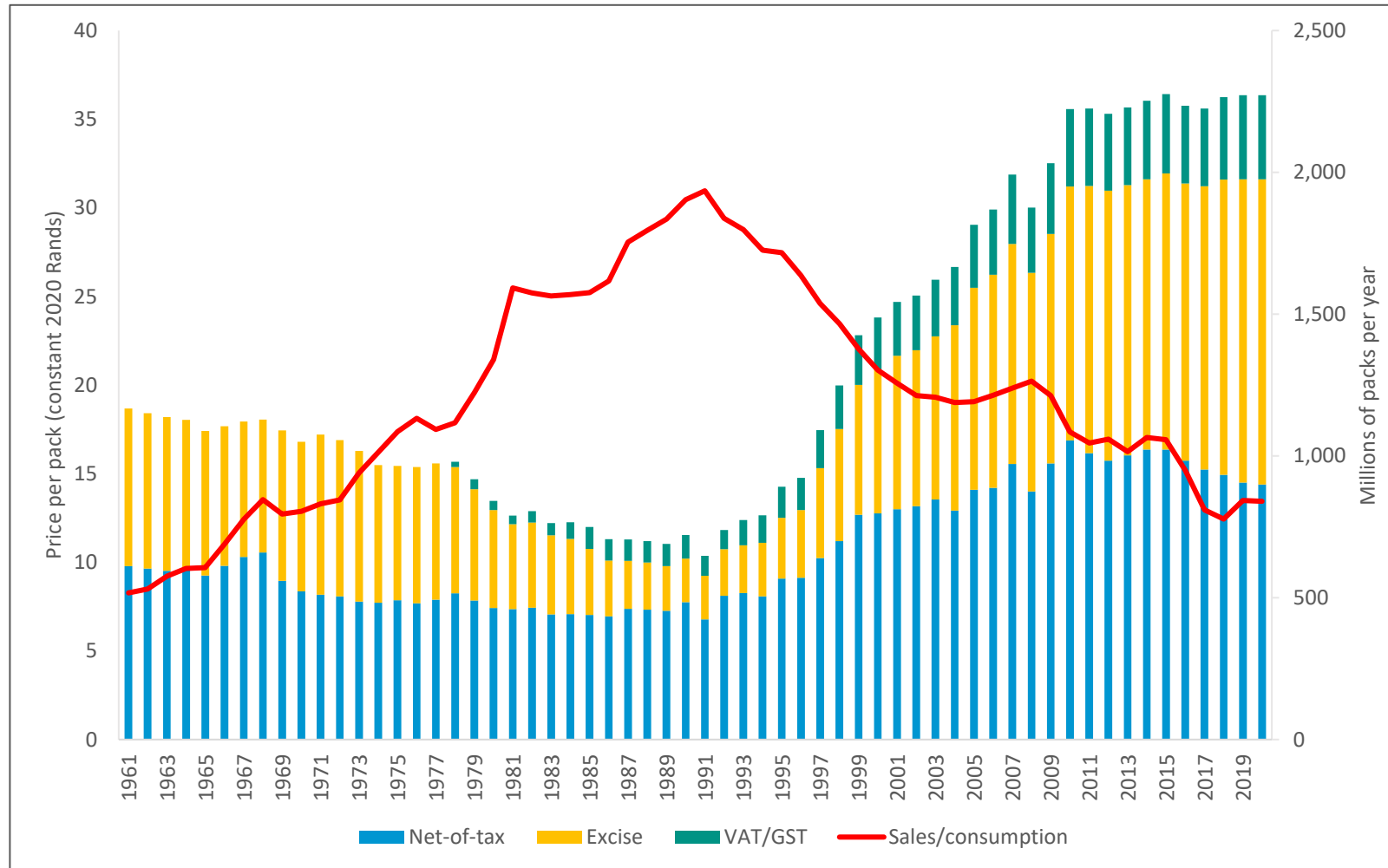
- Type of tax: specific, ad valorem, mixed, hybrid, etc
- Tax base: early or late in the value chain, or volume of beverage or volume of alcohol/sugar
- Attributes: tiers, thresholds, etc
- Scope: products to include/exclude

What are good practices in health tax design?

