Supplementary Materials for "Intergovernmental Politics of Fiscal Balance in a Federal Democracy: The Experience of Brazil, 1996-2005"

Endnote 14, Descriptive Statistics

Variable	N	Mean	S.d.	Min	Max
Spending	270	82.22	11.35	27.99	114.21
Diff. in Deputies	270	-0.44	0.23	-1.13	0.38
Important Reforms	270	0.03	0.02	0	0.07
Deputies* reforms	270	-0.016	0.01	-0.07	0.003
Diff. in Deputies 2	270	-0.27	0.31	-1.13	0.38
Deputies2* reforms	270	-0.01	0.01	-0.07	0.02
Pork	270	0.33	0.04	0.27	0.39
Deputies* pork	270	-0.15	0.08	-0.39	0.12
Competitiveness	270	8.83	7.24	0.20	30.70
PT	270	0.10	0.30	0.00	1.00
Election	270	0.20	0.40	0.00	1.00
Fiscal Resp. Law	270	0.50	0.50	0.00	1.00
Incumbent Party	270	0.63	0.48	0.00	1.00
Transfer	270	37.76	20.98	2.79	89.67
Revenue (in mil.)	270	2.22	3.81	0.15	38.69
GDP per capita	270	22.55	20.81	7.18	244.28
Logged Population	270	15.11	1.11	12.56	17.52
Lagged Spending	270	-0.17	0.12	-0.72	0.15
Lagged Transfer	270	37.61	21.15	2.79	89.67
Trend	270	5.50	2.88	1.00	10.00
97 Reforms	270	0.80	0.40	0.00	1.00
Lula	270	0.30	0.46	0.00	1.00

Endnote 15, Capital and Total Spending

VARIABLES	(1) Capital	(2) Total
Important Reforms	190.6981*	-13.46
	(102.946)	(100.215)
Difference in Deputies	-6.6733	4.16
	(6.501)	(6.420)
Deputies* reforms	210.3419	-176.12
	(204.378)	(205.221)
Competitiveness	-0.0325	-0.22***
	(0.105)	(0.080)
PT	0.3203	3.14
	(2.571)	(1.886)
Election	7.0914***	2.55
	(1.715)	(1.820)
Fiscal Responsibility Law	-1.5910	4.86***
	(1.525)	(1.673)
Incumbent Party	1.0748	0.06
	(0.997)	(1.144)
Transfer	-0.2715***	0.31**
	(0.088)	(0.121)
Revenue	1.9770***	-1.27
	(0.255)	(0.952)
GDP per capita	-0.0813	-0.46***
	(0.123)	(0.150)
Logged Population	-8.4602	-46.64***
	(12.001)	(14.822)
Lagged Dependent Var.	0.1158	-11.97
	(0.086)	(7.218)
Constant	143.3726	698.45***
	(158.119)	(193.762)
Observations	270	270
R-squared	0.616	0.297

Robust standard errors in parentheses
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Endnote 17, Random Effects Model

```
. xtreg spendshareperc impbillsper depnatgovdif impbilldepnatgovdif abscomp50 pt election frlaw govparty transshareperc adjrevmi
> l gdppercap logpop lagdefrev, re
```

| Random-effects GLS regression | | | | Number of obs | | = | 270 |
| Group variable: **code** | | | | Number of groups | | = | 27 |

R-sq:	within = **0.2103**			Obs per group: min =			10
	between = **0.5322**					avg =	10.0
	overall = **0.3026**					max =	10

| Random effects u_i ~ **Gaussian** | | | | Wald chi2(**13**) | = | **111.08** |
| corr(u_i, X) | = **0** (assumed) | | | Prob > chi2 | = | **0.0000** |

spendshare~c	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
impbillsper	-83.6248	85.72252	-0.98	0.329	-251.6378	84.38825
depnatgovdif	6.216051	6.227007	1.00	0.318	-5.988657	18.42076
impbilldep~f	-273.6427	166.2426	-1.65	0.100	-599.4722	52.18694
abscomp50	-.023656	.0846592	-0.28	0.780	-.189585	.1422731
pt	4.512164	2.145437	2.10	0.035	.3071857	8.717143
election	-.6507439	1.79864	-0.36	0.718	-4.176015	2.874527
frlaw	4.897655	1.51638	3.23	0.001	1.925604	7.869706
govparty	.1883185	1.300478	0.14	0.885	-2.360572	2.737209
transshare~c	.1008572	.0486882	2.07	0.038	.0054301	.1962843
adjrevmil	-1.049384	.2125529	-4.94	0.000	-1.465981	-.6327884
gdppercap	.1183077	.0333289	3.55	0.000	.0529843	.1836311
logpop	4.940425	1.087854	4.54	0.000	2.80827	7.072581
lagdefrev	32.90155	5.311187	6.19	0.000	22.49181	43.31128
_cons	7.521375	18.16985	0.41	0.679	-28.09088	43.13363

sigma_u	0					
sigma_e	7.3430558					
rho	0	(fraction of variance due to u_i)				

Please note the "sigma_u=0" above.

