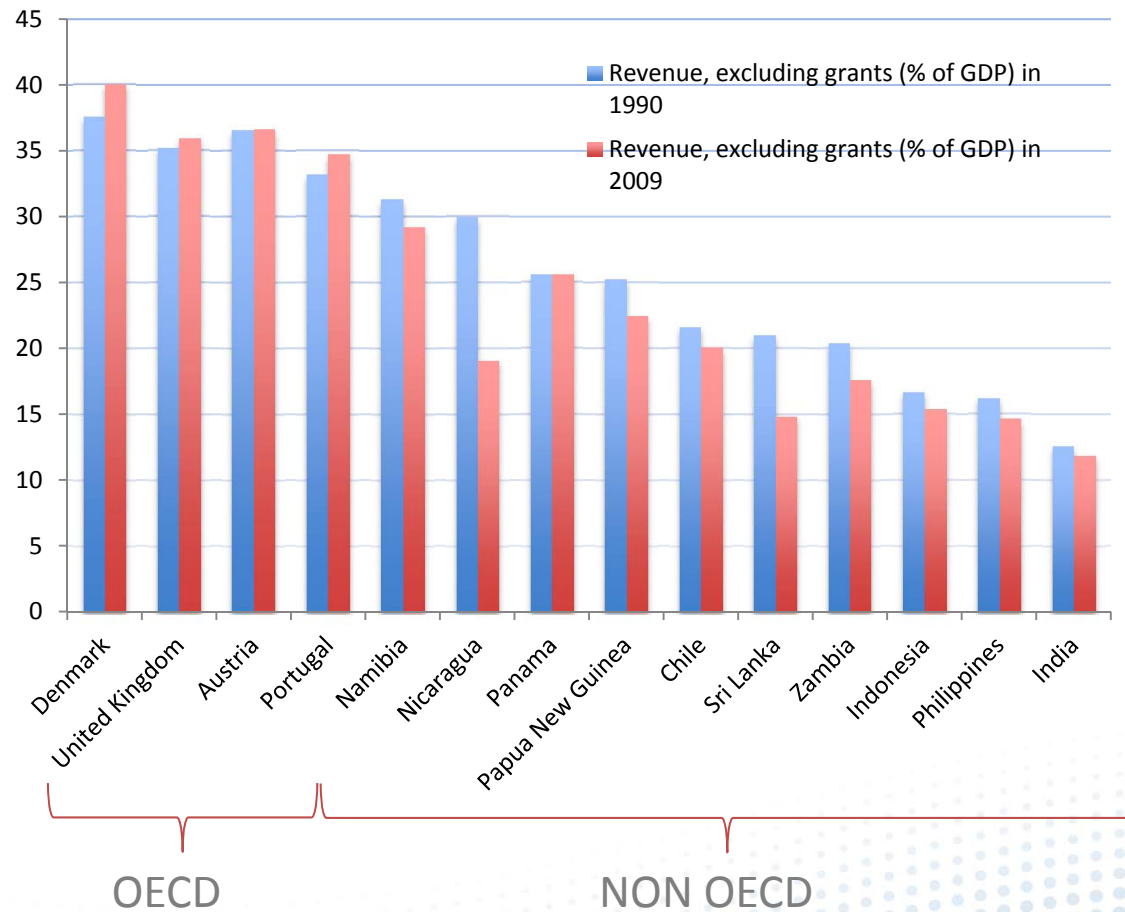# How Democracies Escalate the Race to the Bottom: International Trade and Government Revenues in Developing Countries

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Government revenues in LDCs are declining overall

Argument in Brief: democracies escalate race to the bottom

- As markets expand, democracies have far greater difficulty than nondemocracies recovering lost revenue from trade liberalization (i.e., domestic tax reform)

- Citizens have limited incentive to adopt or comply with tax reforms
  - Low confidence in government

- Governments have limited incentives to enforce tax reform

  - Tools of coercion absent
  - Large winning coalition

- Poor bear the brunt of revenue shortfall in democracies

Surprisingly, in more repressive countries, welfare of the poor improves with liberalization

Research focus: The impacts of declining trade tax revenue

- Declining trade tax revenue is critical because:

    - Major tax resource in LDCs
    - Critical component of liberalization
    - Existing research on globalization-tax debate has neglected the role of trade liberalization
    - Effects citizen welfare

Revenue Mobilization is Harder for Democracies Post-Openness (supply-side)

(1) Political leaders have fewer resources and incentives to implement and/or enforce reform

- constrained: limited penalties for noncompliance

- Business pressure to keep taxes low greater post-openness (race to the bottom)

- Businesses are part of large winning coalition (BDM)

- Vs authoritarian regimes:
    - Use of coercion
    - Fewer businesses are part of small winning coalition

Revenue Mobilization is Harder for Democracies Post-Openness *(demand-side)*

(2) Low confidence in government leads to unfavorable cost-benefit ratio

- Democracies pursue inefficient public goods (e.g. 'white elephants')
  (Robinson and Torvik 2005, Ross 2006)

- Dissatisfaction in govt performance leads to low confidence in government (Chappell 1990, Hetherington 1998, Fiorina 1978, Mackuen, Erikson and Stimson 1992)

*Consequence: Citizens less likely to support tax reform*

- vs. authoritarian regimes: Cost-benefit ratio more favorable in nondemocracies
- Exception: kleptocracies

Testable Hypotheses

- *H1: As trade taxes decline in a globalizing environment, democracies will be unable to increase domestic taxes to replace the lost revenue.*

- *H2: As trade taxes decline in a globalizing environment, authoritarian regimes will more successfully increase domestic taxes to replace the lost revenue.*

Trade Taxes and Revenue Trends
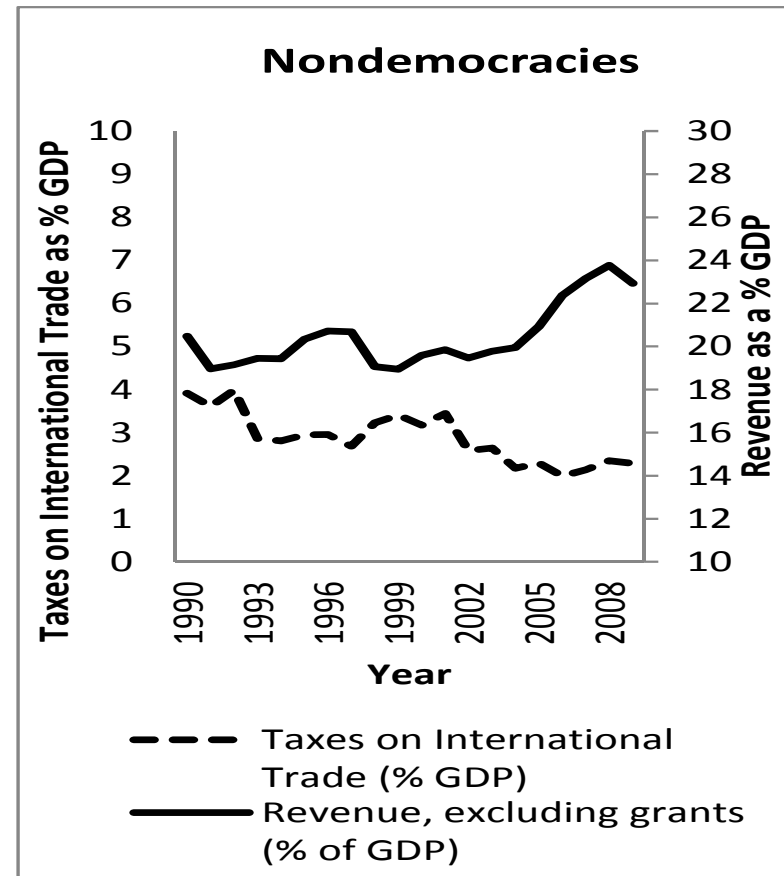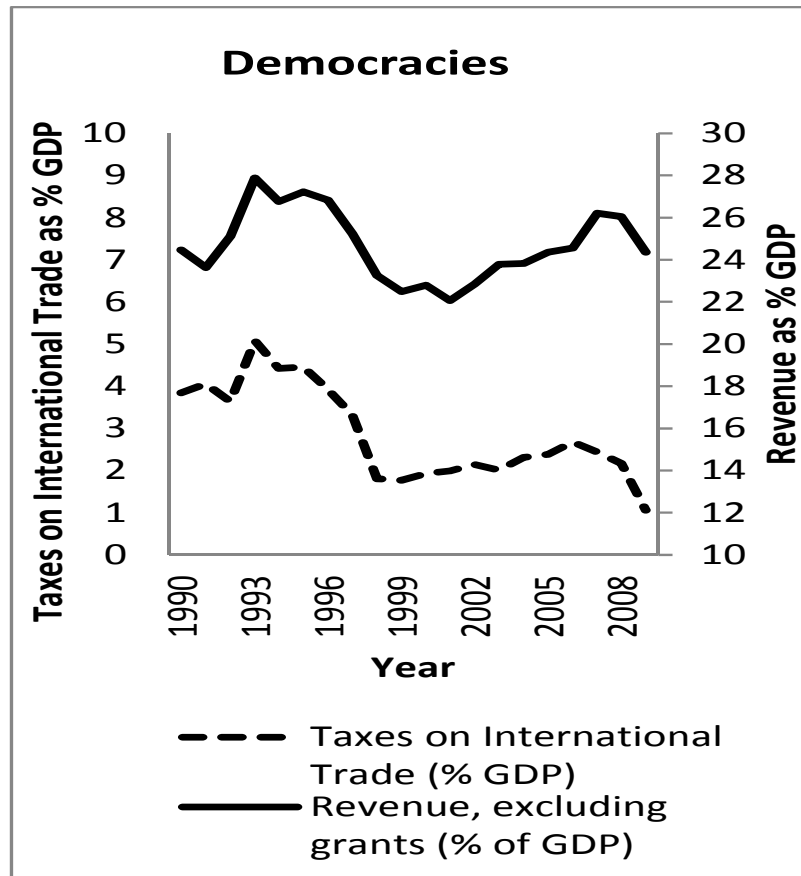
Predicted Long Run Effects of Declining Trade Revenue