Health taxes generally favor the use of specific taxes (taxes based on quantity or volume) rather than ad valorem taxes (taxes based on value)

- Negative externalities and internalities, and health harms are correlated with volume rather than value
- A cheaper cigarette or beer does not generate a smaller externality or internality, and is not less harmful than a more expensive cigarette or beer
- Specific taxes raise the prices of cheaper products by more than ad valorem taxes, reducing opportunities to avoid tax increases, thereby reducing consumption by more
- Specific taxes tend to be over shifted more (larger decline in use), ad valorem taxes tend to be under shifted more (smaller decline in use)
- Tax revenue tends to be more predictable under specific rather than ad valorem taxes

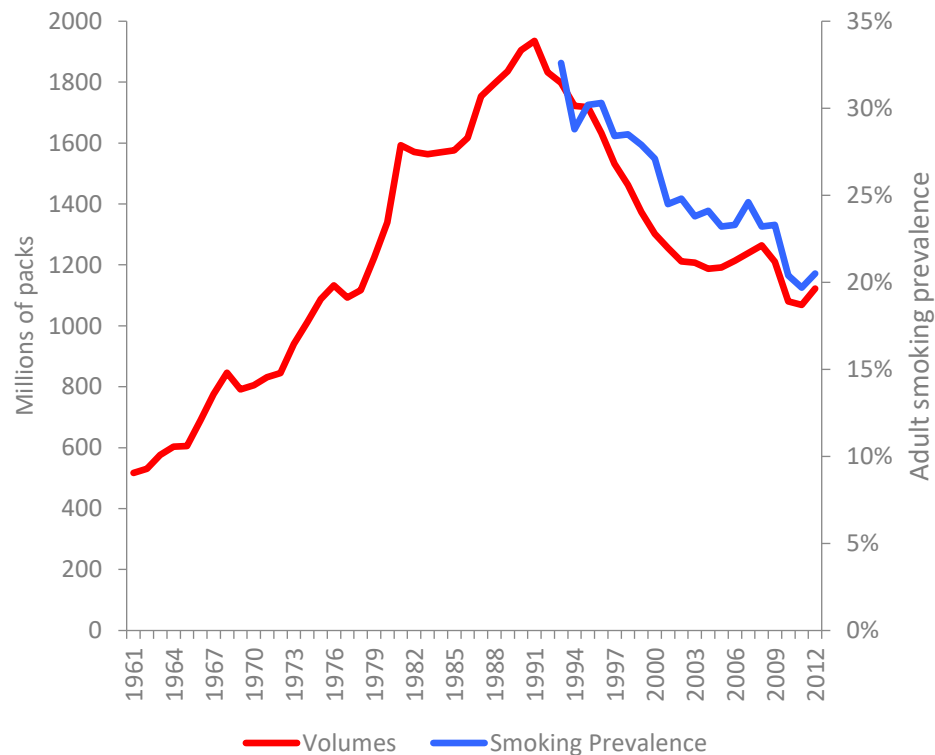
Specific taxes on cigarettes in South Africa