<u>Endnote 18, Test for Serial Correlation</u>

VARIABLES	e
Lage	-0.09
	(0.093)
Important Reforms	-17.81
	(73.133)
Difference in Deputies	4.69
	(5.185)
Deputies* reforms	-86.21
	(130.293)
Competitiveness	-0.07
	(0.105)
PT	0.48
	(2.908)
Election	-0.45
	(1.296)
Fiscal Responsibility Law	0.01
	(1.994)
Incumbent Party	0.07
	(0.898)
Transfer	0.03
	(0.150)
Revenue	-0.11
	(0.823)
GDP per capita	0.06
	(0.097)
Logged Population	5.11
	(9.646)
Lagged Spending	0.82
	(5.282)
Constant	-69.15
	(122.890)
Fixed effects	yes
Observations	243
R-squared	0.034

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Endnote 19, Robustness to the use of alternative standard errors

VARIABLES	(1)	(2)	(3)	(4)
Important Reforms	-166.51**	-166.51**	-166.51**	-166.51***
	(71.856)	(68.288)	(69.353)	(64.624)
Difference in Deputies	9.48*	9.48**	9.48*	9.48**
	(4.728)	(4.341)	(5.011)	(4.200)
Deputies* reforms	-354.51***	-354.51***	-354.51***	-354.51***
	(127.316)	(125.471)	(134.528)	(111.960)
Competitiveness	-0.16*	-0.16**	-0.16**	-0.16**
	(0.091)	(0.077)	(0.071)	(0.065)
PT	2.14	2.14	2.14	2.14
	(2.331)	(2.318)	(2.225)	(1.660)
Election	-3.75***	-3.75***	-3.75***	-3.75**
	(1.274)	(1.421)	(1.407)	(1.484)
Fiscal Responsibility Law	7.15***	7.15***	7.15***	7.15***
	(1.807)	(1.665)	(1.639)	(1.999)
Incumbent Party	-1.25	-1.25	-1.25	-1.25
	(0.830)	(1.061)	(1.092)	(0.823)
Transfer	0.56***	0.56***	0.56***	0.56***
	(0.142)	(0.102)	(0.085)	(0.080)
Revenue	-3.27***	-3.27***	-3.27***	-3.27***
	(0.870)	(0.712)	(0.328)	(0.330)
GDP per capita	-0.31***	-0.31***	-0.31***	-0.31***
	(0.089)	(0.100)	(0.121)	(0.121)
Logged Population	-31.96***	-31.96***	-31.96***	-31.96***
	(8.773)	(9.671)	(11.720)	(11.775)
Lagged Spending	3.33	3.33	3.33	3.33
	(5.479)	(5.165)	(4.892)	(7.811)
Constant	469.65***	469.65***	561.84***	469.65***
	(109.953)	(126.111)	(178.125)	(155.113)
Fixed effects	Yes	Yes	Yes	Yes
Observations	270	270	270	270
R-squared	0.642	0.642	0.486	0.642
Number of states	27	27	27	27

Robust standard errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Please note that column 1 is identical to column 2 of Table 1 in the article. It is included here to make the comparison easier.

coalition (divided by total number of deputies)