Support for H1 & H2 (predicted outcomes)	Trade Tax Revenue * Polity (effects of decline in trade taxes conditional on polity)	Description	Interpretation
Dependent Variable: Total Revenue			
Democracies	+	A one unit decrease in trade tax revenue leads to a one unit decrease in total revenue.	Domestic tax reform has been limited and/or unsuccessful; democratic governments unable to replace lost trade tax revenue.
Non- democracies	-	A one unit decrease in trade tax revenue leads to a one unit increase in total revenue.	Domestic tax reform has been successful; nondemocratic governments have been able to generate revenue over and above lost trade tax revenue.
Non- democracies	Insignificant	A one unit decrease in trade tax revenue has no effect on total revenues.	Domestic tax reform has been successful; nondemocratic governments have been able to replace lost revenue, but not over and above amount lost trade tax revenue.

Estimated Effects of Declining Trade Taxes on Revenue

Error Correction Regression Results

	ΔRevenue (% GDP)	ΔRevenue (% GDP)	ΔRevenue (% GDP)	Δ Net Dom Rev (% GDP)	ΔGoods Tax (% GDP)	ΔIncome Tax (% GDP)
ΔTrade Tax (% GDP)	0.833***	1.019***	0.991***	-0.00529	-0.182***	0.0569
	(0.0828)	(0.113)	(0.126)	(0.0933)	(0.0604)	(0.0587)
Trade Tax (% GDP) t-1	0.229***	0.426***	0.573***	0.0598	-0.109**	0.0478
	(0.0727)	(0.0906)	(0.107)	(0.0707)	(0.0534)	(0.0463)
ΔPolity	-0.0221	-0.0156	0.0558	0.0637*	0.0515**	0.00218
	(0.0274)	(0.0414)	(0.0438)	(0.0364)	(0.0241)	(0.0244)
Polity $_{t-1}$	0.0188	-0.0171	-0.0211	-0.124***	0.00447	-0.116***
	(0.0139)	(0.0270)	(0.0310)	(0.0307)	(0.0219)	(0.0253)
ΔTrade Tax (% GDP)* Polity	0.00465	0.0111	-0.0225	-0.0319***	-0.0134	-0.00989
	(0.00585)	(0.0159)	(0.0173)	(0.0118)	(0.00854)	(0.00691)
Trade Tax (% GDP) Polity $_{t-1}$*	*0.00671**	*0.0361***	*0.0345***	*0.0527***	*0.0250***	*0.0345***
	(0.00407)	*(0.0129)*	*(0.0145)*	*(0.0103)*	*(0.00756)*	*(0.00659)*
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	No	No	Yes	Yes	Yes	Yes
Observations	1,091	540	388	388	388	386
R-squared	0.498	0.681	0.530	0.450	0.457	0.564
Number of countries	105	68	54	54	54	54

