

Supplemental Material for ‘Authoritarian collaboration and repression in the digital age: Balancing foreign investment and control in internet infrastructure’*

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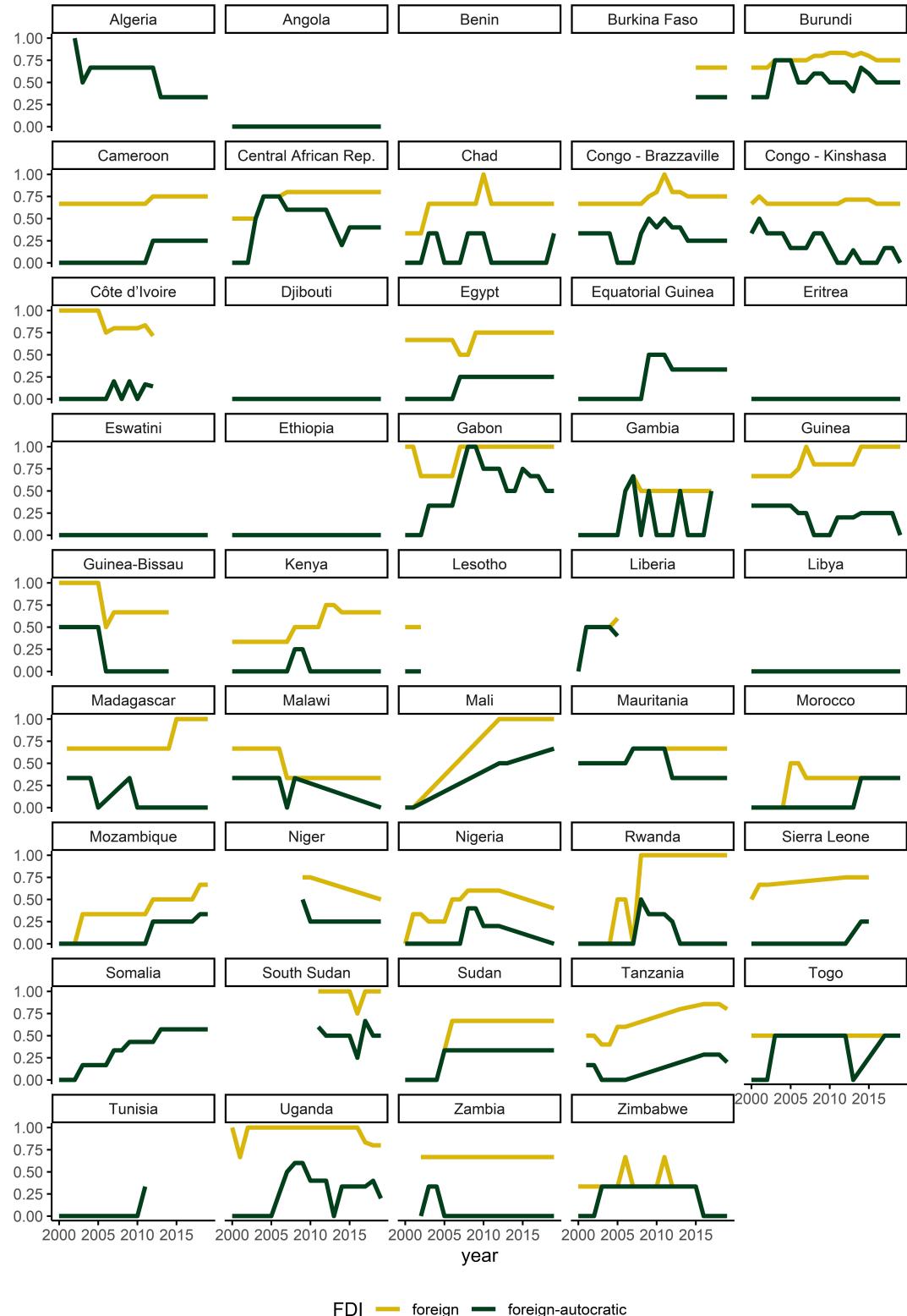
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*Replication data is available at <https://tosco.shinyapps.io/data/>.

