

TAX PRINCIPLES WORKSHOP

Inflation adjustment (indexation)

Presentation by:

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Presentation agenda



1. What is indexation?
2. Indexation of Excise duty in Kenya
3. Indexation of in other jurisdictions
4. Key take away



What is indexation?

Brief overview



- “linking adjustments made to the value of a good, service or other metric, to a ***predetermined index***”
- Scenarios utilizing indexation:
 - Minimum wage determination
 - Interest and exchange rate pricing
 - **Specific tax rates adjustment**
 - Determination of purchasing power parity
 - Net present value computation

How is it calculated?



- Different economic models define the computation of index formulae based on different assumptions and criteria employed
- Use of different index formulae depends on what is being achieved

Examples of some index



Index	Explanation
Consumer price index (CPI)	A measure that examines the weighted average of prices of a basket of consumer goods and services
Laspeyre's index	Compares total cost of same base period basket of goods differ between time period or geographical location
Paasche's index	Measuring current price or quantity levels relative to those of a selected base period. It differs from the Laspeyres index in that it uses current-period weighting
Fisher's ideal price index	Its is the geometric average of the Laspeyres price index and the Paasche price index

Indexation on property



- Technique to adjust tax payments by employing a price index which adjusts for inflation
- Factored in disposal of property and goods- Indexation accounts for inflation from the time you bought the asset to the time you sell it
- Inflate the purchase price of the asset to take into account the impact of inflation

Indexation on property

Example



- Land Purchase Price in Year 2008 KShs 10,000,000
- Selling Price in Year 2018 Kshs 30,000,000
- Cost inflation index issued by government 2.11

Description	With indexation	Without Indexation
Selling price	30,000,000	30,000,000
Less Purchase price* index	(21,100,000)	(10,000,000)
Gain	8,900,000	20,000,000

- Indexation factors in inflation and reduces tax liability

Indexation on taxes



- Technique to **adjust tax payments** by employing a price index which adjusts for inflation
- Applied to **Excise duty** where there is a **specific rate** on quantity and not on Ad volerum which is based on value
- Factored in to cater for inflation on the taxes as opposed to changing the rate year on year

Indexation on taxes

Example



- Beer Excise duty rate is KShs 100 per litre
- Beer Price per litre is KShs 20,000
- Adjustment factor 1.12 issued by government
- Adjusted Excise duty rate for Beer is
 $100 \times 1.12 = 112$
New Excise duty is KShs 112 per litre

Why is it calculated?



- Indexes adjust notional values to reflect '**real**' or **current economic reality** by factoring in inflation or interest rates or weighting
- Inflation **reduces effective tax rates** and therefore tax revenue due to Kenya Revenue authority

Why factor it in taxes



If the specific duty is not raised but the general level of all other prices is inflated, then the real burden or incidence of the specific duty is reduced” James Meade (author - *The Structure and Reform of Direct Taxation*).

Illustration



- Beer Excise duty rate is KShs 100 per litre
- Beer Price per litre is KShs 20,000 in 2015
- Beer Price per litre is KShs 30,000 in 2018
- Adjustment factor 1.12 issued by government

Year	QTY Litre	Price	Revenue to manufact ure	Tax rate without adjustmen t	Tax Rate after adjustmen t
2015	200	20,000	4,000,000	20,000	20,000
2018	200	30,000	6,000,000	20,000	22,400

Incidence of tax



- With specific rate taxes remain constant even when the prices go high
- Taxes need to be adjusted to check the economic reality – Adjustment factor
- This adjustment if not monitored may increase inflation in the country



