Revenue Effect of the Global Effective Minimum Corporate Tax for African Countries

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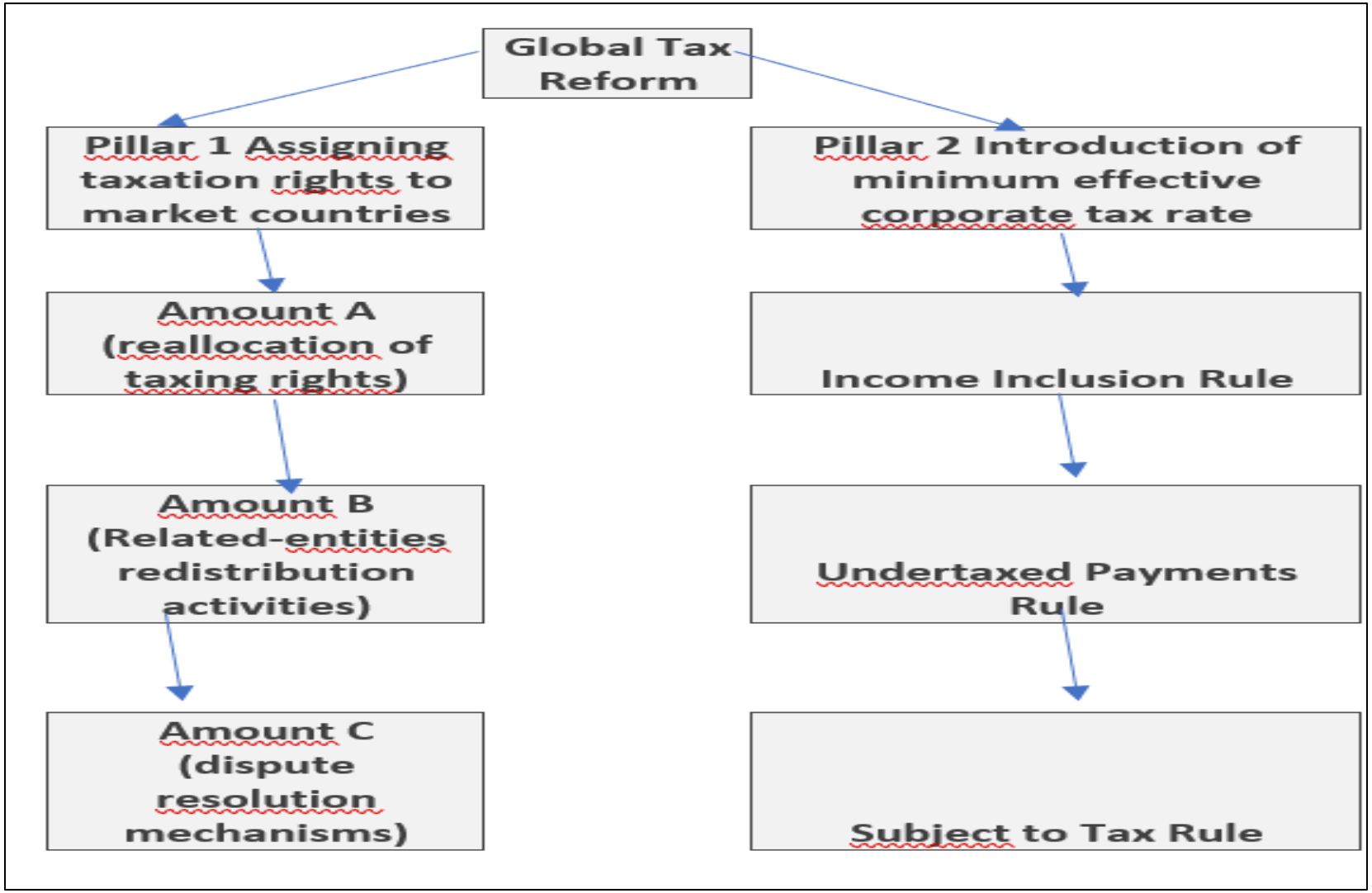
Agenda

