Fiscal Affairs Department

ANALYZING COMPLIANCE GAPS

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Outline

- Measurement and trends
- Some world experience
- Methodological considerations
- IMF RA-GAP program

MEASUREMENT AND TRENDS

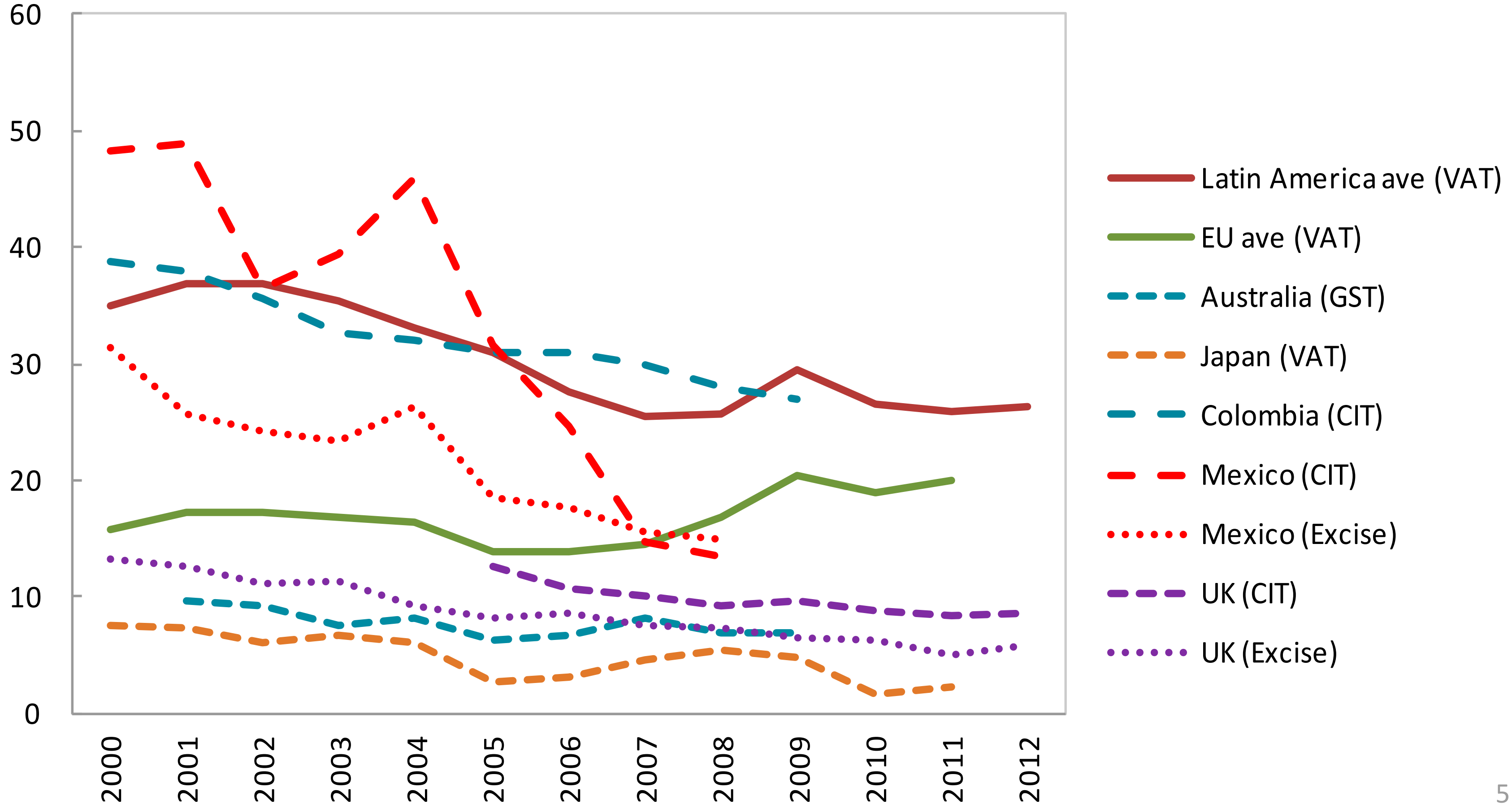
Measuring noncompliance…

Some approaches and issues…

- Widely cited (MIMIC) estimates are ~~nonsense~~ to be used with caution
- Informative traces can be found
  - E.g. change in consumption/income
- ‘Informality’ is too loose
  - lumps together very different forms of noncompliance

‘Compliance gaps’ are the way to go

Calculated by an increasing number of Revenue Authorities (RAs)…



‘Compliance gaps’ are the way to go

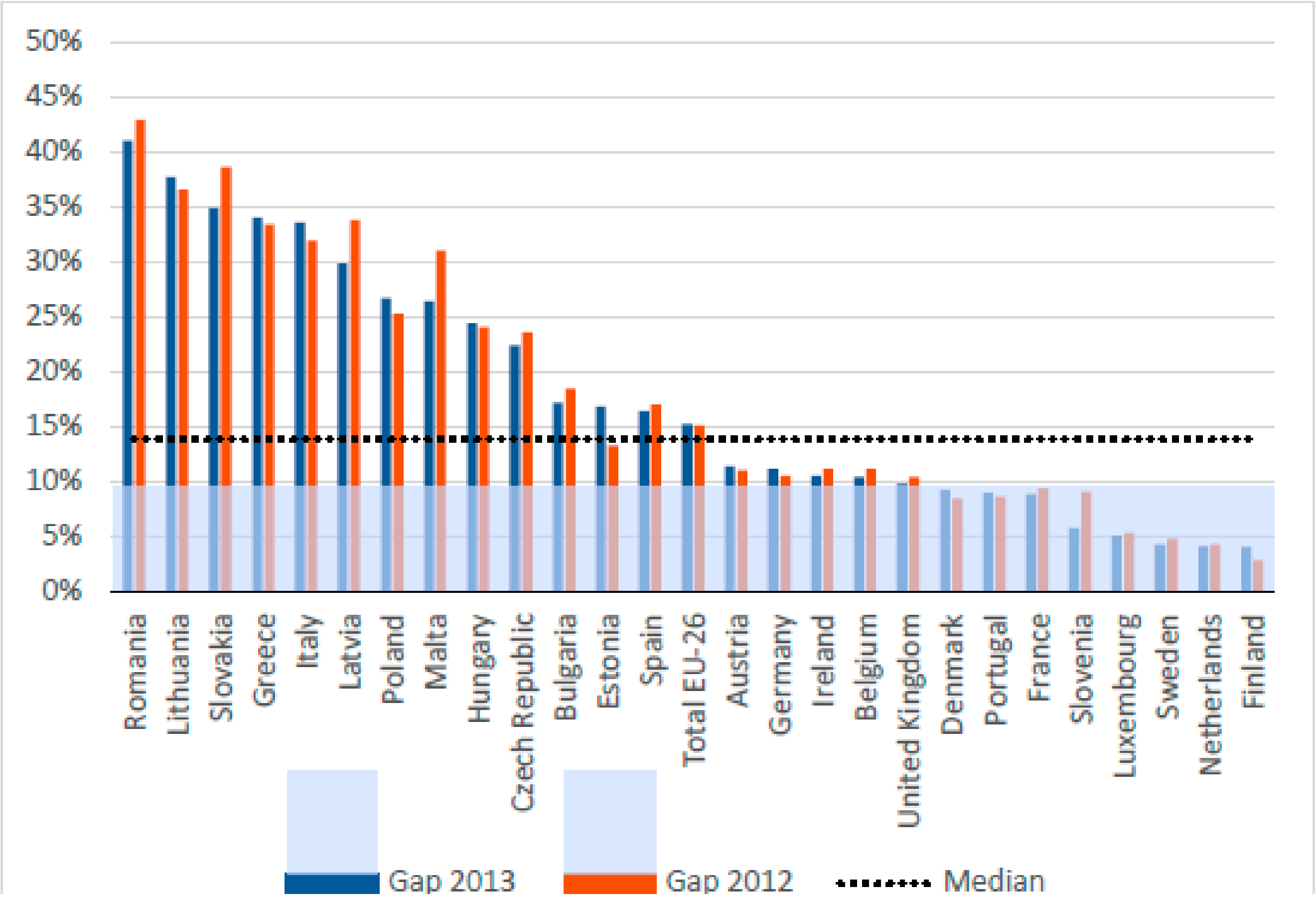
Hard work and need to be interpreted and used carefully…