Controls not shown here: gdp per cap, population, gov debt, FDI, capital account openness, IMF credits, tax aid

Exploring causal mechanisms

Survey Results (multilevel Ordered Probit Estimation)

|	Cheat on Taxes (Objective =Shadow Economy)	Government Confidence (Objective= Rule of Law)	Political System (Objective= Gini)	Cheat on Taxes (Objective =Shadow Economy)	Government Confidence (Objective= Rule of Law)
Country Level Indicators					
Objective Measure	0.014***	0.121***	-0.060***	0.007***	0.241***
	(0.0006)	(0.012)	(0.002)	(0.0007)	(0.012)
Polity	*0.007****	*-0.078****	*-0.032****		
	(0.0012)	*(0.001)*	*(0.002)*		
Kleptocracy				*-0.211****	*-0.038***
				(0.023)	*(0.016)*
GDP Growth	-0.024***	0.086***	-0.119***	-0.003	0.035***
	(0.0025)	(0.002)	(0.003)	(0.002)	(0.002)
Life Expectancy	0.004***	-0.019***	-0.037***	-0.002	0.001
	(0.001)	(0.001)	(0.002)	(0.001)	(0.0008)
GDP per capita (Log)	0.098***	-0.104***	-0.244***	0.137***	-0.177***
	(0.008)	(0.008)	(0.011)	(0.007)	(0.008)
Individual Level Indicators					
Age	-0.010***	0.003***	-0.0002	-0.011***	0.003***
	(0.0004)	(0.0004)	(0.0005)	(0.0004)	(0.0004)
Education	-0.012***	-0.038***	-0.0152***	-0.009***	-0.034***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Male	0.115***	-0.034***	-0.024*	0.116***	-0.032***
	(0.011)	(0.011)	(0.014)	(0.011)	(0.011)
Income	0.0007	-0.022***	0.010***	0.0002	-0.027***
	(0.002)	(0.003)	(0.003)	(0.002)	(0.002)
Obser. Level 1 units	51196	38922	23423	52335	42435
Obser. Level 2 units	41	29	17	42	32

So what? ... Trade liberalization hurts the poor in democracies

	Gini	Poverty Headcount	Poverty Gap	Life Expectancy	Health Spending, public (% GDP)	Edu Spending, public (%GDP)	Social Benefits (% GDP)
%Δ Trade Tax	-2.919***	0.423	0.628	-0.465	0.0692	-2.420	-3.315***
	(0.768)	(0.952)	(0.596)	(0.402)	(0.0602)	(1.543)	(1.130)
Polity	-0.119	-0.235	-0.151	-0.0324	0.00414	0.113	0.0183
	(0.129)	(0.366)	(0.199)	(0.100)	(0.0130)	(0.0951)	(0.0747)
%Δ Trade Tax* Polity	*-0.510***	*-0.509****	*-0.279***	*0.182****	*0.0178**	*-0.149*	*-0.0550*
	(0.195)	*(0.141)*	*(0.108)*	*(0.0640)*	*(0.00925)*	*(0.393)*	*(0.162)*
GDP Growth	-0.614***	-0.338*	-0.389**	0.00569	-0.0444**	-0.268***	0.0420
	(0.205)	(0.187)	(0.178)	(0.0548)	(0.0220)	(0.0580)	(0.0960)
GDP per capita	2.638	-20.26***	-6.944	4.174***	-0.144	0.318	0.161
	(4.652)	(7.540)	(4.407)	(1.350)	(0.385)	(2.123)	(2.200)
Constant	-17.42	502.5***	173.9	-31.91	6.600	-2.382	2.066
	(110.4)	(180.4)	(105.1)	(32.15)	(9.112)	(50.33)	(52.69)
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	196	197	197	278	225	147	144
R - squared	0.212	0.412	0.354	0.348	0.113	0.144	0.246
# countries	91	87	87	104	101	68	61