1. Background
2. Overview of OECD/G20 two pillars global tax reform proposal
3. Critiques and concerns about the international tax reform agreement
4. Empirical analysis of the impact of global effective minimum tax rate on tax expenditures and on tax revenue
5. Conclusion and policy implications

Background

- In October 2021, 137 out of the 141 jurisdictions of the OECD/G20 Inclusive Framework reached agreement on the two-pillar tax reform for addressing the tax challenges arising from the digitalisation of economies.

Structure of the agreement



Criticisms/reservations about the pillar 2 of the international tax reform agreement

- Priority given to headquarters countries to charge a top up tax under the income inclusion rule of pillar 2
- Rate and scope are low for pillar 2: The global minimum corporate tax rate of 15% (for MNEs that meet) is low and the the EUR 750 million threshold is two high to cover major taxpayers in developing countries.
- Legitimacy of OECD and call for setting an UN tax body to lead discussions on global tax reform (Mukamba, 2021; TJNA).

Global minimum corporate tax (GMT) and tax revenue: Transmissions mechanisms

The GMT could affect tax revenue collection through two main transmission channels: cuts in tax incentives and reduction of profit shifting (Devereux, Vella and Wardell-Burrus, 2022).

1. Tax incentives

- The implementation of the GMT rate may lead countries to review tax incentives (OECD, 2022; Readhead, Lassourd and Mann, 2021).

- However, it may be difficult to amend tax incentives that are subject to fiscal stabilisation clauses (OECD, 2022;Readhead et al, 2021).

- Accordingly, the impact of global tax reform on tax expenditures for developing countries is unknown a priori.

2. Profit shifting

- The GMT may discourage MNEs from shifting profits to low or no tax jurisdictions, a factor that may directly increase tax collection in non haven countries.

Revenue impact of the GMT: Literature review

- **Barake et al (2021) indicate that the revenue gain for EU 27 will reduce from €83 billion to € 64 billion**, a decrease corresponding to 23% of the initial revenue gain for the EU-27 without carve outs.
- The gain for the United States would be about €57 billion a year,.
- The GMT revenue gains would be smaller in developing countries because most multinational companies are headquartered in high-income countries : the gain for China would be €6 billion, €4 billion for South Africa, and €1.5 billion for Brazil.
- **The OECD has estimated that the minimum effective tax rate will result in the collection of USD 150 billion in new revenues annually**

Objective of the paper

- This paper explores the likely revenue impact of the global effective minimum corporate tax rate for African countries.
- This ex-ante evaluation will inform policy decisions for the revision, the adoption and the implementation of global tax reform rules

Empirical methodology

Objective: Evaluate the effect of having an effective corporate tax rate of at least 15% on tax expenditures.

- Methodology: Randomized discontinuity design (Imbens and Lemieux, 2008; Hahn, Todd, and Van der Klaauw, 2001; Meyersson, 2014)
- Assigment/forcing variable: Effective corporate income tax rate
- Cutoff (threshold): 15%
- Outcome variable: tax expenditures (revenue forgone in %GDP) , CIT revenue, total tax revenue in %GDP
- Specification:

$$y_i = \alpha + \beta T_i + f(a_i) + \varepsilon_i$$

$$\forall a_i \in (c - h, c + h)$$

Data

- Data on tax expenditures : Global Tax Expenditures Database (GTED) built by the Council on Economic Policies and the German Development Institute (Redonda, von Haldenwang and Aliu, 2021).

