# Taxation and Development

Anne Brockmeyer <sup>1</sup> Lucie Gadenne <sup>2</sup> Anders Jensen <sup>3</sup>

<sup>1</sup>Co-Editor (World Bank)

<sup>2</sup>Co-Editor (Queen Mary University of London)

<sup>3</sup>Senior Editor (Harvard Kennedy School)

VoxDevLit Launch - September 2024

• There are vast differences in the size of government across countries today

- There are vast differences in the size of government across countries today
- Improving the ability to collect taxes has multiple potential benefits, including:

- There are vast differences in the size of government across countries today
- Improving the ability to collect taxes has multiple potential benefits, including:
  - 1 Fund productivity-enhancing public goods and services

- There are vast differences in the size of government across countries today
- Improving the ability to collect taxes has multiple potential benefits, including:
  - Fund productivity-enhancing public goods and services
  - ② Decouple domestic policy from international influences (economic, political)

- There are vast differences in the size of government across countries today
- Improving the ability to collect taxes has multiple potential benefits, including:
  - Fund productivity-enhancing public goods and services
  - ② Decouple domestic policy from international influences (economic, political)
  - 3 Improve redistribution and ability to implement policies as intended

- There are vast differences in the size of government across countries today
- Improving the ability to collect taxes has multiple potential benefits, including:
  - Fund productivity-enhancing public goods and services
  - ② Decouple domestic policy from international influences (economic, political)
  - 3 Improve redistribution and ability to implement policies as intended
  - O Strengthen social contract between State and citizens

What can developing countries do to improve their ability to tax?

What can developing countries do to improve their ability to tax?

How does the pursuit of tax collection depend upon and influence other important objectives of a tax system - equity, growth and governance?

What can developing countries do to improve their ability to tax?

How does the pursuit of tax collection depend upon and influence other important objectives of a tax system - equity, growth and governance?

This VoxDevLit summarizes findings in three areas

- 1 Constraints on effective taxation and enforcement
- ② Tax authorities: Administrative reforms and communication
- 8 Equity and redistribution

This VoxDevLit draws primarily on two review articles

- Bachas, Gadenne and Jensen (2024): "Tax Equity in Low- and Middle-Income Countries"
- Ø Jensen and Weigel (2024): "No Taxation Without the State"

Many excellent reviews related to this topic, including: Besley and Persson (2014), Mascagni (2018), Pomeranz and Vila-Belda (2019), Slemrod (2019), Okunogbe and Santoro (2023), Brockmeyer et al. (2024), Okunogbe and Tourek (2024).

Active space at the intersection of policy and research, including: IGC (T4G); ICTD; EUTAX; TaxDev; UNU-WIDER; WB (DaTax); IMF (FAD)

- 1 Constraints on effective taxation and enforcement
- 2 Tax authorities: Administrative reforms and communication
- 8 Equity and redistribution
- 4 Conclusion

### **()** Constraints on effective taxation and enforcement

- 2 Tax authorities: Administrative reforms and communication
- 8 Equity and redistribution
- 4 Conclusion

- Achieving a high level of effective taxation often hinges on strong enforcement
- Enforcement depends on the existence of information
- Enforcement is strengthened when 3<sup>rd</sup>-party coverage is in place (Kleven et al., 2011; Pomeranz, 2015)

- Information trail can break down at the final consumer stage (Naritomi, 2019)
- Taxpayers can adjust toward non-covered margins of activity (Carillo et al., 2017)
- Questions about extent of cross-checking capacity and, more fundamentally, taxpayers' beliefs about such checks (Almunia et al., 2024)

Withholding occurs when the third-party institution remits some or all of the tax due directly to the tax authority

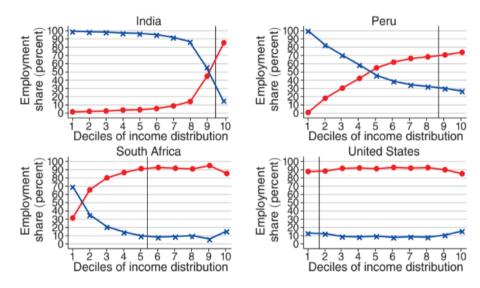
Prevalent practice in developing countries

Withholding reforms can enhance effective tax collection

- Expansion of withholding duties (Garriga and Tortarolo, 2024)
- Increase in the withholding rate (Brockmeyer and Hernandez, 2022)

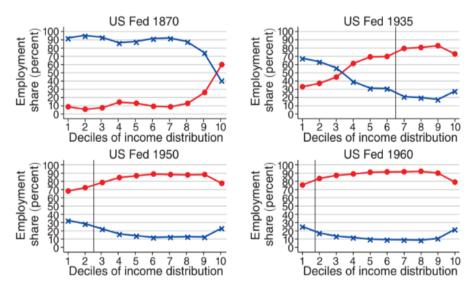
Positive effects operate through multiple mechanisms, including enforcement perceptions and 'default remittance'

# Change in 3<sup>rd</sup>-party coverage over development (across countries)



The dotted (crossed) line represents the share of employees (self-employed) in the workforce in the income decile of the country. Source: Jensen (2022).