1 Foreign investment in ISPs in African autocracies



2 Descriptive statistics

Descriptive Statistics

Variable	Minimum	Maximum	Mean	SD	N	Type	Source
Share foreign	0	1	0.55	0.34	641	Dependent	TOSCO 2.0
Share foreign-authoritarian	0	1	0.23	0.24	765	Dependent	TOSCO 2.0
Share foreign-democratic	0	1	0.28	0.28	765	Dependent	TOSCO 2.0
Online repression	-1.79	3.59	0.98	1.04	765	Dependent	V-DEM
Repression (PTS)	1	5	3.35	0.91	741	Independent	PTS
Repression (Fariss)	3.43	7.89	5.87	0.9	696	Independent	Fariss et al.
Repression (VDEM)	-2.48	2.82	0.22	1.21	765	Independent	V-DEM
Treatment indicator	0	1	0.56	0.5	765	Independent	TOSCO 2.0
GDP pc	110.46	19849.72	1888.07	2666.22	734	Control	World Bank
GDP pc growth	-48.39	96.96	1.45	7.31	718	Control	World Bank
Nat. resources rents (% GDP)	0.19	88.59	14.52	13.05	708	Control	World Bank
Population rural	174140	101575770	14772541	19488983	765	Control	World Bank
Population total	684977	218541212	23888520	30314052	765	Control	World Bank
Trade (% of GDP)	2.7	348	66.16	36.26	645	Control	World Bank
Legal transparency	-2.74	2.85	-0.28	1.01	765	Control	V-DEM
Hereditary	0	0.83	0.04	0.16	765	Control	V-DEM
Military	0	1	0.28	0.16	765	Control	V-DEM
Autocratization	0	1	0.06	0.24	250	Control	V-DEM
Conflict	0	2	0.11	0.39	765	Control	UCDP/PRIOR
Coup	0	2	0.02	0.16	722	Control	V-DEM
Polyarchy	0.07	0.52	0.29	0.11	765	Control	V-DEM
Number of ISPs	1	7	3.17	1.43	765	Control	TOSCO 2.0
State involvement	0	1	0.71	0.45	763	Control	TOSCO 2.0

3 Alternative coding of regime type

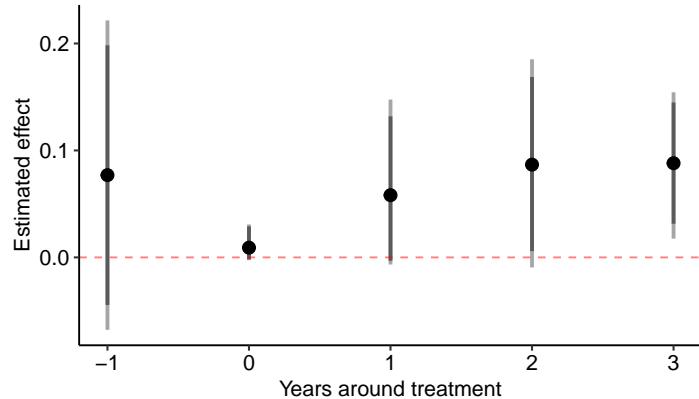
As a robustness check, we employ two different indicators of democracy to classify whether a company's headquarters is located in a democratic or autocratic country, as well as to define the sample of African autocracies. Although various democracy indices exist (see Krieger (2022) for an overview), many could not be included in our analysis due to limitations in time coverage (e.g., Kekic et al. (2007)) or their reliance on a minimalist definition of democracy (e.g., Boix, Miller, and Rosato (2013)). We selected two indicators that adequately cover our study period: the Lexical Index of Electoral Democracy (LIED) (Skaaning, Gerring, and Bartusevičius 2015) and the Polity V index (Marshall et al. 2002). Data from these two sources were used to recode the regime types of company headquarters and to identify a sample of African autocracies. We then re-ran our main analyses using the recoded data, with the results presented in the following subsections.

3.1 Analyses based on the Lexical Index of Electoral Democracy (LIED)

LIED operationalizes democracy as a series of necessary and sufficient conditions. Specifically, it codes regimes based on factual characteristics to avoid problems of subjective measurement. The binary codings are then “aggregated together using the cumulative logic of a lexical scale with seven levels” (Skaaning, Gerring, and Bartusevičius 2015, 1493). More details are provided in the codebook (Skaanning 2021). Following a similar logic as V-Dem, we code all electoral democracies and polyarchies as democratic and the remaining regimes as autocratic. Table 2 and Figure 1 present results from the main analyses.

