Replication Exercise Cycles of Fire? Politics and Forest Burning in Indonesia

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1 Introduction

The goal of this exercise is to replicate the figures and tables for the paper "Cycles of Fire? Politics and Forest Burning in Indonesia" by Clare Balboni, Robin Burgess, Anton Heil, Jonathan Old and Benjamin A. Olken.

B Full regression results by land types

Table B1: Electoral cycle by land types – Ignitions, District and Year FE

		4=1					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All Forest	Concession	Oil Palm	Fibre	Logging	Unleased	Protected
Election date:							
In 2 years	0.104	0.092	-0.088	0.168	0.221	0.097	0.138
•	(0.086)	(0.107)	(0.112)	(0.143)	(0.190)	(0.098)	(0.107)
Next year	0.049	0.165	0.040	0.218	0.184	-0.049	-0.059
	(0.080)	(0.091)	(0.116)	(0.115)	(0.212)	(0.090)	(0.100)
This year	-0.418	-0.378	-0.515	-0.328	-0.043	-0.441	-0.158
•	(0.120)	(0.145)	(0.194)	(0.172)	(0.255)	(0.115)	(0.119)
Last year	0.032	0.091	0.019	0.093	0.192	-0.049	0.078
-	(0.083)	(0.107)	(0.152)	(0.110)	(0.163)	(0.076)	(0.115)
Observations	4218	4218	4218	4218	4218	4218	4218
Mean of DV	17.63	9.04	4.00	4.13	0.90	6.92	3.37
Spatial FE	District	District	District	District	District	District	District
Temporal FE	Year	Year	Year	Year	Year	Year	Year
Joint p-value	< 0.01	< 0.01	< 0.01	< 0.01	0.157	< 0.01	0.149
This vs. last:							
Difference	0.450	0.469	0.534	0.420	0.235	0.392	0.236
p-value	< 0.01	< 0.01	< 0.01	<0.01	0.138	<0.01	0.059

Table B2: Electoral cycle by land types – Total area burned, District and Year FE

	(1) All Forest	(2) Concession	(3) Oil Palm	(4) Fibre	(5) Logging	(6) Unleased	(7) Protected
Election date:							
In 2 years	0.163	0.160	-0.020	0.256	0.282	0.257	-0.173
·	(0.152)	(0.209)	(0.148)	(0.300)	(0.240)	(0.147)	(0.151)
Next year	-0.062	0.029	-0.116	0.037	0.180	-0.090	-0.226
-	(0.143)	(0.199)	(0.212)	(0.237)	(0.245)	(0.143)	(0.144)
This year	-0.541	-0.513	-0.370	-0.741	-0.055	-0.455	-0.420
	(0.201)	(0.251)	(0.237)	(0.313)	(0.328)	(0.182)	(0.226)
Last year	-0.035	0.008	-0.014	-0.093	0.244	-0.075	-0.110
	(0.151)	(0.204)	(0.208)	(0.231)	(0.213)	(0.125)	(0.182)
Observations	4218	4218	4218	4218	4218	4218	4218
Mean of DV	75.61	41.14	18.08	20.14	2.92	27.12	14.39
Spatial FE	District	District	District	District	District	District	District
Temporal FE	Year	Year	Year	Year	Year	Year	Year
Joint p-value	< 0.01	0.012	0.054	< 0.01	0.063	< 0.01	0.331
This vs. last:							
Difference	0.506	0.521	0.356	0.648	0.299	0.380	0.310
p-value	< 0.01	0.021	0.114	0.031	0.098	0.042	0.213

Note: Standard errors clustered at 2018 district level in parentheses.

Table B3: Electoral cycle by land types – Slash and burn, District and Year FE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All Forest	Concession	Oil Palm	Fibre	Logging	Unleased	Protected
Election date:							
In 2 years	0.066	0.066	-0.179	0.121	0.364	0.088	-0.056
	(0.142)	(0.144)	(0.117)	(0.203)	(0.204)	(0.170)	(0.258)
Next year	0.018	0.022	-0.131	0.092	0.083	-0.118	0.029
	(0.098)	(0.100)	(0.102)	(0.137)	(0.209)	(0.173)	(0.189)
This year	-0.364	-0.353	-0.587	-0.241	-0.141	-0.620	0.045
	(0.143)	(0.145)	(0.170)	(0.182)	(0.281)	(0.197)	(0.268)
Last year	-0.025	-0.014	-0.094	-0.048	0.131	-0.288	0.033
	(0.115)	(0.115)	(0.123)	(0.132)	(0.191)	(0.193)	(0.212)
Observations	4218	4218	4218	4218	4218	4218	4218
Mean of DV	3.46	3.30	1.30	1.68	0.33	0.15	0.11
Spatial FE	District	District	District	District	District	District	District
Temporal FE	Year	Year	Year	Year	Year	Year	Year
Joint p-value	< 0.01	< 0.01	< 0.01	0.190	0.106	< 0.01	0.973
This vs. last:							
Difference	0.338	0.339	0.494	0.192	0.272	0.332	-0.012
p-value	< 0.01	< 0.01	< 0.01	0.119	0.196	0.020	0.956

