

Getting greener by going black: the effect of blacklisting municipalities on Amazon deforestation

Juliano Assunção^{1,2*} and Romero Rocha³

¹ Climate Policy Initiative Rio de Janeiro (CPI Rio) & Núcleo de Avaliação de Políticas Climáticas da PUC-Rio (NAPC/PUC-Rio), Brazil, ² Department of Economics, PUC-Rio, Brazil and ³ Department of Economics, Federal University of Rio de Janeiro, Brazil

* Corresponding author. Email: juliano@cpirio.org

ONLINE APPENDIX

Appendix A. The monitoring and law enforcement channel results

This appendix explains the columns of table A1, presenting the results of section 5.4. Column 1 uses the same specification as column 3 of table 1 (in the main text), but now instrumenting number of fines by clouds. In column 2, we use a restricted sample of municipalities with more than half of their territory covered by native vegetation in the first sample year. In column 3, we use the share of municipality area deforested instead of normalized deforestation as the dependent variable. In column 4, we control for municipalities specific time trends.

Table A1. The effect of blacklisting on deforestation in the Amazon Biome

VARIABLES	(1) Normalized Deforestation	(2) Normalized Deforestation	(3) Deforestation Share	(4) Normalized Deforestation
Priority Municipalities	0.146 (0.374)	0.550 (0.591)	0.000659 (0.00288)	2.462 (4.065)
Number of Fines in t-1	-0.0621 (0.0350)	-0.0912 (0.0474)	-0.000476 (0.000264)	-0.185 (0.269)
Rain in t-1	-0.0222 (0.0161)	-0.0412 (0.0280)	-0.000153 (0.000120)	-0.173 (0.283)
Cloud Prodes	0.00169 (0.00253)	0.00234 (0.00339)	1.24e-05 (1.60e-05)	0.00553 (0.0126)
Non-Observed Prodes	0.0251 (0.0135)	0.0372* (0.0190)	0.000129 (0.000109)	0.0853 (0.148)
Protected Areas	2.852 (1.473)	3.727 (2.133)	0.0213 (0.0112)	7.785 (11.42)
Crops Price Index (Lagged)	0.291 (0.321)	0.0714 (0.327)	0.00316 (0.00255)	0.111 (0.966)
Crops Price Index 1st Semester	-0.0711 (0.190)	-0.260 (0.281)	8.37e-05 (0.00160)	0.431 (0.766)
Prices Cattle in t-1	-0.0136 (0.00975)	0.0165 (0.0575)	-0.000111 (6.66e-05)	-0.0466 (0.107)
Cattle Price Index (1st sem)	0.00966 (0.0104)	-0.0290 (0.0422)	6.26e-05 (7.17e-05)	0.0499 (0.0666)
Observations	2,630	1,655	2,630	2,630
Number of municipalities	526	331	526	526
Municipality and Year FE	Yes	Yes	Yes	Yes
Municipality Time Trend	No	No	No	Yes

Notes: Significance: * $p < 0.05$. First (Panel B) and second stage (panel A) regressions measuring the impact of priority municipalities on deforestation are presented. Column 1 uses the same specification as table 1, column 3. In column 2, we use a restricted sample of municipalities with more than half of their territory covered by native vegetation in the first sample year. In column 3, we use the share of municipality area deforested instead of normalized deforestation as the dependent variable. In column 4, we control for municipalities-specific time trends.