Regression Analysis with the Lexical Indicator of Electoral Democracy (LIED)

	Share of Foreign ISPs	Share of Foreign Autocratic ISPs	Share of Foreign Democratic ISPs	(1)	(2)	(3)	(4)	(5)	(6)
Repression (Fariss)	0.020 (0.012)	0.037 (0.012)**	0.026 (0.012)*	0.029 (0.014)*	-0.010 (0.011)	0.003 (0.013)			
Tot. Population (log)		0.427 (0.158)**		0.420 (0.175)*				-0.017 (0.170)	
Rural Population (% of total)		0.019 (0.065)		0.108 (0.072)				0.020 (0.070)	
Military Control		-0.005 (0.009)		0.008 (0.009)				-0.020 (0.009)*	
Hereditary Control		-0.322 (0.082)***		-0.132 (0.090)				-0.228 (0.088)**	
GDP pc (log)		0.051 (0.030)+		-0.020 (0.033)				0.097 (0.032)**	
GDP pc growth		-0.005 (0.007)		-0.003 (0.007)				-0.008 (0.007)	
Natural Resources (% of GDP)		-0.038 (0.015)*		-0.012 (0.017)				-0.006 (0.017)	
Trade (% of GDP)		0.030 (0.016)+		-0.020 (0.017)				0.059 (0.017)***	
Legal Transparency		0.030 (0.019)		0.021 (0.021)				0.016 (0.021)	
State-owned ISP		-0.118 (0.009)***		-0.065 (0.010)***				-0.021 (0.010)*	
Constant	0.276 (0.081)***	-0.099 (0.155)	0.310 (0.081)***	0.081 (0.171)	-0.017 (0.073)			-0.170 (0.167)	
Num.Obs.	629	543	629	543	629			543	
R2	0.842	0.874	0.723	0.762	0.813			0.820	
R2 Adj.	0.825	0.856	0.693	0.728	0.792			0.794	
Year FE	Yes	Yes	Yes	Yes	Yes			Yes	
Country FE	Yes	Yes	Yes	Yes	Yes			Yes	



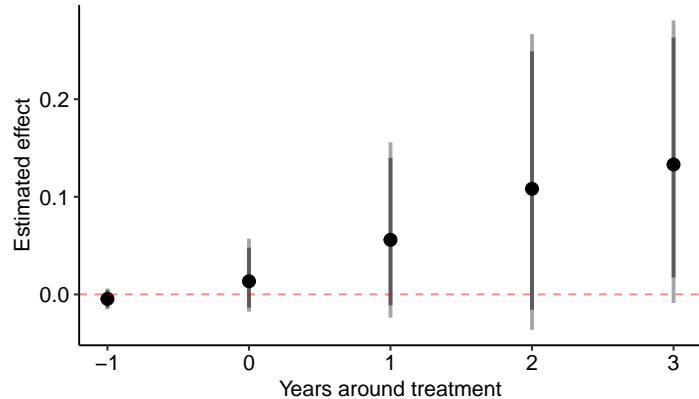
Effects of foreign-autocratic investment on online repression. Point estimates from matching adjusting for treatment and covariate histories during the 2-year pre-treatment period ($L = 2$) and estimated with a lead of three years ($F = 3$), with propensity score weighting as refinement method; asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars. Estimates in the year before treatment ($t-1$) are based on a placebo test.

3.2 Analyses based on Polity V

We use the AUTOC variable of the Polity data to classify a regime as autocratic (Marshall, Gurr, and Jaggers 2017). This indicator is based on an eleven-point additive scale derived from codings of the competitiveness of political participation, the regulation of participation, the openness and competitiveness of executive recruitment, and constraints on the chief executive (for more details see *ibid.*, p. 15). For our purposes, we classify a regime as autocratic if its value is at least 1 ($AUTOC > 1$). Table 3 and Figure 2 show results from the main analyses.

