

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
- 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

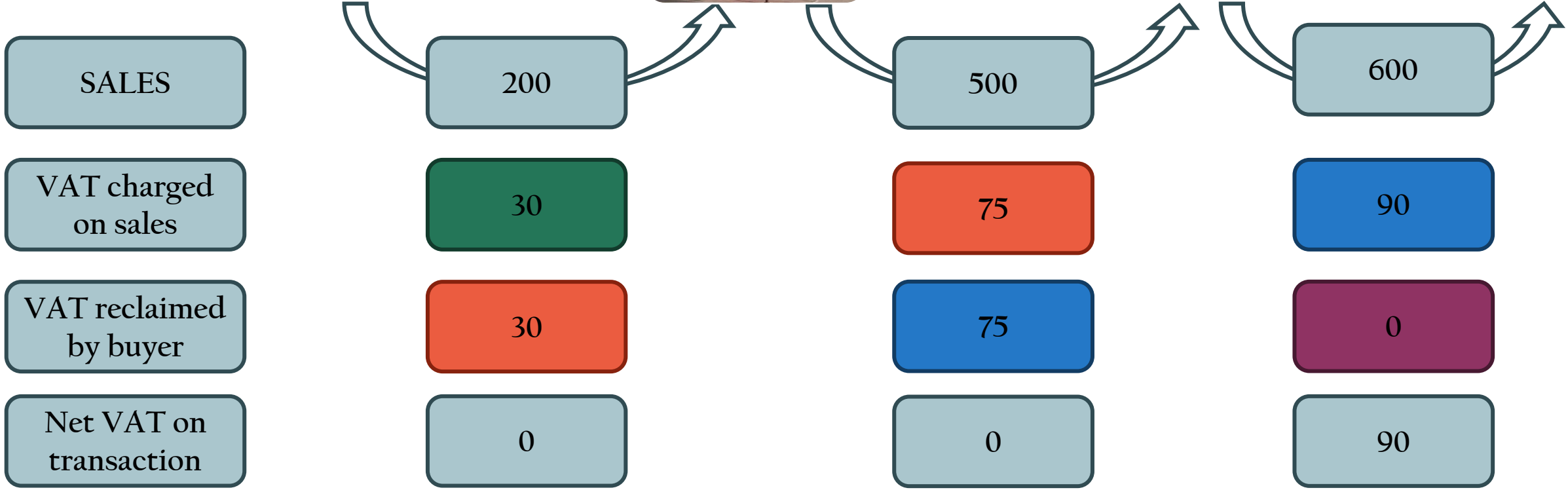
purchases the
flour & produces
bread



Consumer

buys the bread
from the bakery

Mechanics of VAT in the supply chain



Departure from the ‘*ideal*’ VAT System

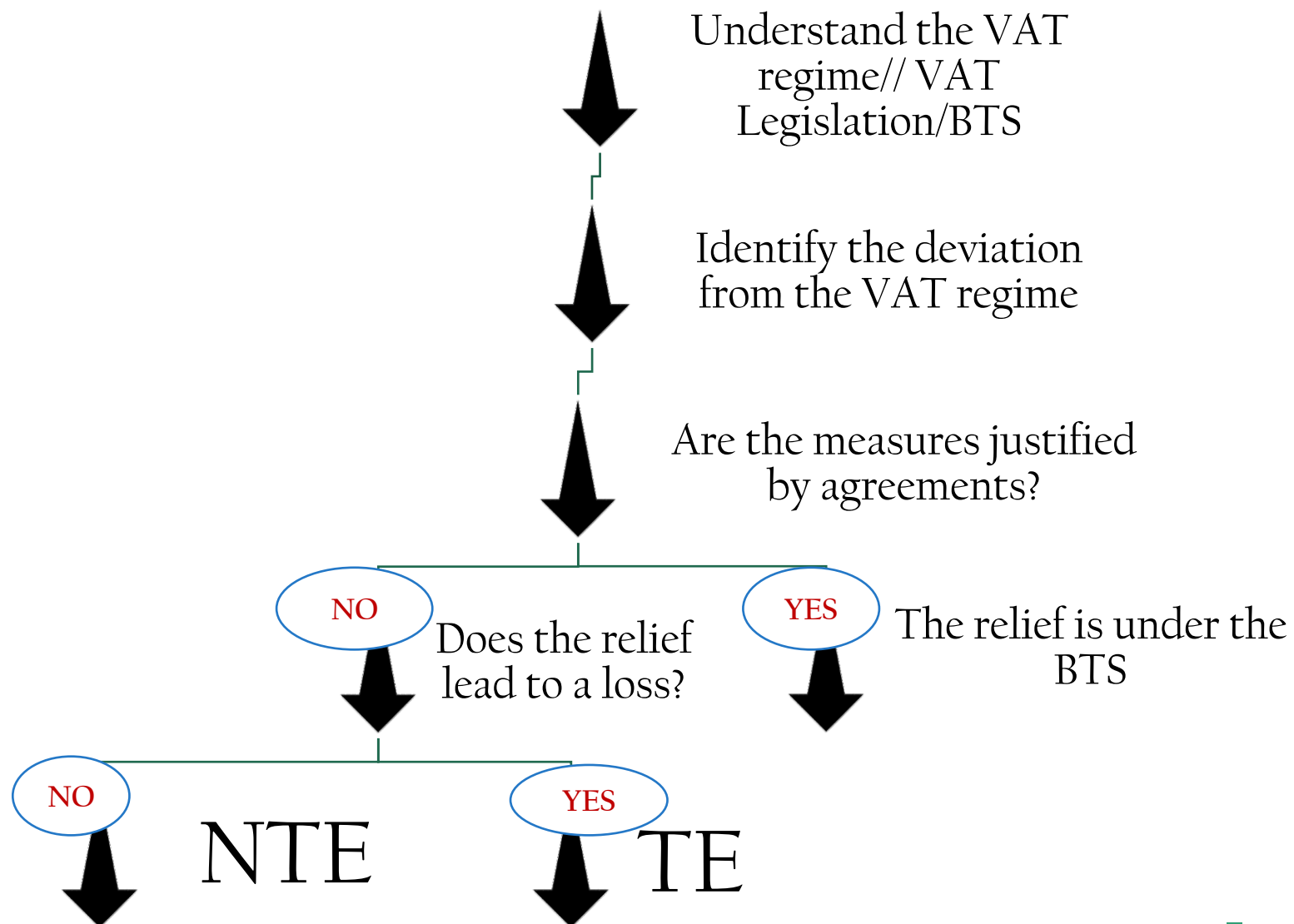
- In practice, there are departures from the ideal VAT system in various forms:
 - Exempt supplies → like *financial services, basic food items*
 - Zero-rated supplies → *exports, gold supplies to Central Banks*
 - Reduced-rate supplies → *use reduced rates for certain items including food items*
 -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

Modeling VAT TEs

Defining the benchmark & methodology

- Defining the benchmark tax system:
 - defining the benchmark tax system is key in identifying and estimating TEs;
 - **standard VAT rate** is usually taken as the benchmark for VAT TE
 - the following elements for each category of tax examined
 - tax base, tax entity (unit), tax rate, the time frame
- Second, the estimation method needs to be well-defined.
 - common method is the standard “revenue foregone” method;
 - Compare tax collection under the **actual tax system** with **potential tax collection** under the benchmark tax system

Decision-making flowcharts-VAT



Approaches to Estimating VAT TEs

Top-down approach

- relies on 'National Account data/SUT;
- uses survey data;
- provide a comprehensive assessment of all TE;

Bottom-up approach

- requires admin data;
- supplement top down approach;

Econometric approach

- uses various methods (frontier and time series analysis) to estimate VAT gap, and then VAT TE;

TRADE TAX EXPENDITURE

Defining the benchmark

- Defining the benchmark tax system:
 - Defining the benchmark tax system is key in identifying and estimating TEs;
 - 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).

Defining the benchmark

- Customs duty is a trade policy tool and is applied differently on different goods.
 - The benchmark customs duty rate will not be the same for all the imported goods.
 - could set the same tariff for relatively similar goods.
 - alternatively the benchmark customs duty could be based on the 'Tariff Book'.
- Any deviation from the benchmark system is considered a tax expenditure

Methodology and Approaches

Methodology and issues in estimating trade TE

- Methodology: the ‘revenue-foregone method’.
- Issues: Estimation of trade TE is a bit complicated.
 - Trade taxes are charged sequentially, so tax expenditures on a given tax will indirectly affect the collection of tax later in the import tax sequence.
 - VAT 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 (like VAT) affect domestic TE estimations

Methodology and issues in estimating trade TE

Direct TEs

resulting from the exemptions/rate reductions of the tax itself.