Indexation of Excise duty in Kenya

Considered tax principles in the legislation drafting



Equity

- distributing the tax burden fairly

Efficiency

- minimize cost of compliance and administration cost

Simplicity

- reduces ambiguity, uncertainty and compliance costs

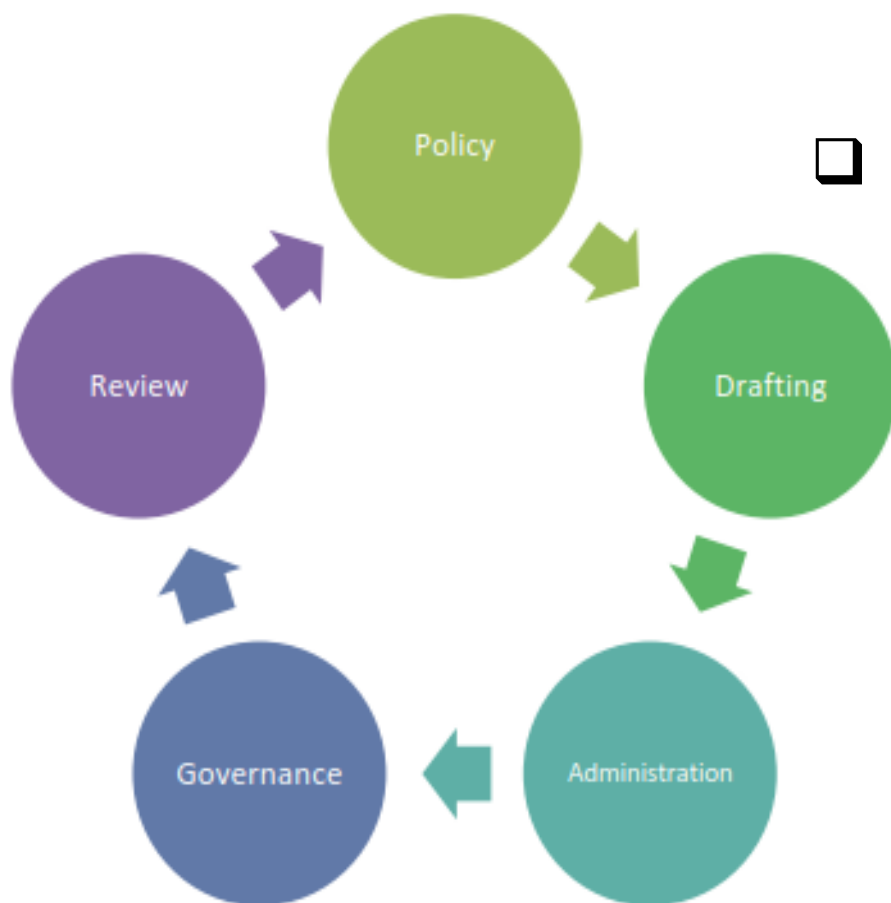
Sustainability

- meets the government's changing revenue needs

Policy consistency

- congruent with the broader policy objectives

Excise tax lifecycle



- ❑ Indexation adjustment provisions are generally introduced in excise duty policy when either:
 - ❑ drafting new policy; or
 - ❑ reviewing existing policy.

Excise Duty Act 2015



- Excise duty is a tax on the importation or local manufacture of certain products and supply of excisable services
- Excise duty objectives
 - Increase Revenue - items targeted have a low price elasticity
 - “Sin Tax” - influence consumer behaviour and discourage consumption

Excise duty base



- Specific excise duty is applied on the quantity of the excisable goods and ad valorem duty is applied based on excisable value
- The excisable value:
 - ☐ Imported excisable goods = customs value + import duty
 - ☐ Locally manufactured excisable goods = ex-factory selling price (excluding VAT, cost of excise stamp and returnable containers)
 - ☐ Local excisable services = consideration for the service excluding VAT

Excise duty collection



- Excise duties are collected by the revenue authority by the following due dates:
 - 20th of the month following the produced commodity leaving the factory.
 - Upon importation in to Kenya.