Regression Analysis with Polity V

	Share of Foreign ISPs	Share of Foreign Autocratic ISPs	Share of Foreign Democratic ISPs			
	(1)	(2)	(3)	(4)	(5)	(6)
Repression (Fariss)	0.017 (0.011)	0.026 (0.011)*	0.037 (0.011)***	0.017 (0.011)	-0.015 (0.011)	0.011 (0.012)
Tot. Population (log)		0.394 (0.160)*		-0.260 (0.163)		0.473 (0.169)**
Rural Population (% of total)		-0.098 (0.066)		0.132 (0.067)*		0.031 (0.069)
Military Control		0.007 (0.008)		0.015 (0.009)+		-0.023 (0.009)*
Hereditary Control		-0.125 (0.136)		-0.216 (0.111)+		-0.175 (0.115)
GDP pc (log)		0.074 (0.036)*		-0.025 (0.034)		0.098 (0.035)**
GDP pc growth		-0.007 (0.006)		-0.007 (0.006)		-0.005 (0.006)
Natural Resources (% of GDP)		-0.021 (0.017)		-0.025 (0.016)		-0.003 (0.017)
Trade (% of GDP)		0.006 (0.013)		-0.032 (0.014)*		0.037 (0.014)**
Legal Transparency		0.007 (0.023)		0.086 (0.023)***		-0.038 (0.024)
State-owned ISP		-0.135 (0.010)***		-0.092 (0.010)***		-0.014 (0.010)
Constant	0.299 (0.077)***	-0.044 (0.161)	0.314 (0.074)***	0.720 (0.163)***	-0.051 (0.074)	-0.675 (0.169)***
Num.Obs.	558	484	655	567	655	567
R2	0.848	0.886	0.684	0.752	0.801	0.820
R2 Adj.	0.830	0.868	0.651	0.719	0.780	0.796
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes



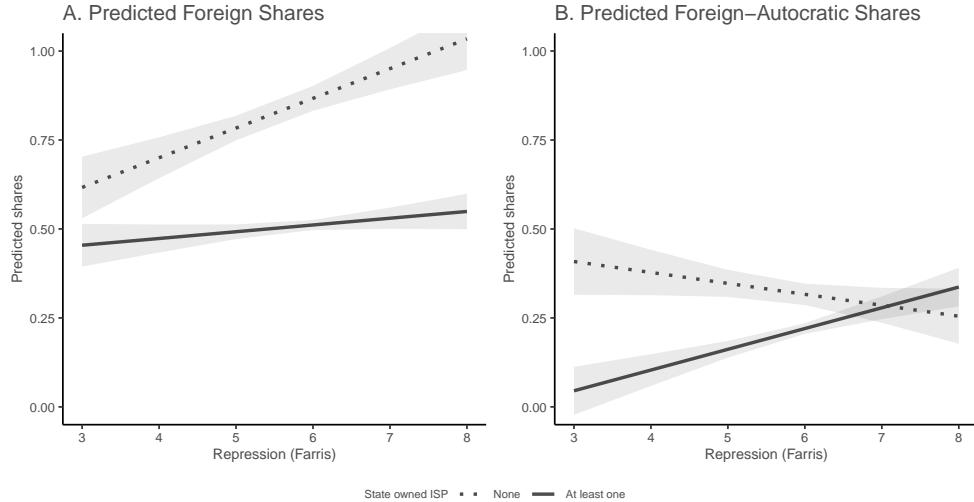
Effects of foreign-autocratic investment on online repression. Point estimates from matching adjusting for treatment and covariate histories during the 2-year pre-treatment period ($L = 2$) and estimated with a lead of three years ($F = 3$), with propensity score weighting as refinement method; asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars. Estimates in the year before treatment ($t=1$) are based on a placebo test.

4 Regression analysis (Fariss, Figure 2)

Regression Analysis (Fariss)

	Share of Foreign ISPs	Share of Foreign Autocratic ISPs	Share of Foreign Democratic ISPs			
	(1)	(2)	(3)	(4)	(5)	(6)
Repression (Fariss)	0.010 (0.013)	0.036 (0.012)**	0.026 (0.012)*	0.029 (0.013)*	-0.001 (0.011)	0.011 (0.013)
Tot. Population (log)		0.408 (0.164)*		0.229 (0.176)		0.160 (0.168)
Rural Population (% of total)		-0.070 (0.068)		0.221 (0.072)**		-0.077 (0.069)
Military Control		-0.005 (0.008)		0.010 (0.009)		-0.024 (0.008)**
Hereditary Control		-0.150 (0.106)		-0.123 (0.092)		-0.199 (0.088)*
GDP pc (log)		0.076 (0.033)*		-0.063 (0.033)+		0.130 (0.031)***
GDP pc growth		-0.008 (0.006)		-0.008 (0.007)		-0.003 (0.006)
Natural Resources (% of GDP)		0.008 (0.018)		0.000 (0.017)		-0.011 (0.016)
Trade (% of GDP)		0.034 (0.016)*		-0.033 (0.017)+		0.079 (0.016)***
Legal Transparency		0.005 (0.017)		0.066 (0.018)***		-0.042 (0.018)*
State-owned ISP		-0.142 (0.011)***		-0.062 (0.010)***		-0.038 (0.010)***
Constant	0.355 (0.082)***	-0.062 (0.156)	0.334 (0.080)***	0.295 (0.167)+	-0.083 (0.074)	-0.378 (0.159)*
Num.Obs.	577	484	696	586	696	586
R2	0.850	0.890	0.669	0.717	0.794	0.816
R2 Adj.	0.833	0.873	0.636	0.680	0.773	0.792
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes

