**Fiscal Affairs Department** 

### CURRENT ISSUES IN TAX ADMINISTRATION



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Views are mine alone

#### Outline

- Part 1: Thinking about tax administration

   Optimal tax gaps
   Thresholds and segmentation
- Part 2: New tools
   —RA-FIT/ISORA
   —TADAT

#### Part 1: THINKING ABOUT TAX ADMINISTRATION

#### Until recently

#### Literature on tax administration had focused on:

- Measuring administration and compliance costs
- Embellishing/puzzling over Allingham-Sandmo

#### Recent explosion of empirical work

Many excellent papers using experiments, natural or other, to address aspects of compliance. E.g.:

- Compliance in VAT chains (Pomeranz, 2015)
- Lotteries (Naritomi, 2013)
- 'Nudges' (reviews in Alm (2014), Luttmer and Singhal (2014))

#### What do tax administrators learn?

- Implications for enforcing VAT chains
  - Pomeranz results seem to imply "Start at the end"
- Importance of withholding and third party information well-known
  - British land tax 1697; and Milton Friedman's regret!
- Are lotteries/nudges first order importance?

## What do tax administrators think about? (IMF, 2015)

- Governance structures
  - Move to semi-autonomous revenue agencies
- Operational management
  - More later
- Information management

– About much more than IT systems

Stakeholder relationships

– E.g. "cooperative compliance"

#### Two issues they (and now we) focus on

Key aspects of operational management:

• 'Tax gaps'

- Measuring, understanding...

• Partitioning and segmentation of taxpayers

Differing treatment for different types (most obviously by size)

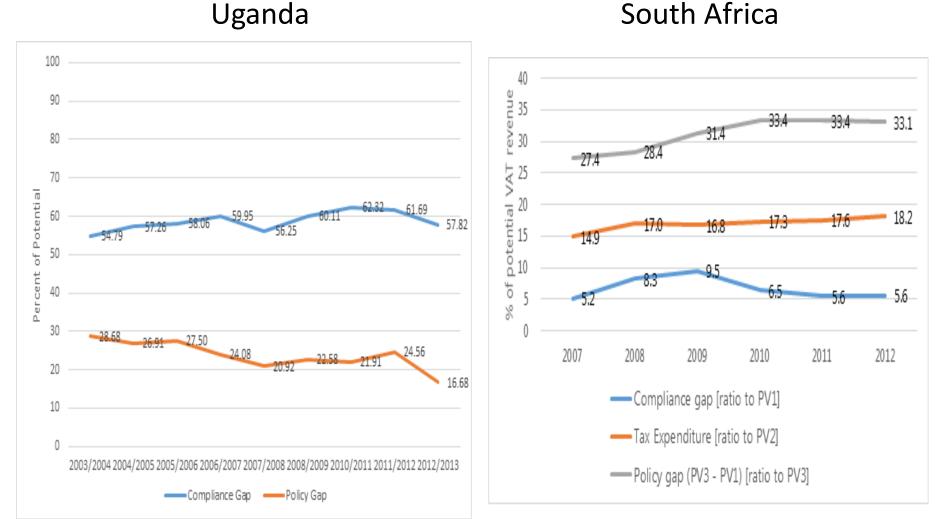


#### **Compliance** gap

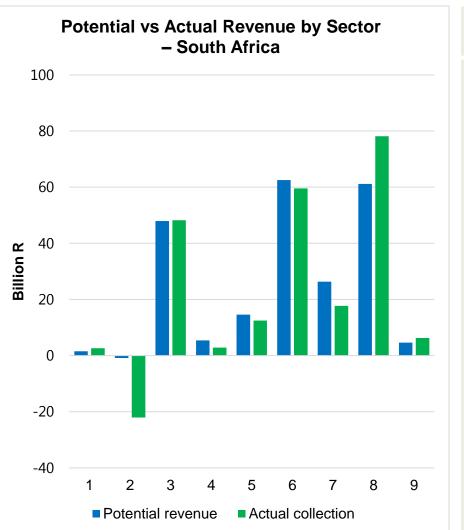
= Excess of tax (e.g. VAT) theoretically due over that actually collected, as percent of former

