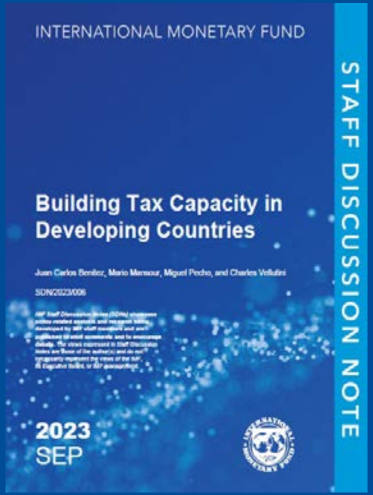
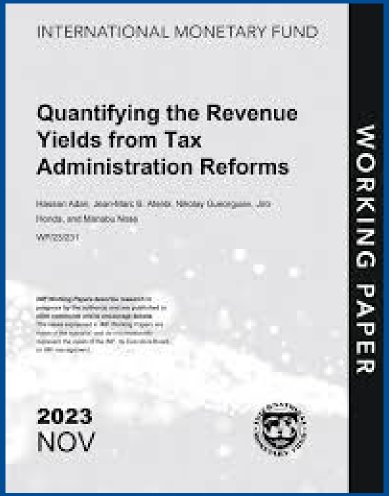




FISCAL AFFAIRS

Collecting More

JUNE 05, 2024

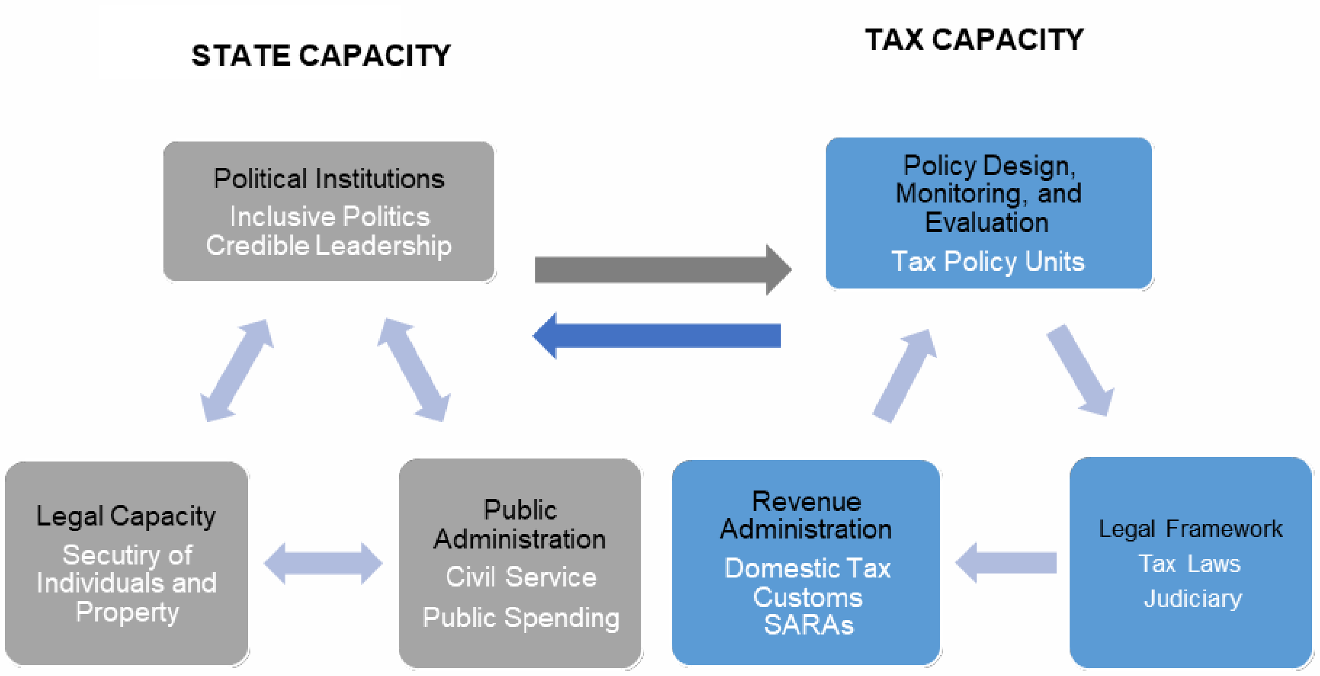
Alexander Klemm
Tax Policy 2 Division

Collecting More

- **Tax Capacity: Definition and Quantification**
- Domestic Revenue Raising Options
- International Reforms

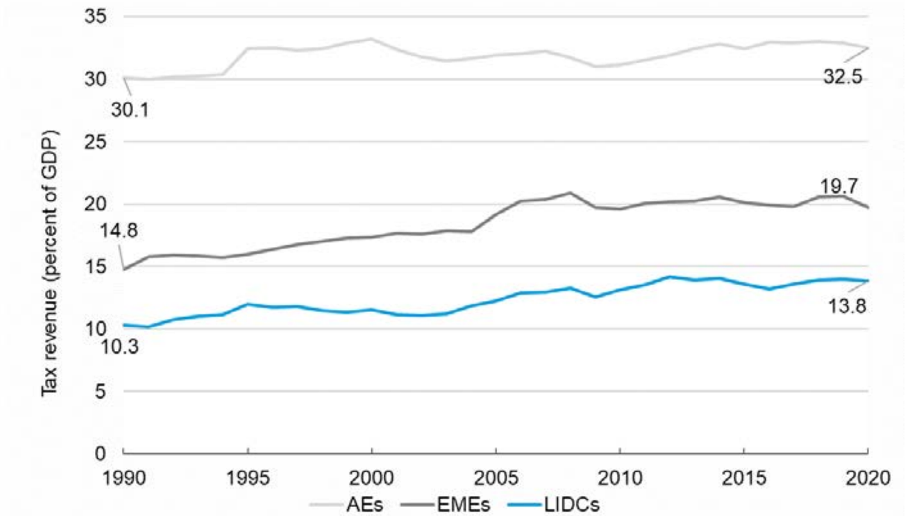
What is Tax Capacity and How is it Measured?