Change in 3<sup>rd</sup>-party coverage over development (within country)



The dotted (crossed) line represents the share of employees (self-employed) in the workforce in the income decile of the year. Source: Jensen (2022).

Developing countries implement policies that a priori are at odds with second-best approaches (Gordon and Li, 2009; Best et al., 2015)

• Production efficiency: Design taxes to minimize distortions on economic choices (Diamond and Mirrlees, 1971)

Challenge: Underlying assumptions for second-best policy design are at odds with reality in most developing countries

• Constrained enforcement and prevalent tax evasion

Once we allow for evasion, optimal design may implement **'third-best' policies** that deviate from production efficiency if they lead to greater revenue efficiency

Application: Implementation of turnover vs corporate income tax (Best et al., 2015)

- Turnover tax is less production efficient than a corporate income tax but more revenue efficient
- Turnover tax may be particularly relevant for smaller firms, where scope for mis-reporting is pronounced

Constrained enforcement has important implications for other design dimensions of corporate taxation (Bachas and Soto, 2021; Lobel, Scot and Zúniga, 2024)

At same time, limited evidence on real effects of taxation – crucial area for future work, given links between taxation and growth

How should a tax authority balance between statutory reforms, on the one hand, and direct investments in enforcement, on the other hand?

• See Keen and Slemrod (2017) for a formal set-up

Trade-off will depend on numerous factors, including institutional context and nature of efficiency costs – strong need to build evidence from 'bottom up'

- Basri et al. (2021): For the corporate income tax in Indonesia, welfare gains from administrative reform (creation of medium size taxpayer office) may exceed those from raising the statutory tax rate
- Brockmeyer et al. (2021): For the property tax in Mexico, welfare may be enhanced by raising statutory rates rather than escalating enforcement

- 1 Constraints on effective taxation and enforcement
- **2** Tax authorities: Administrative reforms and communication
- **3** Equity and redistribution
- 4 Conclusion

Tax authorities play an important role in shaping the ultimate impacts of enforcement and statutory reforms

Review evidence for: (i) administrative reforms; (ii) communication with taxpayers

'Building blocks' of a well functioning tax authority

- · Feasible policy levers in most settings, including at lower level of initial capacity
- · Potential impacts beyond immediate improvements in enforcement

Without skilled and well-managed tax collectors, inspectors, and auditors, efforts to enhance tax capacity are likely to fall short

• Rationalising and professionalising personnel, in line with Weber's notion of an effective bureaucracy

Personnel reforms can take various forms

- Incentive structure, including performance pay (Khan et al., 2016) and performance posting (Khan et al., 2019)
- Assignment of tax collectors to teams (Bergeron et al., 2024)
- Delegation of collection duties to non-state actors (Balán et al., 2022)

In settings of low capacity, firms' and citizens' interactions with the tax authority are often unpredictable, idiosyncratic, and arbitrary

• Officials in the field may target certain subgroups for opaque reasons

Rationalising processes to follow systematic rules: tenet of Weberian bureaucracy

- In the DRC, campaign to systematically register property owners improved tax compliance and citizens' attitudes toward government (Weigel and Ngindu, 2023)
- In Tajikistan, electronic filing reduced compliance costs and had heterogeneous effects on compliance (Okunogbe and Pouliquen, 2022)
- In Senegal, providing bureaucrats with discretion to value properties led to a regressive tax profile (Knebelmann et al., 2023)

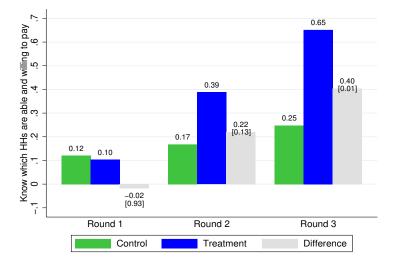
Informational capacity may go beyond the existence of 3<sup>rd</sup>-party trails

• Relates to notion of 'legibility' in social sciences (Scott, 1999)

What policies can render taxpayers more legible to the State?

- Signal identifying information to the taxpayer (Okunogbe, 2021)
- Leverage local information of non-state actors (Balán et al., 2022)
- State can directly build local information (Dzansi et al., 2024)

## Tax officials can directly build locally relevant information in the field



The bars denote the share of tax collectors who report having a good understanding of which households have a high propensity to pay, by round of the tax campaign and treatment status. Source: Dzansi et al. (2022).