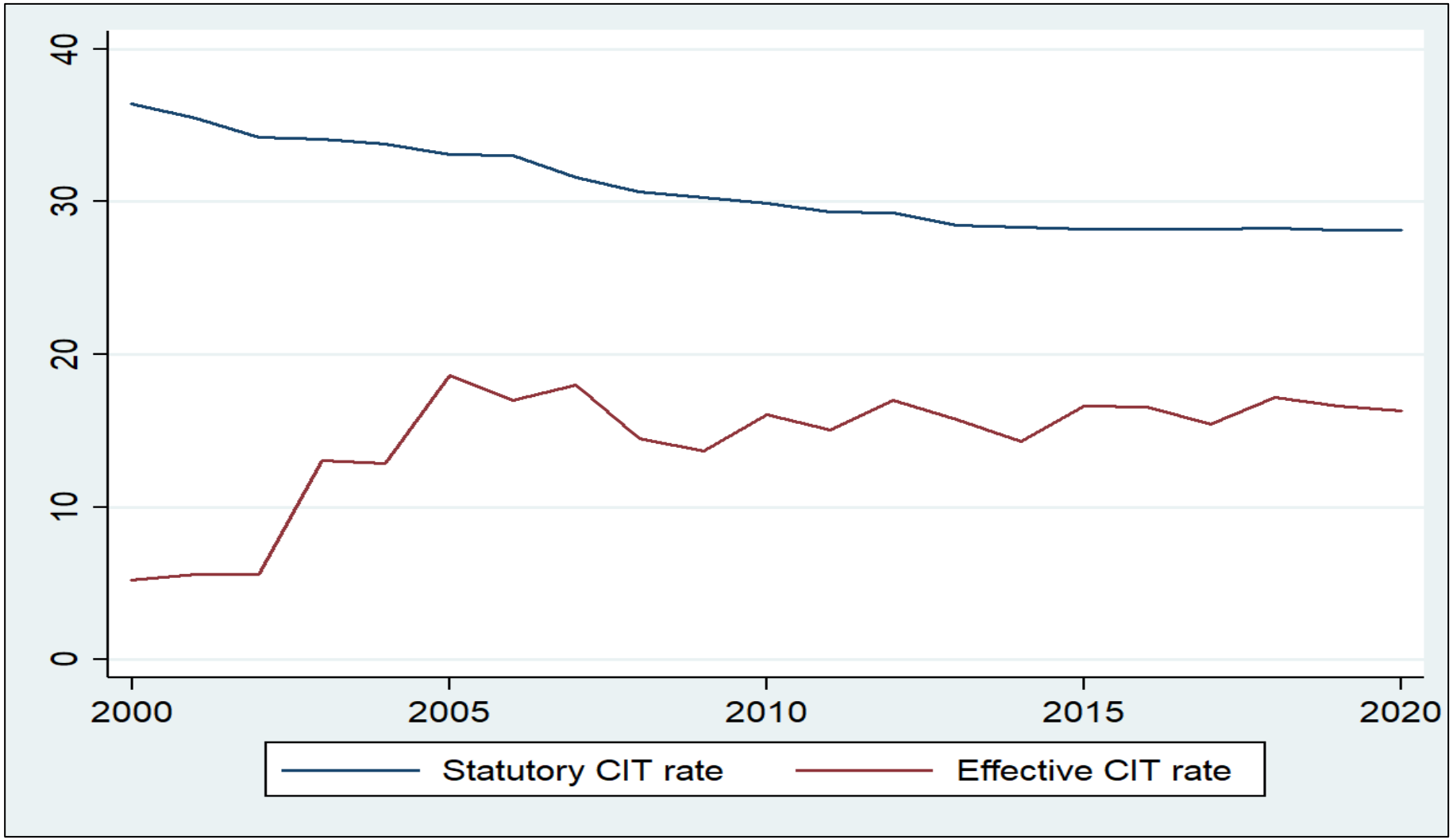
- Corporate income tax revenue : ICTD/UNU-WIDER-GRD database.

- Statutory corporate income rate : Tax Foundation's Corporate Tax Rates and the Fiscal Affairs Department of IMF.
- Author's calculations: Effective corporate tax rate (ETR)

ETR=actual taxes/((actual taxes+ tax expenditures)/STR)

- Controls variables including GDP per capita growth, FDI net inflows and trade openness are extracted from the WDI.

