VALUE ADDED TAX
ANALYSIS AND SOME CURRENT ISSUES

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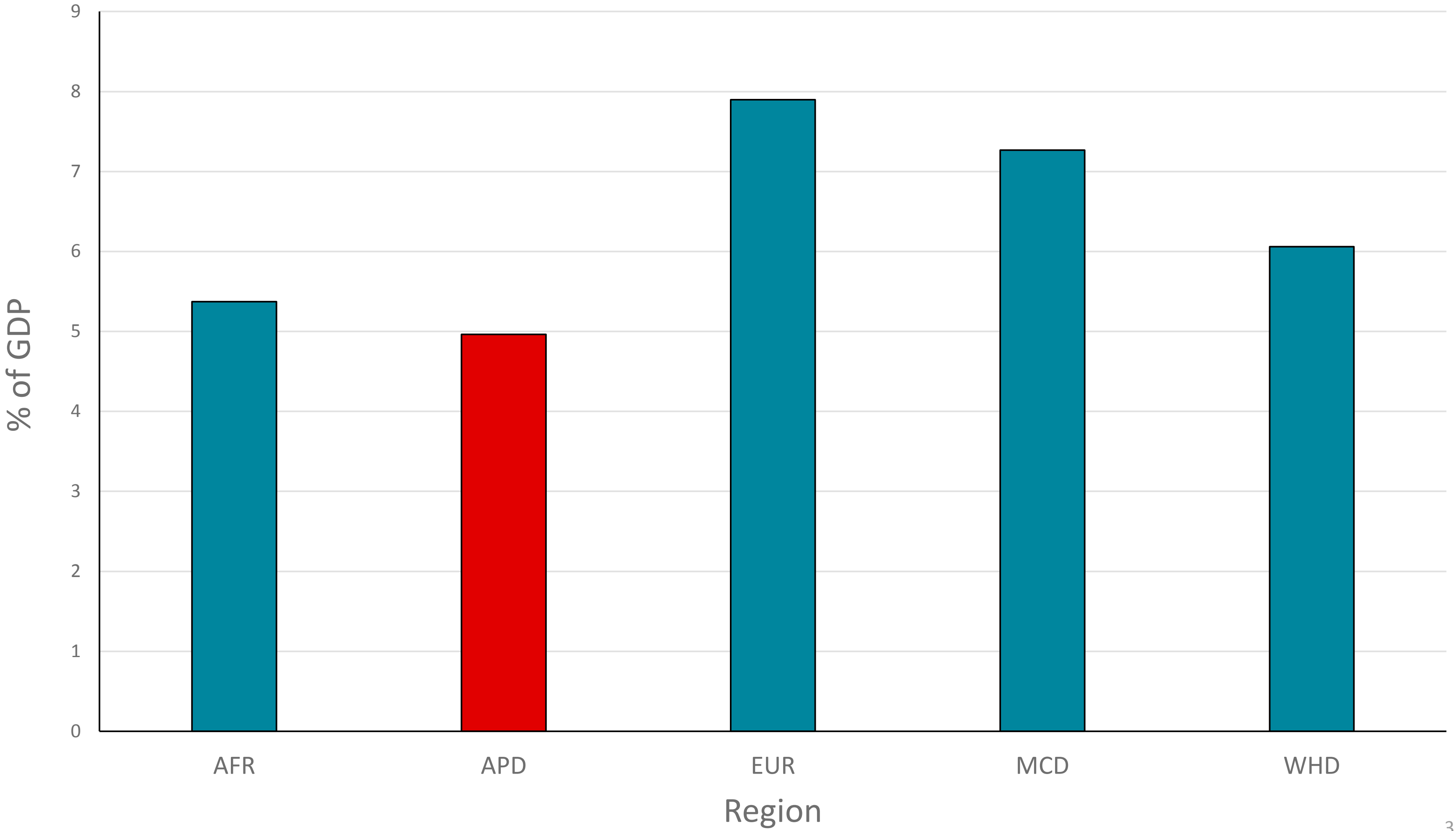
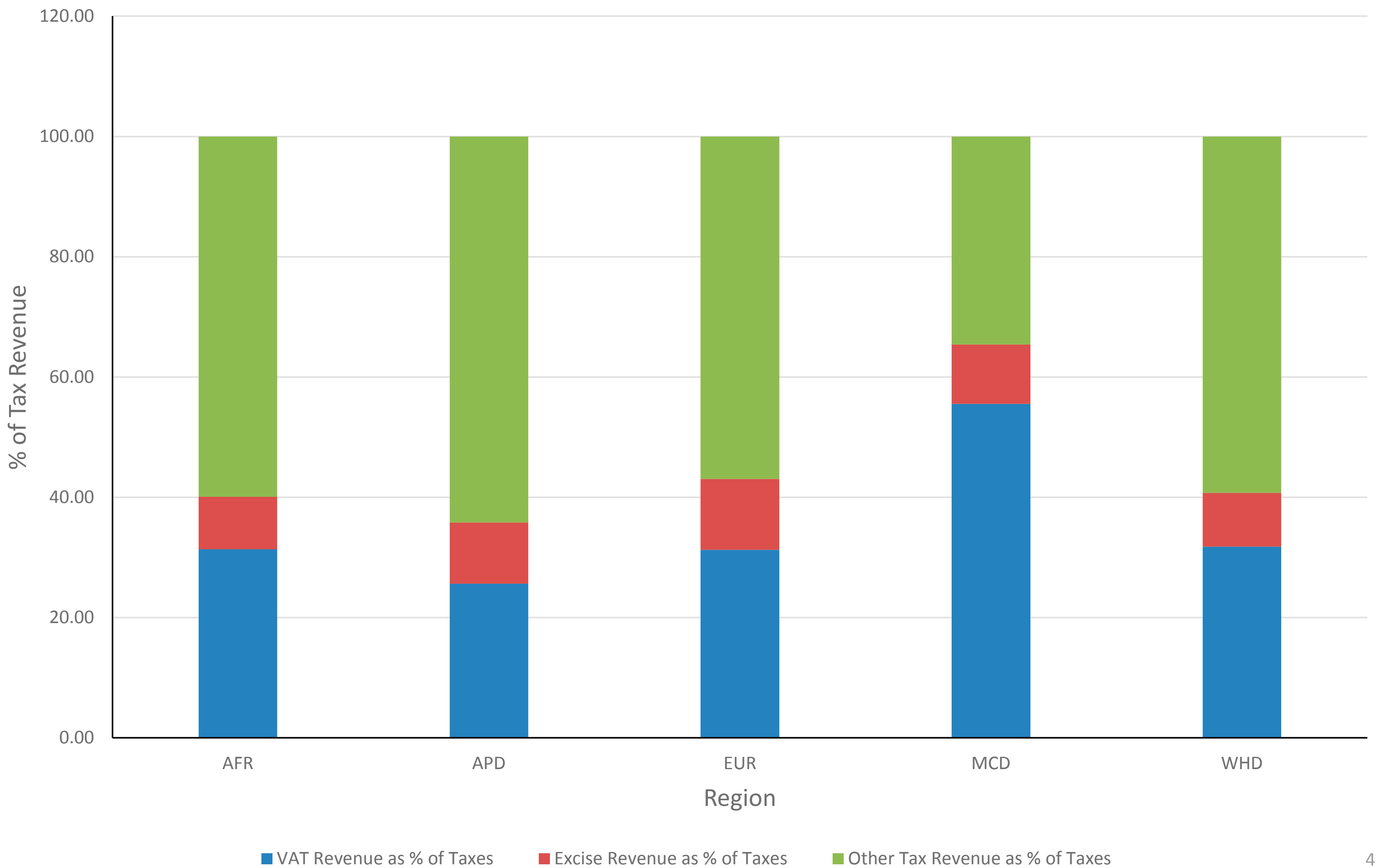
Overview of VATs in the region