5 Interaction between repression and state ownership



Marginal effects of repression on the percentage of shares held by foreign(-autocratic) investors for countries with no or at least one state-owned ISP with 90% confidence intervals using the ggeffects() R function to calculate predicted shares; we use inverted scores such that higher values indicate higher levels of repression; all variables included in the model are z-standardized to facilitate comparison.

6 Alternative measures of repression

Regression Analysis (PTS)

	Share of Foreign ISPs		Share of Foreign Autocratic ISPs		Share of Foreign Democratic ISPs	
	(1)	(2)	(3)	(4)	(5)	(6)
Repression (PTS)	0.001 (0.010)	0.020 (0.009)*	0.012 (0.010)	0.015 (0.011)	-0.002 (0.009)	0.007 (0.010)
Tot. Population (log)		0.418 (0.159)**		0.121 (0.179)		0.287 (0.164)+
Rural Population (% of total)		-0.082 (0.059)		0.273 (0.068)***		-0.116 (0.062)+
Military Control		-0.005 (0.007)		0.010 (0.009)		-0.021 (0.008)*
Hereditary Control		-0.113 (0.102)		-0.121 (0.096)		-0.180 (0.089)*
GDP pc (log)		0.061 (0.030)*		-0.102 (0.032)**		0.128 (0.030)***
GDP pc growth		-0.008 (0.006)		-0.006 (0.007)		-0.004 (0.006)
Natural Resources (% of GDP)		0.012 (0.017)		0.001 (0.018)		-0.005 (0.016)
Trade (% of GDP)		0.039 (0.015)*		-0.034 (0.018)+		0.076 (0.016)***
Legal Transparency		0.002 (0.016)		0.055 (0.018)**		-0.028 (0.017)+
State-owned ISP		-0.140 (0.009)***		-0.068 (0.010)***		-0.038 (0.009)***
Constant	0.387 (0.048)***	0.077 (0.128)	0.427 (0.049)***	0.518 (0.145)***	-0.090 (0.044)*	-0.430 (0.133)**
Num.Obs.	618	518	741	622	741	622
R2	0.850	0.891	0.642	0.684	0.789	0.815
R2 Adj.	0.833	0.874	0.607	0.644	0.768	0.791
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes

Regression Analysis (V-Dem)

	Share of Foreign ISPs		Share of Foreign Autocratic ISPs		Share of Foreign Democratic ISPs	
	(1)	(2)	(3)	(4)	(5)	(6)
Repression (V-Dem)	0.024 (0.014)+	0.021 (0.017)	0.006 (0.013)	0.040 (0.019)*	0.013 (0.012)	-0.010 (0.017)
Tot. Population (log)		0.384 (0.158)*		0.124 (0.177)		0.262 (0.163)
Rural Population (% of total)		-0.065 (0.060)		0.291 (0.067)***		-0.111 (0.062)+
Military Control		-0.005 (0.007)		0.010 (0.009)		-0.021 (0.008)*
Hereditary Control		-0.093 (0.102)		-0.111 (0.096)		-0.183 (0.089)*
GDP pc (log)		0.060 (0.030)*		-0.105 (0.032)**		0.126 (0.029)***
GDP pc growth		-0.008 (0.006)		-0.006 (0.007)		-0.004 (0.006)
Natural Resources (% of GDP)		0.012 (0.017)		0.001 (0.018)		-0.006 (0.016)
Trade (% of GDP)		0.036 (0.015)*		-0.036 (0.017)*		0.074 (0.016)***
Legal Transparency		0.007 (0.019)		0.074 (0.021)***		-0.037 (0.019)+
State-owned ISP		-0.139 (0.010)***		-0.068 (0.010)***		-0.038 (0.009)***
Constant	0.394 (0.043)***	0.178 (0.123)	0.453 (0.044)***	0.601 (0.136)***	-0.088 (0.040)*	-0.403 (0.126)**
Num.Obs.	641	518	765	622	765	622
R2	0.838	0.890	0.629	0.686	0.776	0.814
R2 Adj.	0.819	0.873	0.594	0.646	0.755	0.791
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes

7 Lagged regression indicator

7.1 Lagged LHRPS

Regression Analysis Fariss (1 Year Lag)

	Share of Foreign ISPs	Share of Foreign Autocratic ISPs	Share of Foreign Democratic ISPs	(1)	(2)	(3)	(4)	(5)	(6)
Repression (Fariss)	0.010 (0.012)	0.051 (0.011)***	0.025 (0.012)*	0.032 (0.014)*	-0.001 (0.011)	0.016 (0.013)			
Tot. Population (log)		0.483 (0.164)**		0.153 (0.188)			0.306 (0.177)+		
Rural Population (% of total)		-0.101 (0.065)		0.259 (0.075)***			-0.109 (0.071)		
Military Control		-0.006 (0.008)		0.007 (0.009)			-0.022 (0.009)*		
Hereditary Control		-0.146 (0.102)		-0.105 (0.096)			-0.197 (0.091)*		
GDP pc (log)		0.087 (0.033)**		-0.093 (0.034)**			0.128 (0.032)***		
GDP pc growth		-0.011 (0.006)*		-0.009 (0.007)			-0.003 (0.006)		
Natural Resources (% of GDP)		0.013 (0.018)		0.004 (0.018)			-0.012 (0.017)		
Trade (% of GDP)		0.038 (0.015)*		-0.027 (0.018)			0.073 (0.017)***		
Legal Transparency		0.015 (0.016)		0.064 (0.018)***			-0.031 (0.017)+		
State-owned ISP		-0.137 (0.010)***		-0.065 (0.011)***			-0.037 (0.010)***		
Constant	0.341 (0.079)***	-0.246 (0.156)	0.312 (0.081)***	0.342 (0.178)+	-0.093 (0.074)		-0.524 (0.168)**		
Num.Obs.	564	477	679	575	679		575		
R2	0.863	0.899	0.661	0.699	0.794		0.816		
R2 Adj.	0.846	0.882	0.627	0.659	0.773		0.791		
Year FE	Yes	Yes	Yes	Yes	Yes		Yes		
Country FE	Yes	Yes	Yes	Yes	Yes		Yes		

Regression Analysis Fariss (2 Year Lag)

	Share of Foreign ISPs	Share of Foreign Autocratic ISPs	Share of Foreign Democratic ISPs	(1)	(2)	(3)	(4)	(5)	(6)
Repression (Fariss)	0.012 (0.012)	0.049 (0.011)***	0.020 (0.013)	0.023 (0.014)+	0.005 (0.012)	0.024 (0.013)+			
Tot. Population (log)		0.590 (0.169)***		0.107 (0.200)			0.394 (0.185)*		
Rural Population (% of total)		-0.103 (0.063)		0.303 (0.076)***			-0.143 (0.071)*		
Military Control		-0.008 (0.008)		0.005 (0.010)			-0.019 (0.009)*		
Hereditary Control		-0.120 (0.097)		-0.033 (0.099)			-0.231 (0.092)*		
GDP pc (log)		0.074 (0.032)*		-0.127 (0.035)***			0.128 (0.033)***		
GDP pc growth		-0.007 (0.006)		-0.006 (0.007)			-0.002 (0.007)		
Natural Resources (% of GDP)		0.009 (0.017)		0.007 (0.019)			-0.017 (0.018)		
Trade (% of GDP)		0.038 (0.015)*		-0.031 (0.019)+			0.075 (0.017)***		
Legal Transparency		0.014 (0.016)		0.050 (0.019)**			-0.017 (0.018)		
State-owned ISP		-0.130 (0.009)***		-0.069 (0.011)***			-0.031 (0.010)**		

