Party system institutionalisation and personal income taxation in developing countries.

Armin von Schiller

Deutsches Institut für Entwicklungspolitik (DIE)

6th International Workshop on Domestic Revenue Mobilisation
DIE, 29. November 2017

Main contributions

Main result

The level of party system institutionalisation has a robust, significant and remarkable effect on the relevance of PIT in the tax composition.

Research focus

Shifting the focus in the study of taxation from coercion capacities to force citizens into taxation to the circumstances under which citizens (especially wealthy citizens) consent to taxation.

Methodological

Broad empirical basis and replication of the analysis using the most comprehensive databases

Main argument and intuition

1. The capacity to force coercion differs strongly between countries with different levels of bureaucratic capacity

2. In developing countries taxation is "a game of credible commitment rather than a game of pure coercion" especially when it cames to taxing wealthy taxpayers.

3. Governments in developing countries have huge problems of credibility:
   - Opportunistic behavior of political leaders
   - Political sustainability of agreements

4. Party system institutionalisation can mitigate these problems

5. The effect of institutions fostering credibility will be more relevant, the lower the capacity to coerce.

Main argument and intuition

The lower the bureaucratic capacity, the stronger the positive effect of party system institutionalisation on the relevance of the PIT in the tax composition.

Main variables

- **Main DV**: Personal income tax collection as percentage of total tax collection
- **Main IVs of interest**:
    - Bureaucratic capacity (ICRG)
    - Party institutionalisation- operationalised as Party age (DPI)
- **Controls:** Gini Index, GDP p.c, trade openness, non tax revenue, urban population, agriculture (value added)

Main results

Figure 1: Marginal effect of party system institutionalisation on the relevance of PIT in the tax composition
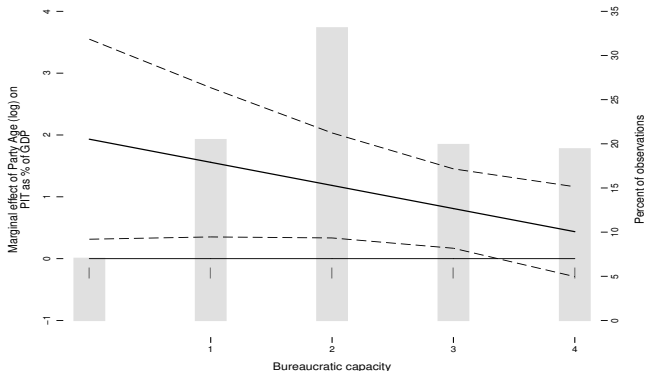

Figure based on fixed effects model presented in Table 1.

Note: Corresponds to Figure 1 in the manuscript (p. 15)

Size of the effect

Table A3: Effect of one Standard deviation of Party Age at different levels of bureaucratic capacity

Level of bureaucratic capacity	Average PIT as % of Total Tax	Size of the effect
0	9.7	18.9
1	10.9	13.5
2	13.2	8.5
3	22.3	3.4
4	37.9	1.1

Robustness

1. Using collection as percentage of GDP as the DV
2. Using alternative data sources ()IMF vs GRD)
3. Additional political variables (Age of the largest government party, Regime durability Years in office of the chief executive)
4. Alternative measure of the Gini Index
5. Jackknife estimations

Heterogeneity of the effect I

Figure 2:   Marginal effect of party system institutionalisation on the relevance of PIT in democracies vs. autocracies
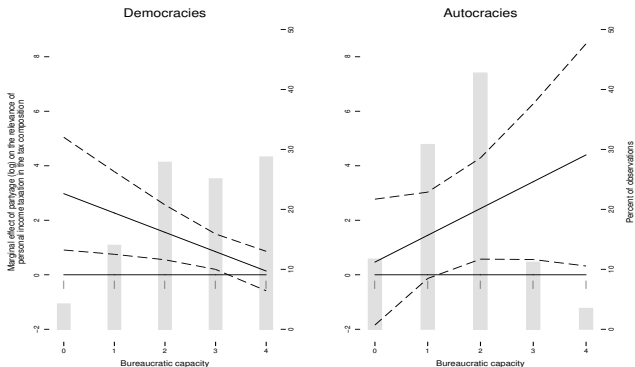

Figure based on fixed effects Model presented in Table 1. Point predictions (solid lines) and 95% confidence intervals (dotted lines).