VAT revenue is low in the region, relative to GDP…
(2012-14, in percent of GDP)

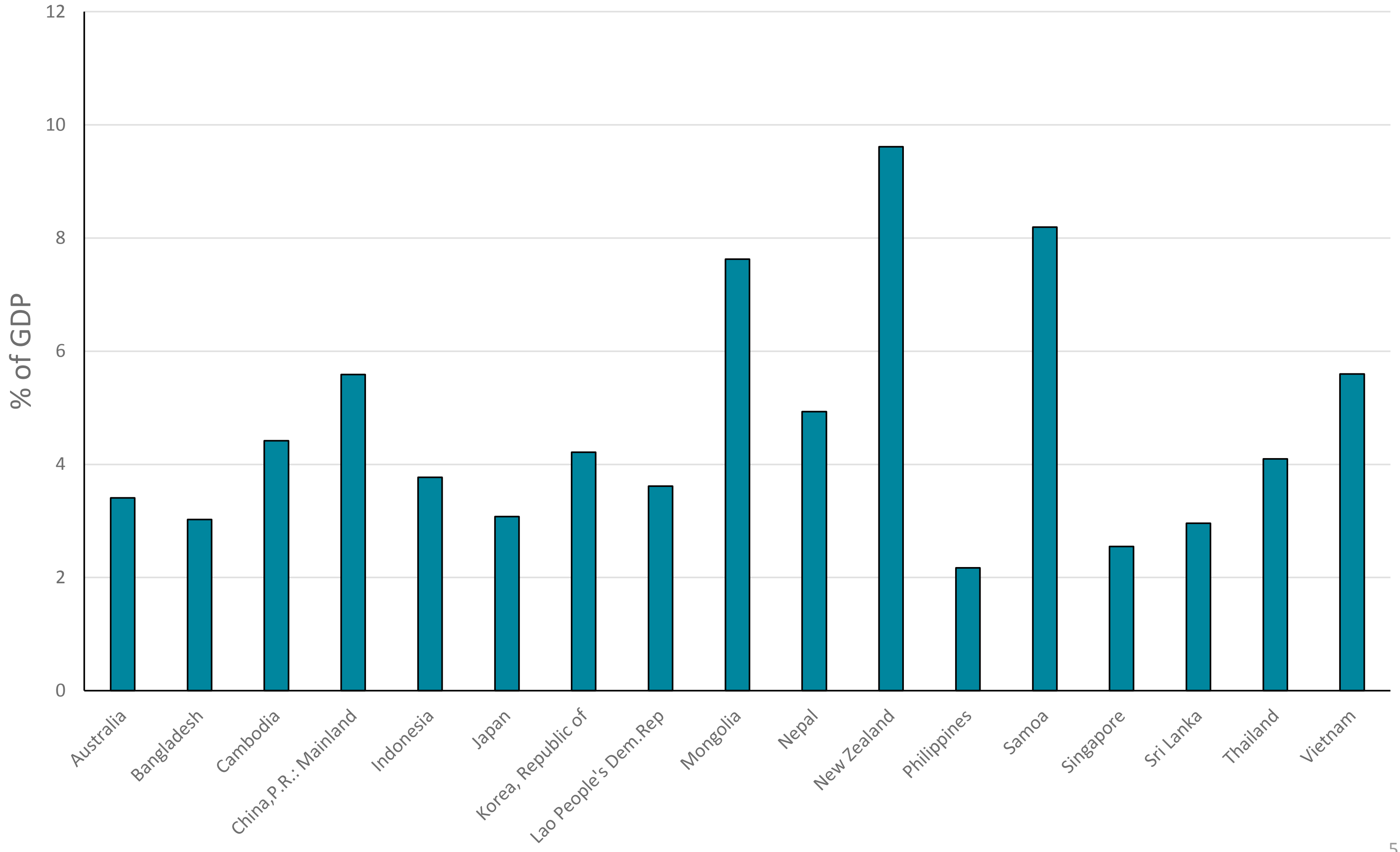


…and as a share of all tax revenue

(2012-14)