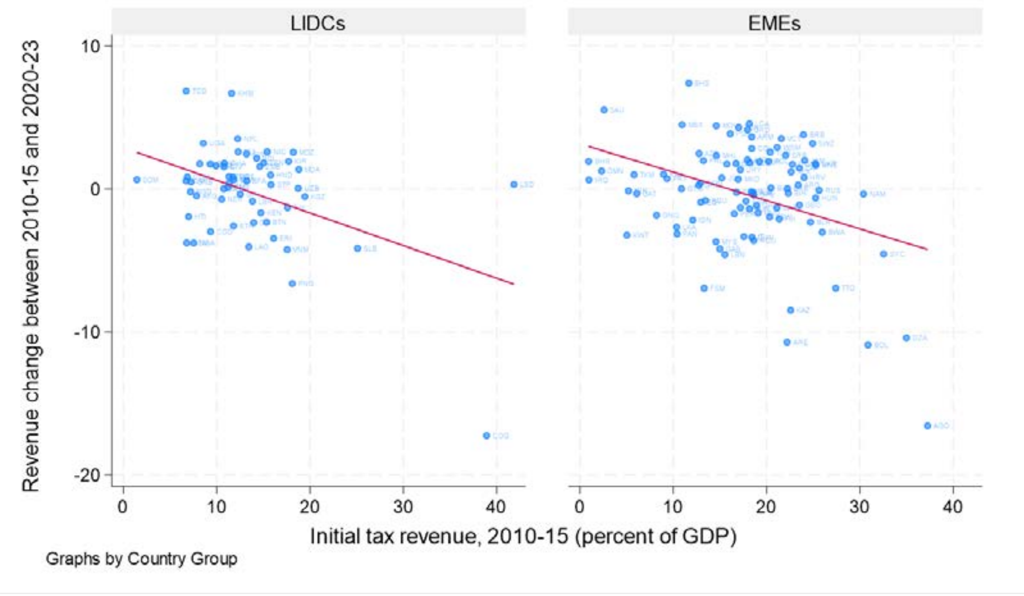
- Tax potential: the highest level of tax revenue that a country can mobilize
  - Estimated from benchmark observed in other countries, controlling for GDP, sectoral composition, openness, government effectiveness, and corruption.



Growth in Tax Revenues Stalled

- Average tax-to-GDP ratios have increased by about 3.5 to 5 percentage points since the early 1990s
  - In LIDCs increase from 10.3 to 13.8 pp
  - In EMEs increase from 14.8 to 19.7 pp
- Progress took place before 2010, and has largely stalled since, on average
- Averages hide significant variation
  - Progress seen since 2010-15 in about 1/3 of the countries – mostly in countries with low initial tax ratios
  - Yet, opposite in several other countries

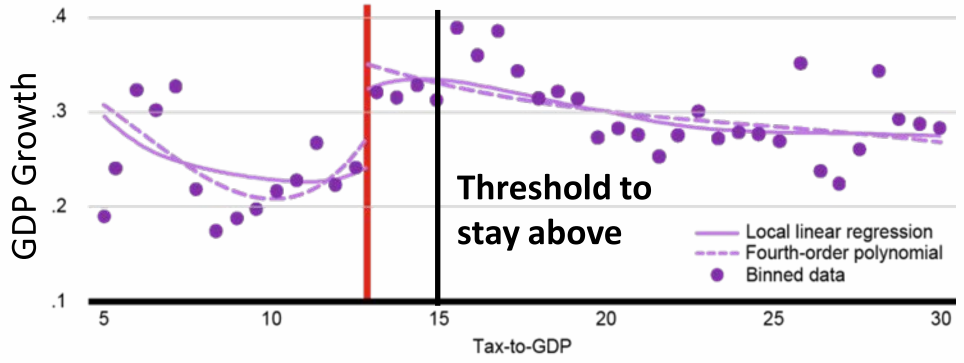




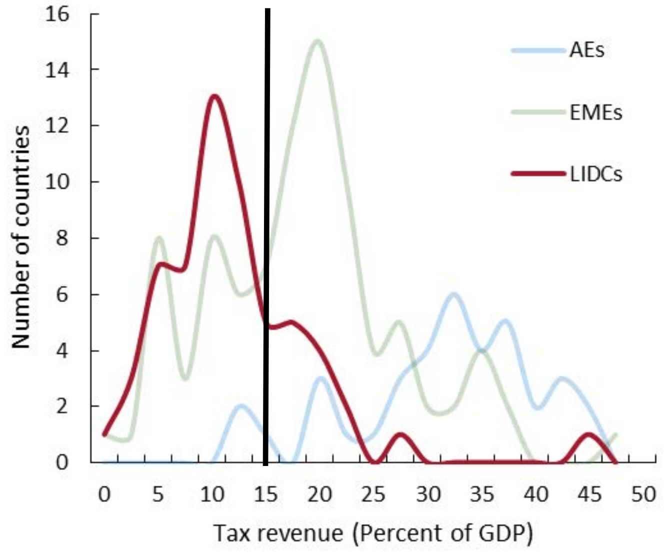
Source: WoRLD database.