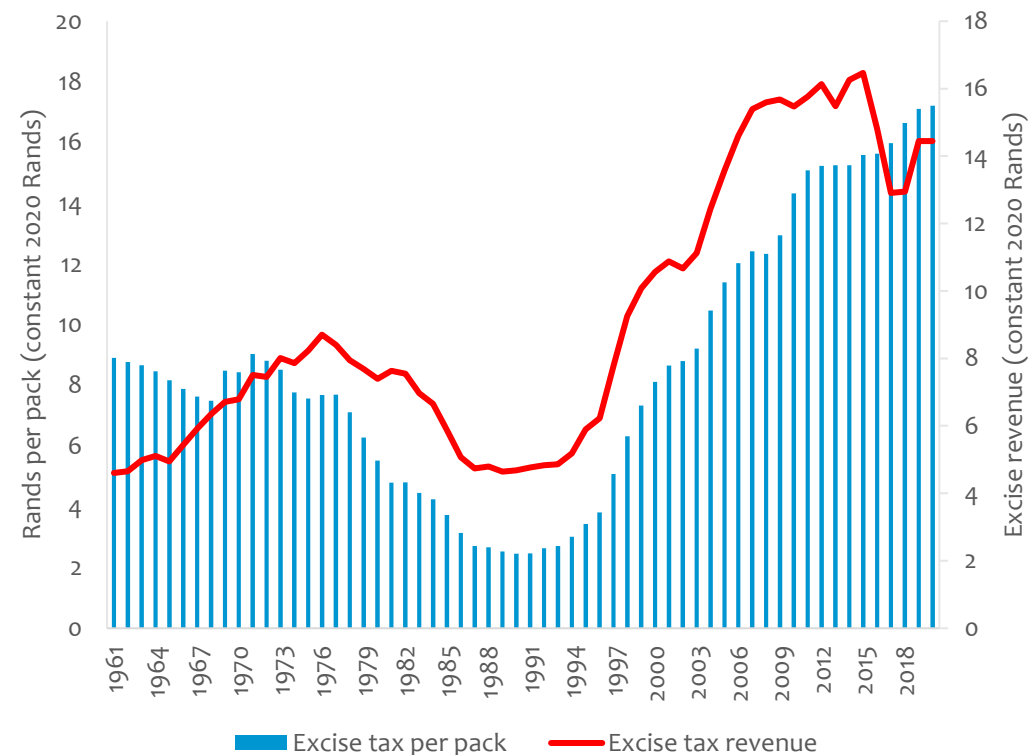
- Excise taxes increased regularly since the early 1990s
- Increases in taxes → increases in prices → dramatic declines in cigarettes sales
- Declines in sales correlates strongly with declines in smoking prevalence, mortality, and morbidity
- Large increases in excise tax revenue
- Relationship between price, sales and tax revenues is an excellent example of the inelastic price elasticity of demand

Source: Research Unit on Excisable Products, University of Cape Town; National Treasury
 Note: all values are adjusted for inflation (converted into 2020 constant prices)