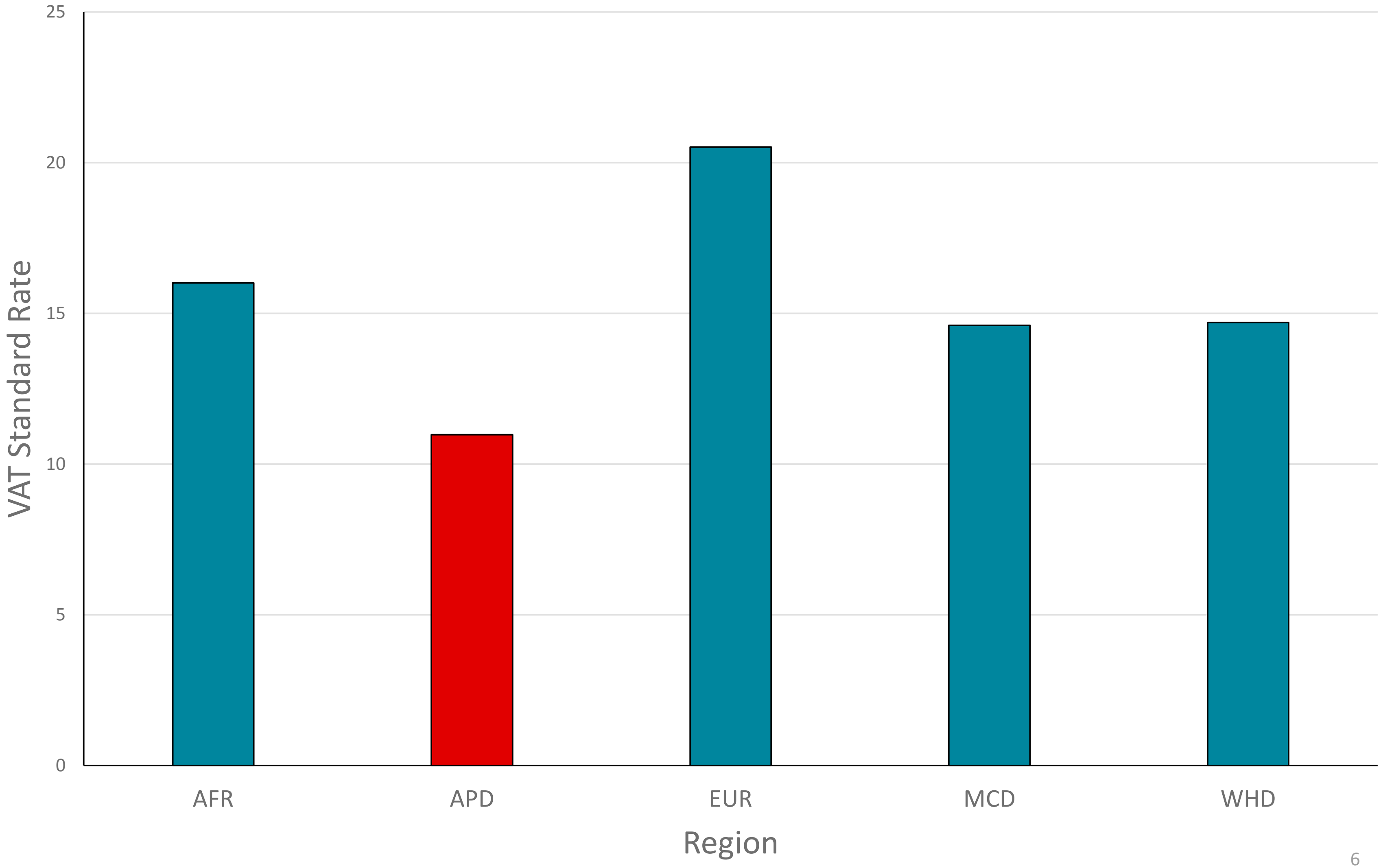


But experience varies widely
(2012-14 averages, VAT revenue in percent of GDP)

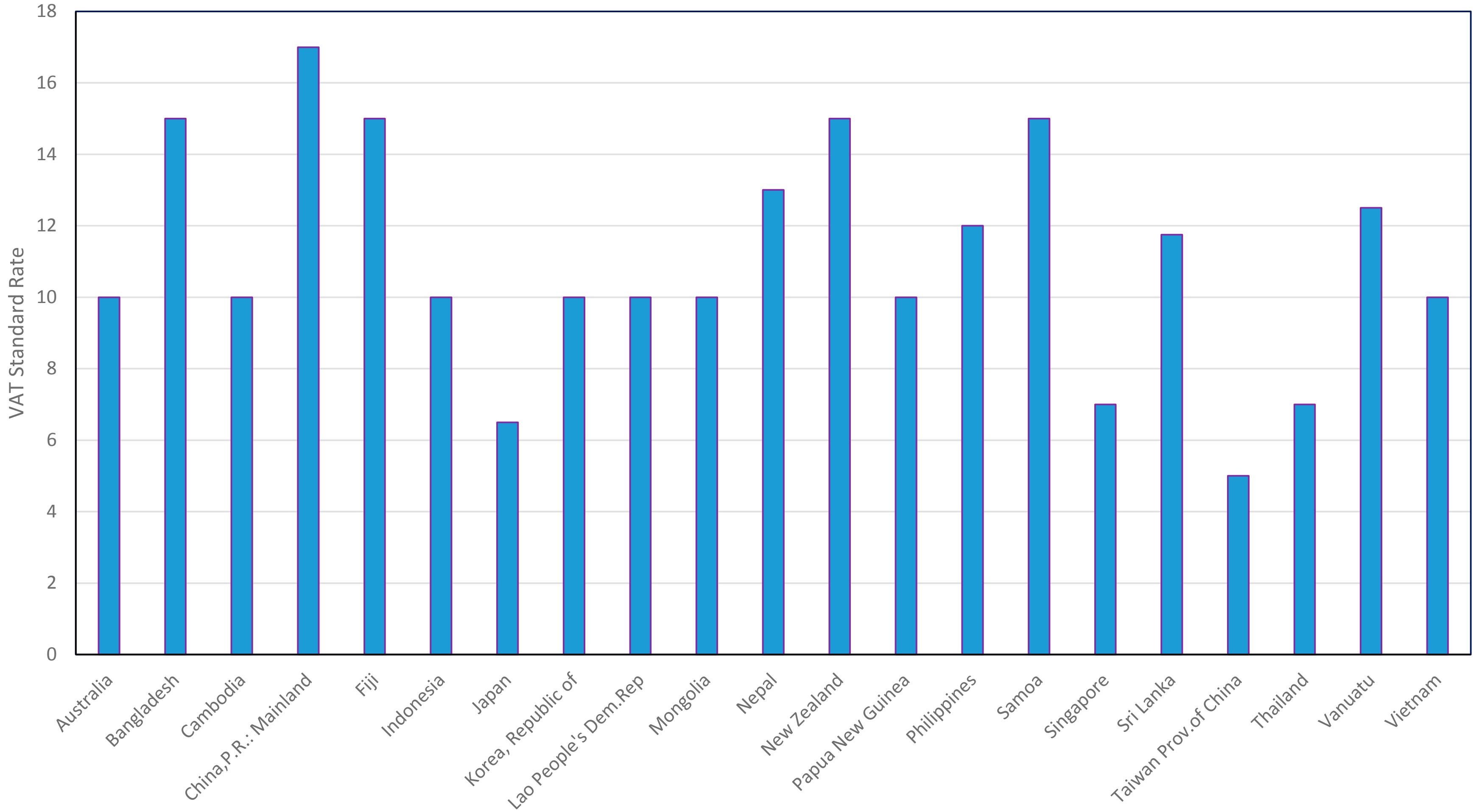


Standard VAT rates also tend to be low…

(2012-14)



…and also vary widely within the region
(2012-14 averages)



VAT gaps

‘C-efficiency’