Many Countries Still Below the Critical 15% Threshold for the Tax-to-GDP Ratio

- Tax-to-GDP ratios below some threshold are problematic as growth only accelerates beyond this point
  - Consistent with the idea that tax capacity is vital for state capacity, allowing the state to fulfil its role in supporting growth and development
  - Threshold has been estimated at around 13% of GDP; allowing for a safe buffer, a rule of thumb is that tax ratios should exceed 15% of GDP
- The distribution of tax-to-GDP ratios across countries indicates:
  - For LIDCs, it is centered around 10%, with only few countries collecting more than 15%
  - For EMEs and AEs, they are centered around 20 and 30% of GDP, respectively



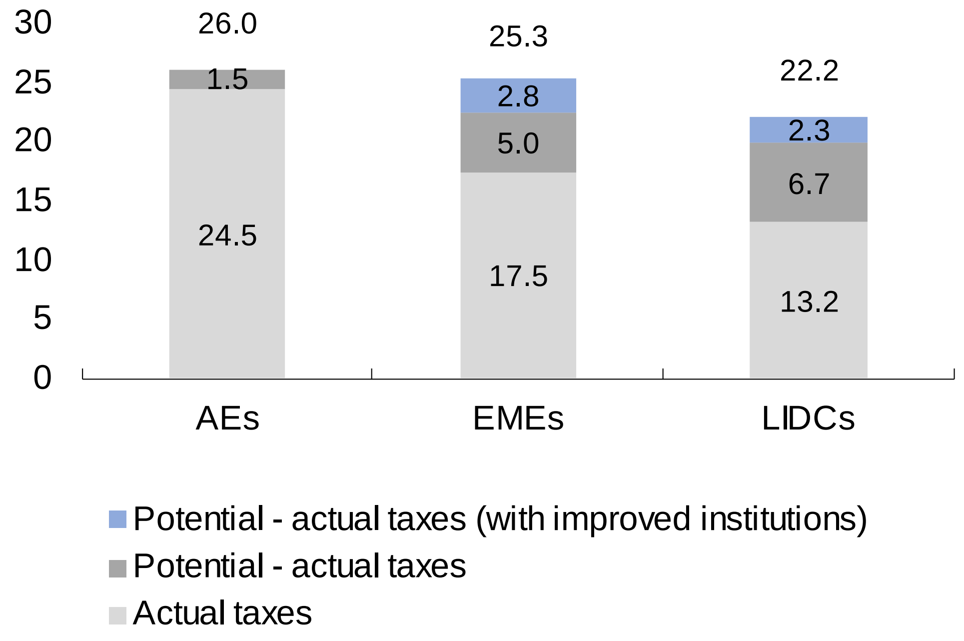
Source: Gaspar, Jaramillo and Wingender (2016), *Tax Capacity and Growth: Is there a Tipping Point?,* IMF Working Paper WP/16/234.



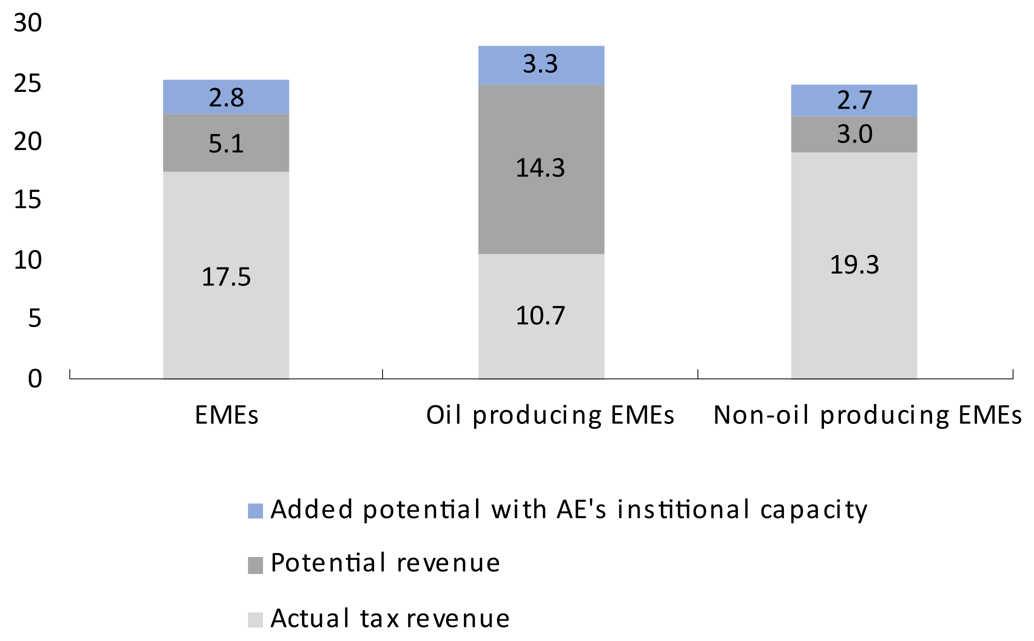
Source: WoRLD database.

