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8.1 Ex-Post evaluation of TEs I: Concepts and Methods

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Introduction

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- **Overview**
  - Ex-post TE evaluation, Cost-benefit analysis
- **Evaluation Methods when ‘ideal’ data is unavailable**
- **Cost-benefit & distributional analysis**
- **Concluding Remarks**

Overview

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- TE report
  - Transparency / Accountability ✓
  - Decision-making ✗
  - The first half of a Cost-Benefit-Analysis (CBA)
  - Doesn't evaluate effectiveness / efficiency of TE
  - Doesn't often evaluate vs. alternatives

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Overview

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- Often might get demand for "evaluate" or "rationalize" TEs.

  - E.g., Uganda: IMF ECF Structural benchmarks

Table 2b. Uganda: Original Structural Benchmarks – Combined 2nd and 3rd Review (concluded)				
Measures	**Rationale**	**Deadline**	**Status**	**Comments**
Adopt a tax exemption rationalization plan applying criteria defined in the tax expenditure framework that would identify at least 0.1 percent of GDP in savings in FY 22/23 and 0.2 percent in subsequent years.	Revenue mobilization through a wider base	June 2022	Not met	**Completed** in November 2022. The plan is in line with TA recommendations provided by the Fiscal Affairs department of the IMF in July.

- But how do you 'rationalize' a TE?

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How do you ‘rationalize’ a TE?

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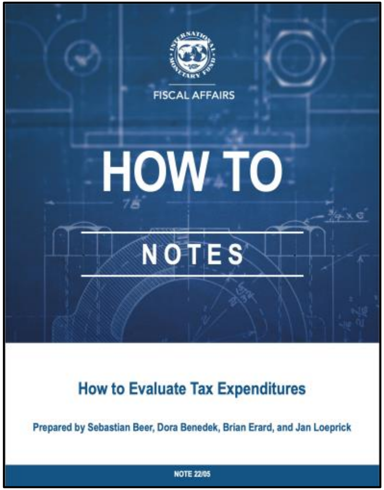
Rationalization : (e.g.) justifying existence of the TE

Not straightforward; 3 distinct questions which can become conflated

- Effectiveness: *Does the TE meet stated objectives?*
  - Are these objectives stated anywhere?
  - We would like to know the causal effect of offering a tax incentive on some pre-determined outcome [difficult!]
- Efficiency / Cost-benefit analysis:
  - *Are there net benefits to society?*
  - *If the objective is met, at what cost?*
- Evaluation *vis-à-vis* alternatives
  - If gov’t committed to providing support, is the TE the best way to do so?

Recent IMF How-to Note

- Beer *et al*. (2022) provide some guidance on TE evaluation
- *“a process that seeks to systematically inform policymakers on the desirability of introducing or maintaining specific tax benefits by gathering and analysing available quantitative and qualitative information on their effects”*
- Only a handful of countries carry out systematic evaluation of TE
- **Germany**: every TE evaluated at least once per decade.
- **Ireland:** aims to evaluate TE every five years.



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Cost-Benefit Analysis

from the British people

Evaluating efficiency (C-B-A)

- IMF paper in 2014 sets out a cost-benefit analysis framework for investment incentives
  - **Social benefits:**
    - Size of net investment effect
    - Net impact of higher investment on jobs and wages
    - Productivity spillovers

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OPTIONS FOR LOW INCOME COUNTRIES' EFFECTIVE AND EFFICIENT USE OF TAX INCENTIVES FOR INVESTMENT

IMF staff regularly produces papers proposing new IMF policies, exploring options for reform, or reviewing existing IMF policies and operations. The following document(s) have been released and are included in this package:

A Report by Staff on "Options for Low Income Countries' Effective and Efficient Use of Tax Incentives for Investment;" an accompanying Background Document including tools for assessment.