Decompose VAT revenue as

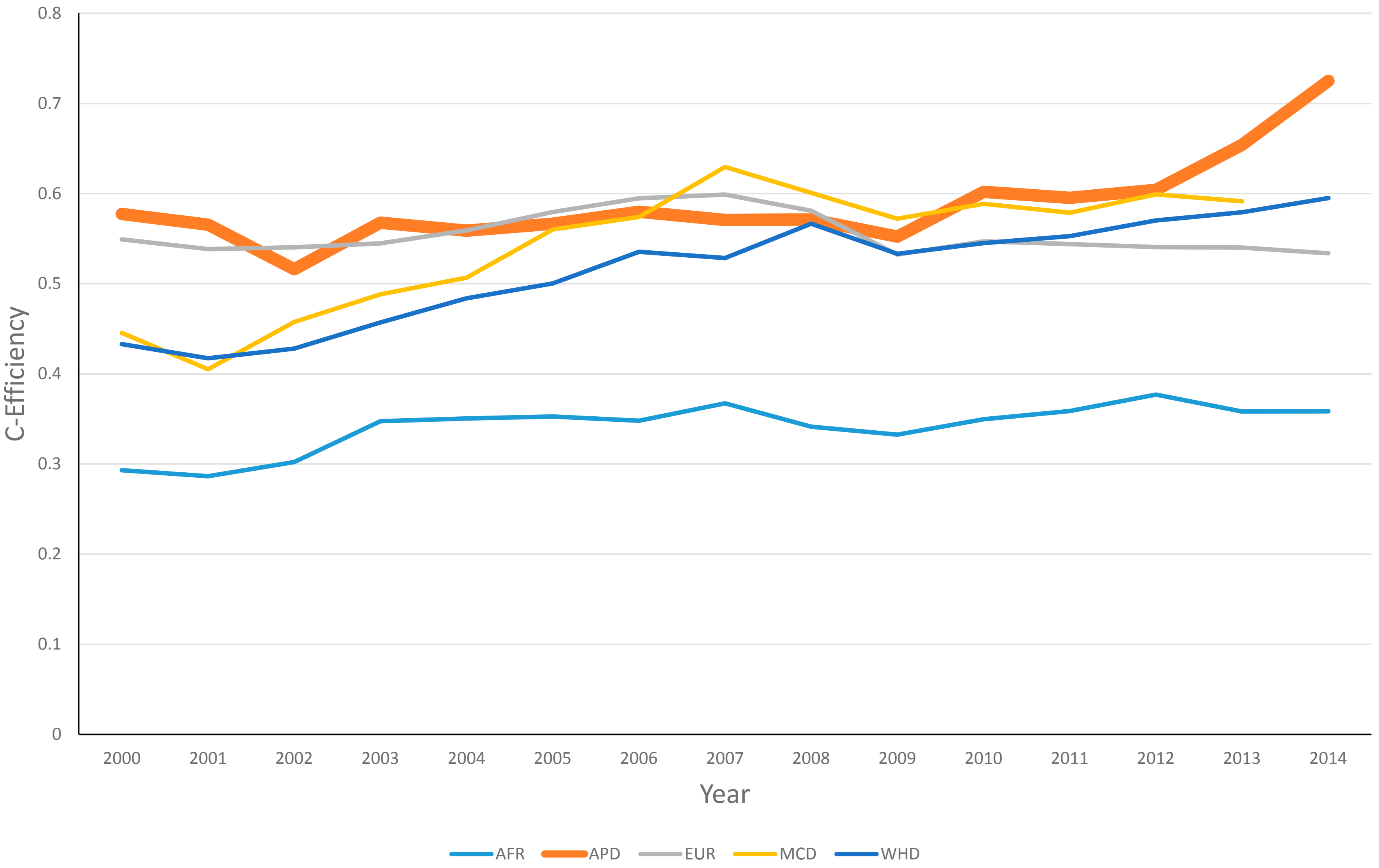
$$\frac{V}{Y} = \tau_s E^c \left(\frac{C}{Y} \right)$$

where V is VAT revenue, Y is GDP, τ_S is the standard VAT rate, C is consumption, and