Untapped Tax Potential Is Significant

Actual and potential tax revenue (% of GDP)



Endowment in natural resource is strongly and negatively correlated with the tax effort (% of GDP)



Collecting More

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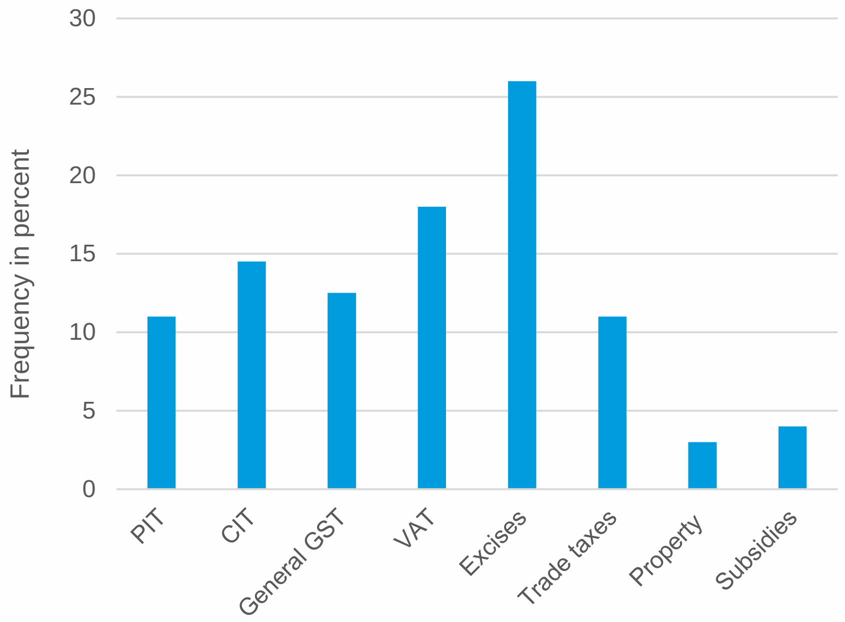
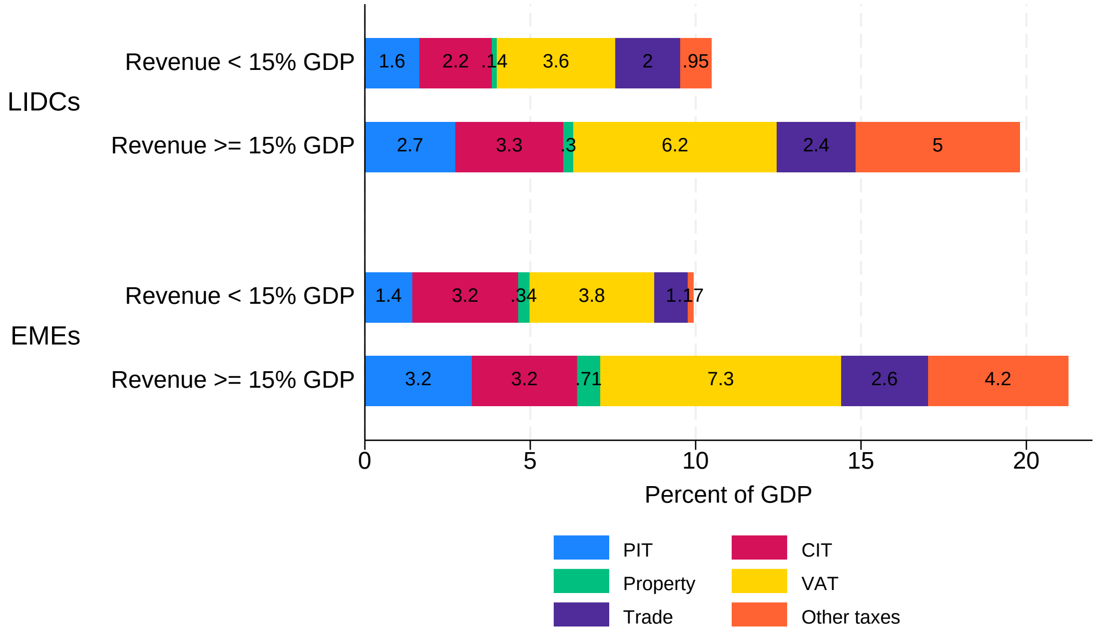
VAT and Excises Key Drivers of Revenue Growth

Excises and VAT reforms have often been instrumental to successful DRM episodes



Source: Akitoby et al., 2020, Tax revenue mobilization episodes in developing Countries, IMF Working Paper 2019/104
Note: Policy instruments used during DRM episodes, in percent.