- Do not necessarily indicate recoverable revenue, but it is a good guide; and trend over time matters.
- Alone, do not indicate remedial action needed; but can guide them.
- Various ways to calculate (discussed later).
- IMF actively promoted this analysis, and support it through its RA-GAP program (discussed later).

SOME WORLD EXPERIENCE

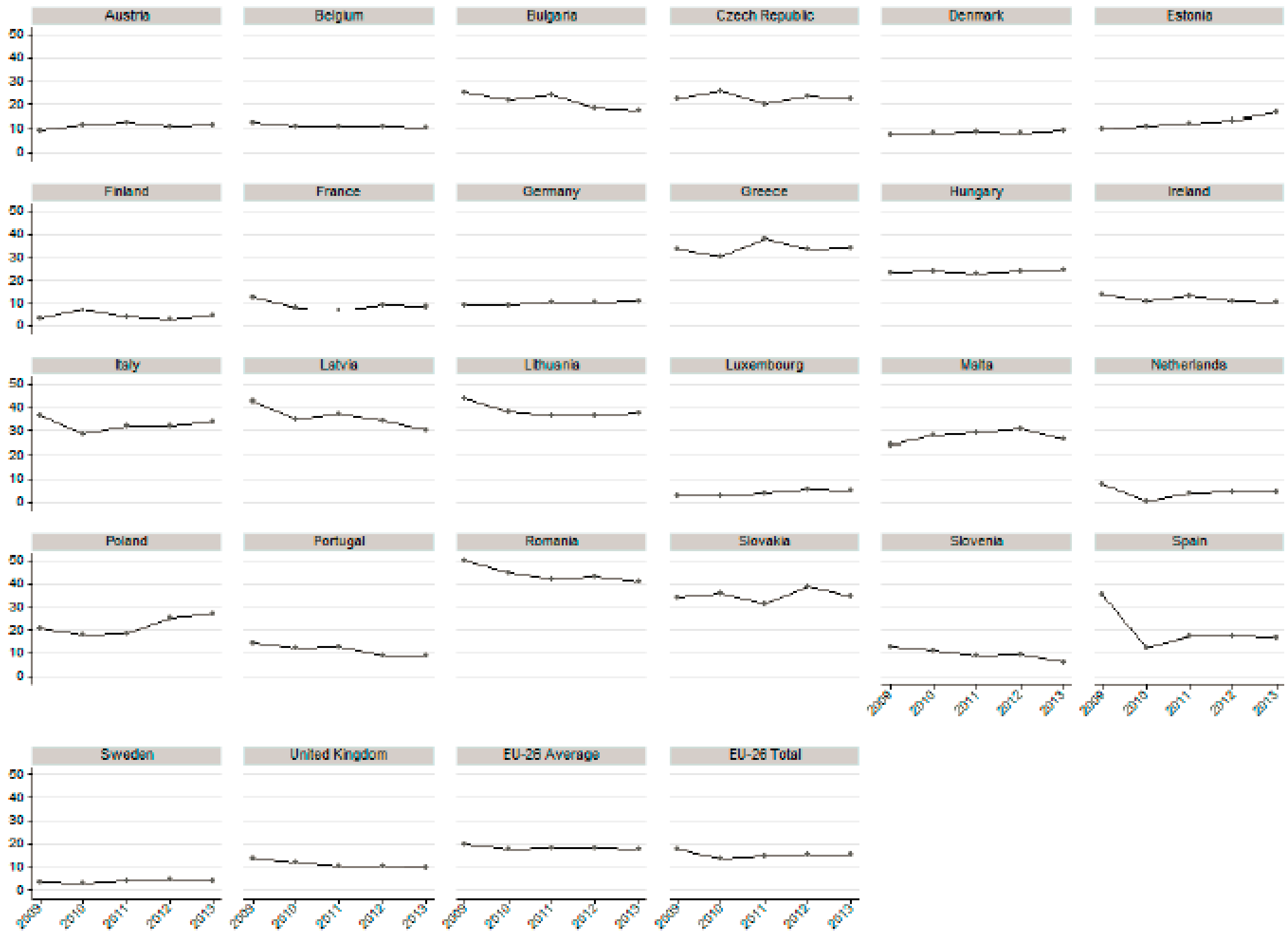
The VAT Gap in the EU—Global estimate

EC TAXUD is promoting regular estimates…



The VAT Gap in the EU—Global estimate

Following trends per country—2009-2013…

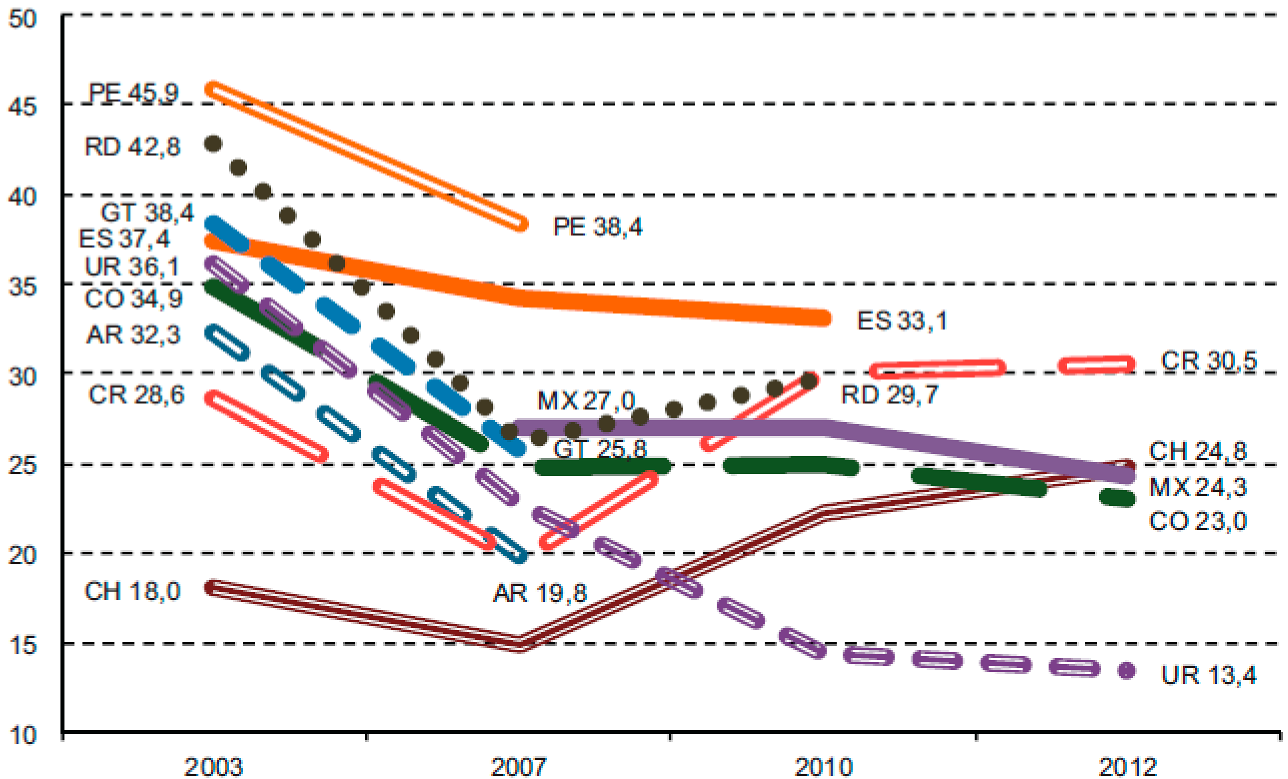


The VAT Gap in LAC—Global estimate

Following trends per country—2003-2012…

Evolución de las tasas de evasión en el IVA en países de América Latina