Graphs by States
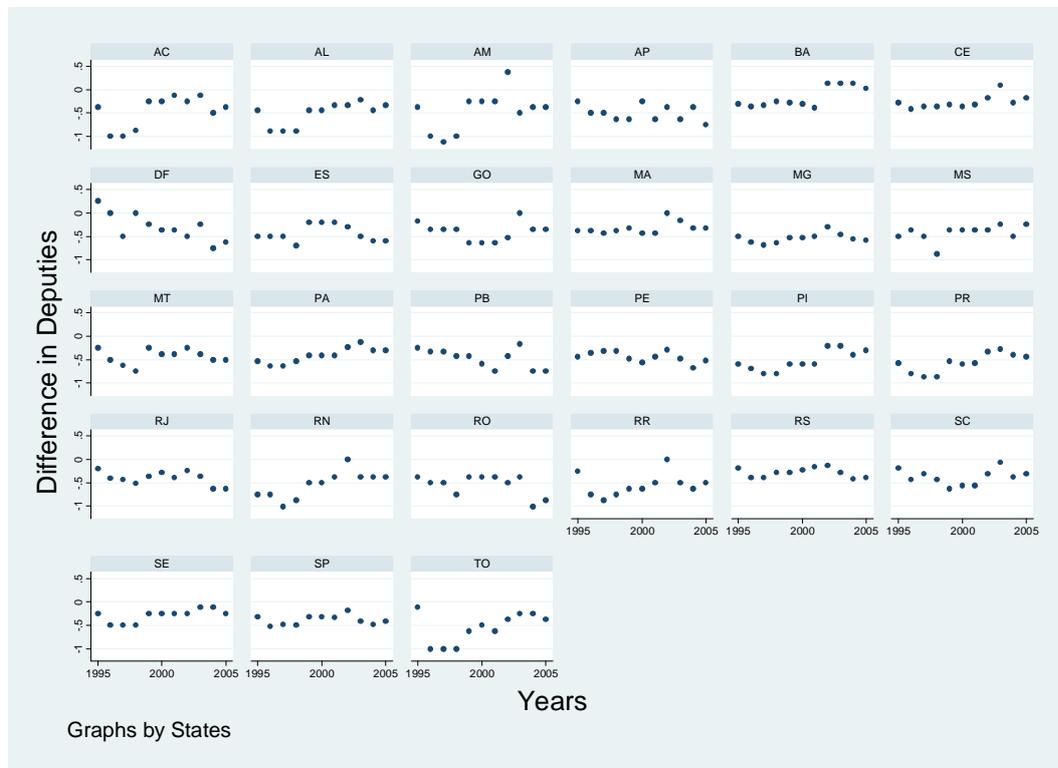
Endnote 25, Indicator Variable for President's Party

VARIABLES	(1)
Important Reforms	-175.17**
	(68.042)
Difference in Deputies 2	10.05**
	(4.463)
Deputies 2* reforms	-373.92***
	(118.133)
Competitiveness	-0.17*
	(0.085)
PT	2.86
	(2.494)
Election	-3.78***
	(1.255)
Fiscal Responsibility Law	7.23***
	(1.791)
President's Party	-0.63
	(1.678)
Transfer	0.57***
	(0.142)
Revenue	-3.28***
	(0.868)
GDP per capita	-0.31***
	(0.090)
Logged Population	-31.71***
	(8.854)
Lagged Spending	3.99
	(5.357)
Constant	465.16***
	(111.463)
Fixed effects	yes
Observations	270
R-squared	0.640