Table B4: Electoral cycle by land types – Ignitions, District and Province \times Year FE

	(1) All Forest	(2) Concession	(3) Oil Palm	(4) Fibre	(5) Logging	(6) Unleased	(7) Protected
Election date:							
In 2 years	0.020	0.018	-0.123	0.226	0.030	0.022	-0.100
•	(0.048)	(0.085)	(0.095)	(0.100)	(0.251)	(0.069)	(0.115)
Next year	-0.033	-0.000	0.025	0.062	-0.332	-0.066	-0.063
,	(0.056)	(0.058)	(0.076)	(0.087)	(0.233)	(0.078)	(0.113)
This year	-0.014	-0.013	-0.133	0.181	-0.237	-0.083	-0.078
	(0.075)	(0.104)	(0.108)	(0.119)	(0.206)	(0.090)	(0.096)
Last year	0.138	0.163	0.122	0.189	0.021	0.044	0.083
	(0.052)	(0.064)	(0.084)	(0.094)	(0.168)	(0.049)	(0.113)
Observations	4218	4218	4218	4218	4218	4218	4218
Mean of DV	17.63	9.04	4.00	4.13	0.90	6.92	3.37
Spatial FE	District	District	District	District	District	District	District
Temporal FE	Prov-year	Prov-year	Prov-year	Prov-year	Prov-year	Prov-year	Prov-year
Joint p-value	< 0.01	< 0.01	0.100	0.026	0.207	0.035	0.143
This vs. last:							
Difference	0.152	0.176	0.255	0.008	0.258	0.127	0.161
p-value	0.040	0.069	0.019	0.929	0.192	0.105	0.054

Note: Standard errors clustered at 2018 district level in parentheses.

Table B5: Electoral cycle by land types – Total area burned, District and Province \times Year FE

	(1) All Forest	(2) Concession	(3) Oil Palm	(4) Fibre	(5) Logging	(6) Unleased	(7) Protected
Election date:					00 0		
In 2 years	0.081	0.177	-0.078	0.614	0.034	0.140	-0.561
,	(0.120)	(0.177)	(0.160)	(0.228)	(0.273)	(0.122)	(0.162)
Next year	-0.118	0.012	-0.126	0.387	-0.542	-0.125	-0.278
•	(0.110)	(0.121)	(0.164)	(0.174)	(0.294)	(0.128)	(0.169)
This year	0.059	0.193	0.143	0.472	-0.327	-0.037	-0.378
-	(0.144)	(0.206)	(0.216)	(0.283)	(0.232)	(0.153)	(0.163)
Last year	0.190	0.279	0.134	0.465	0.048	0.059	-0.091
	(0.085)	(0.119)	(0.135)	(0.195)	(0.182)	(0.080)	(0.189)
Observations	4218	4218	4218	4218	4218	4218	4218
Mean of DV	75.61	41.14	18.08	20.14	2.92	27.12	14.39
Spatial FE	District	District	District	District	District	District	District
Temporal FE	Prov-year	Prov-year	Prov-year	Prov-year	Prov-year	Prov-year	Prov-year
Joint p-value	0.016	0.037	0.353	0.087	0.042	0.013	< 0.01
This vs. last:							
Difference	0.130	0.087	-0.009	-0.007	0.374	0.096	0.287
p-value	0.374	0.652	0.969	0.970	0.082	0.450	0.044

Table B6: Electoral cycle by land types – Slash and burn, District and Province \times Year FE?

	(1) All Forest	(2) Concession	(3) Oil Palm	(4) Fibre	(5) Logging	(6) Unleased	(7) Protected
Election date:							
In 2 years	0.078	0.076	-0.081	0.269	-0.021	0.045	-0.222
,	(0.098)	(0.101)	(0.113)	(0.115)	(0.255)	(0.163)	(0.308)
Next year	-0.013	-0.009	-0.090	0.167	-0.399	-0.314	-0.349
,	(0.084)	(0.086)	(0.122)	(0.100)	(0.281)	(0.235)	(0.279)
This year	0.001	0.013	-0.155	0.268	-0.509	-0.440	0.158
-	(0.111)	(0.116)	(0.118)	(0.127)	(0.191)	(0.219)	(0.333)
Last year	0.094	0.100	0.077	0.129	-0.163	-0.131	-0.518
	(0.066)	(0.067)	(0.107)	(0.090)	(0.192)	(0.195)	(0.204)
Observations	4218	4218	4218	4218	4218	4218	4218
Mean of DV	3.46	3.30	1.30	1.68	0.33	0.15	0.11
Spatial FE	District	District	District	District	District	District	District
Temporal FE	Prov-year	Prov-year	Prov-year	Prov-year	Prov-year	Prov-year	Prov-year
Joint p-value	0.083	0.124	< 0.01	0.117	0.055	< 0.01	0.022
This vs. last:							
Difference	0.094	0.086	0.232	-0.138	0.346	0.309	-0.676
p-value	0.389	0.448	0.091	0.109	0.175	0.019	0.025