(Años seleccionados: 2003, 2007, 2010, 2012, en porcentajes)

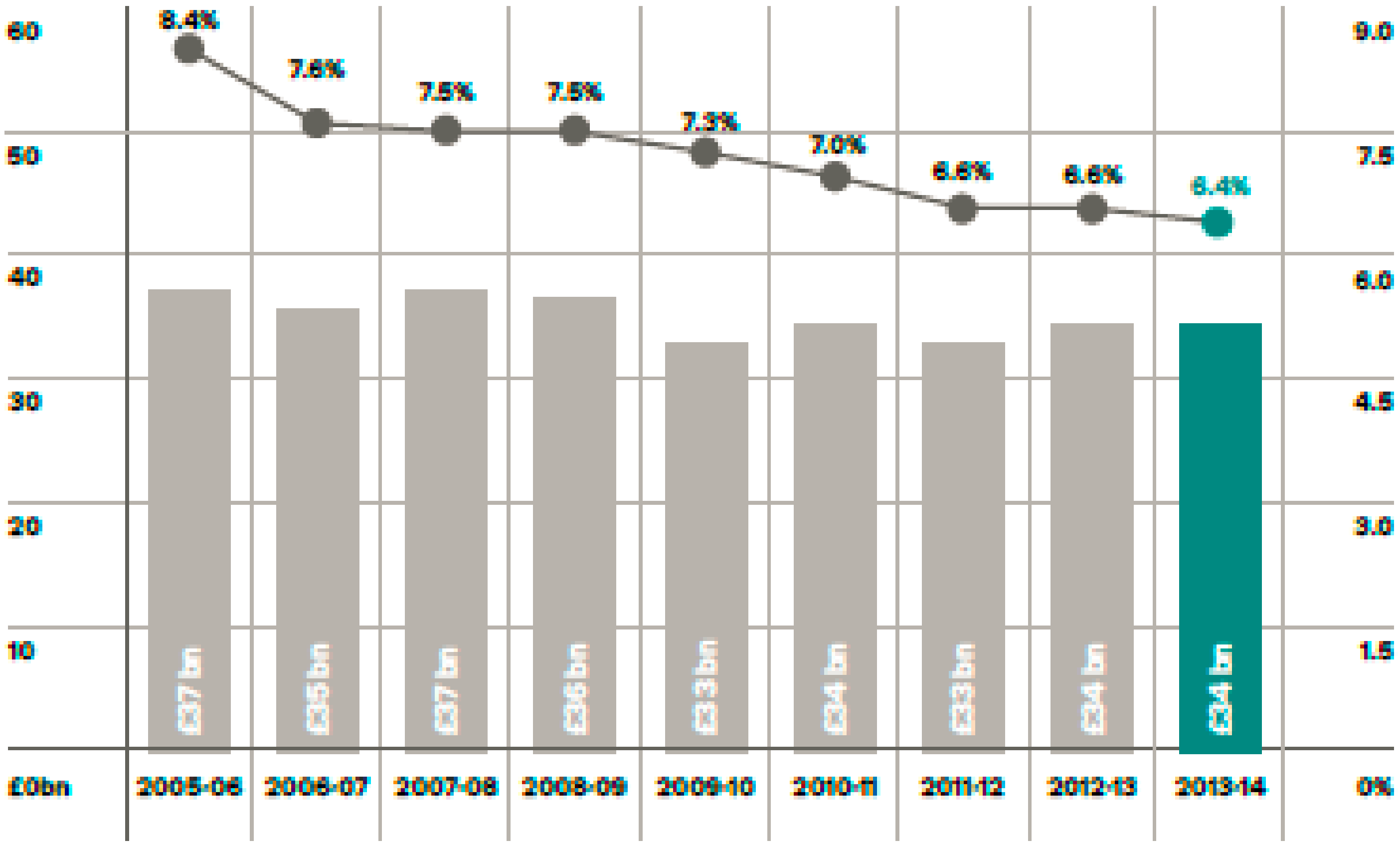


Fuente: Elaboración propia sobre la base de AFIP (2008) para Argentina, SII (2015) para Chile, Ávila Mahecha y Cruz Lasso (2015) para Colombia, Contraloría General de la República (2010) y Ministerio de Hacienda (Molina Bolaños y Muñoz Núñez, 2014) para Costa Rica, DGII (2012) para El Salvador, SAT (2008) para Guatemala, Fuentes Castro (2013) para México, SUNAT (2010) para Perú, DGII (2008) para República Dominicana, DGI (2013) para Uruguay.

The Tax Gap in UK—Global

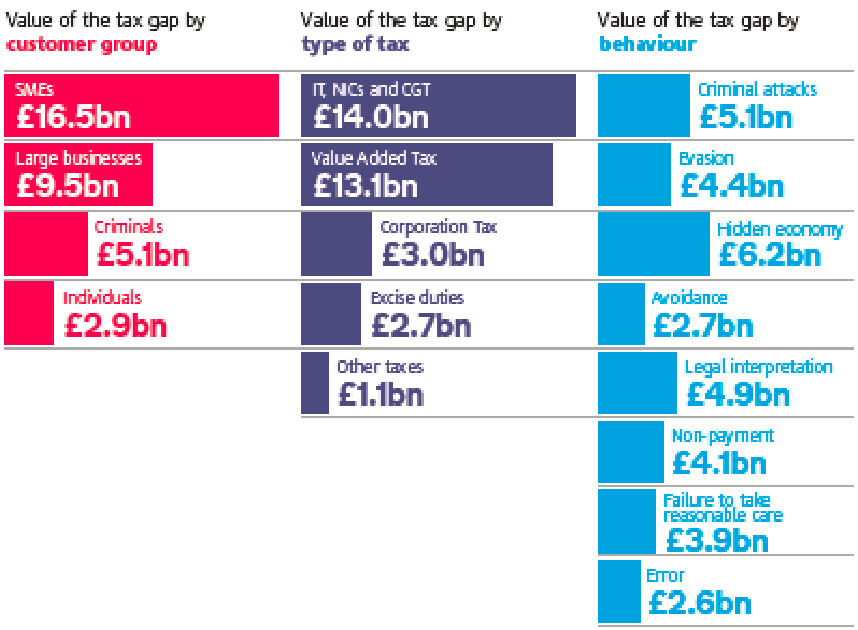
Periodic estimates as public Official Statistics…