Distinction in excise duty rates



- Specific excise duty rates are different from ad valorem rates as tabulated below:

Basis	Ad valorem duties (Percentage)	Ad quantum duties (Specific)
Taxation mode	% proportion of the excisable value	Fixed amount per product unit
Simplicity	Simple to apply	Requires precision in application
Equity principle	Tax rate is high for products with unique features which makes the product expensive	Tax rate lower for unique product as based on quantity .
Certainty	More volatile based on commodity prices fluctuation	Less volatile as it is based on units
Indexation to inflation	Does not require indexation to inflation	Requires indexation to inflation

2015 changes in legislation



- Simplified administration of excise duty in Kenya avoiding frequent periodic legislation amendments
- Excise Duty Bill 2015 preferred specific rates to *ad valorem* rates, a departure from previous law
- In Introduction of ***indexation formulae*** applicable on all specific excise duty rates pegged on preceding financial year's average inflation rate

Specific excise duty rates



Items	Excise Act, 2015 Rates
Beer	KShs 100 per litre
Wines	KShs 150 per litre
Spirits	KShs 175 per litre
Cigarettes	KShs. 2,500 per mille
Cigars, cheroots, cigarillos	KShs 10,000 per Kg
Electronic Cigarettes	KShs. 3,000 unit
Electronic cigarettes cartridge	KShs. 2,000 unit
Cigarette with filters	Shs. 2,500 per mille
Cigarettes without filters	Shs. 1,800 per mille
Juices	KShs 10 per litre
Water except ordinary “tap” water	KShs 5 per litre;
Illuminating Kerosene	Kshs 7,205 Per 1000l @20 degC

Ad valorem excise duty



Items	Excise Act, 2015 Rates
Food supplements	10%
Cosmetics and beauty products	10%
Motor vehicles excluding school buses for use by public schools *and locally assembled motor vehicles excluding locally assembled vehicles of tariff heading 87.02, 87.03 and 87.04	20%
Mobile cellular phone services, money transfer services and other fees charged by financial institutions	10%

Excise Duty indexation provision



- Each specific rate of excise duty... shall be replaced by the rate of excise duty computed by reference to the following formula
- $=A(1+B)$ **previously $=A*B$**
where –
 - A is the rate of excise duty on the day immediately before the adjustment day (1st July of every **two** years) ; and
 - B is the adjustment factor for the adjustment day, calculated as the average rate of monthly inflation of the preceding financial year.

Illustration



	Quantity	Excise rate (per mille)	Excise revenue
Before indexation	1,000	2,500	2,500,000
After indexation	1,000	2,675*	2,675,000
Increment in tax revenue			175,000

Indexation adjustment (taking average inflation at 7%)	Adjustment factor	Rate before adjustment	New specific rate
=A(1+B)	=(1+7%)	2,500	2,675

Current revenue performance



- ❑ Ordinary revenue composition includes income tax, import duty, excise duty, VAT, investment income and other revenue excluding railway development levy and appropriations in aid
- ❑ Excise duty revenue performance has been stagnant since 2015 yielding an average **12%** of the ordinary revenue and **2%** of nominal GDP (National Treasury, 2017)

Revenue performance (billion)

