

TaxDev



Indirect tax expenditure:

Principles, modelling and data

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Presentation outline

- VAT tax expenditure
 - Principles and modelling VAT TE
- Trade tax expenditure
 - Methodology and benchmarking
 - Data requirement
- Practical session

VAT TEX EXPENDITURE:

The “*ideal*” VAT System

- Broad-based tax on **final consumption**
 - a tax on all final consumption of goods and services at a **single rate**
 - no distortionary effect on production decisions
 - consumers have no incentive to shift consumption to more lightly taxed

- It is collected through a **staged process through an invoice credit system**
 - Each business in the supply chain takes part in **controlling, collecting, and remitting** the tax;
 - Suppliers deduct VAT paid on inputs from the output VAT and remit the net to the tax authority
 - generates third-party paper trails; helps to improve compliance and reduce tax avoidance

Mechanics of VAT in the supply chain

Simple supply chain with a standard VAT rate of 15% with no exemptions or rate reduction



Farmer

produces wheat & sells it to the 'miller'



Miller

purchases the wheat and produces flour



Bakery

purchases the flour & produces bread



Consumer

buys the bread from the bakery

Mechanics of VAT in the supply chain



SALES

200

500

600

VAT charged on sales

30

75

90

VAT reclaimed by buyer

30

75

0

Net VAT on transaction

0

0

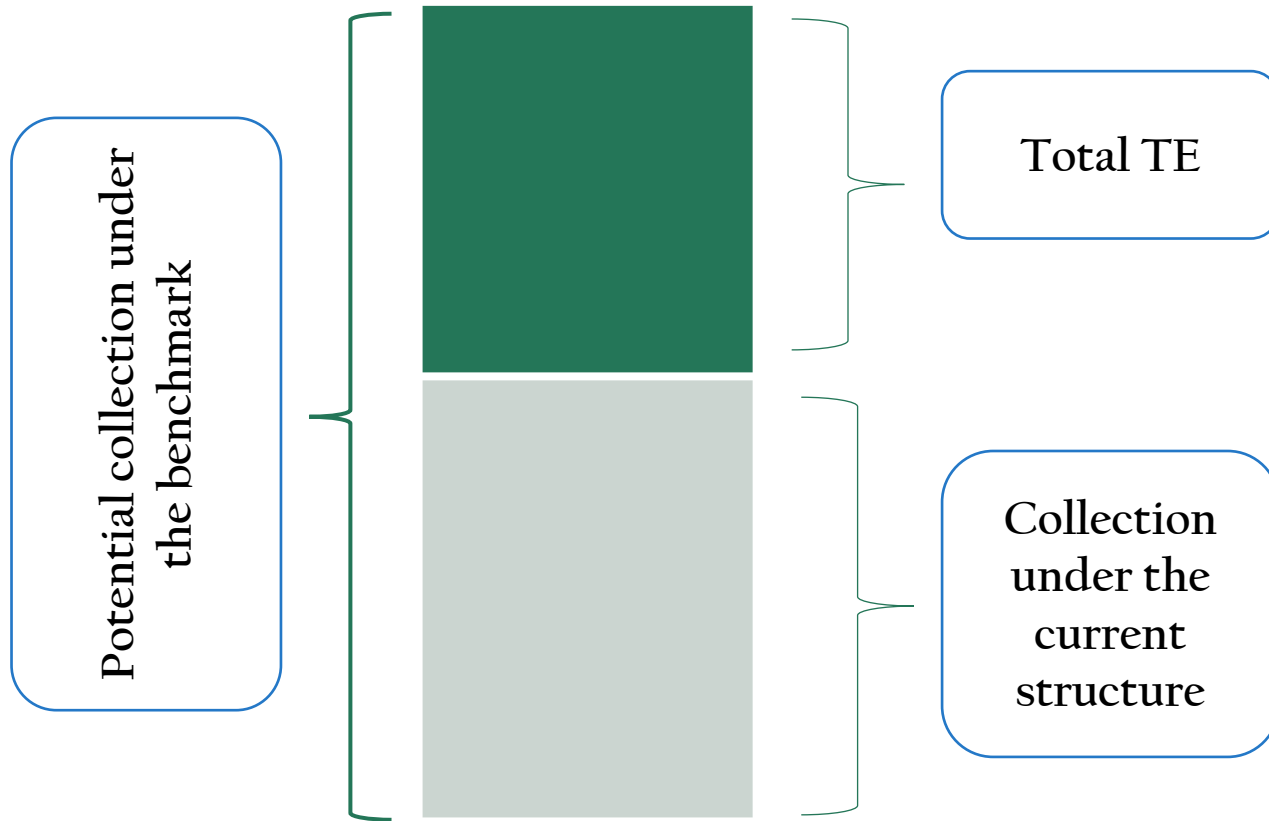
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Departure from the ‘*ideal*’ VAT System