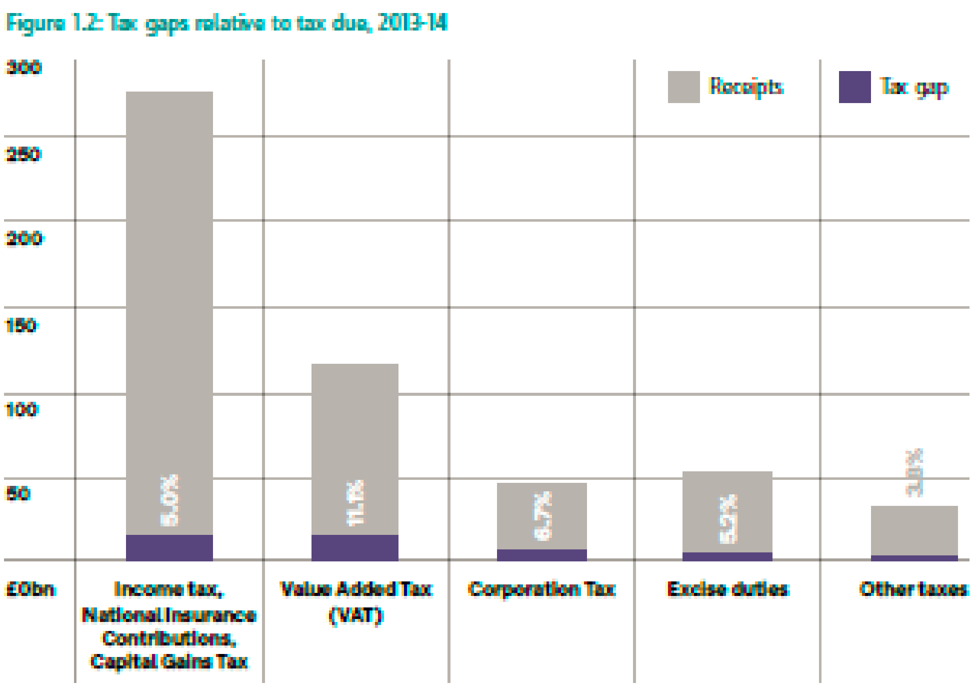
Tax gap and percentage of liabilities: 2005-06 to 2013-14



The Tax Gap in UK—Decomposed…

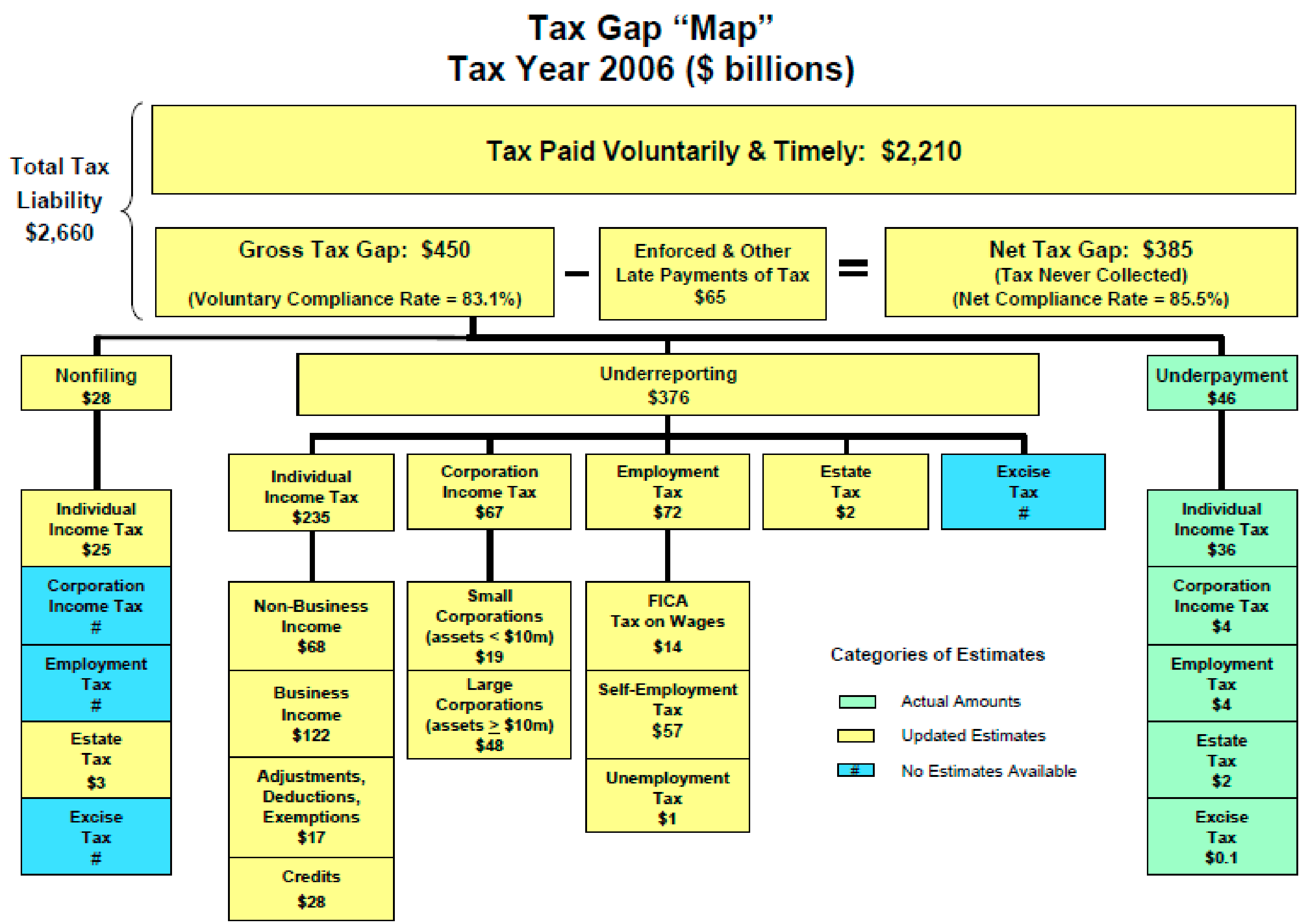
Estimates by segments, tax type, and behavior…