Informal Session to Brief:

The attached report was prepared by IMF staff jointly with staff of the OECD Center for Tax Policy and Administration, the World Bank Group, and the United Nations (collectively, the "IOs"), at the request of the G20's Development Working Group (DWG). Countries often face pressures to attract investment by offering tax incentives, which then erode the countries' tax bases with little demonstrable benefit in terms of increased investment. The IOs were asked to use their shared expertise to assist low income countries in making better and more efficient use of tax incentives. Drawing on recent country experiences and an extensive range of academic and other studies, the IOs prepared a report aiming to take a fresh look at tax incentive policies in low income countries. A separate background document also attached here reviews practical tools and models to assess the costs and benefits of tax incentives, and to enhance transparency and support informed decision making. The report was presented to the IMF Executive Board in an informal session on October 22, 2015. Such informal sessions are used to brief Executive Directors on policy issues. No decisions are taken at these informal sessions. The views expressed in this paper are those of the IMF staff and do not necessarily represent the views of the IMF's Executive Board.

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Evaluating efficiency (C-B-A)

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- IMF paper in 2014 sets out a cost-benefit analysis framework for investment incentives
  - **Social costs:**
    - Net public revenue losses
    - Admin + compliance costs
    - Scarcity of public funds
    - Distorted resource allocation

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Example of CBA: Rwanda

Cost-Benefit Analysis (investment incentive): Rwanda

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- The **benefits** were measured in two parts:
- **Direct benefits** for the recipients of tax incentives + **Indirect benefits** for the *suppliers* of the recipients of tax incentives
  - The outcomes of interest are:
  - (Post-tax employment income + PAYE) = **gross employment income** & (Post-tax corporate income + CIT) = **gross corporate income**

- The **costs** of tax incentives were measured as:
  - Direct costs from the revenue foregone by government
  - Indirect costs of administering, monitoring and enforcing the incentives properly

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Evaluation & Cost-Benefit Analysis: Methods (TaxDev Rwanda)

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- CBA just one of four methods used
  - Each brings slightly different information or evidence to the table

- Conclusion of study

"*positive impacts on investment from tax incentives have been limited, while the tax revenue foregone is substantial*"

Method	What it tells us
Cost per job	How proportional is TE to number of (formal) jobs
Cost benefit analysis	How much does the economy gain relative to cost of attracting investment
METR	Impact of different incentives on returns to investment
Econometric model	What drives FDI choices across various countries

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Distributional Analysis

Distributional Analysis

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- Distributional analysis can be very useful to help when trying to understand effectiveness (for certain TE).
  - E.g., if a VAT exemption on basic foodstuffs is targeted to provide relief to the poorest households, you want to know the extent to which poorest households are benefitting.
  - For VAT expenditures, tax-benefit microsimulation models are very useful
    - Or at least, some modelling using a household consumption survey
  - For PIT expenditures, can use PAYE returns
  - For CIT expenditures, can use CIT returns (firm size).
  - Some examples:

Distributional Analysis: Examples

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- IFS paper looked at poverty & distributional effects of VAT exemptions vs cash transfers
- Use microsimulation models to study the effects of reduced VAT rates and exemptions on revenues, poverty and inequality.
- In isolation, reduced VAT rates and exemptions in six LMICs studied are poverty-reducing.
- Find them to be expensive in terms of foregone tax revenue, and in all cases richer households benefit the most in cash terms.
- Though better targeted at poor households, existing cash transfer programmes often miss large shares of poor households.
- Recycling the revenue yield from a broader VAT base with universal benefits would reduce inequality and most measures of poverty.


ELSEVIER

World Development
Volume 151, March 2022, 105742

The redistributive power of cash transfers vs VAT exemptions: A multi-country study

Ross Warwick [a], Tom Harris [a], David Phillips [a], Maya Goldman [b], Jon Jellema [b], Gabriela Inchauste [c], Karolina Goraus-Tańska [d]

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Distributional Analysis: Examples