- In practice, there are departures from the ideal VAT system in various forms:
 - Exempt supplies → like *financial services, basic food items*
 - Zero-rated supplies → *exports, gold supplies to Central Banks*
 - Reduced-rate supplies → *use reduced rates for certain items including food items*
 - Size-based registration → *micro and small enterprises*
- Such departures from the ‘*ideal*’ system give rise to TE

Modeling VAT TEs

Measuring VAT TE



- Defining the benchmark tax system:

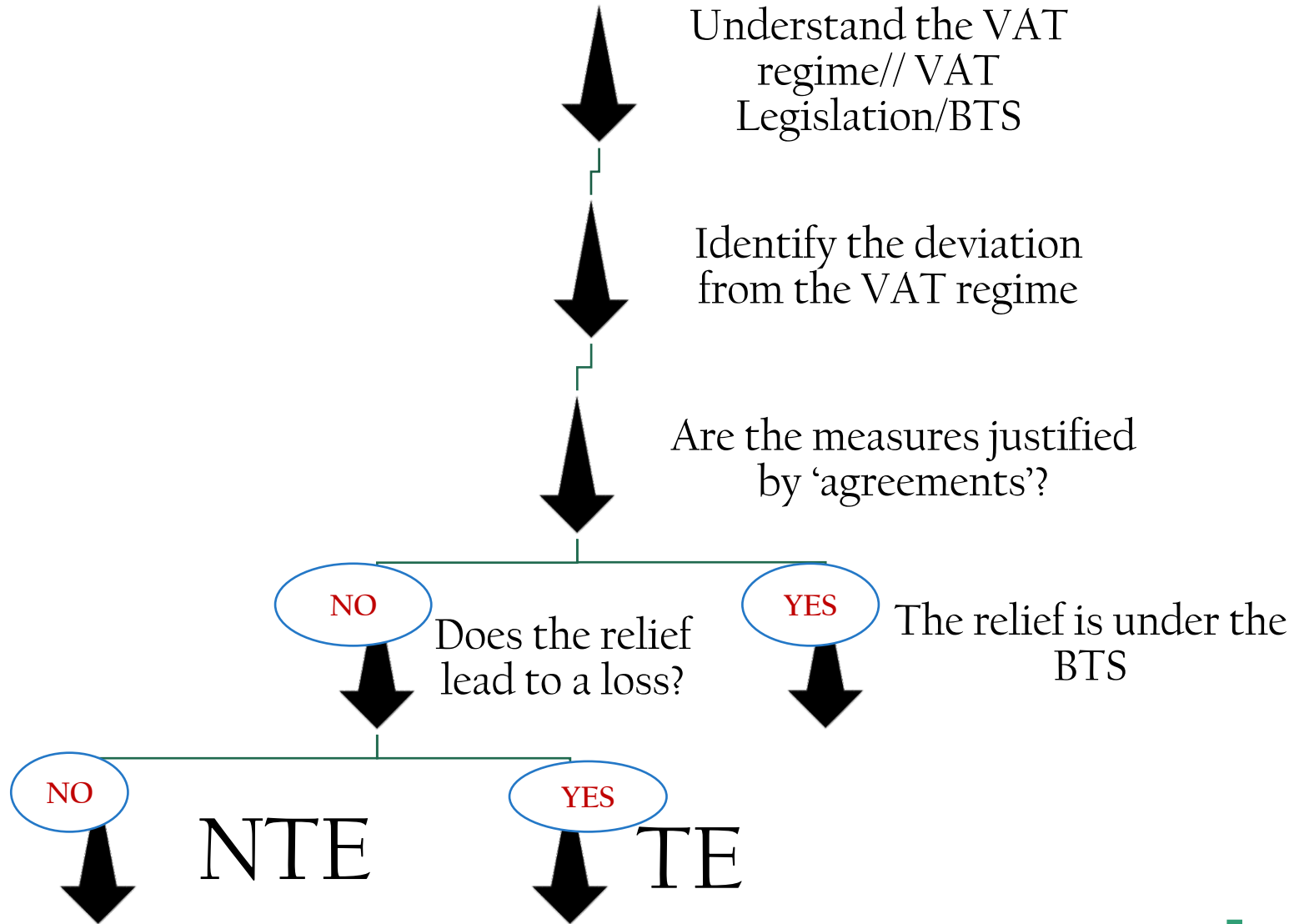
Standard VAT rate=benchmark

- Identifying the VAT base

Final consumer goods sold by registered companies/businesses

Inputs & equipment used by non-registered businesses OR used by registered companies that sell VAT-exempt goods.