The Tax Gap in the USA—Decomposed

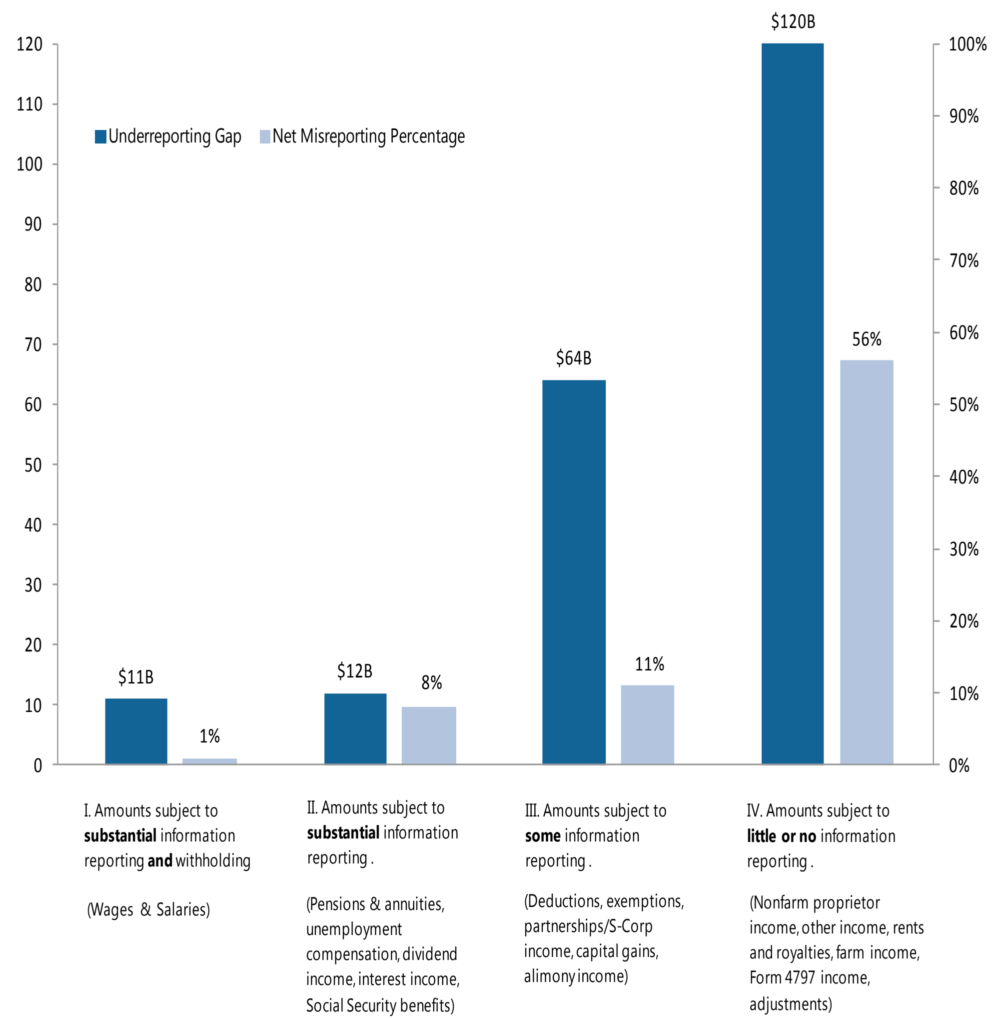
Estimates by tax type…



Internal Revenue Service, December 2011

The Tax Gap in the USA—Decomposed

Estimates by taxpayer segments…



The Tax Gap in Australia—Decomposed

Estimates by tax type…

TABLE 2.12 Tax gaps as a percentage, 2008–09 to 2013–14[(a)]

	Reliability of estimate	2008–09 %	2009–10 %	2010–11 %	2011–12 %	2012–13 %	2013–14 %
Tax							
Goods and services tax	Medium	6.9	3.0	5.5	6.2	5.6	4.9
Petrol and diesel excise and duty	Medium	na	na	0.8	0.0	1.9	1.6
Wine equalisation tax[(b)]	Medium	na	na	2.3	4.3	3.3	[(c)]
Beer excise and duty	Low	0.2	0.5	1.0	1.0	0.0	[(c)]
Luxury car tax	Medium	na	4.1	4.3	4.1	4.3	3.3
Withholding							
Pay as you go withholding	Medium	2.0	2.1	2.2	2.1	[(c)]	[(c)]
Administered expense							
Fuel tax credits	Medium	na	na	1.5	1.5	1.5	1.5

(a) The estimates are exclusive of debt.
(b) This is an estimate of the gap in wine equalisation payable only, not taking into account wine producer rebates.
(c) These will be calculated when revised National Accounts data is released in late October 2015.

METHODOLOGICAL CONSIDERATIONS

Tax Gap Estimation Framework

General considerations…

Tax Gap Estimation Framework

General considerations…

Design Criteria for an Effective Tax Gap Estimation Framework

1. Captures the appropriate tax base
2. Covers all potential taxpayers
3. Accounts for all potential forms of non-compliance
4. No overlap between any two components of the framework

Estimation Framework for Direct Taxation

Random-Audit Based Estimate...

Criteria for an Effective Random-Audit Based Gap Estimation Methodology

1. Proper definition of the population
2. Risk-based taxpayer segments for sample selection
3. Proper sample selection
4. Comprehensive audit
5. Projection to the population
6. Projection to other populations
7. Accounting for undetected undeclared liability

Estimation Framework for Direct Taxation

Data-Matching Based Estimate...

Criteria for an Effective Data-Matching Based Gap Estimation Methodology

1. Availability of unique taxpayer identifiers
2. Availability of unique identifiers in third party data.
3. Accounting for unmatched data
4. Comprehensive coverage
5. Proper estimation of the associated tax gap
6. Accounting for undetected undeclared liability .

Estimation Framework for Indirect Taxation

Top-Down Based Estimate...

Design Criteria for an Effective Top-Down Gap Estimation Methodology

1. Independent source of statistics for the tax base
2. Accurate statistical data
3. Consistency in statistical data
4. Sufficiently detailed statistical data
5. Comprehensive statistical data
6. Accurate modeling of the tax structure.

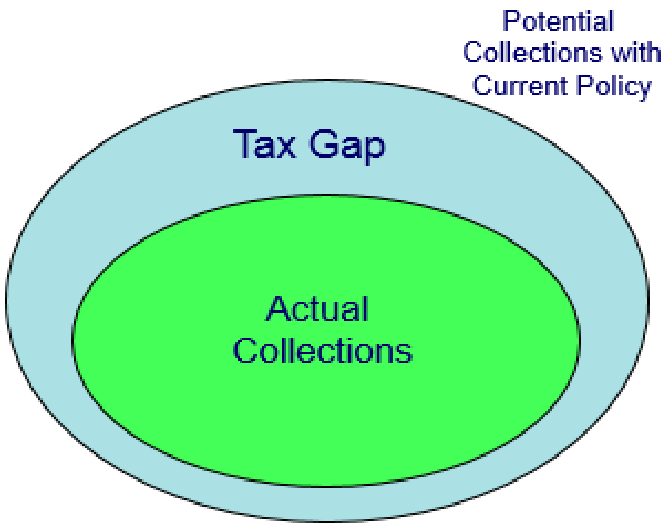
IMF RA-GAP PROGRAM

What is the IMF RA-GAP program?

- An evaluation of a RA's operations to assess their effectiveness in collecting main taxes:
  - Focused on VAT and Excises (indirect main taxes) and CIT and PIT (direct main taxes).
  - Started with VAT and Excise and CIT frameworks under development.
  - Conducted by IMF staff working closely with local teams familiar with operations, tax design and policy, and statistical data.
  - IMF medium-term goal is to help countries build capacity to conduct similar domestic programs.
- This assessment aims to estimate the *tax gap*.