Beyond merely conveying tax liabilities, transparent and clear communication can play a crucial role in shaping taxpayers' perceptions of the State

• Influence beliefs over enforcement, public goods, equity

It may be possible to design communication strategies that bolster tax morale – the set of non-monetary motivations for tax compliance (Luttmer and Singhal, 2014)

• Synthesis of evidence across contexts rejects the notion that non-monetary factors have no impact on actual tax behaviour

It is perhaps in environments with limited enforcement that seeking to influence tax morale can have high returns

## Evidence on intrinsic motivation, social considerations and reciprocity

Intrinsic motivation: Set of privately held beliefs, views and morals

- Heterogeneity across individuals (Dwenger et al., 2016; Bergolo et al., 2020)
- Mixed evidence on communication strategies to leverage it (Mascagni, 2018)

## Evidence on intrinsic motivation, social considerations and reciprocity

Intrinsic motivation: Set of privately held beliefs, views and morals

- Heterogeneity across individuals (Dwenger et al., 2016; Bergolo et al., 2020)
- Mixed evidence on communication strategies to leverage it (Mascagni, 2018)

Social considerations: Norms and social interactions

- Communication strategies must be carefully designed, as impacts depend on people's priors and the socio-cultural context (Manwaring and Regan, 2023)
- Public reward and shaming policies have significant effects (Dwenger and Treber, 2018; Perez-Truglia and Troiano, 2018; Slemrod et al., 2022)

Intrinsic motivation: Set of privately held beliefs, views and morals

- Heterogeneity across individuals (Dwenger et al., 2016; Bergolo et al., 2020)
- Mixed evidence on communication strategies to leverage it (Mascagni, 2018)

Social considerations: Norms and social interactions

- Communication strategies must be carefully designed, as impacts depend on people's priors and the socio-cultural context (Manwaring and Regan, 2023)
- Public reward and shaming policies have significant effects (Dwenger and Treber, 2018; Perez-Truglia and Troiano, 2018; Slemrod et al., 2022)

Reciprocity: Fiscal exchange of tax payment for public goods

- Mixed effects of providing information on PG spending (Hallsworth, 2014)
- Actual changes in PGs may impact compliance, but it is not guaranteed (Khwaja et al., 2020; Krause, 2020; Carillo et al., 2021; Brockmeyer et al., 2024)

- 1 Constraints on effective taxation and enforcement
- 2 Tax authorities: Admninistrative reforms and communication
- **8** Equity and redistribution
- 4 Conclusion

Taxes serve not only to raise revenue but also to redistribute – what role can or might taxation play in reducing income inequality in developing countries?

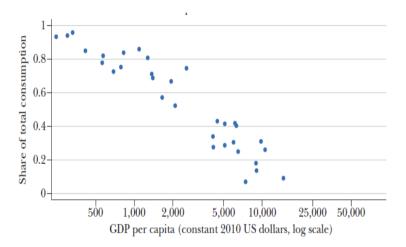
Income inequality is high in developing countries and has either been stable or increased over the past 30 years

- Currently, top 10% share of pre-tax income is 55% in Africa; 58% in Brazil; 43% in China; 57% in India
- Based on recent data from the World Inequality Database (https://wid.world)

- Statutory incidence: Defines the taxes legally imposed by the government and identifies who is expected to pay taxes directly
- **De facto incidence**: Reflects who actually pays taxes, taking into account the possibility of tax evasion or avoidance
- 8 Economic incidence: Describes how taxes influence market prices and net resources, potentially shifting the effective tax burden away from statutory agents

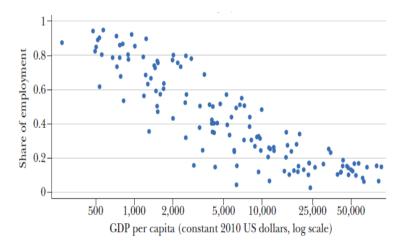
What evidence? #1 is easy to measure, #2 can be proxied, #3 is largely unstudied

### Informal consumption: Traditional stores



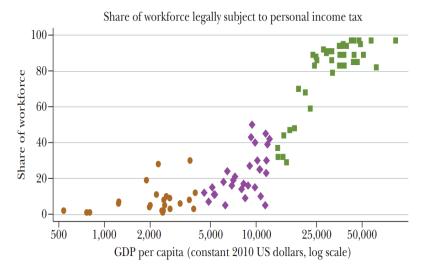
Displays the share of total consumption in traditional stores (markets, small convenience stores, street stalls, home production) for 32 low- and middle-income countries based on expenditure surveys which record the places of purchase where consumption occurred. Source: Bachas et al. (2023)

# Informal individual income: Self-employment



Displays the share of self-employed workers using 2020 data from the International Labor Organization for 132 countries. Source: Bachas et al. (2024)