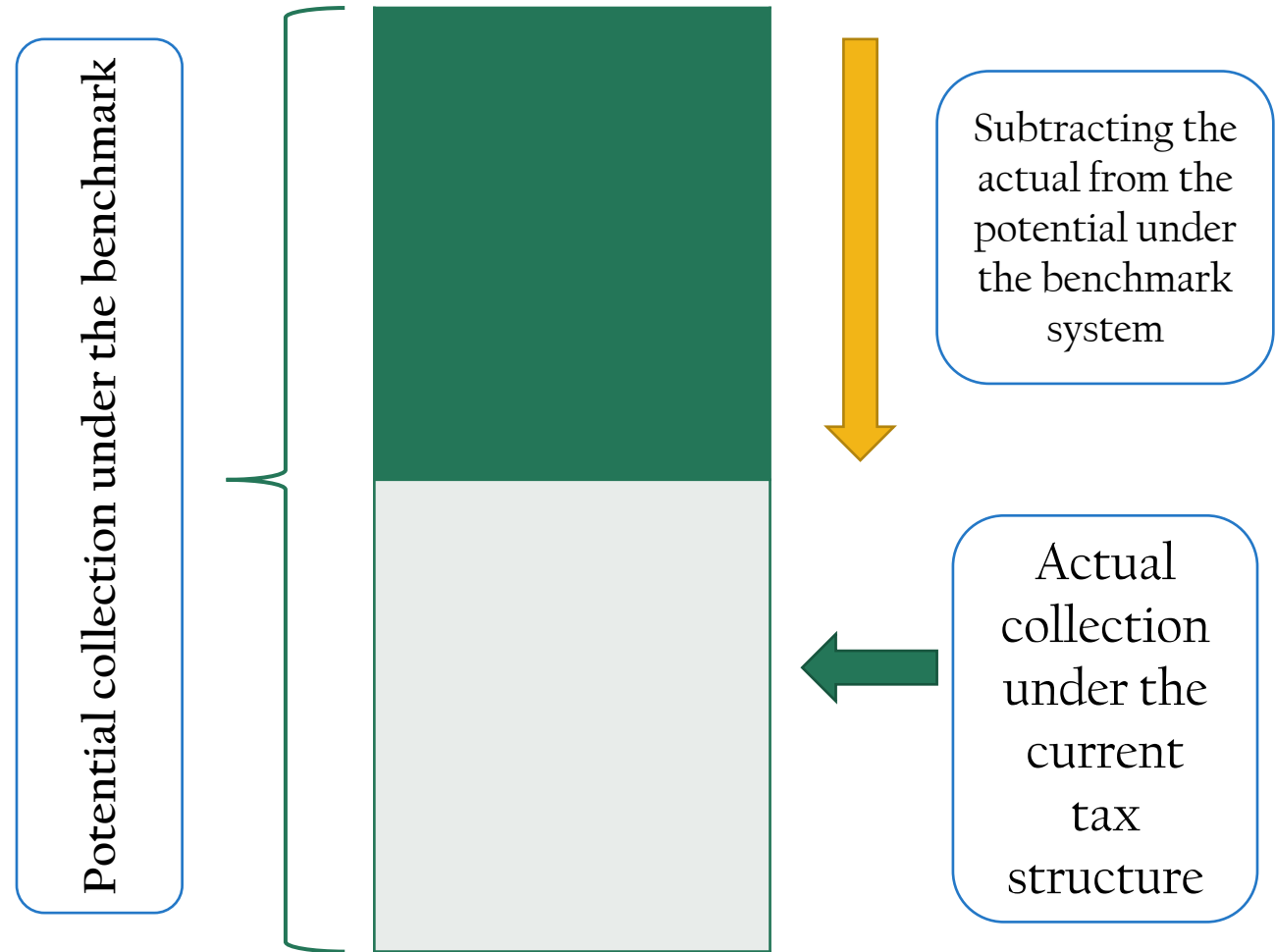
Decision-making flowcharts-VAT



Approaches to Estimating VAT TEs

Top-down approach

- is a subtractive process
 - first estimate the potential tax and then subtract from that the actual tax to arrive at the tax gap.
 - relies on 'National Account data/SUT; and survey data
 - provide a comprehensive assessment of all TEs;