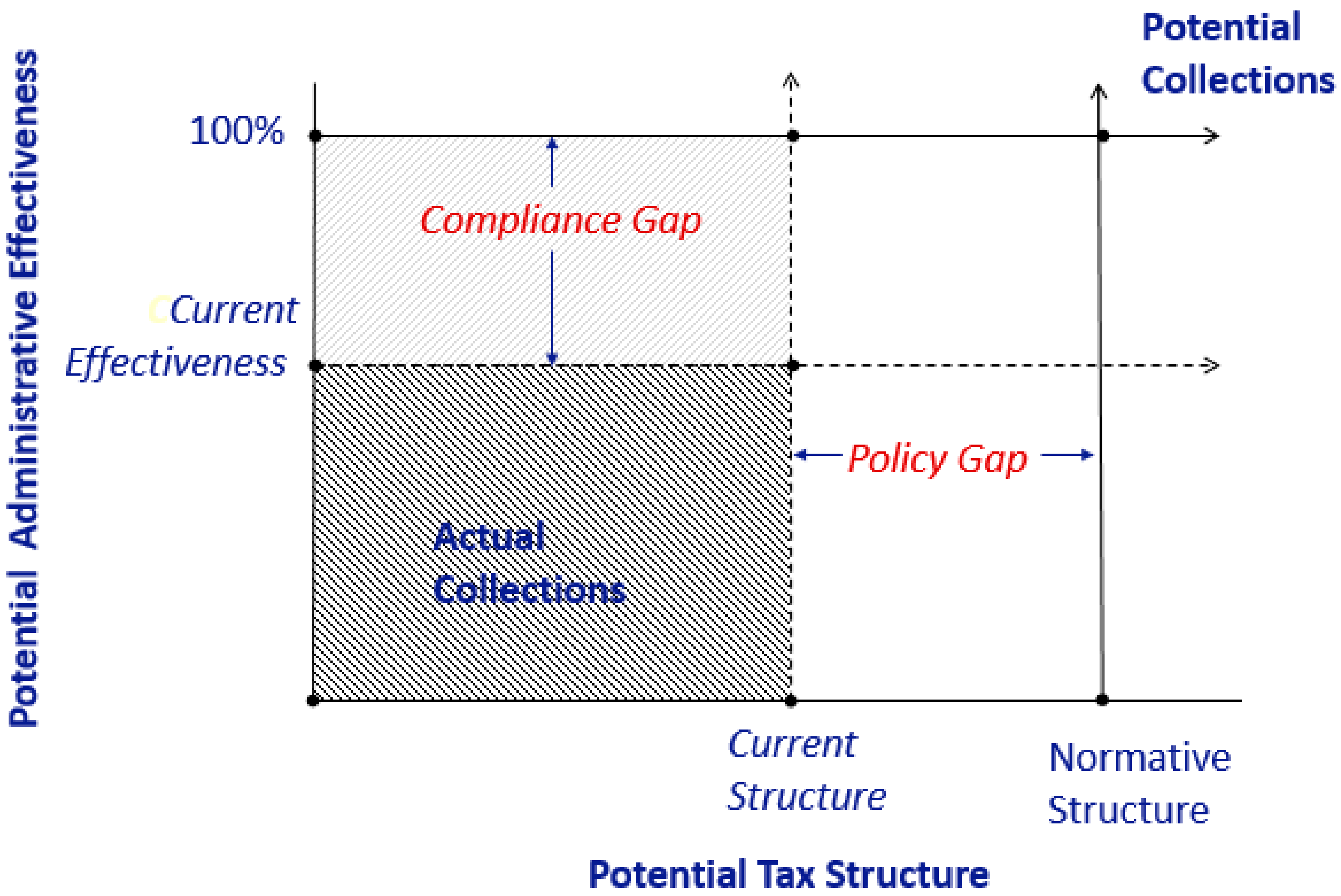
Defining the Tax Gap

- How *tax gap* is defined influences how it is measured.
- *Usual definition*: difference between actual and potential collections, given the current policy framework.



- *Broader definition—IMF approach*: difference between actual and potential collections, against a 'normalized' policy framework—allows estimating Compliance Gap (CP) and Policy Gap (PG):
  - **CG**: difference between potential collections given the current policy framework and actual collections.
  - **PG**: difference between potential collections given the current policy framework and normative policy framework (i.e. single rate, broad base).

Visualizing the Tax Gap under RA-GAP



RA-GAP for VAT—'Reproduces' VAT compliance

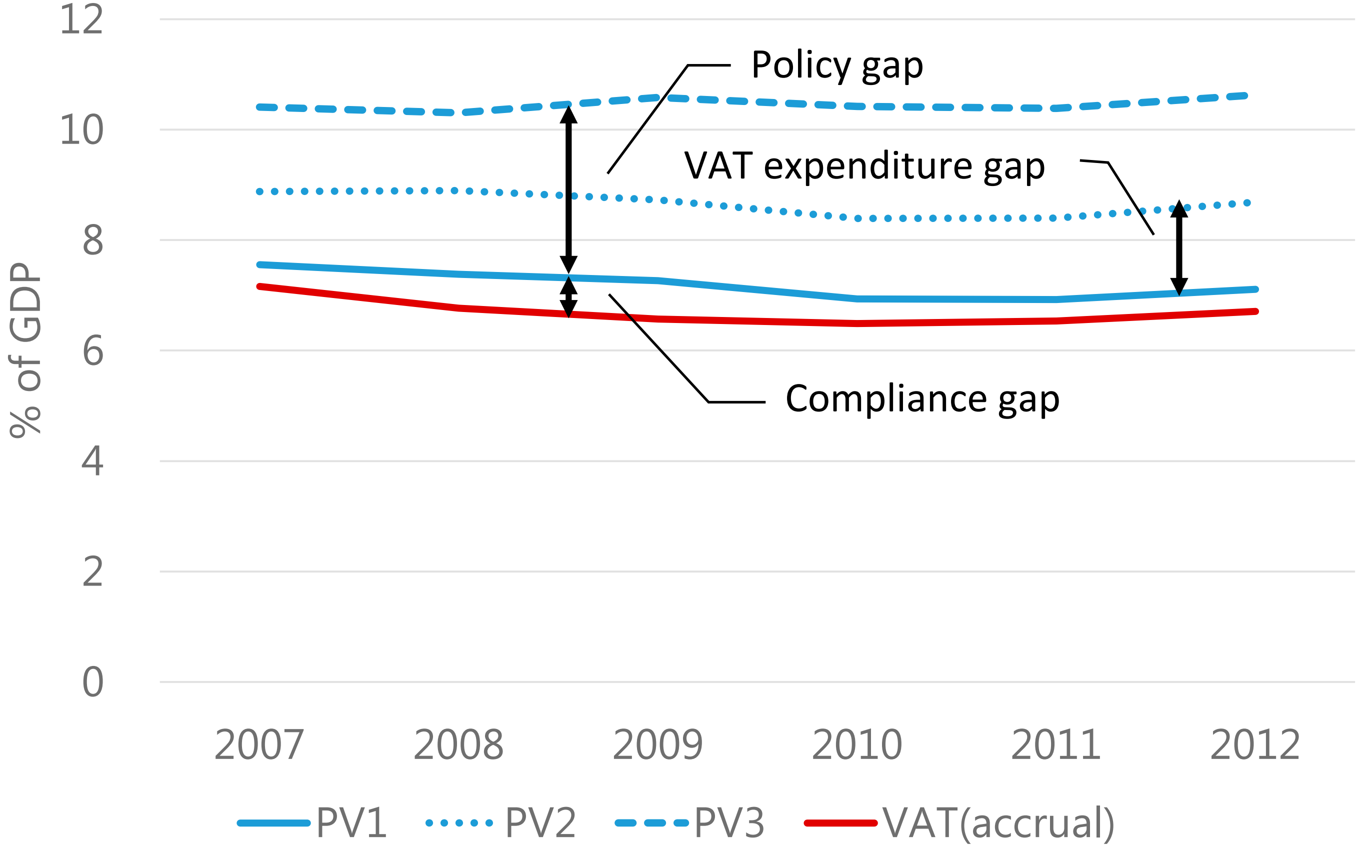
- Most top-down VAT gap models use final consumption and intermediate consumption for exempt supplies to estimate potential VAT base.
- RA-GAP looks at the amount of output which would be taxable per sector and the amount of input tax credits due a sector to determine the potential net VAT per sector.
  - This approach allows estimates at the sectoral level, and the model treats economic sectors in the same manner as individual taxpayers, which makes it easier to explicitly model the nuances of the policy structure.