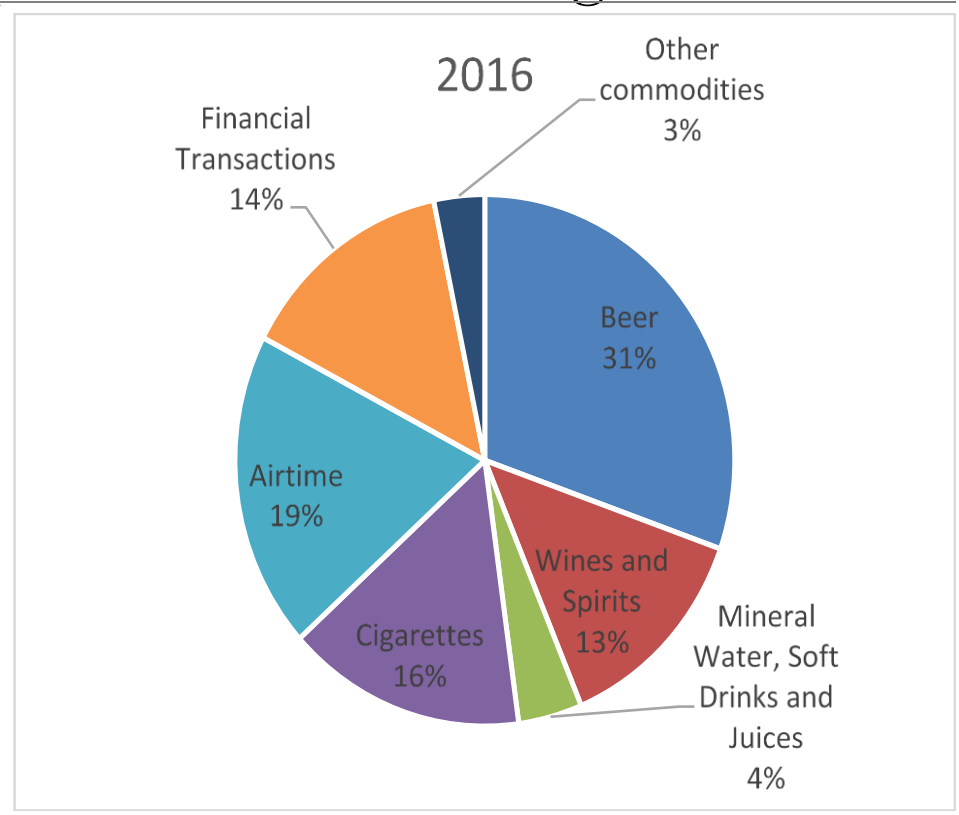
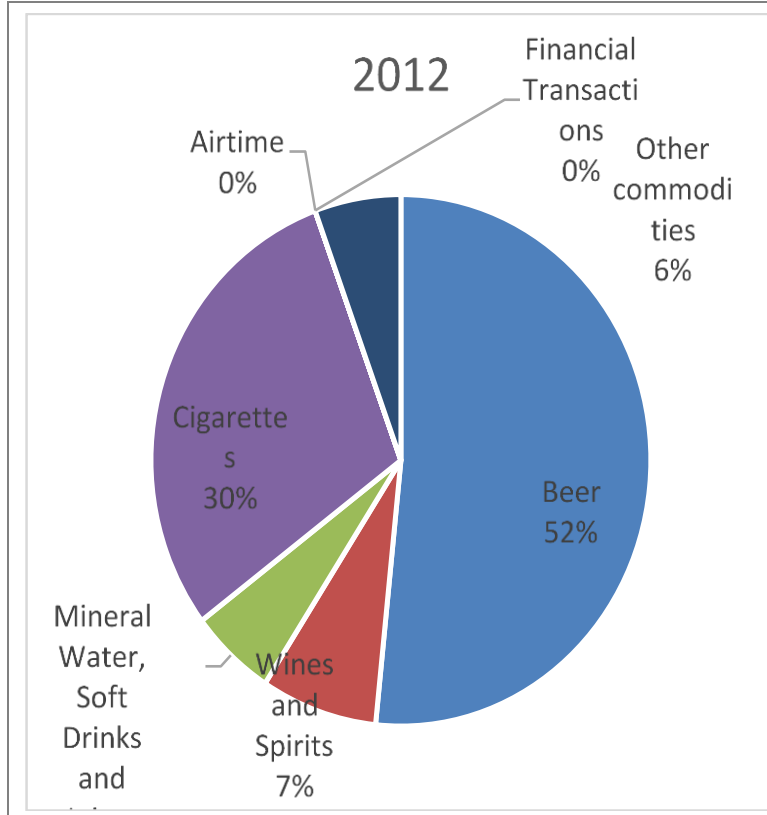