Top-down approach



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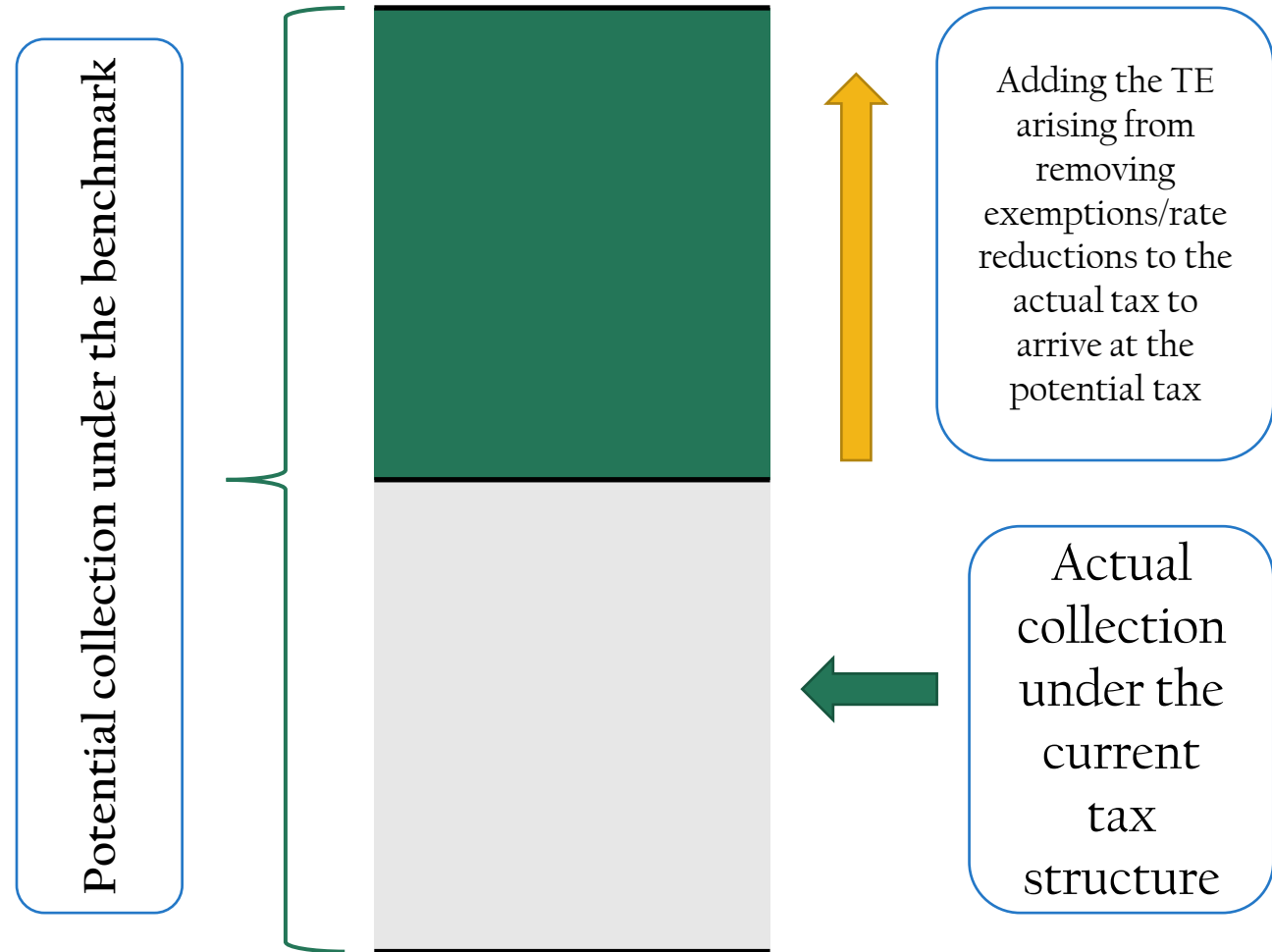
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90

Approaches to Estimating VAT TEs

Bottom-up approach

- The policy gap (which includes tax expenditure) is estimated directly using tax admin data, such as results of random audits or operational audits targeted by some criteria
 - potential revenue is arrived at through an additive process, adding the calculated gaps to the actual tax to arrive at the potential tax.
 - Often used for income taxes.