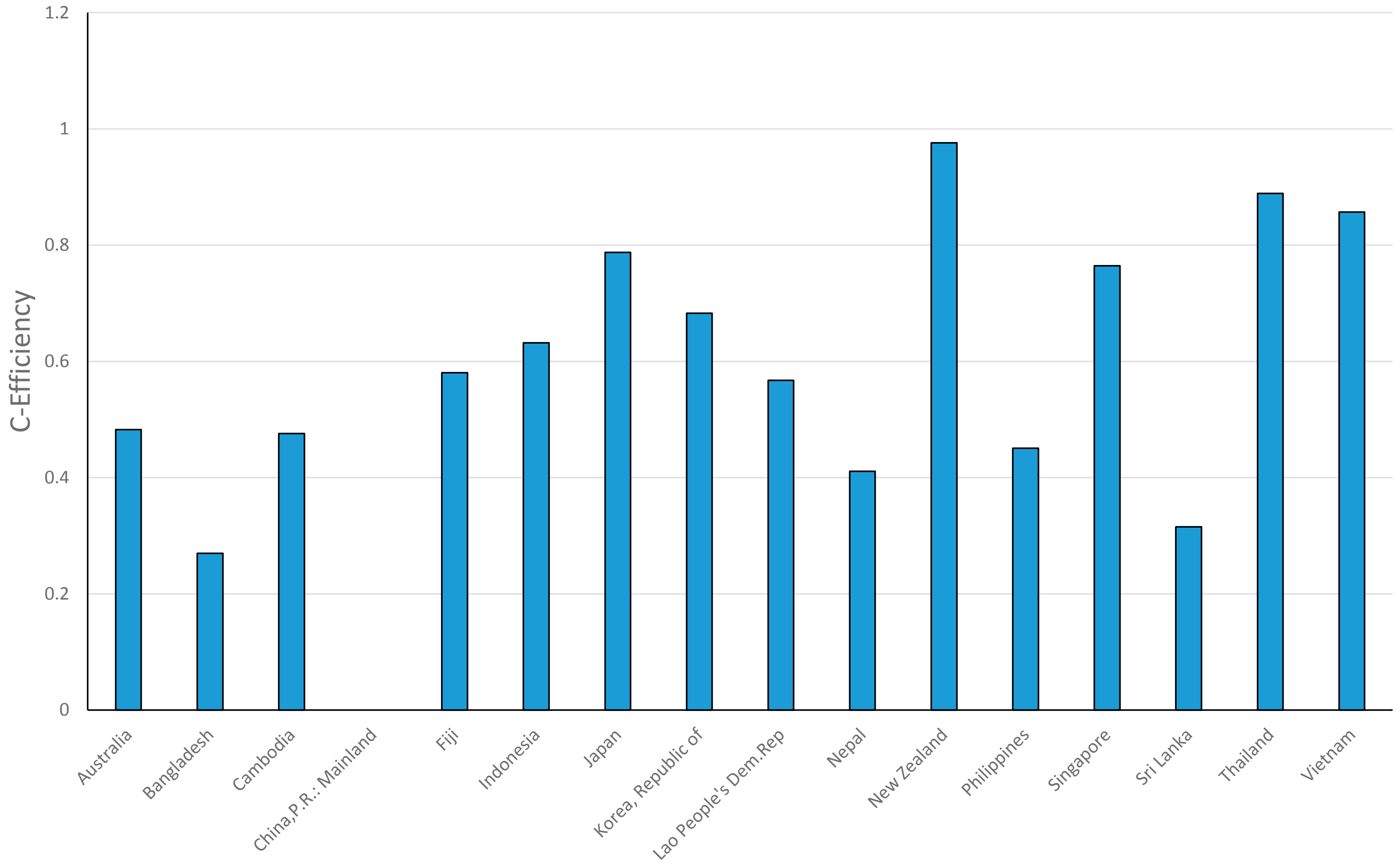
$$E^C \equiv \frac{V}{\tau_s C}$$

is ‘C-efficiency’ (OECD call it the ‘VAT revenue ratio’)

C-efficiency by region



C-efficiency within the region
(2012-14)



What drives C-efficiency?

Denoting by *V** the revenue that would be raised if implementation of current system were perfect:

$$\frac{V}{\tau_S C} = \left(\frac{V^*}{\tau_S C}\right)\left(\frac{V}{V^*}\right) = (1-P)(1-\Gamma)$$

where P is a ‘policy gap’ and Γ a ‘compliance gap’

For the EU, for instance...

Country	C-efficiency (E^C)	Compliance gap (Γ)	Policy gap (P)
Austria	59	14	31
Belgium	52	11	42
Denmark	64	4	33
Finland	61	5	36
France	51	7	45
Germany	57	10	37
Greece	47	30	33
Ireland	66	2	33
Italy	43	22	45
Luxembourg	87	1	12
Netherlands	60	3	38
Portugal	53	4	45
Spain	57	2	29
Sweden	56	3	42
United Kingdom	48	17	42

…which means

- If France reduced its policy gap to Germany's (45% to37%), VAT revenue would increase 15%
- If Greece reduced its compliance gap to Italy's (33% to 22%), VAT revenue would increase 12%

Performance of the VAT

Compared to alternatives

Unlike turnover tax, no cascading or distortion of production

Equivalent in principle to retail sales tax, but:

- Protects revenue by collection at earlier stages
- Folk wisdom that RST unworkable at 10% or more
- In practice, likely to bear on business use (40% in US)

VAT combined with tax at turnover tax at retail?

- Worst of both worlds!
  - Risk of cascading
  - Transfer pricing between retailers and other
- Non-transparent

Evidence?