Standard errors in parentheses   *** p<0.01, ** p<0.05, * p<0.1

Conclusion: In Democracies...
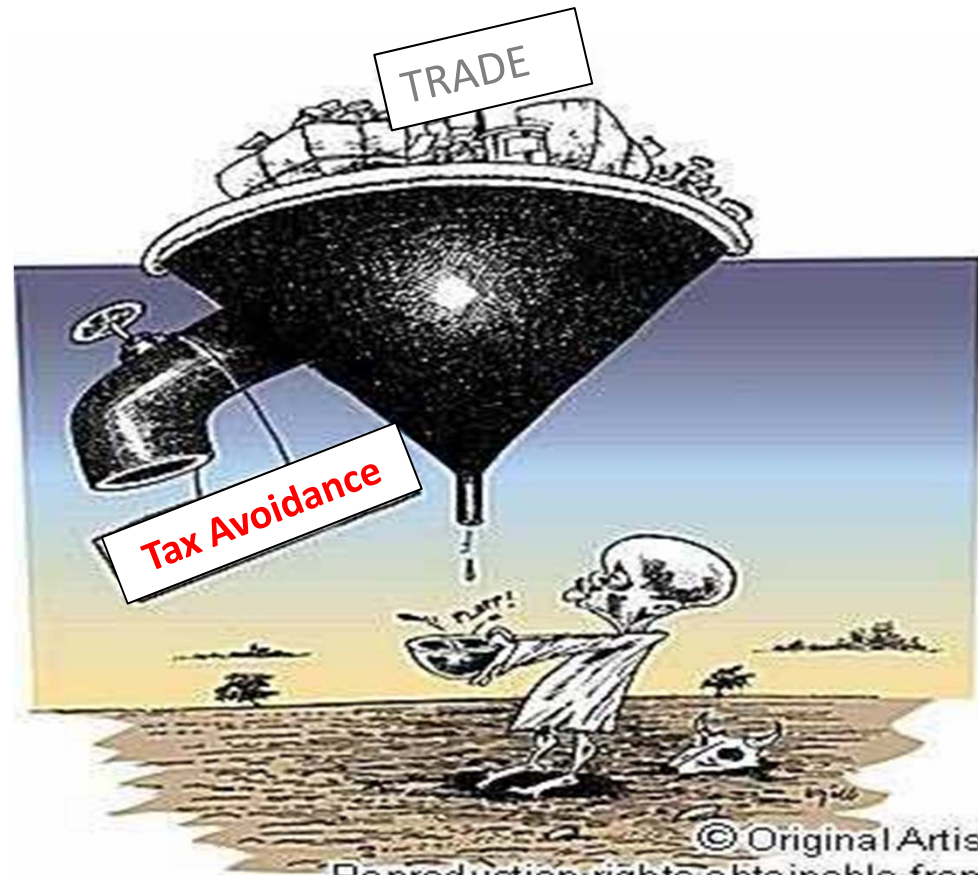
Distributional Impacts of Declining Trade Taxes

- "Starve the Beast": Reductions in government spending tend to follow decreases in taxes

- This is why increasing revenue via taxation so critical, especially for IFIs

- But as political battle ensues over distribution of now even more scarce government revenue, least organized and least powerful interest group in democratic nations are apt to lose: the poor

Authoritarian Regimes, declining trade tax revenue ambiguous effect:
- Higher tax revenue likely to enrich political elites (McGuire & Olson 1996)
- Pro-poor spending maintain stability and some legitimacy (Ames 1987, Wintrobe 1998)