VAT is the dominant share of tax revenue, and remains so as tax levels increase

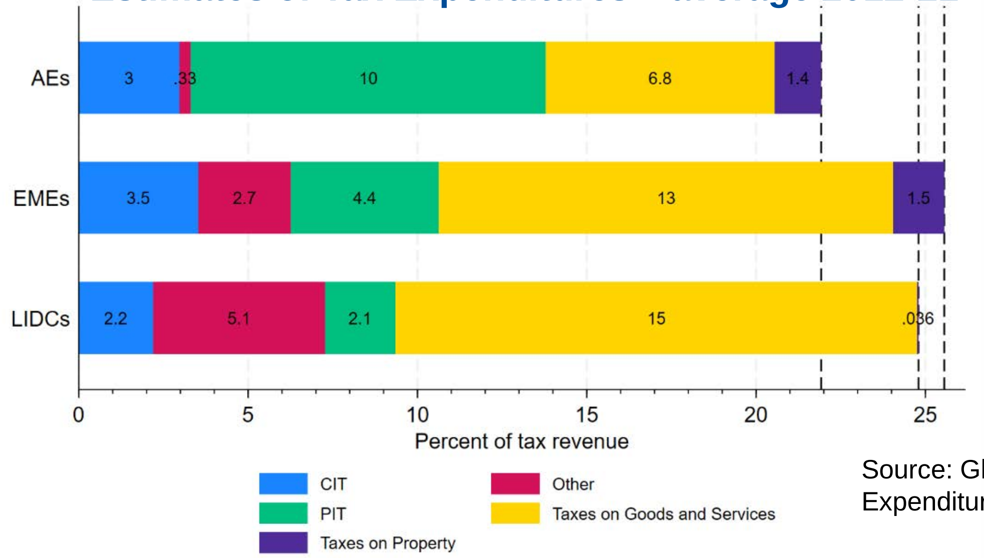


Source: WoRLD database.
Note: Average over 2015-20.

Key Revenue-Raising Options

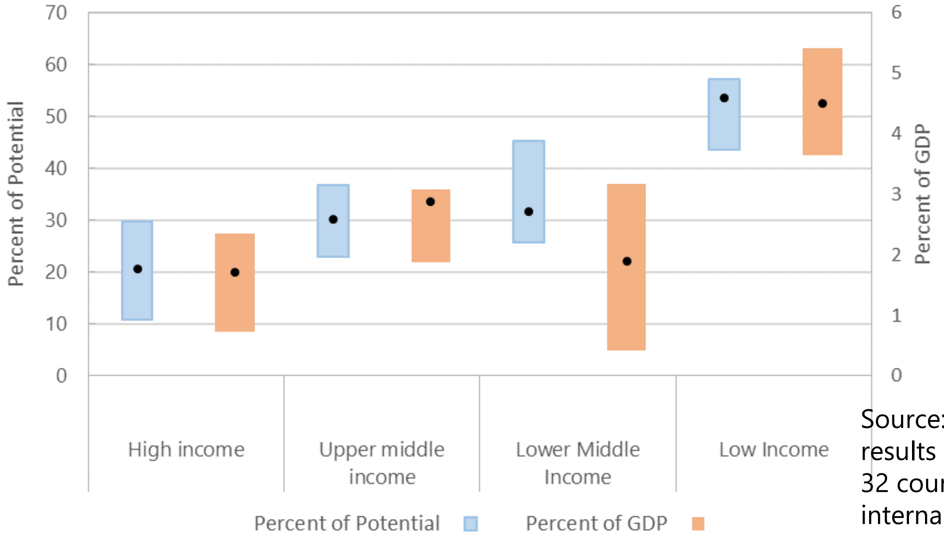
- **Reconsidering tax expenditures**
  - Occur in all taxes and can be regressive
  - About ¼ of tax revenue in EMDEs – or between 2 – 5% GDP
  - VAT tax expenditures are particularly large
- **Addressing tax compliance gaps**
  - Revenue forgone from non-compliance, such as evasion/fraud – for given policy
  - VAT compliance gaps alone can be 4% GDP in LIDCs – compared to 2% GDP in high income

Estimates of Tax Expenditures – average 2012-21



Source: Global Tax Expenditures Database

VAT compliance gaps by income level (median and inter-quartile range)



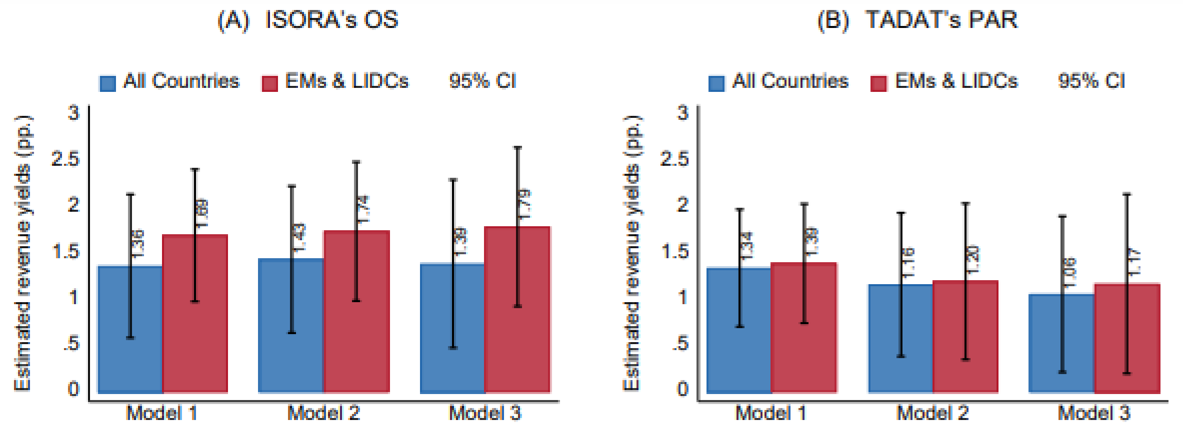
Source: IMF staff calculations using results of VAT gap studies conducted in 32 countries. Regions based on IMF internal administrative regions.