Countries with a VAT raise more revenue, all else equal, though

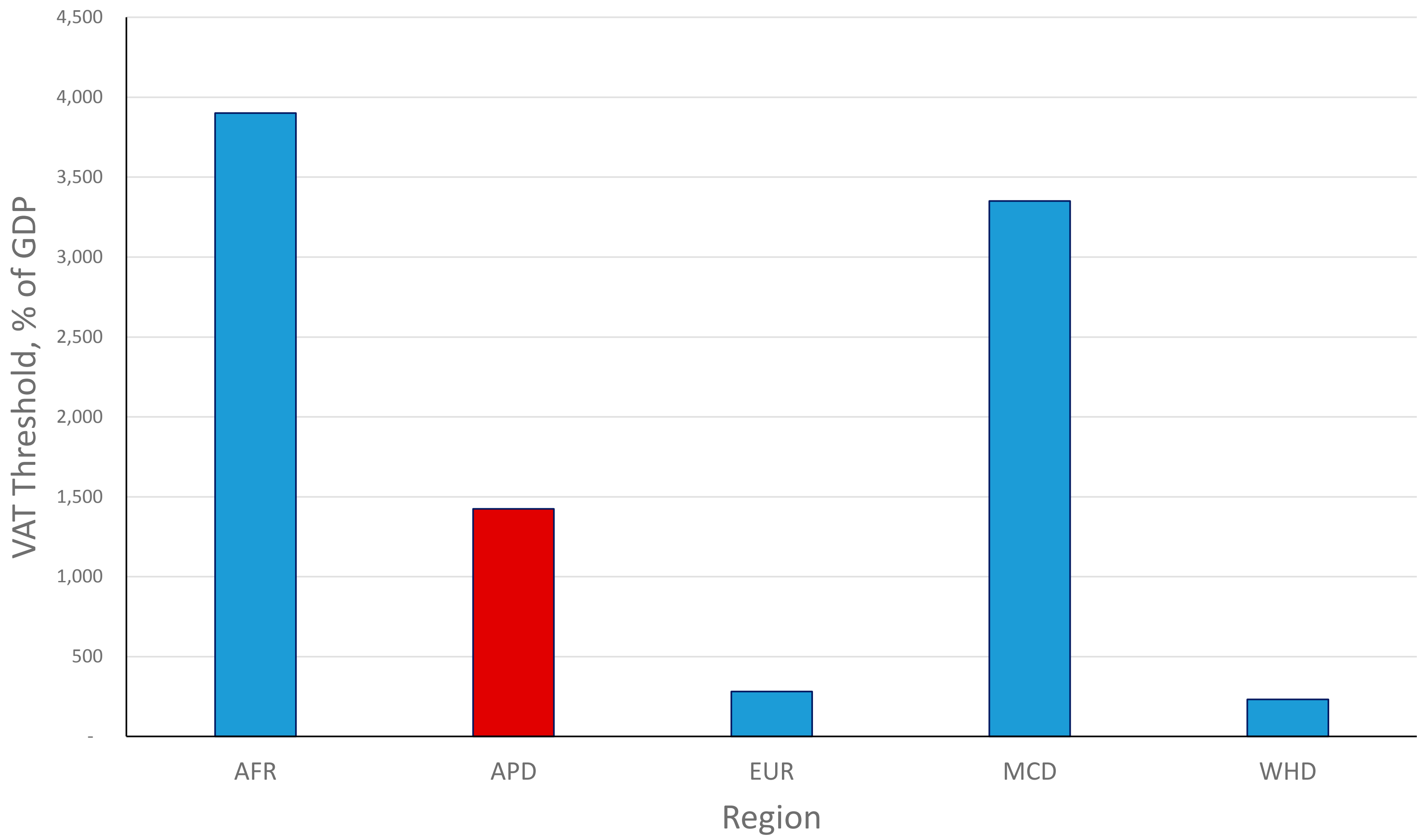
- Effects less at lower levels of income
- Not clear in Sub-Saharan Africa

