



Tax Equity

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Progressive and Equitable Taxation

- Context: fiscal pressure + high income concentration
- Needs to be addressed multidimensionally (*Atkinson 2015*):
 - Market income inequality (\rightarrow skills, labor market policies, anti-trust)
 - Transfers, social insurance
 - **Progressive and fair taxation** (vertically and horizontally equitable)
 - Progressive tax: higher tax rates for those able to pay more

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- This presentation: based on the article "*Tax Equity in Low- and Middle-Income Countries*", Journal of Economic Perspectives 2024
 - with Lucie Gadenne (Queen Mary Uni. London) & Anders Jensen (Harvard Kennedy School)
 - + ongoing work

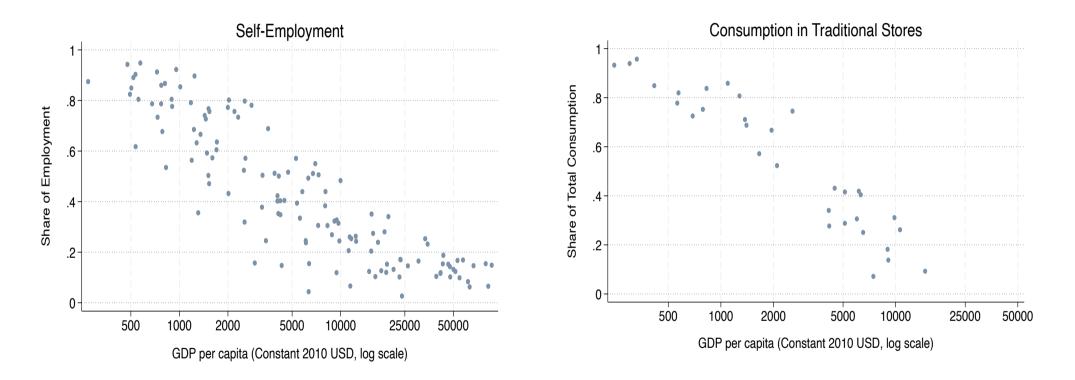
Tax Incidence

Framework: who pays taxes?

To assess the equity of a tax system, we want to know three key features:

- 1. Statutory incidence: who is expected to pay taxes directly (de-jure)
- **2. De facto incidence:** who actually pays taxes. Can differ greatly from statutory incidence when there is tax evasion, informality
 - Optimistic assumption: this is not first order in HICs (*Slemrod 2007*).
 - Clearly first order in LMICs

Informality limits tax collection & can change de-facto Incidence



Source: Figure 2 in Bachas, Gadenne & Jensen (JEP, 2024), based on data from International Labour Organization (2020).

Source: Figure 2 in Bachas, Gadenne & Jensen (JEP, 2024) based on data from Bachas, Gadenne & Jensen (RES, 2023).

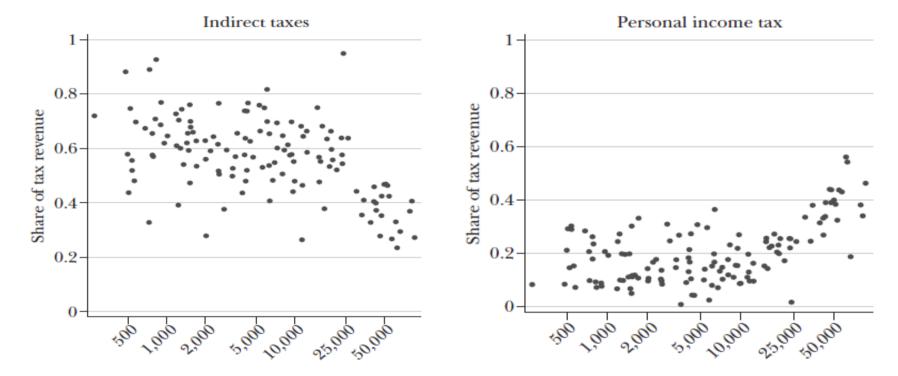
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 - Optimistic assumption = not first order in HICs (*Slemrod 2007*).
 - Clearly first order in LMICs
- **3. Economic incidence:** prices respond to taxes, potentially shifting the burden away from agents remitting taxes to those trading with them
 - E.g. sales tax remitted by firms, but tax burden often passed to consumers via higher prices
 - Active literature in OECD, recent in LMICs (requires prices)(e.g. *Benzarti, Garriga, Tortarolo 2024*)

A Tale of Two Taxes

A Tale of Two Taxes: Indirect Taxes and Personal Income Tax



Source: Figure 1 in Bachas, Gadenne & Jensen (JEP, 2024). Based on data for 2018 from Bachas, Jensen, Fisher-Post & Zucman (2022).