- An increasing focus in many countries. E.g.:
  - UK has produced 'VAT gaps' for several years
  - Reckon (2009) and CASE (2013) for EU
  - RA-GAP project at IMF, including some developing countries
- Ideally, combine with analysis of 'policy gaps' — Similar to tax expenditures

#### For example (from RA-GAP)



#### VAT gaps by sector



#### Sectors:

- 1. Agriculture, forestry and<br/>fishery6. Wholesale and retail<br/>trade, catering and
- 2. Mining and quarrying
- 3. Manufacturing
- 4. Electricity, gas and water
- 5. Construction

#### accommodations 7. Transport, storage and

- communications
- 8. Financial

intermediation, insurance, real estate and business services

9. Community and social services

#### BUT: Gemmell-Hasseldine critique of gap concept

Compliance gap may not be recoverable

 Because raising effective rate though enforcement may reduce the base

#### AND: What is the optimal compliance gap?

Imagine policy maker choosing both:

• Tax rate (T)

• Some enforcement parameter (α)

—E.g. audit rate, penalties, detail required from taxpayer....

#### Optimal choice of tax rate, T

- Well-known: A sufficient statistic for behavioral responses to tax rate changes is "elasticity of taxable income" = elasticity of reported tax base to (one minus) tax rate

   Higher this is, the lower is the optimal tax rate
- Large empirical literature seeks to estimate this
  - Almost all for advanced countries

#### Optimal choice of 'enforcement', α...

• An analogous sufficient statistic: the "enforcement elasticity of taxable income" = elasticity of taxed base to the enforcement parameter,  $E_{Z,\alpha}$ 

-separate impacts on 'true' tax base and evasion do not matter

#### More precisely

#### At the optimum, necessary condition on $\alpha$ gives

$$\lambda = E_{Z,\alpha}$$

where  $\lambda$  is (modified) ratio of implementation costs to revenue

#### Optimal compliance gap

## The same condition can be expressed as an optimal compliance gap:

For example: if  $E_{Z,\alpha}$ =0.2,  $\lambda$  = 5%, optimal gap is 25%

# If \$1 more is needed, should it come from higher rate or stronger enforcement?

Answer is more likely to be enforcement:

- Higher is the elasticity of taxable income
  - Because that means high inefficiency
- Higher is the tax rate
- Higher is enforcement elasticity
- Lower are administration and compliance costs
  - Former especially damaging to case for implementation

What we know about the enforcement elasticit(ies) of taxable income?

- Evidence from panel of EU compliance gaps suggests  $E_Z = 0.17$
- Experimental evidence – For audit,  $E_Z = 0.1-0.2$
- Empirically, some IRS work (Plumley)...
  - Mainly concerned with choice between administrative instruments

...suggests  $E_Z$  for audit of 0.6-0.85 (?)

#### **Thresholds and segmentation**

#### Choosing the VAT threshold

If all taxpayers compliant(!), increasing the threshold:

- Government loses revenue (only) from those at the threshold (each dollar valued at, say, \$1.2) but saves administration costs (of say \$400)
- Taxpayer has money in the pocket and saves compliance costs (of say \$1,000)

Balancing these effects (assuming 20% tax rate and value added 20% of sales), optimal threshold is \$98,000

# What if they are not necessarily compliant, but can...

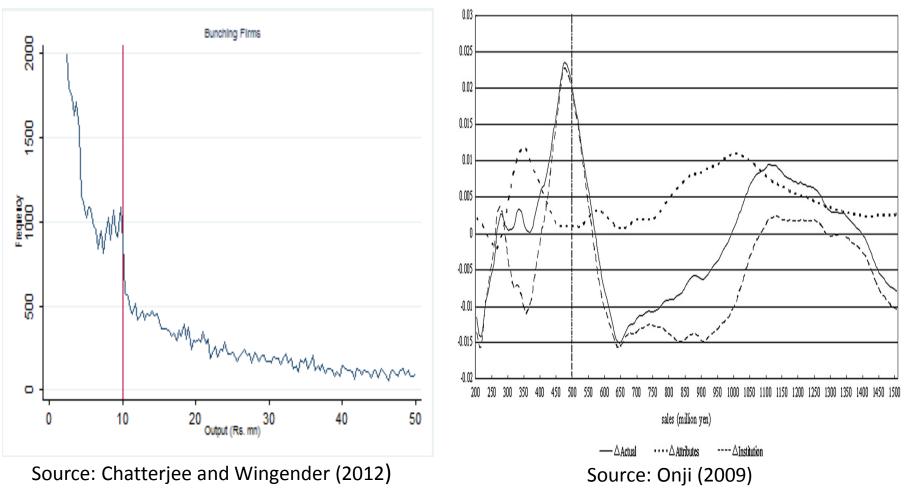
- Declare truthfully
- Adjust, legally, to below Z
- Become ghosts/falsely declare under Z
- Conceal a fraction of their income