Statutory corporate tax rate and Effective corporate tax rate



Results

- RDD specification tests (Cattaneo et al, 2020) :

(i) the null treatment effect on predetermined covariates

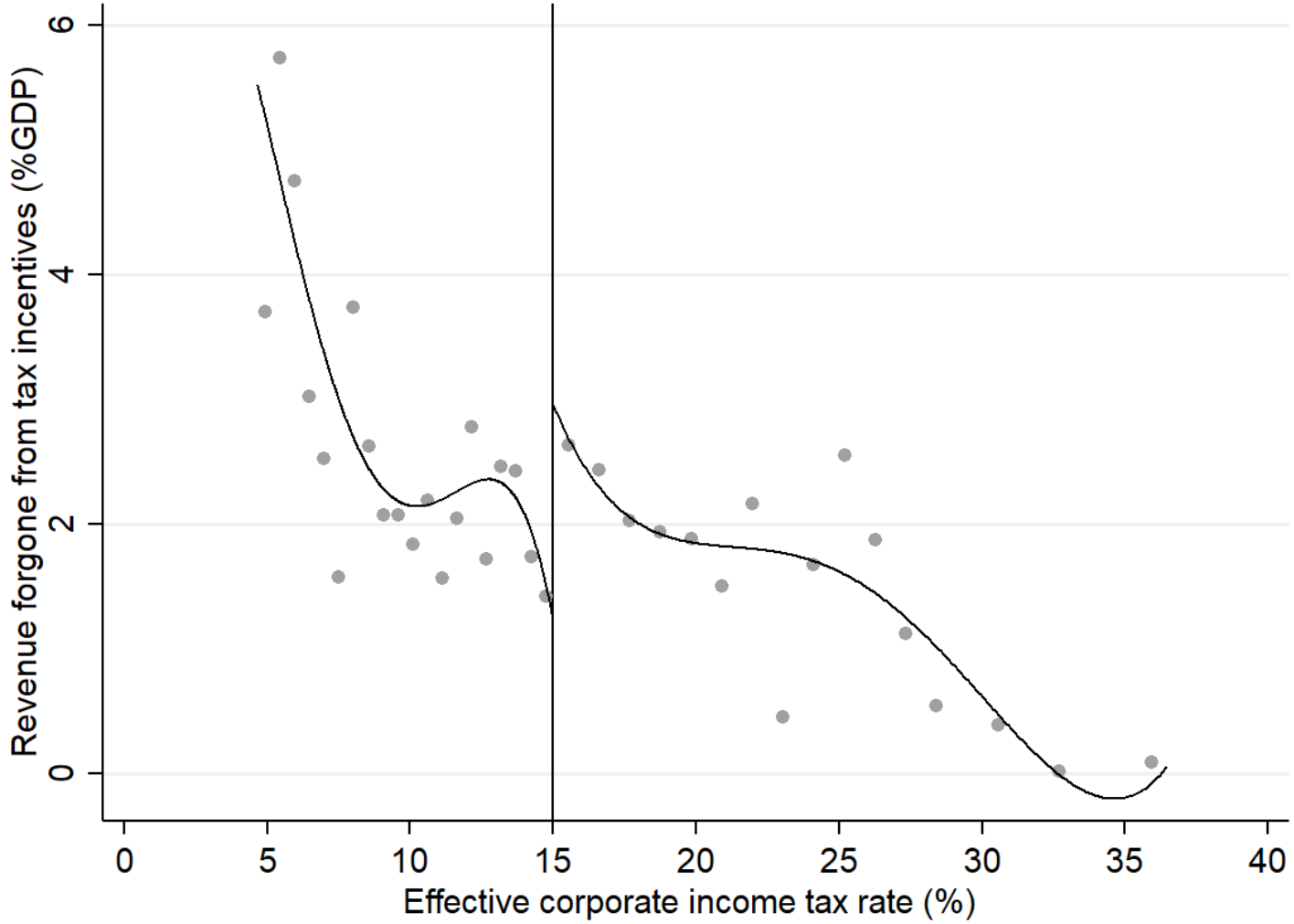
(ii) (ii) the continuity of the score density around the cutoff. H0: No difference in the density of treated and control observations at the cutoff