What is the Progressivity of the PIT?

LMICs characterized by:

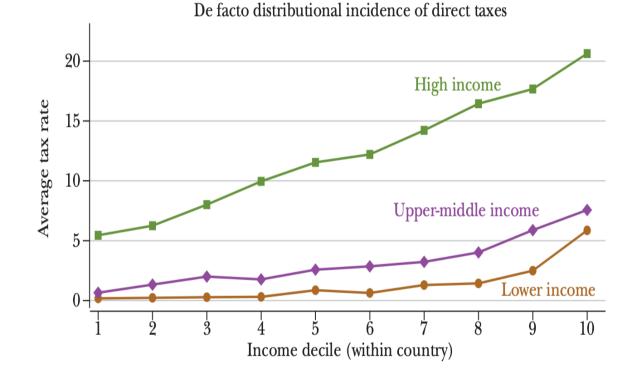
- 1. Large share of economic activity in the informal sector
- 2. High reliance on indirect taxes
- 3. Low PIT tax collection

Hard Times: (lack of) Progressivity of the PIT

LMICs characterized by:

- 1. Large share of economic activity in the informal sector
- 2. High reliance on indirect taxes
- 3. Low PIT tax collection

4. Low progressivity of personal income taxes



Source: Figure 4 in Bachas, Gadenne & Jensen (JEP, 2024), based on data from Wai-Poi, Sosa, Bachas (2024) sourced from CEQ country studies.

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Optimal taxation with constrained income taxes

"Textbook" policy: all redistribution via direct income taxes & transfers (*Atkinson & Stiglitz 197*6)

- This assumes income is perfectly observable along full distribution
- Once PIT enforcement constraints are considered, indirect taxes are needed for equity (*Huang and Rios, 2016*)
- In practice, countries do rely on the VAT for distributional purposes:
 - Lower VAT rates on many necessity goods
 - Sometimes higher VAT rates on luxuries

How to introduce progressivity in this context?

Middle-income countries:

1. The PIT can be strengthened in a progressive way (next section)

Lower-income countries:

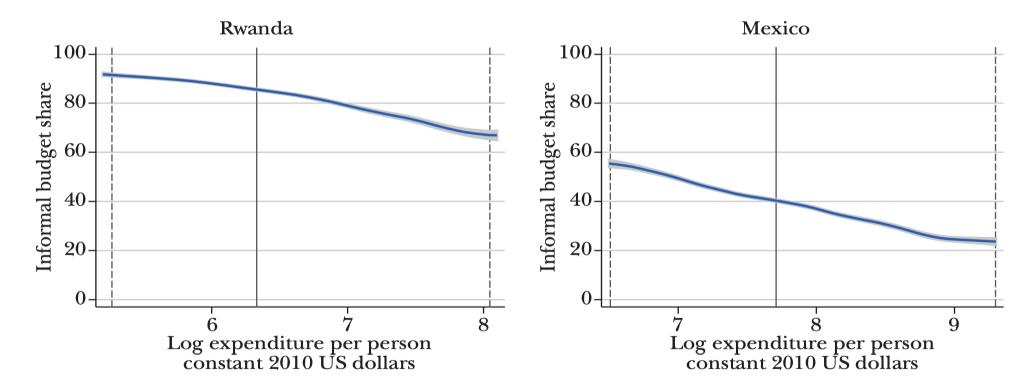
2. Tax administration decisions can raise revenue & equity:

- Chapter "A Bleak House? The Role of Tax Administration, with Examples from Property Taxation"
- e.g., Discretion vs automation of property tax valuation in Senegal (*Knebelman, Pouliquen, Sarr 2024*)

3. Indirect taxes and their design matter for equity

Informal Consumption falls with household income

Informality Engel Curves in Rwanda and Mexico



Source: Bachas, Gadenne & Jensen (ReStud, 2023). Based on the authors' data collection.