## Limits on enforcement cause the income tax to be narrow in developing countries



Displays the workforce-share that is covered by the personal income tax, based on the location of the exemption threshold in the income distribution. Circle, diamond and square countries are low and lower-middle, upper-middle and high-income countries, respectively. Source: Jensen (2022). Governments face difficulties to effectively tax lower-income (primarily self-employed) individuals, leading them to exempt large segments of the workforce from PIT

The narrow tax base impacts the optimal choice of tax instrument to redistribute

• Atkinson and Stiglitz (1976): Redistribution should ideally be achieved exclusively through direct income taxation

Once we account for enforcement constraints, using consumption taxes both for revenue and equity objectives is a robust policy design (Huang and Rios 2016)

Consumption taxes (e.g. VAT) are one of the main sources of collection in developing countries, but what are its equity effects?

Bachas et al. (2023): Lower income households consume more from informal stores

- Informality Engel curve is downward-sloping in 32 countries
- Strong overlap between informality and food Engel curves

These consumption patterns have implications for the equity of consumption taxes

- Consumption tax with a uniform rate will de facto be progressive
- Reduced rate on necessity goods (e.g. food) has limited impacts on progressivity

Assumption on economic incidence: Study pass-through of VAT rate change to consumer prices by store-type in Mexico

How to effectively tax the most well-off in an increasingly globalised economy (Scheuer and Slemrod 2021, Bergolo et al., 2023)?

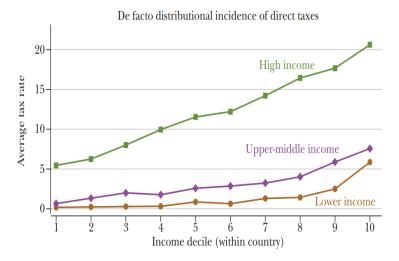
There are two key challenges

- Wealthy individuals derive a substantial portion of their income from businesses under their direct or indirect control (Kopczuk and Zwick 2020).
- Wealthy individuals often hold wealth abroad, including in tax haven jurisdictions with low tax rates and limited transparency

Empirically, these challenges appear to be significant

• Financial wealth held in tax havens accounts for up to 18% of GDP in Africa and the Middle East, 13% in Latin America, and 5% in Asia (Alstadsæter et al. 2018).

# Direct effective taxation is limited at the top of the income distribution



Displays the de facto incidence of direct taxes following the methodology developed by the Commitment to Equity institute (CEQ; see Lustig 2022). 30 are high-income countries, 21 are upper-middle-income countries, and 23 are low- and middle-income countries Source: World Bank (2022).

Consistent with these challenges, research finds large behavioral responses to tax reforms at the top of the income distribution

Elasticity of taxable income/wealth in range of 0.6-2 (Waseem, 2018; Jouste et al. 2021; Londoño-Vélez and Ávila-Mahecha, 2022; Axelson et al., 2023; Locks, 2023)

The magnitude of the elasticity can, however, be reduced through other reforms

- Amnesties and voluntary disclosure programs (Londoño-Vélez and Tortarolo, 2022)
- Taxation of dividends distributed to shareholders (Brounstein, 2023)
- Automatic information exchange across borders (Alstadsæter et al., 2023)

The corporate income tax could serve as a backstop, but that role is diminished in a globalized world (Johannesen et al., 2020; Tørsløv et al. 2023)

- 1 Constraints on effective taxation and enforcement
- **2** Tax authorities: Administrative reforms and communication
- 8 Equity and redistribution
- 4 Conclusion

This VoxDevLit has reviewed evidence on taxation and development, highlighting what we know in three areas. *What are some topics we know less about in these areas?* 

This VoxDevLit has reviewed evidence on taxation and development, highlighting what we know in three areas. *What are some topics we know less about in these areas?* 

### Area #1: Constraints on effective taxation and enforcement

- How to balance enforcement and statutory reforms, given limited resources?
- What are the promises and pitfalls of digitization for enforcement? Can digital data lead to 'individualized' tax instruments or will it create a collection process that is even more uneven, both horizontally and vertically?
- What are the real efficiency costs of commonly implemented tax instruments, and how do the costs depend on constrained administrative capacity?

## Area #2: Tax authorities

- How to design policies that enhance informational capacity while minimizing capture by rent-seeking officials?
- Can communication strategies impact perceptions of redistributive and procedural fairness, and do such perceptions eventually matter for compliance?

## Area #2: Tax authorities

- How to design policies that enhance informational capacity while minimizing capture by rent-seeking officials?
- Can communication strategies impact perceptions of redistributive and procedural fairness, and do such perceptions eventually matter for compliance?

#### Area #3: Equity and redistribution

- Who benefits from the existence of a large informal sector?
- What is the economic incidence of commonly implemented taxes in developing countries, and what governs the incidence?
- What are the distributional impacts of environmental fiscal policies?