RA-GAP for VAT—Beyond estimating overall gap

- Overall tax gap estimates don’t tell how to fix it.
- RA-GAP identifies potential causes and sectoral gaps; so the main contributors to the VAT gap.
- Why? It uses detailed VAT record data, which allows:
  - Breaking the gap across taxpayer segments/sectors
  - Estimating/comparing with other type of operational gaps: filing and registry gaps, payment and refund gaps, reporting and audit gaps.
  - Decomposing the compliance gap into the *collections gap* and the *assessment gap.*

RA-GAP for VAT—ilustrative results…

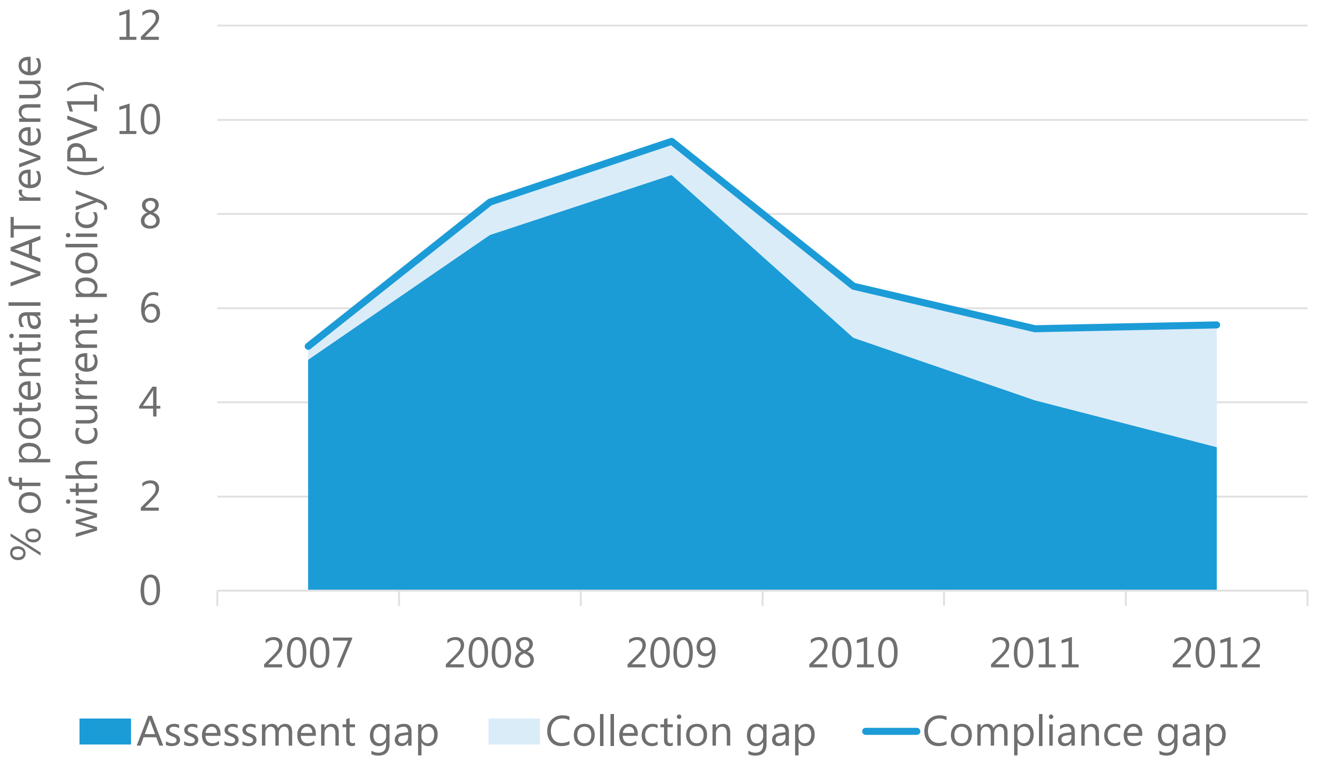
Decomposed by type of gaps…



Note: PV1—Potential VAT, with the current policy framework and no compliance gap;
PV2—Potential VAT, with practical benchmark policy (no expenditure gap);
PV3—Potential VAT, if all final consumption is taxed.