	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
	Actual	Actual	BPS'18	BPS'18	BPS'18	BPS'18	BPS'18
Total tax revenue	1,233	1,400	1,643	1,849	2,105	2,417	2,747
Ordinary revenue	1,153	1,305	1,486	1,684	1,931	2,229	2,548
Excise duty	139	165	183	209	241	276	315
Excise duty to ordinary revenue ratio	12.10%	12.67%	12.36%	12.43%	12.49%	12.40%	12.38%
Excise duty to nominal GDP ratio	2.08%	2.16%	2.12%	2.14%	2.17%	2.19%	2.20%

Is indexation necessary?



- The adjustment has never been applied before.
Excise revenue composition has changed



Merits of indexation



- ❑ It embodies the **tax principles** of equity, efficiency and simplicity
- ❑ allows a **gradual increase** in excise tax rates to curb disruption in current revenue collection as a result of an instant rate revision
- ❑ **Predictable and certain** compared to an adjustment of ad valorem rates.

'Cont. Merits



- ☐ Chosen index is **publicly available** at least cost
- ☐ Eliminates lengthy negotiation process for new rates
- ☐ Used as **regional integration policy tool** for convergence to harmonized excise duty rates

Demerits



- Indexation does NOT reward the taxpayer for gains made in reducing **production cost**
- Excise duty suffers a narrow compliance **tax base** who pass on the burden to consumers, indexation adjustment does little to broaden the tax base

'Cont Demerits



- ❑ Basing rate revision on indexation gives little room for ad hoc rate revision based on other factors such as:
 - ❑ Marginal spill over effects of alcohol, cigarettes and beer
 - ❑ Restriction and prohibition of selected products: *shisha*, plastic bags

Demerits of indexation



- Indexation increases cost of production for excisable goods and introduces a conundrum to the government in its quest to contain **inflation** within prescribed limits. Central Bank's autonomous role is key to curtail this

Is indexation necessary?



- Following restriction of the CS's powers to amend excise rates outside the budget window, indexation offers a reasonable alternative
- Indexed excise duty aligns specific rates with government's projected excise duty revenue yields
- The revised adjustment factor $= A(1+B)$ fairly factors inflationary effect on specific duties



Indexation other
jurisdictions

Income taxes indexation



- Most countries do not adjust their tax system for inflation, or do so only partially
- Inflation erodes amounts expressed in national currency especially the tax brackets and personal deductions
- Advance taxes introduced in lieu of indexation
 - Option is to pay taxes at end year and adjust

'Cont...



- For Personal taxes, a revision of the brackets is preferred by most countries compared to indexation of income tax brackets

Excise duty indexation findings AUSTRALIA



- Australia has applied indexation adjustments for over 36 years
- Excise and customs tariff specific tax indexation adjustment are applied on selected products such as tobacco
- In Australia, there is no correlation between indexation and general excise revenue increment