(iii) (iii) the treatment effect at artificial cutoff values (placebo cutoff)

	(1)	(2)	(3)	(4)	(5)
	FDI	AIDI	Trade openness	Inflation	GDP per capita growth
RD Estimate	-1.364	26.058**	-12.443	-10.05**	1.397
	(2.310)	(10.232)	(11.953)	(5.060)	(1.164)
Observations	146	146	147	145	149
N right	84	85	83	83	85
N left	62	61	64	62	64
Pvalue	0.581	0.0309	0.322	0.0422	0.210
Density test of the assignment variable RD Estimate =0.8424 ; Robust P-value =0.3996					
Placebo test RD Estimate= -0.17809 ; Robust P-value =0.127					

Results

- Graphical representation



Estimation Results: GMT and tax incentives

	(1)	(2)	(3)	(4)
Revenue forgone from tax incentives (%GDP)				
RD Estimate	-0.569***	-1.029**	-0.672***	-1.045***
	(0.205)	(0.407)	(0.211)	(0.363)
Observations	139	139	139	139
Threshold of forcing variable (c) (%)	15	20	15	20
Clustered standard errors	No	No	Yes	Yes

Estimation Results: GMT and tax revenue

°¤	(1)¤	(2)¤	(3)¤	(4)¤	(5)¤	(6)¤
Dependent·variable¤	total·tax·revenue¤	total·tax·revenue¤	total·tax·revenue¤	CIT·revenue¤	CIT·revenue¤	CIT·revenue¤
RD·Estimate¤	0.251¤	0.338¤	0.326¤	0.082¤	-0.370¤	-0.103¤
¤	(0.287)¤	(0.372)¤	(0.344)¤	(0.162)¤	(0.381)¤	(0.390)¤
Observations·(N)¤	110¤	110¤	110¤	110¤	110¤	110¤
Polynomial·order·of·the·control·function·(p)¤	1¤	2¤	3¤	1¤	2¤	3¤
Threshold·of·the·forcing·variable·(c)¤	15¤	15¤	15¤	20¤	20¤	20¤
N·right¤	55¤	55¤	55¤	23¤	23¤	23¤
N·left¤	55¤	55¤	55¤	87¤	87¤	87¤

Conclusion and Policy implications

- ✓ This study contributes to the debate on the revenue implications of the global minimum corporate tax rate for african economies.

- ✓ We implement a RDD to evaluate the effect of having an effective corporate tax rate at least 15% on tax expenditures and on tax revenue.

- ✓ **The GMT positive revenue impact is likely to materialize through cuts in tax incentives by government rather than through reduction in MNEs profits shifting.**

- ✓ The results indicate that the implementation of the global minimum effective corporate tax rate of 15% is likely to reduce tax expenditures and thereby increase tax revenue for african economies.
- ✓ Moreover, we find that the potential gains from the global tax reform in terms of cuts in tax expenditures would have been much larger for african economies if the minimum global effective corporate income tax rate was at least 20%.

THANK YOU FOR YOUR ATTENTION

Data

We compute effective corporate tax rate (ETR) using data on tax expenditures, tax revenue and statutory corporate tax rate (STR) as inputs in the following approach:

- **(Accounting Profit) x STR- (tax expenditures) = actual taxes (1)**
- **Accounting profit= (actual taxes + tax expenditures) /STR (2)**
- **ETR=actual taxes/Accounting profit (3)**
- **ETR=actual taxes/((actual taxes+ tax expenditures)/STR) (4)**