RA-GAP for VAT—ilustrative results…

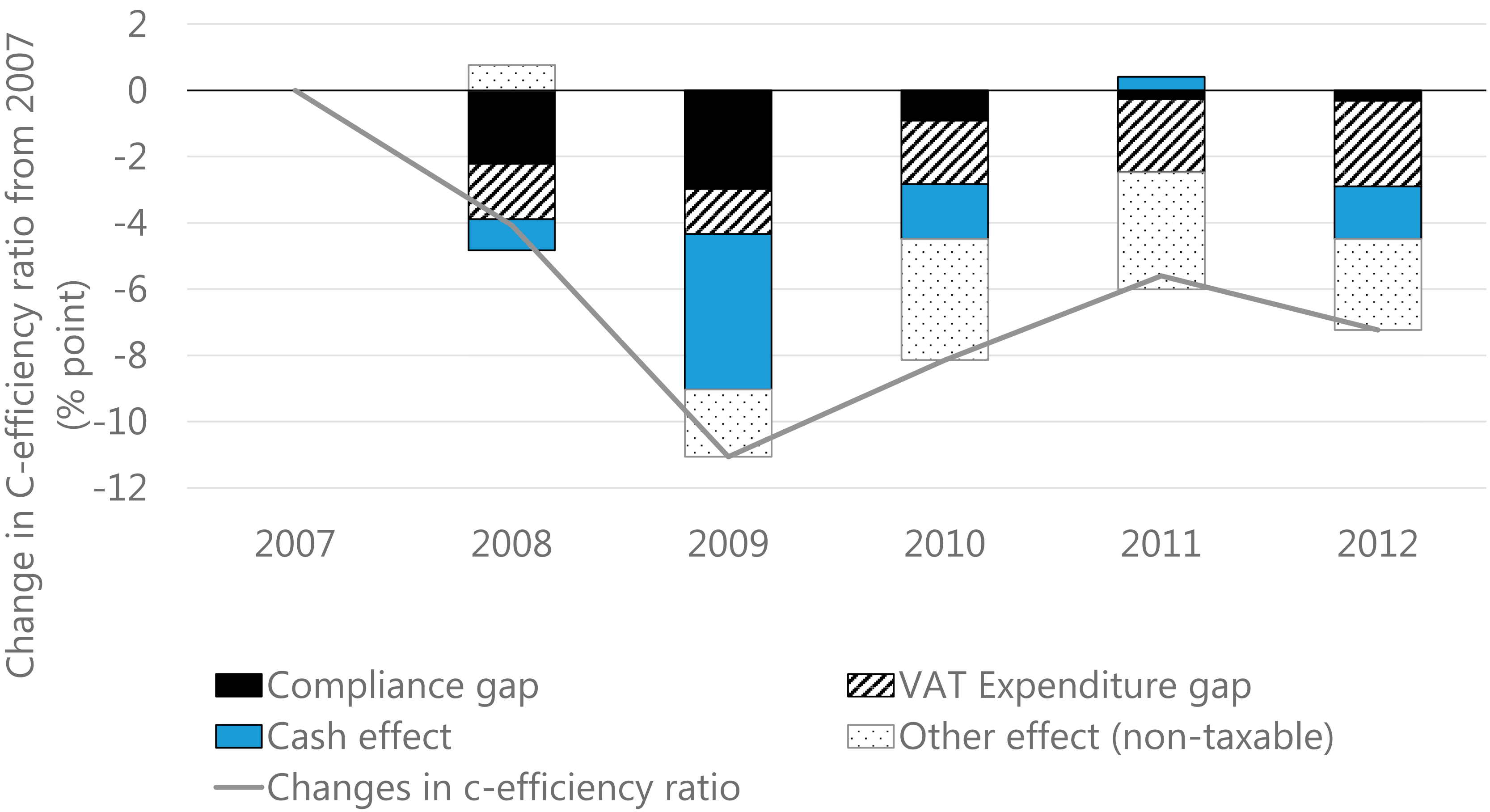
Decomposed by type of gaps…



Note: Assessment gap: Difference between Potential VAT and VAT declared or assessed; Collection gap: Difference between VAT declared or assessed and actual VAT collection.

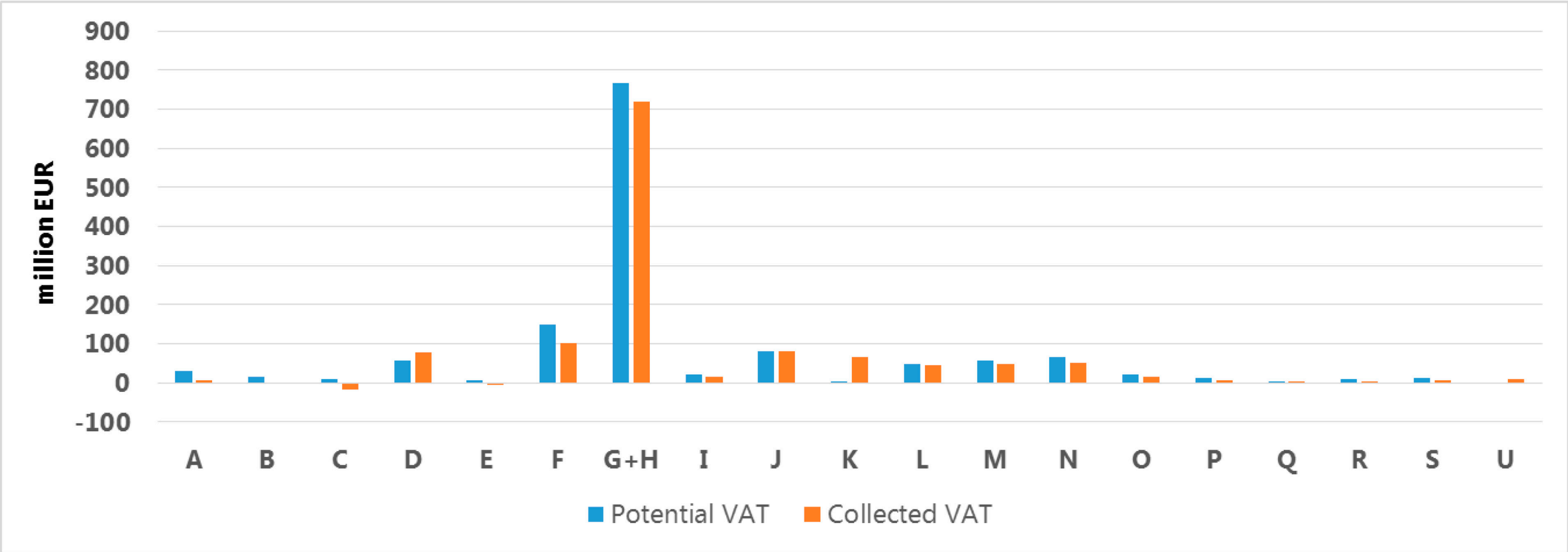
RA-GAP for VAT—ilustrative results…

Identifies the drivers of change in VAT performance…



RA-GAP for VAT—ilustrative results…

Provides a sectoral breakdown of the compliance gap…



A	Agriculture, forestry and fishing	K	Financial and insurance activities
B	Mining and quarrying	L	Real estate activities
C	Manufacturing	M	Professional, scientific and technical activities
D	Electricity, gas, steam and air conditioning supply	N	Administrative and support service activities
E	Water supply, sewerage, waste management and remediation activities	O	Public administration and defence; compulsory social security
F	Construction	P	Education
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	Q	Human health and social work activities
H	Transportation and storage	R	Arts, entertainment and recreation
I	Accommodation and food service activities	S	Other service activities
J	Information and communication	U	Unknown

Source: IMF Staff Estimates

RA-GAP—finished and ongoing programs

- Several VAT gap analyses finished or underway
  - *Finished*: Portugal, Estonia, Slovakia, Philippines, Uganda, Denmark, Finland, Greece, Colombia, South Africa, Thailand, Nepal, Lebanon, Rwanda, Jamaica
  - *Underway*: Albania, Cape Verde, Senegal, Ukraine.
- RA-GAP also assesses countries' tax gap analysis (e.g. UK) and conduct revenue analysis (e.g. Georgia, Albania).

RA-GAP—finished and ongoing program

- Several VAT gap analyses published
  - Estonia: https://www.imf.org/external/pubs/ft/scr/2014/cr14133.pdf
  - Uganda: Publication by country authorities (published by Uganda MoF, not yet by the IMF)
  - South Africa: https://www.imf.org/external/pubs/ft/scr/2015/cr15180.pdf
  - Denmark: https://www.imf.org/external/pubs/ft/scr/2016/cr1659.pdf
  - Finland: https://www.imf.org/external/pubs/ft/scr/2016/cr1660.pdf
- Also an assessment of the UK tax gap analysis program
  - UK: https://www.imf.org/external/pubs/ft/scr/2013/cr13314.pdf

THANKS FOR

YOUR ATTENTION