Excise duty indexation finding BULGARIA

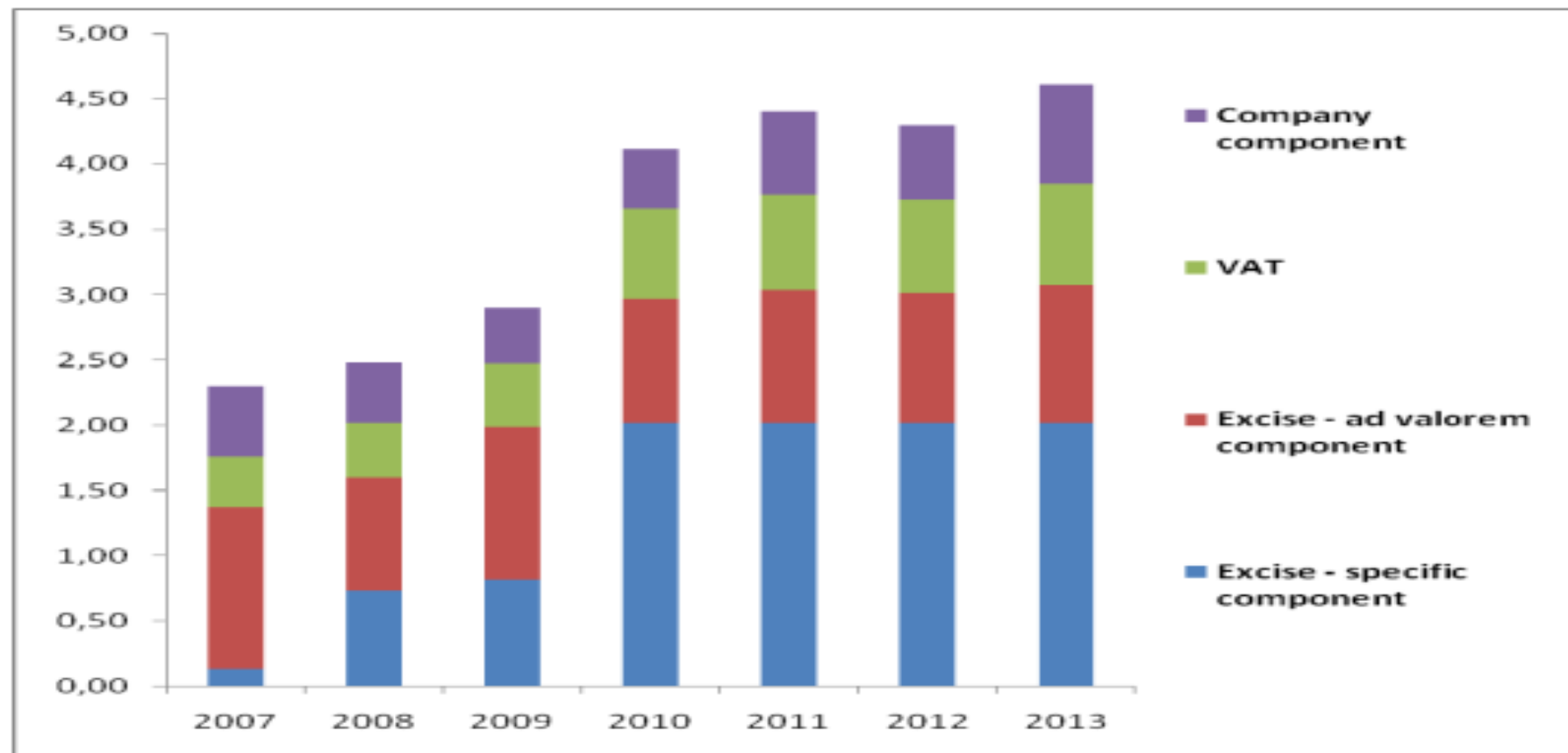


- Bulgaria, joined EU, revised its excise duty rates upwards without indexation in line with EU directives
- Decrease in the ad valorem component and a parallel increase in the specific component
- The specific excise rate component did not factor an indexation adjustment
- Excise duty yield dropped with an influx of illicit excisable goods such as tobacco

Excise duty indexation findings BULGARIA



Graph 2: Weighted average price of a pack of cigarettes – main components



Source: Excise Duty Tables (2007-2013), European Commission; IME calculations

Excise duty indexation finding BULGARIA



- The increase of the specific component inadvertently led to a greater tax burden than planned
- By 2013, no further increase in taxes would be recommended. An indexation specific rate adjustment would have regularized the increment



Conclusion

Key take away



- Indexation safeguard revenue yields due to the government
- Indexation for property can be used to ease inflation burden on capital gain tax
- Indexation does not compound excise tax collection since the excise base does not change
- Indexation on excise duty if not monitored may lead to increasing inflation

Interactive Session





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