Note: Corresponds to Figure 2 in the manuscript (p. 20)

Heterogeneity of the effect II

Figure 1:   Marginal effect of party system institutionalisation on the relevance of PIT conditional on the Largest Government Party being programmatic
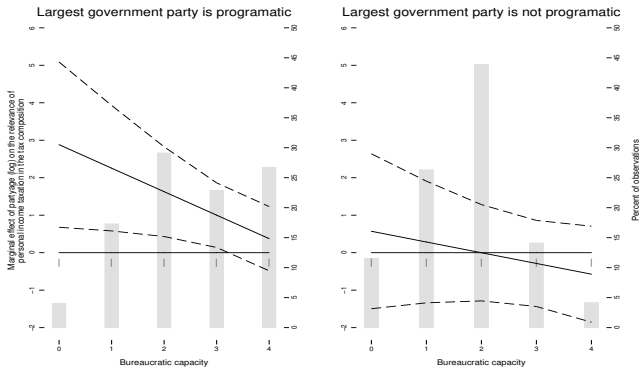

Figure based on fixed effects model presented in Table 1. Point predictions correspond to the solid lines. Dotted lines delimit the 95% confidence intervals.

Note: Corresponds to Figure 3 in the manuscript (p. 21)

Main conclusions

1. At low level of bureaucratic capacity, party system institutionalisation has a strong positive effect on the relevance of progressive taxes in the tax composition.

2. The effect appears to be particularly strong and reliable in democracies and when governmental parties have a programmatic orientation.

Implications

1. Wealthy taxpayers are not *a priori* against taxation.
2. Especially where bureaucratic capacity is low taxation represents a game of credible commitment rather than one of coercion.
3. Political institutions are crucial to solve this problem and allow the definition of more ambitious fiscal agreements with wealthy taxpayers.

What does this mean in terms of policy implications?

1. There is a scope to move tax and development debate beyond the broad generalization that politics matters. Certain institutions appear to matter more than others

2. We need to change the question: What do citizens need in order to consent to taxation

3. Increasing overall tax performance in developing countries is in the vast majority of cases desirable, if not urgently needed. Still, the question of who is taxed should not be neglected.

armin.schiller@die-gdi.de

Additional figures and tables

Robustness

Table 2: Tax Collection of Different Tax Types as Percentage of GDP

| | GRD Revenue Data | | | | |
	PIT	CIT	GS	TRD	TOTAL TAX
Party Age (log)	0.401**	0.00101	-0.625	-0.199	-0.161
	(2.01)	(0.43)	(-1.53)	(-0.85)	(-0.32)
Bureaucratic Capacity	0.195	0.00178	-0.754*	-0.178	-0.118
	(0.87)	(0.67)	(-1.74)	(-0.78)	(-0.19)
Party Age (log)*Bur. Cap.	-0.0839	-0.000384	0.231*	-0.00169	-0.0719
	(-1.24)	(-0.38)	(1.74)	(-0.02)	(-0.35)
Gini Index	0.00705	0.0000914	0.0140	-0.00927	-0.000290
	(0.42)	(0.48)	(0.74)	(-0.67)	(-0.01)
GDP p.c. (log)	-0.540	0.0157**	-1.228	0.557	0.514
	(-1.04)	(2.41)	(-1.46)	(0.98)	(0.54)
Trade Openness	0.0114	0.000113	0.0689***	-0.0375***	0.0402
	(1.02)	(0.47)	(2.98)	(-4.22)	(1.24)
Urban Pop. (%)	-0.0220	0.000296	0.0693	-0.0300	0.0350
	(-0.50)	(0.82)	(1.09)	(-0.98)	(0.41)
Agriculture (V.A.)	-0.0214	0.0005***	-0.0844**	0.00802	-0.0461
	(-1.40)	(2.89)	(-2.21)	(0.51)	(-1.07)
Non Tax Revenue	0.0297	0.00120	-0.143***	0.0189	-0.118**
	(1.06)	(1.42)	(-4.60)	(0.98)	(-2.48)
Constant	8.880	-0.151***	12.90*	2.257	11.93
	(1.59)	(-2.64)	(1.66)	(0.41)	(1.45)
R^2	0.39	0.10	0.26	0.24	0.39
N	1156	1148	1388	1340	1483
N. of countries	95	94	105	103	106

PIT = Personal Income Tax; CIT=Corporate Income Tax; GS= General Sales Tax; TRD=Trade Tax; TOTAL TAX=Total tax collection t statistics in parentheses; *0.1, ** 0.05, ***0.01. All models include country- and year-fixed effects. Standard errors are clustered by country. The model specification corresponds to fixed effects model presented in Table 1.

Note: Corresponds to Table in the manuscript (p. 17)