#### Then taxpayers partition such that

Starting at the lowest level of true income

- Lowest are (honestly) out of the system
- Next lowest adjust out
- Then there are the bounders
- Then the cads
- And the largest are fully honest

#### Adjusters (and bounders?) in practice



Ghosts? Non-filers 7% all potential US taxpayers

#### Towards optimal segmentation...

But what is the optimal threshold?

• Set high enough to eliminate 'bounders', because....

Increasing threshold gives:

- No output or revenue loss from B's who become A's
- Increased output of A's
- More generally, likely higher than with full compliance

#### ...with compliance patterns suggesting:

Administrative challenges are related to size:

- For top: compliance likely to be good; control avoidance and ensure timely payment
- Middle segment: Concealment
- Bottom segment: Concealment and ghosts

This looks much like LTO, MTOs and STOs....

#### Part 1: Concluding



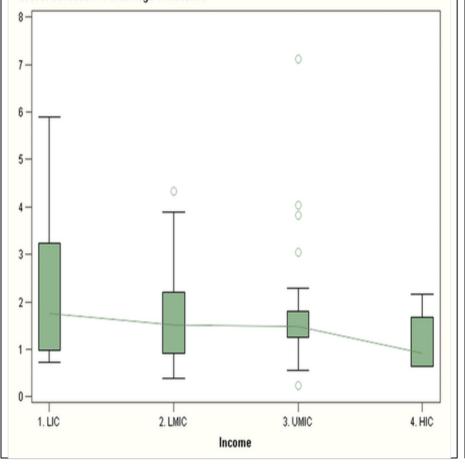
- "...it is time to put to rest the claim that [evasion, avoidance, and administration] is...understudied" Slemrod and Yitzhaki, 2002
- "...there is still only a relatively small scholarly literature [on] tax administration"
  - Hasseldine, 2011
- First view has become more persuasive—but much remains

#### Part 2: NEW TOOLS

#### Two other new analytical tools

## RA-FIT: Collects RA data and establish baselines/benchmarks

Cost of Collection - Percentage of Revenue





### RA-FIT The Revenue Administration Fiscal Information Tool

#### **RA-FIT** is designed to

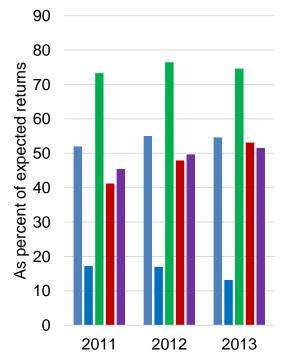
- Gather and analyze core tax and customs administration data annually
- Make data and analysis available to enable countries to monitor and benchmark their performance
- Establish baseline measures for TA programs and provide data for an results-based framework
- Help target TA strategies

#### Sample Output

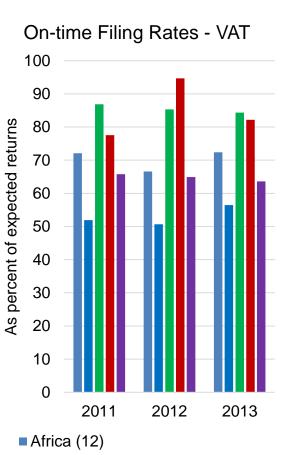
**On-time Filing Rates -**Corporate Income Tax 90 80 As percent of expected returns 70 60 50 40 30 20 10 0 2011 2012 2013

- Africa (11)
- Asia and Pacific (4)
- Europe (3)
- Middle East and Central Asia (1)
- Western Hemisphere (18)