The role of indirect taxation for redistribution

- 1. Consumption taxes are more progressive than often considered:
 - Reduce Gini by around one percentage point (Bachas, Gadenne & Jensen, 2023)
- 2. Low tax rates on necessity goods--such as food--add little additional progressivity once informal consumption is considered
 - These exemptions benefit mainly the consumers of formal stores who are richer on average
 - Key policy challenge: how to phase those out in a societally acceptable way?
- 3. Non-standard indirect tax policies can play a positive equity role:
 - Ration shops: subsidized prices for fixed quantity of basic goods
 - → Raise welfare + acts as insurance in India (*Gadenne 2020*; *Gadenne, Norris, Singhal, Sukhtankar 2021*)
 - Higher luxury rates → progressive + low distortions in India (Bachas, Behring, Ghosh, In progress)

Need more evidence concerning the economic incidence of indirect taxes:

In Mexico, price pass-through of VAT hike to consumer prices estimated at 75-80% for formal sector vs 15-20% informal sector → 60 p.p. higher in formal (modern) stores (*Bachas, Gadenne & Jensen, 2023*)

Towards progressive income taxation

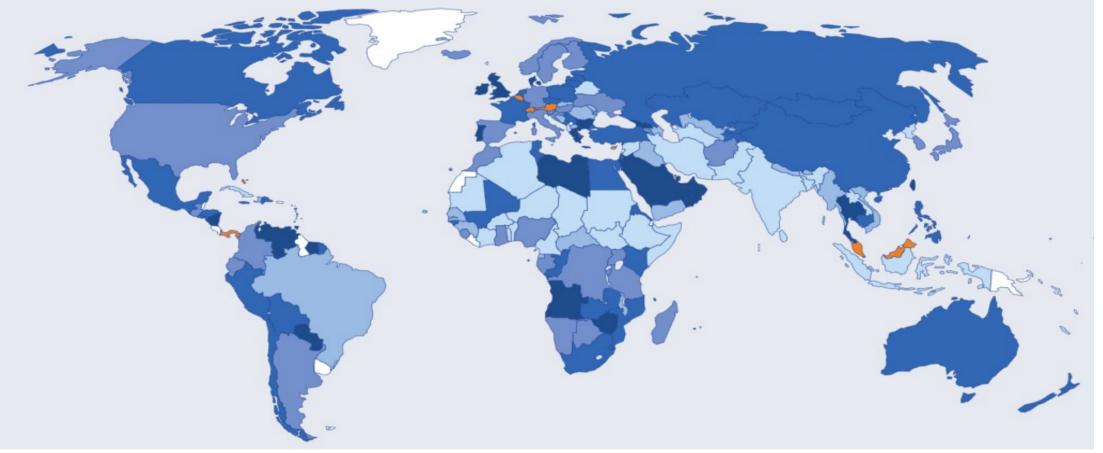
Challenges to Progressive Taxation

- Improving tax equity in the medium run will requires more than better designed VAT, property taxes, and targeted enforcement
 - → progressive income taxes + capital taxation (corporate, inheritance, potential minimum tax on wealth)
- Observing the income of the rich and the profits of multinationals is challenging:
 - Offshore income and wealth
 - Blurred borders between capital and labor income
 - Can decide on the type of income and the timing of its realization
 - Can use corporate assets for private benefits (consume within the firm, obtain loans)
 - The corporate tax as a backstop for the PIT has been weakened (tax competition, avoidance)

Who owns offshore financial wealth?