Cigarette sales volumes and smoking prevalence in South Africa, 1961-2012



Tobacco excise taxes and tax revenue in South Africa, 1961-2020

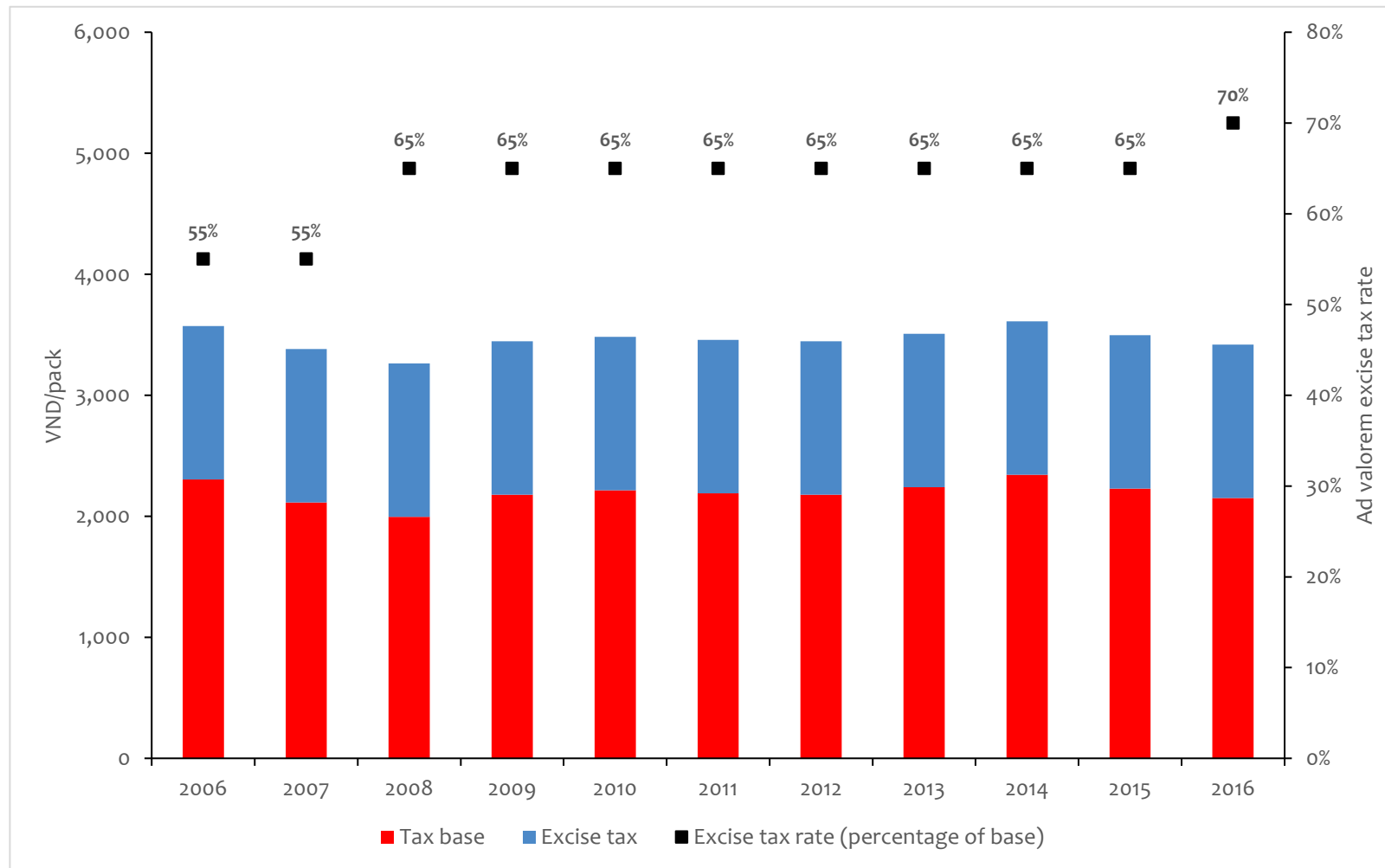


Mortality and morbidity due to tobacco use in South Africa, 1990-2019

Percentage of all cause mortality	1990	2000	2010	2019
Deaths	13.0%	10.6%	7.9%	8.2%
DALYs	7.6%	6.2%	4.8%	5.0%
Rate per 100,000				
Deaths	104	127	100	77
DALYs	3,785	4,042	3,122	2,372

Source: Research Unit on Excisable Products, University of Cape Town; National Treasury; Global Burden of Disease study (2019)

Ad valorem taxes on cigarettes in Vietnam



- Vietnam applies an ad valorem excise tax on the ex-factory price, which is early in the supply chain
- The tax rate increased twice, in 2008 and 2016
- Following the tax increase, retail prices did not increase
- Tax increases “under shifted” as producers cut ex-factory prices to lessen the effect on retail prices
- Since the tax increases did not increase prices there would be no effect on smoking prevalence or health!
- Furthermore, no increase in tax revenues since the effective tax remained unchanged even when the tax increased

Source: Blecher and Le Thu Thu (2018)

Note: all values are adjusted for inflation (converted into 2016 constant prices)

But what does this have to do with inflation?

What the South African and Vietnamese examples failed to point out was the impact on inflation under these two tax structures

- Specific and ad valorem taxes have different attributes that are differentially affected by inflation
- In the case of South Africa, the pre-1990 period saw specific taxes dramatically eroded by inflation with a lack of tax increases (either no nominal increase or insufficient increase) resulting in prices declining in real terms, sales rising, and revenue declining; it required deliberate action to reverse these trends post-1990
- In the case of Vietnam, despite the lack of tax increases, effective taxes and prices maintained their real value over time

In a macroeconomic environment of higher inflation, we need to pay attention to the risks and challenges of inflation when considering tax design

Initial engagement areas

Focal areas	Tax policy	Tax administration
Diagnostics and analysis	Assessing tax structure, base and rates, trends in key metrics including prices, price distribution, affordability, volume and revenue, including benchmarking to peer countries	Assessing the impact of tax policy on administration; investigating industry structure; tax evasion and compliance with international obligations (e.g. Protocol to Eliminate Illicit Trade in Tobacco Products)
Modeling	Impact of tax structure, base and rate changes on prices, price distribution, volumes, tax revenues, health impact and distributional impact	Examining illicit trade, tax gap, and impact of innovative mechanisms for improving supply chain control
Implementation	Support to policy briefs, excise policy reviews, or structured excise policy dialogue in country; or excise roadmap development that includes recommendations for reform	Development of market surveillance systems, supporting implementation of supply chain control systems like track and trace systems and fiscal marks
Monitoring and surveillance	Of prices and revenue, and linked to data generated via effective administrative systems	Using market surveillance for price monitoring; evaluating the performance and cost effectiveness of a supply chain control systems (e.g. track and trace)
Capacity building	Skill building, country-to-country knowledge sharing, internal collaboration with WB country offices and development of legacy tools, strategies, and products for future use	