Revenue Yields from Tax Administration Reform

- **Revenue can increase by more than 3% of GDP in 6th year following a comprehensive reform of tax administration**
  - Reforms reinforce each other
  - Largest effects from
    - Public accountability
    - Segmentation (large-taxpayer office)
    - Compliance risk management
      - Measuring, identifying and addressing root of non-compliance
      - VAT, professionals, wealthy—to improve effective tax progression

- **TADAT** provides objective assessment of country's tax administration and can help prioritize reforms

Estimated revenue yield from an increase in strength of tax administration (from 40th to 60th percentile)

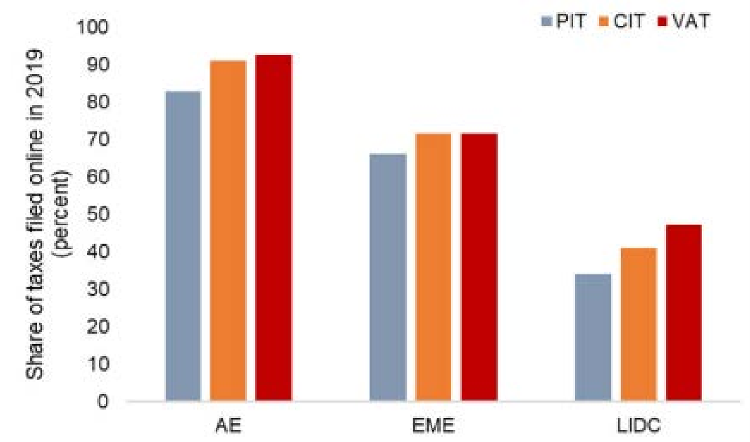


Source: Adan, Atsebi, Gueorguiev, Honda and Nose, Quantifying the revenue yields from tax administration reform, IMF Working Paper 23/231.

Digital Transformation of Revenue Administration

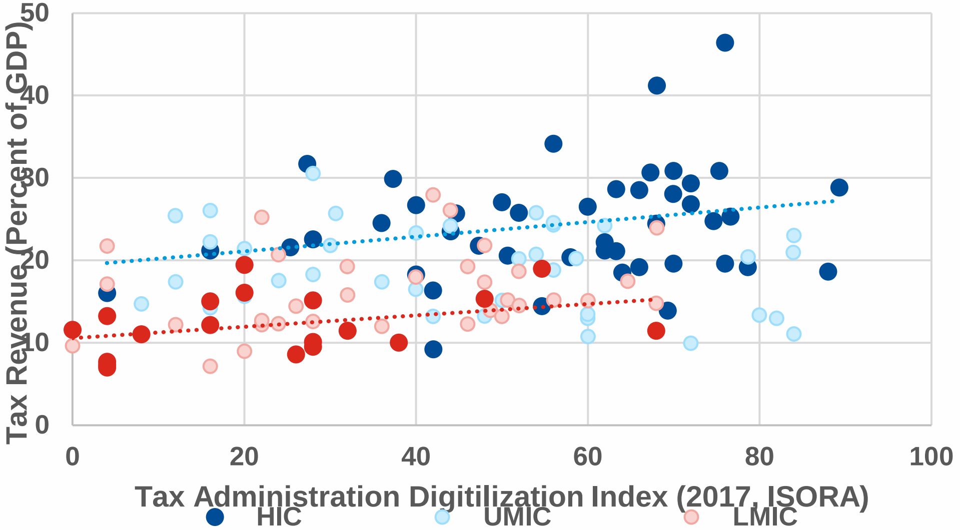
- Developing countries still lag behind in terms of digitalization of revenue administration (Fig)
- IMF estimates suggest that e-invoicing and electronic fiscal devices can yield, respectively, 0.7 and 0.5% GDP (on average)
- Digitalization goes well beyond e-filing/e-payment – e.g. use data for risk-analysis, artificial intelligence, taxpayer services
- Transformation calls for holistic reform of tax administration – skills, governance, organization, processes
- Digitalization can also mitigate tax arrears and reduce administrative and compliance costs

Figure 6. Share of Taxes e-Filed by Tax type, 2019 *(Percent)*



Source: D. Amaglobeli et al, Transforming Public Finance Through GovTech, IMF Staff Discussion Note 2023/04.

Correlation between degree of digitalization of tax administration and revenue performance