Indirect TEs

arising indirectly from exemptions/rate reductions of other taxes (through its impact on the tax base)

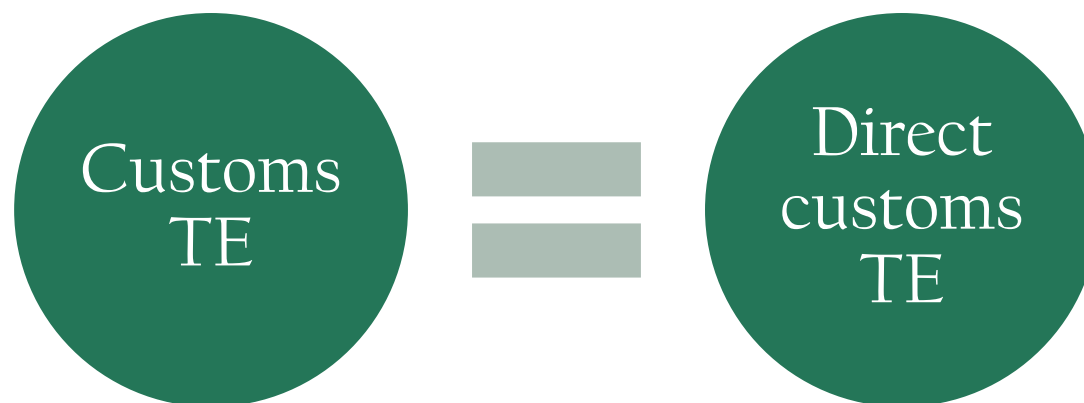
Methodology and issues in estimating trade TE

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
- There are two common approaches to account for these two effects
 - **Approach 1:** Compare actual tax collection on each tax with theoretical collection under the benchmark system.
 - TEs are counted where they *accrue*, not where they *originate*
 - Common in many African countries

Approach 1

- Customs TE captures only TEs accruing to customs. On the other hand, TEs arising from exemptions or reductions in customs duties but accruing to VAT are reported as part of the VAT TE.
- $\text{Customs TE} = (\text{Benchmark customs duty rate} - \text{Actual customs duty rate}) * \text{CIF Value}$



Approach 1



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

CIF Value	Benchmark customs duty rate	Applied customs duty rate	Benchmark VAT rate	Actual VAT rate
1,500	0.10	0.05	0.15	0

	Customs TE	VAT TE
Approach I	75	247.5

Methodology and issues in estimating trade TE

Advantages:

- straightforward to calculate, and
- captures interactions, so tax expenditures on different taxes can be summed up.

Disadvantage:

- Estimates for individual TEs have no direct connection to policy

Methodology and issues in estimating trade TE

Approach 2: An alternative approach based on what TaxDev has done in Ethiopia

- Reports indirect effects where they originate not where they accrue

Advantages:

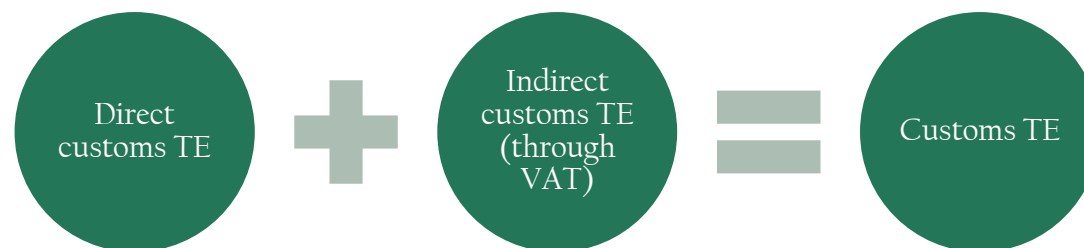
- Tax expenditures on different taxes can be summed up, and removing tax expenditures sequentially starting from the last tax in the sequence

Disadvantage:

- Not straightforward to calculate than the other approach

Methodology and issues in estimating trade TE

Approach 2



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

CIF Value	Benchmark customs duty rate	Applied customs duty rate	Benchmark VAT rate	Actual VAT rate
1,500	0.10	0.05	0.15	0

	Direct customs TE	Indirect customs TE (through VAT)	Direct VAT TE
Approach II	75	11.25	236.25

DATA REQUIREMENTS

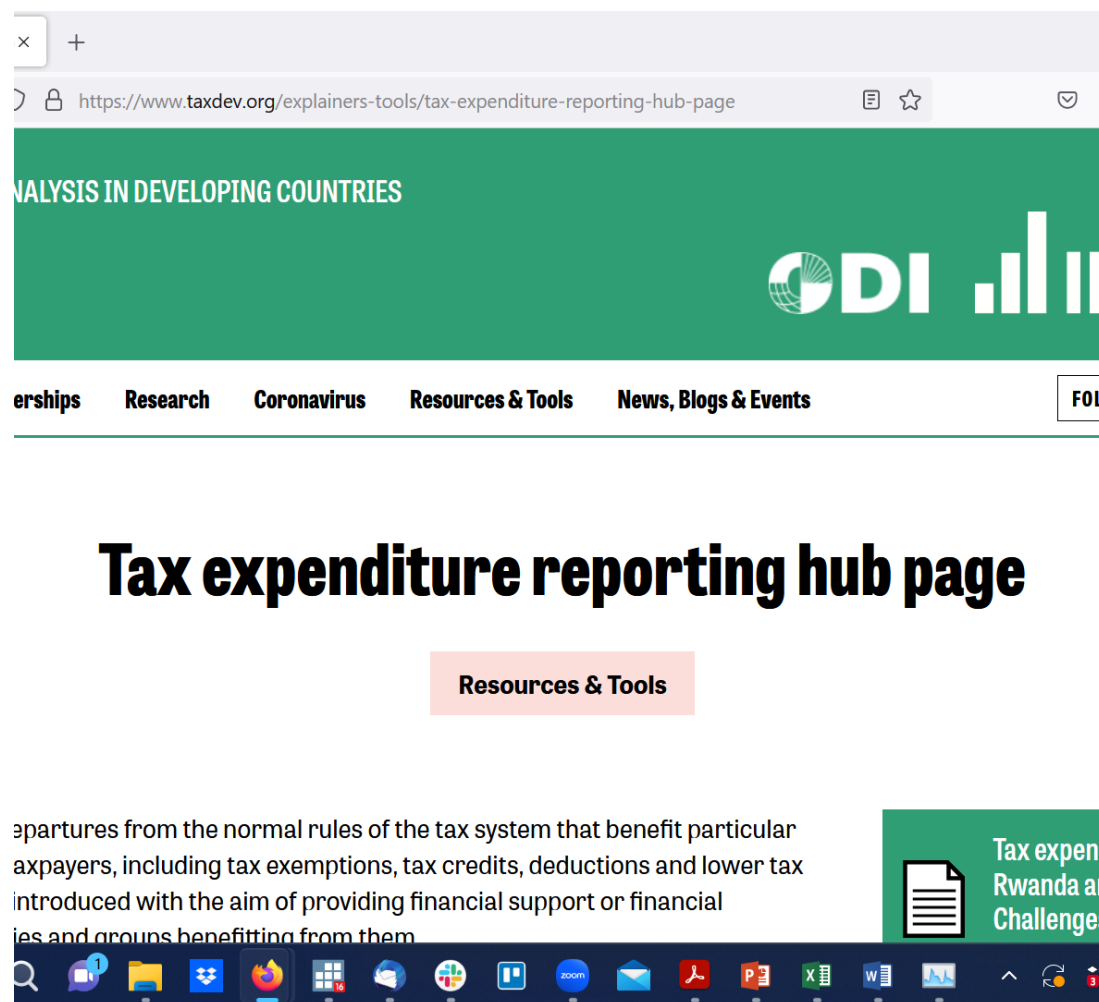
Data requirements

- 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

TaxDev has set up 'TE Resource Hub' which you can access easily

Available at:

<https://www.taxdev.org/explainers-tools/tax-expenditure-reporting-hub-page>



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