Robust standard errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$
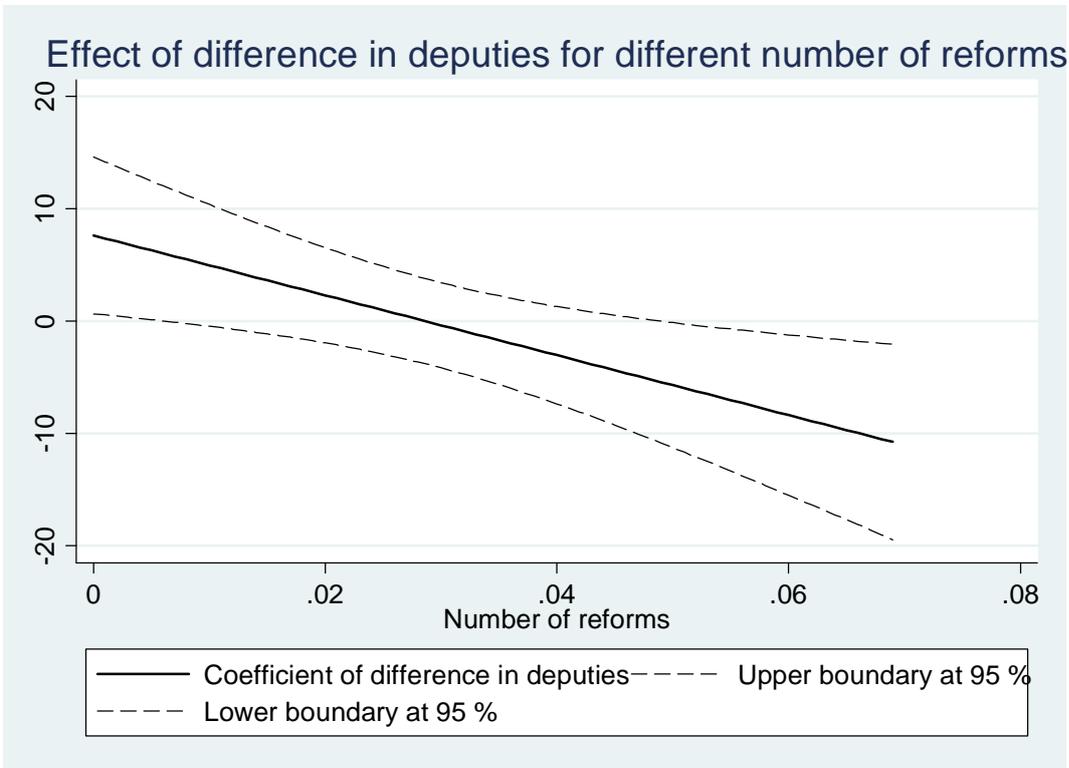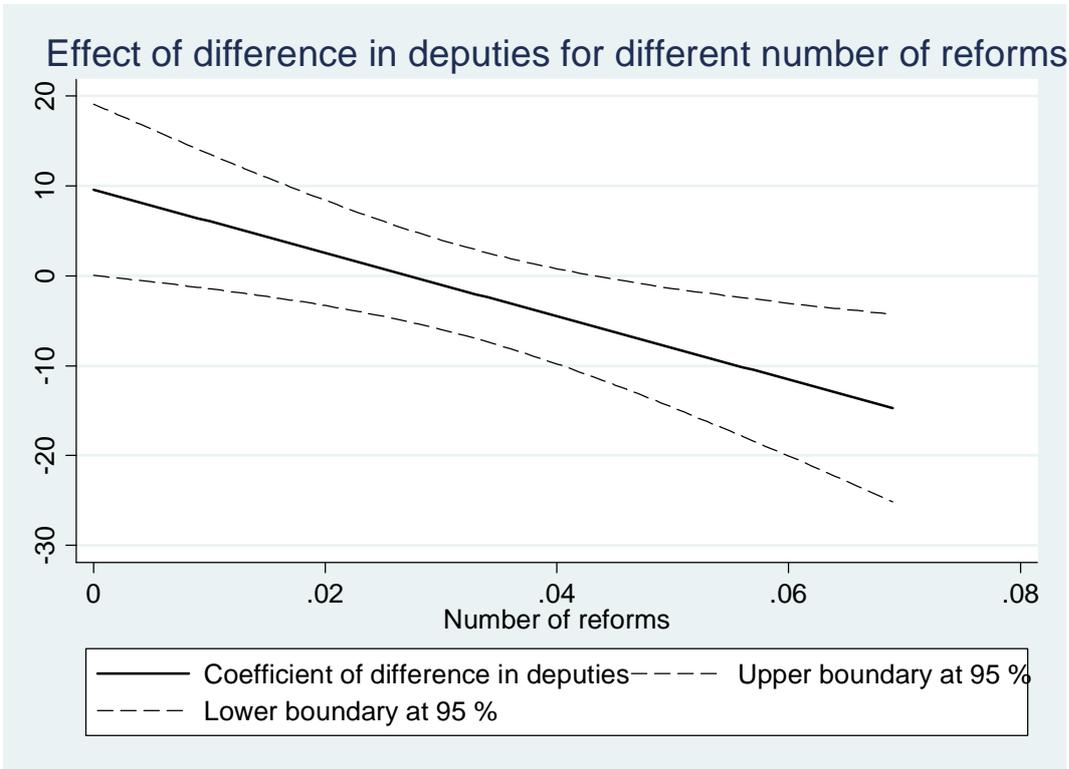
Upper (lower) graph estimated from the model in column 3 (4) in Table 1.

Endnote 30, Model without the transfers

VARIABLES	(1)
Important Reforms	-160.23*
	(78.707)
Difference in Deputies	12.65**
	(5.113)
Deputies* reforms	-384.62**
	(138.624)
Competitiveness	-0.13
	(0.096)
PT	2.99
	(2.663)
Election	-3.10*
	(1.639)
Fiscal Responsibility Law	6.72***
	(2.221)
Incumbent Party	-2.02**
	(0.934)
Revenue	-3.36***
	(0.838)
GDP per capita	-0.15
	(0.106)
Logged Population	-16.61
	(10.198)
Lagged Spending	5.87
	(5.798)
Constant	304.98**
	(136.305)
Observations	270
R-squared	0.574

Robust standard errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$