Source: IMF staff estimates based on ISORA

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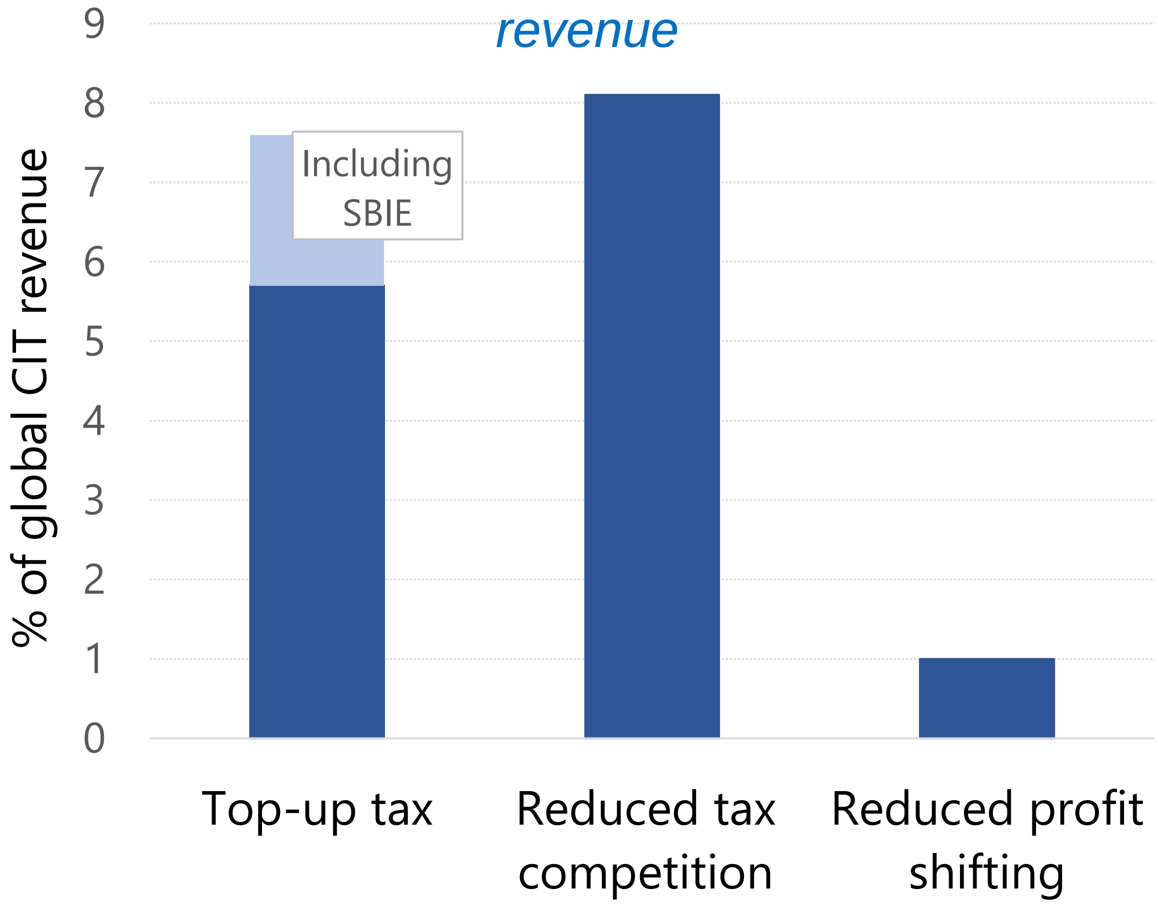
International Corporate Tax

Focus of G20 in past decade – 2-pillar agreement

- Pillar 2’s global minimum tax raises global revenue
  - Directly through top-up taxes ≈ 0.15% GDP
  - Indirectly through
    - Reduced profit shifting ≈ 0.03% GDP
    - Reduced tax competition ≈ 0.2% GDP
      - Opportunity for broader tax reforms, including revisiting wasteful tax incentives

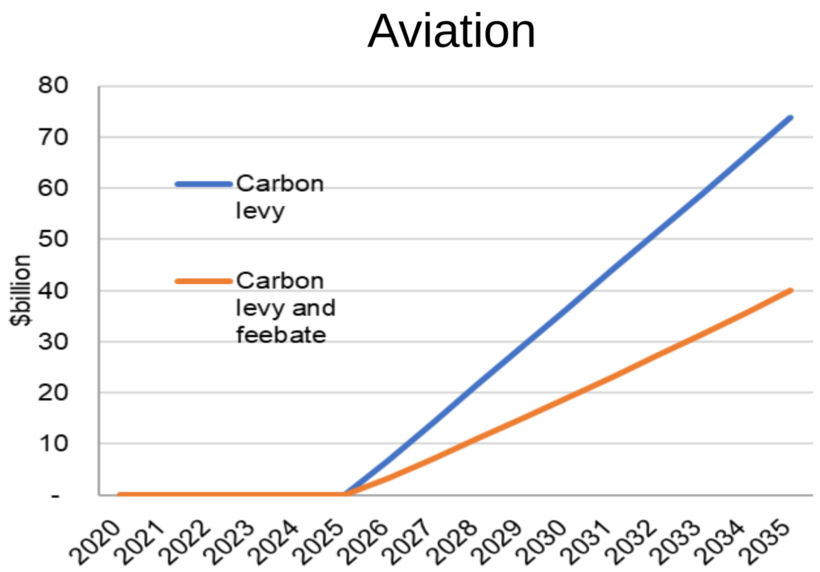
The minimum tax is expected to raise global revenue

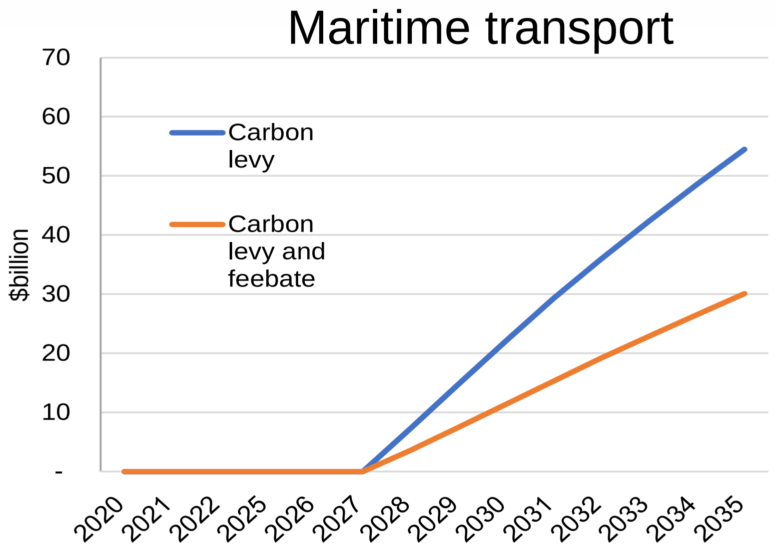


Source: IMF (2023) and IMF (2022b).