More recent work finds positive effect in SSA too

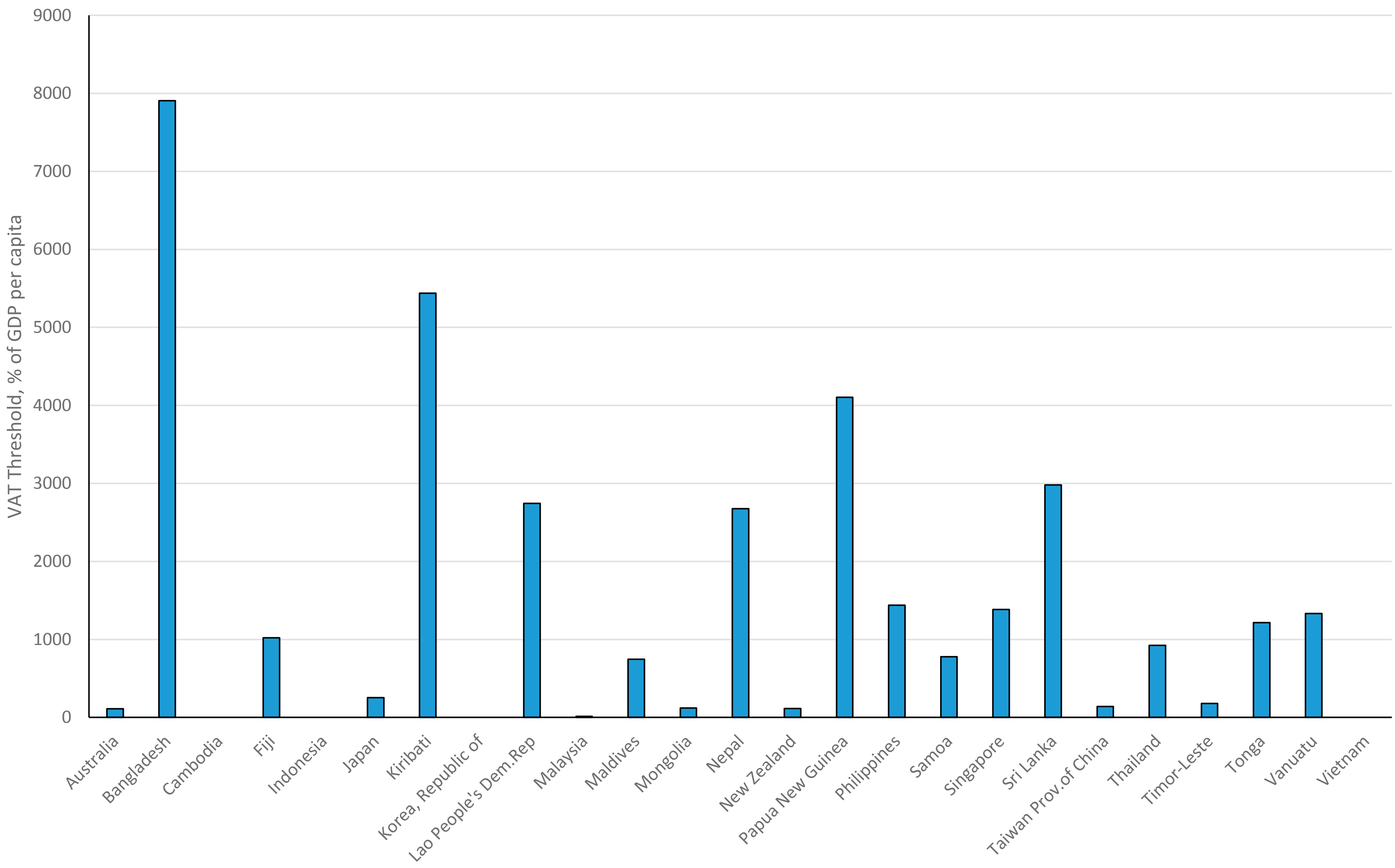
Revealed preference: 5 countries have removed VAT—but all have reinstated it!

Threshold

Large variation across regions
(Average VAT Threshold as % of GDP per capita, 2015)



…and within the region



What should be the VAT threshold?

Starting point is amazing degree of concentration of potential tax base:

—Largest of companies often account for 70-90% of all turnover

One approach is to set threshold to match available administrative capacity

—But, for longer term, capacity is a policy choice:

More systematically

A = Administrative cost per registrant ($100)

C = Compliance cost per registrant ($500)

δ = Marginal cost of public funds (>1, otherwise would be no taxes) (1.2)

υ = Ratio of value added to sales (40 percent)

t = Tax rate (15 percent)

Z = Threshold (to be chosen)

Then..

Equating marginal social benefit of increasing threshold...

$$\delta A + C + \tau \upsilon Z$$

...to marginal social cost

$$\delta \tau \upsilon Z$$

gives optimal threshold of

$$Z^* = \frac{\delta A + C}{(\delta - 1)\tau \upsilon}$$

(= with figures above, Z* = $52,000)

Further considerations

- Threshold affects distributional implications of the VAT
- Noncompliance may suggest a threshold higher than Z^*
- What tax below the threshold?
  - Little revenue, large administrative/compliance burden

  But

  - Levels competitive playing field
  - Enhances accountability of the government
- How align VAT threshold with that for personal income tax?

Border crossing services and intangible goods

The destination principle

= Tax ultimately levied at the rate of the jurisdiction in which the consumer is located

- Inherent in notion of consumption tax, and to avoid distorting production
- For goods, implement by zero-rating exports and taxing imports
  - Border checks critical
- But how implement this for intangible and (non "on the spot") services—which can't be intercepted at the border?

OECD Guidelines (Nov 2015)

- http://www.oecd.org/ctp/consumption/international-vat-gst-guidelines.htm

- General principle is to tax where customer is located
  - Broadly similar to rules now in place in EU

- For B2B: This means reverse charge—relatively straightforward (supplier need not register) but risks breaking VAT chain (as with goods)

- For B2C: Issue is implementation—can't rely on consumer to declare
  - Require non-resident sellers to register
  - Simplified procedures (e.g. no input tax credit)
  - Mini one stop shop (MOSS) in EU