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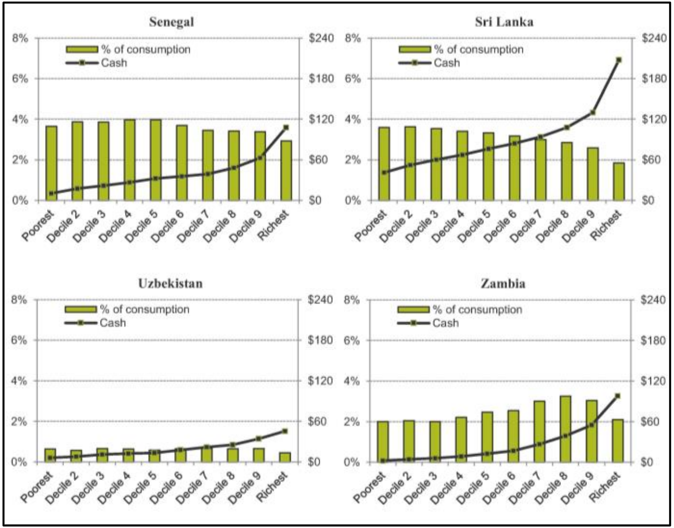

Distributional Analysis: Examples

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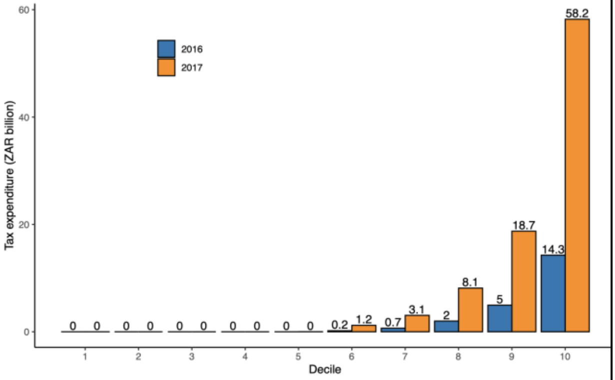
- Axelson & Redonda (2021)
- Examined distributional effects of a pension credit on PIT in South Africa.

Figure 7: Total tax expenditure by taxable income decile



Source: authors' elaboration based on National Treasury and UNU-WIDER (2019).

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Distributional Analysis: Examples

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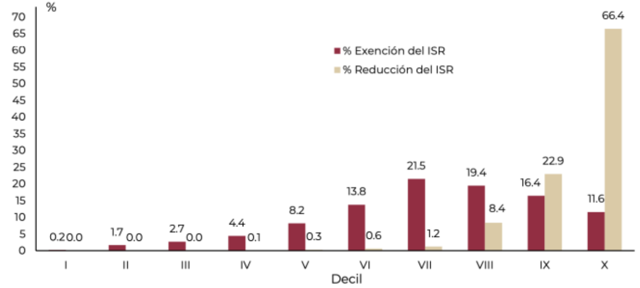
- Mexico TE report
- Exemption and tax reductions for businesses engaged in Agricultural, Livestock, Forestry and Fishing Activities, by income decile

Gráfica 3. Distribución por decil de ingresos de la Exención y la Reducción en el ISR del Régimen de Actividades Agrícolas, Ganaderas, Silvícolas y Pesqueras



Fuente: Elaborado por la SHCP con información de las Declaraciones Anuales 2019.
Nota: El total puede no coincidir debido al redondeo.

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Evaluation: Important Practicalities & Lessons

- Build procedures for ongoing review (ex post evaluation)
- This might require:
    - Defining *ex-ante* what the *ex-post* evaluation will look like
    - Determining information needs.
        - Is administrative or legislative change required?
    - Openness to reform / removal of ineffective TEs.

- Partnering with external researchers etc. can bring much-needed objectivity

Conclusions & Practical take-aways

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- Lessons:
  - Evaluation is time-consuming & resource intensive
  - Often **difficult to arrive at a clear answer** with just one set of data
    - Manage expectations of decision-makers accordingly.
  - Qualitative and quantitative analysis can complement one another
  - If not part of an ‘official’ review process: where do the findings go?
  - Good to evaluate / monitor TE, but structures, procedures must be in place for the results to feed into decision making.

Conclusions & Practical take-aways

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- Many different approaches to evaluation / effectiveness / efficiency / CBA etc.
- Set out in advance the questions that will be asked, methods employed, and how the results are used.
- TEs with clearly defined objectives are easier to evaluate.
- Manage expectations
  - Unlikely that a clear-cut answer will exist.

- **Start to build the evidence base today**

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