International transportation – Emissions Taxes

- (Untaxed) emissions from international aviation and maritime transport account for 5% of global GHGs
- Fee of \$50/tonne CO2 in 2030, rising to \$100/tonne in 2035 would raise annual revenues of \$80 billion from aviation and \$50 billion from maritime in 2035 (≈ **0.1% of global GDP**)
  - Amount is reduced if part is rebated using feebates
  - Average flight prices estimated to increase by 10% and price for shipped products by 1% in 2035
  - International coordination key, ideally through a globally agreed price to ensure equal treatment for carriers and nations
  - Administration straightforward given oversight by International Civil Aviation Organization, International Maritime Organization
- Revenues could be channeled toward SDGs
  - Provide assurance of no net incidence on developing countries





Source: IMF Staff using CPAT

International transportation: Policy (CIT and VAT) & Customs

- Spread of tonnage tax regimes has led to (very) low effective tax rates on shipping profits
  - 2019 OECD/ITF study estimates tax expenditure in OECD at € 1.1 billion (before post-pandemic boom)
  - More progress needed on international tax cooperation: E.g., shipping excluded from Pillar 2; limited profit reallocation under Pillar 1
- Important revenue potential from extending VAT to international air passenger transport
  - Est. $ 277 billion extra revenue (**0.25% of global GDP**)
- More effective customs administrations to facilitate and secure the complex and sensitive supply chain of food produce and food-related trade, including to safeguard food safety

3.7 billion passengers in 2022

Average ticket price of $749

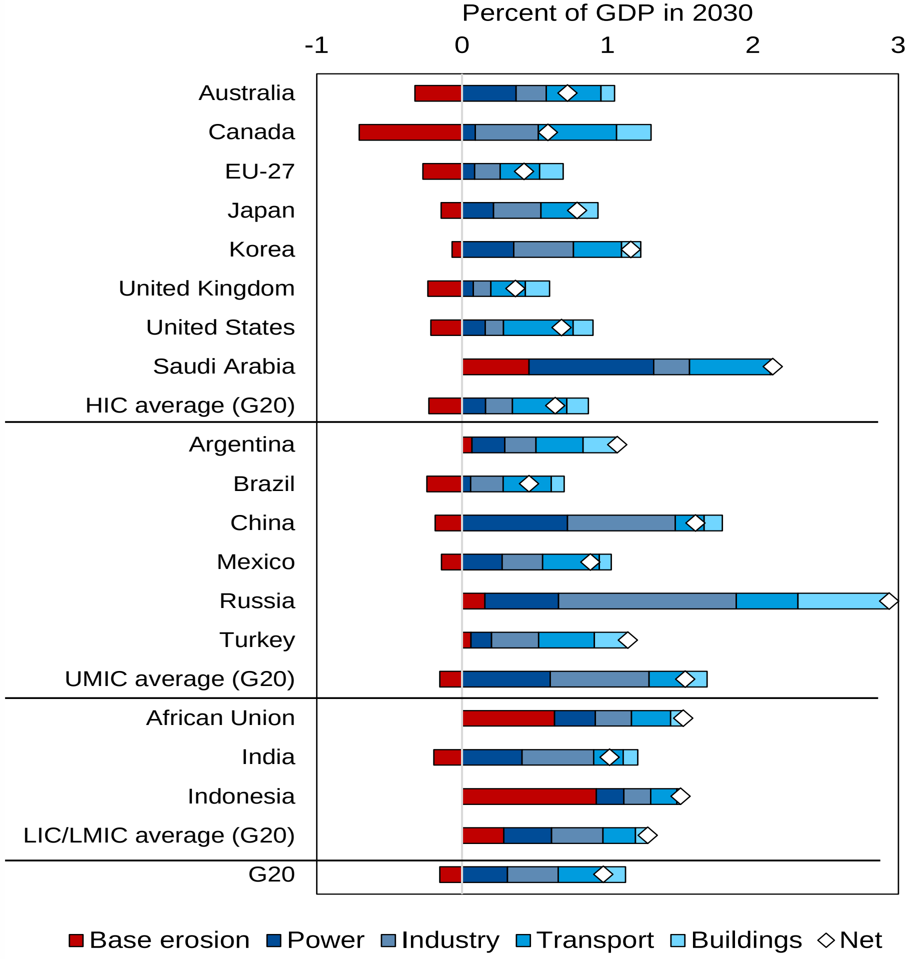
Assuming a flat 10% VAT rate

$277 billion of extra global revenue

Carbon pricing

- **Carbon pricing** is promising as an efficient policy to support decarbonization and mobilize revenue
  - To get on track to limit warming to 1.5-2°C requires reducing GHG emissions by 50-25% below 2019 levels by 2030
  - Carbon can be priced through a tax or an emission trading scheme
- **Potential revenues of carbon pricing in 2030 varies:**
  - $75 price in HICS raises 0.4-1.0% GDP; $50 price in UMICs raises 0.5-1.5% GDP; $25 price in LICs/LMICs raises 1.0-1.5% GDP
  - Adds up to $1.4 trillion globally by 2030 (**1.1% of global GDP**)
  - Phasing out explicit fossil fuel subsidies adds another 1.3% GDP
  - Base erosion of existing fuel excises due to decarbonization may offset revenue gains – and revenue declines further if countries make progress toward net zero goals
  - A revenue sharing scheme can support development agenda toward the SDGs

Revenues from Carbon Pricing, G20 Countries 2030



Source: IMF Staff using CPAT. LIC is low-income countries; LMIC is lower-middle income countries; UMIC = Upper-middle income countries; HIC = higher income countries.