Offshore financial wealth **held abroad** (in % of GDP) | 2022

0 - 3 3 - 6 6 - 11 11 - 20 > 20 Tax havens No data

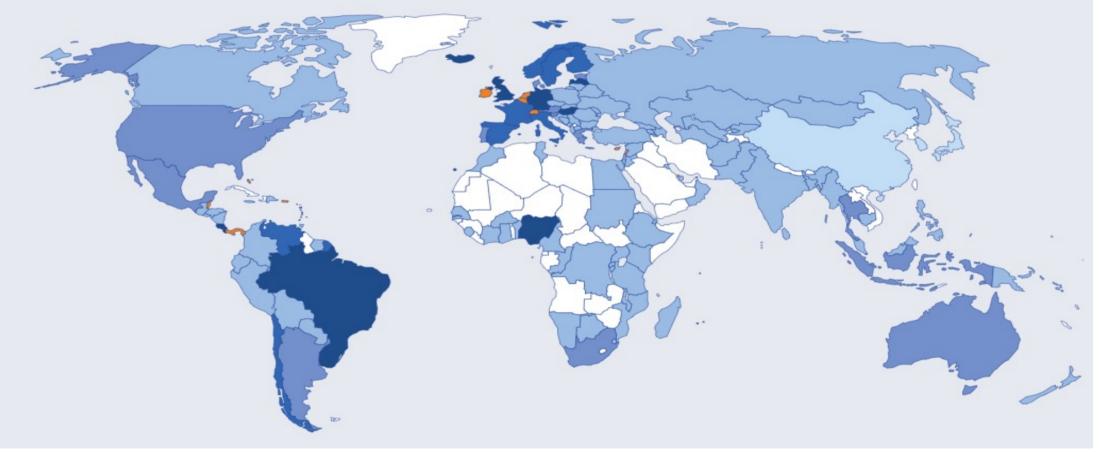


Source: Atlas of the Offshore World (2024, https://atlas-offshore.world/). Data based on Alstadsæter, Johannesen & Zucman (JPUBE, 2018).

Where are the missing profits?

Corporate tax revenue lost as a share of corporate tax revenue collected (in %) | 2020

□ 0 - 4 □ 4 - 8 □ 8 - 12 □ 12 - 16 □ > 16 □ Tax havens □ No data



Source: Atlas of the Offshore World (2024, https://atlas-offshore.world/). Data based on Tørsløv, Wier & Zucman (RES, 2023).

Challenges to Progressive Taxation

- Improving tax equity in the medium term requires more than better designed VAT, property tax, and targeted enforcement
 - → broad progressive income taxes + capital taxation (corporate, inheritance, potential minimum tax on wealth)
- Observing the income of the rich and the profits of multinationals is challenging:
 - Offshore income and wealth
 - Blurred borders between capital and labor income
 - The corporate tax as a backstop has been weakened (tax competition, avoidance)
- Policy response of past decades:
 - Lower taxes on mobile bases: capital income, top earners; replace with payroll, indirect taxes
 - Limit rate differentials across tax types, thus limiting progressivity of entire tax system (e.g. Eastern Europe and Central Asia's flat taxes on corporate and personal income)