On-time Filing Rates -Personal Income Tax



- Africa (8)
- Asia and Pacific (3)
- Europe (1)
- Middle East and Central Asia (1)
- Western Hemisphere (9)



- Asia and Pacific (3)
- Europe (4)
- Middle East and Central Asia (2)
- Western Hemisphere (18)

#### Now in partnership

 The International Survey on Revenue Administration (ISORA) is the result of a collaborative effort by a number of international organizations

• The new Survey will be launched in May 2016





### TADAT Tax Administration Diagnostic Assessment Tool

#### What it is

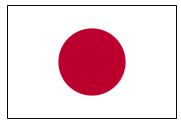
- An objective and standardized performance assessment of a country's system of tax administration
- Does not assess special tax regimes such as for natural resources, or customs administration
- Supported by international development partners and institutions
- Secretariat hosted by the IMF's Fiscal Affairs Department

#### The TADAT partners...





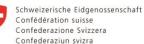
Federal Ministry for Economic Cooperation and Development





Ministry of Foreign Affairs of the Netherlands





Swiss Confederation

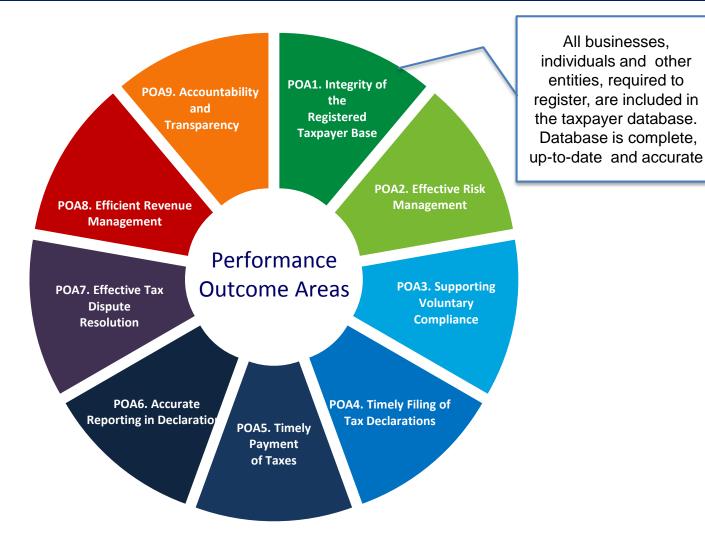
Federal Department of Economic Affairs FDEA State Secretariat for Economic Affairs SECO



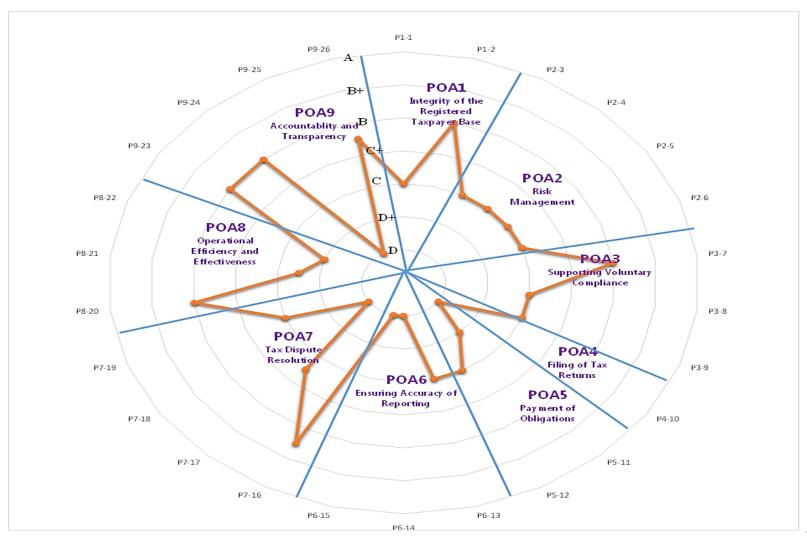




#### How it works



#### Outcomes from 12 pilots



References

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Plumley, Alan, 1996, "The Determinants of Individual Income Tax Compliance," Internal Revenue Service, U.S. Department of the Treasury, Publication 1916 (Rev. 11-96).