TRADE TAX EXPENDITURE

Measuring trade TE

- Defining the benchmark tax system:
 - For customs and import taxes, the benchmark tax system USUALLY includes:
 - International agreements like the *Vienna Convention*, *Chicago Convention*, *Florence Agreement*, and *Nairobi Agreement*
 - Regional and bilateral trade agreements (granting preferential treatments for goods originating from the bloc or partner country).
 - The benchmark customs duty rate will not be the same for all the imported goods.
 - the benchmark customs duty could be based on the ‘Tariff Book’.

Approaches

Issues in estimating trade TE

- Issues: Estimation of trade TE is a bit complicated.
 - Customs duty & import taxes are charged sequentially:
 - TE on a given tax will indirectly affect the collection of taxes in the later stage.
 - Excise on imports is calculated on the sum of the CIF value of imports and the customs duty payable.
 - This gives rise to ‘direct’ and ‘indirect’ effects.
 - Trade taxes (such as VAT on imports) affect domestic TE estimations

Approaches to estimating trade TE

How do we account for these indirect and interaction effects in import TE estimates?

- No 'correct' way of doing but different approaches have advantages and disadvantages
- Two common approaches to account for these effects

Approaches to estimating trade TE

Approach I



TEs are counted where they **ACCRUE**, not where they **ORIGINATE**

Customs TE captures only TEs accruing to customs.

TEs arising from exemptions or reductions in customs duties but accruing to excise are reported as excise TE.

Approach II



TEs are counted where they **ORIGINATE**, not where they **ACCRUE**.

Direct TE: resulting from the tax itself.

Indirect TE: arising indirectly from other taxes (through its impact on the tax base)

Approach I

Example: Country A has customs duty (on CIF value) and excise on imports (on the sum of CIF value and customs duty payable).

CIF Value	Benchmark duty rate	Applied duty rate	Benchmark excise rate	Applied excise rate
2,000	0.10	Exempt	0.20	0.20

- Under Approach I: the TE is reported as:

$$\begin{aligned} \text{Customs duty TE} &= (\text{Benchmark duty rate} - \text{Applied duty rate}) * \text{CIF Value} \\ &= \underline{200} \end{aligned}$$

Approach I

Example: Country A has customs duty (on CIF value) and excise on imports (on the sum of CIF value and customs duty payable).

CIF Value	Benchmark duty rate	Applied duty rate	Benchmark excise rate	Applied excise rate
2,000	0.10	Exempt	0.20	0.20

- Under Approach I: the TE is reported as:

$$\begin{aligned}
 \text{Excise TE} &= \text{Benchmark excise rate (CIF+CIF*Benchmark duty rate)} \text{ less } \leftarrow \text{Collections under the BTS} \\
 &\quad \text{Applied excise rate (CIF+CIF*Applied duty rate)} \leftarrow \text{Actual collections} \\
 &= \underline{440 - 400 = 40}
 \end{aligned}$$

Approach II

Example: Country A has customs duty (on CIF value) and excise on imports (on the sum of CIF value and customs duty payable).

CIF Value	Benchmark duty rate	Applied duty rate	Benchmark excise rate	Applied excise rate
2,000	0.10	Exempt	0.20	0.20

- Under Approach II: We report TEs as direct effect and indirect effects

$$\begin{aligned} \text{Direct Customs duty TE} &= (\text{Benchmark duty rate} - \text{applied duty rate}) * \text{CIF Value} \\ &= \underline{200} \end{aligned}$$

Approach II

Indirect Customs duty TE (through excise)=

$$\begin{aligned} & \left(\text{Benchmark Excise Rate} \right) \left(\text{Direct customs duty TE} \right) \\ & = \underline{0.20 * 200 = 40} \end{aligned}$$

Excise TE=

$$\begin{aligned} & \left(\text{Benchmark Excise Rate} - \text{Applied Excise Rate} \right) \left(1 + \text{Applied Customs Duty} \right. \\ & \quad \left. \text{Rate} \right) \left(\text{CIF} \right) \\ & = 0 \end{aligned}$$

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DATA REQUIREMENTS

Data requirements

- The data for customs & import tax expenditure comes from the Customs Commissions/Authority/
 - ASYCUDA World/customs management system:
 - Shipment level import, the customs, and import tax payable
 - CIF value of imports, customs duty payable, VAT payable, surtax payable
 - HS code of the shipment, Customs Procedure Code (CPC)
 - The country's Tariff Book
 - List of the regional, and bilateral trade agreements



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