Individual Tax Rates, with comprehensive income

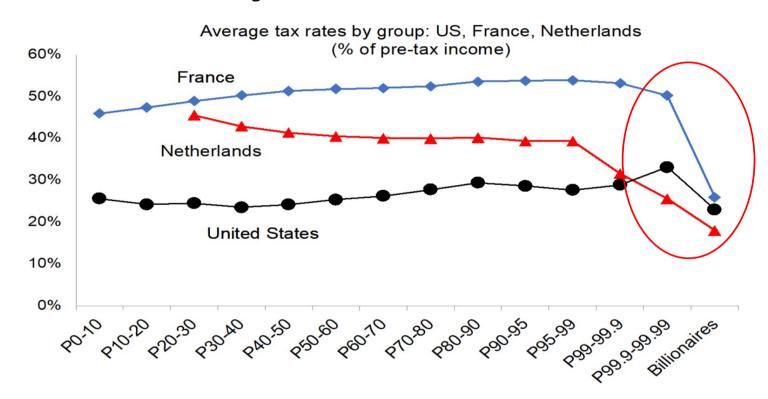


Figure 4: the tax deficit of billionaires

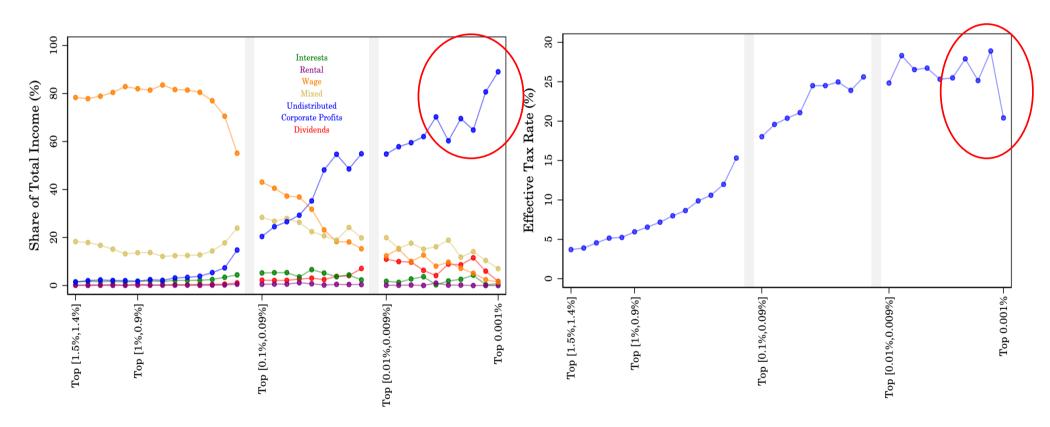
Source: Figure 4.1 in Global Tax Evasion Report (EU Tax Observatory, 2024). Data for the US from Saez & Zucman (2019), data for France from Bozio, Garbinti, Goupille-Lebret, Guillot & Piketty (2023), and data for the Netherlands from Bruil, Van Essen, Leenders, Lejour, Mohlmann & Rabaté (2022).

ETR at the top: the case of Honduras

Figure 2: Income Composition (2019)

Figure 3: Average ETR (2019)

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Source: Scott, Bachas, Cesteros, Flores, Oqueli (Working paper, "How much do top earners pay in taxes? An application to Honduras" 2024). Based on the administrative data from SAR Honduras.

Great expectations for progressive taxation

- Large dispersion in tax rates paid across multinationals & the very wealthy (within size/income groups):
 - Improved tax equity can also level the playing field and efficiency
- Important evolutions the **ABC**:
 - Automatic Exchange of financial information
 - Beneficial Ownership Registries
 - Corporate minimum tax (Global min. tax of 15%)

 \rightarrow Cause for cautious optimism

- Yet, governments need assistance in fast-changing environment:
 - Tracking the evolution of comprehensive top incomes
 - Using new admin data to reduce evasion and avoidance at the top
 - Adapt domestic tax policy to changing international tax environment

→ Part of new **DATAX** initiative with colleagues in DEC and in other parts of the World Bank, stay tuned for the launch event!

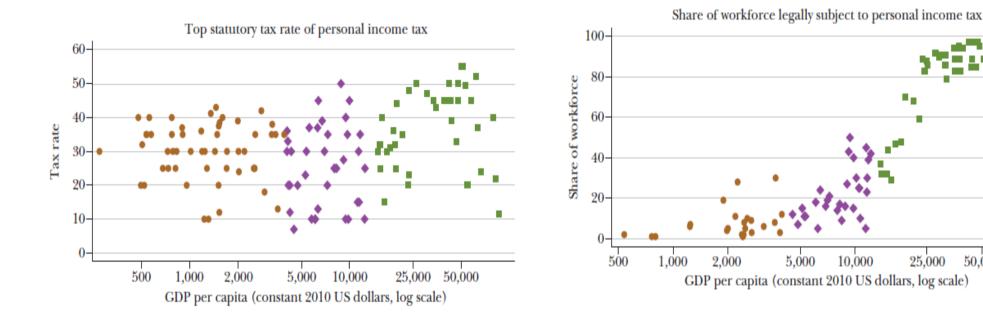


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References:

- Alstadsæter, A., Johannesen, N., & Zucman, G. (2019). Tax evasion and inequality. American Economic Review, 109(6), 2073-2103.
- Alstadsæter, A., Godar, S., Nicolaides, P., & Zucman, G. (2023). Global tax evasion report 2024 (Eu-Tax Observatory).
- Atkinson, A. B., & Stiglitz, J. E. (1976). The design of tax structure: direct versus indirect taxation. Journal of Public Economics, 6(1-2), 55-75.
- Atkinson, A. B. (2015). Inequality: What can be done?. Harvard University Press.
- Bachas, P., Fisher-Post, M. H., Jensen, A., & Zucman, G. (2022). Globalization and factor income taxation (No. w29819). National Bureau of Economic Research.
- Bachas, P., Gadenne, L., & Jensen, A. (2023). Informality, consumption taxes, and redistribution. Review of Economic Studies, rdad095.
- Bachas, P., Jensen, A., & Gadenne, L. (2024). Tax Equity in Low-and Middle-Income Countries. Journal of Economic Perspectives, 38(1), 55-80.
- Benzarti, Y., Garriga, S., & Tortarolo, D. (2024). Can VAT Cuts and Anti-Profiteering Measures Dampen the Effects of Food Price Inflation? (No. w32241). National Bureau of Economic Research.
- Bozio, A., Garbinti, B., Goupille-Lebret, J., Guillot, M., & Piketty, T. (2024). Predistribution versus Redistribution: Evidence from France and the United States. American Economic Journal: Applied Economics, 16(2), 31-65.
- van Essen, C., Leenders, W., Lejour, A., Möhlmann, J., & Rabaté, S. (2022). Inequality and Redistribution in the Netherlands (No. 436). CPB Netherlands Bureau for Economic Policy Analysis.
- Gadenne, L. (2020). Can rationing increase welfare? Theory and an application to India's ration shop system. American Economic Journal: Economic Policy, 12(4), 144-177.
- Gadenne, L., Norris, S., Singhal, M., & Sukhtankar, S. (2021). In-kind transfers as insurance (No. w28507). National Bureau of Economic Research.
- Huang, J., & Rios, J. (2016). Optimal tax mix with income tax non-compliance. Journal of Public Economics, 144, 52-63.
- Jensen, A. (2022). Employment structure and the rise of the modern tax system. American Economic Review, 112(1), 213-234.
- Knebelmann, J., Pouliquen, V., & Sarr, B. (2023). Discretion versus algorithms: Bureaucrats and tax equity in senegal. Working Paper.
- Scott, Bachas, Cesteros, Flores, Oqueli (2024) "How much do top earners pay in taxes? An application to Honduras", Working Paper
- Saez, E., & Zucman, G. (2019). The triumph of injustice: How the rich dodge taxes and how to make them pay. WW Norton & Company.
- Slemrod, J. (2007). Cheating ourselves: The economics of tax evasion. Journal of Economic perspectives, 21(1), 25-48.
- Tørsløv, T., Wier, L., & Zucman, G. (2023). The missing profits of nations. The Review of Economic Studies, 90(3), 1499-1534.

Direct income Taxation: legal features

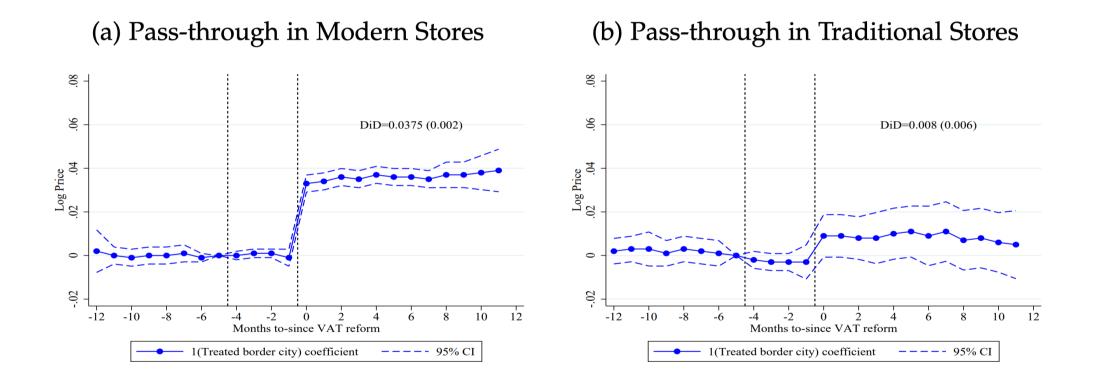


Source: Figure 4 in Bachas, Gadenne & Jensen (JEP, 2024). Based on the authors' data collection.

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Pass-through by Store Type: VAT Reform in Mexico



Source: Bachas, Gadenne & Jensen (ReStud, 2023). Based on the authors' data collection.