	Share of Foreign ISPs		Share of Foreign Autocratic ISPs		Share of Foreign Democratic ISPs	
	(1)	(2)	(3)	(4)	(5)	(6)
Constant	0.302 (0.078)***	-0.321 (0.159)*	0.319 (0.084)***	0.455 (0.191)*	-0.125 (0.076)+	-0.657 (0.176)***
Num.Obs.	553	470	662	563	662	563
R2	0.871	0.905	0.653	0.691	0.801	0.823
R2 Adj.	0.854	0.889	0.617	0.649	0.780	0.799
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes

7.2 Lagged PTS

Regression Analysis PTS (1 Year Lag)

	Share of Foreign ISPs		Share of Foreign Autocratic ISPs		Share of Foreign Democratic ISPs	
	(1)	(2)	(3)	(4)	(5)	(6)
Repression (PTS)	-0.003 (0.010)	0.025 (0.009)**	0.011 (0.010)	0.020 (0.011)+	-0.006 (0.009)	0.002 (0.010)
Tot. Population (log)		0.457 (0.164)**		0.108 (0.189)		0.325 (0.175)+
Rural Population (% of total)		-0.106 (0.062)+		0.275 (0.072)***		-0.118 (0.067)+
Military Control		-0.006 (0.008)		0.008 (0.009)		-0.020 (0.008)*
Hereditary Control		-0.095 (0.099)		-0.075 (0.097)		-0.202 (0.090)*
GDP pc (log)		0.073 (0.032)*		-0.117 (0.034)***		0.128 (0.032)***
GDP pc growth		-0.009 (0.006)		-0.006 (0.007)		-0.003 (0.006)
Natural Resources (% of GDP)		0.017 (0.017)		0.005 (0.018)		-0.008 (0.017)
Trade (% of GDP)		0.038 (0.015)*		-0.032 (0.018)+		0.074 (0.017)***
Legal Transparency		0.007 (0.016)		0.055 (0.018)**		-0.030 (0.017)+
State-owned ISP		-0.137 (0.010)***		-0.069 (0.011)***		-0.036 (0.010)***
Constant	0.381 (0.048)***	0.002 (0.135)	0.408 (0.050)***	0.524 (0.156)***	-0.091 (0.046)*	-0.465 (0.145)**
Num.Obs.	608	494	726	593	726	593
R2	0.849	0.897	0.636	0.687	0.779	0.817
R2 Adj.	0.831	0.880	0.600	0.646	0.758	0.793
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes

Regression Analysis PTS (2 Year Lag)

	Share of Foreign ISPs	Share of Foreign Autocratic ISPs	Share of Foreign Democratic ISPs			
	(1)	(2)	(3)	(4)	(5)	(6)
Repression (PTS)	-0.007 (0.010)	0.016 (0.009)+	0.000 (0.011)	0.005 (0.012)	-0.001 (0.010)	0.009 (0.011)
Tot. Population (log)		0.526 (0.173)**		0.065 (0.203)		0.368 (0.187)+
Rural Population (% of total)		-0.090 (0.064)		0.314 (0.077)***		-0.136 (0.071)+
Military Control		-0.010 (0.008)		0.004 (0.010)		-0.021 (0.009)*
Hereditary Control		-0.081 (0.098)		-0.026 (0.099)		-0.224 (0.092)*
GDP pc (log)		0.068 (0.032)*		-0.131 (0.035)***		0.125 (0.033)***
GDP pc growth		-0.006 (0.006)		-0.005 (0.007)		-0.002 (0.007)
Natural Resources (% of GDP)		0.013 (0.018)		0.009 (0.019)		-0.015 (0.018)
Trade (% of GDP)		0.033 (0.015)*		-0.034 (0.019)+		0.073 (0.017)***
Legal Transparency		0.008 (0.016)		0.046 (0.019)*		-0.020 (0.018)
State-owned ISP		-0.129 (0.010)***		-0.070 (0.011)***		-0.031 (0.010)**
Constant	0.377 (0.048)***	-0.032 (0.145)	0.424 (0.051)***	0.609 (0.170)***	-0.099 (0.047)*	-0.526 (0.157)***
Num.Obs.	576	470	686	563	686	563
R2	0.856	0.901	0.639	0.690	0.786	0.823
R2 Adj.	0.838	0.884	0.601	0.647	0.764	0.798
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes

7.3 Lagged V-Dem

Regression Analysis V-Dem (1 Year Lag)

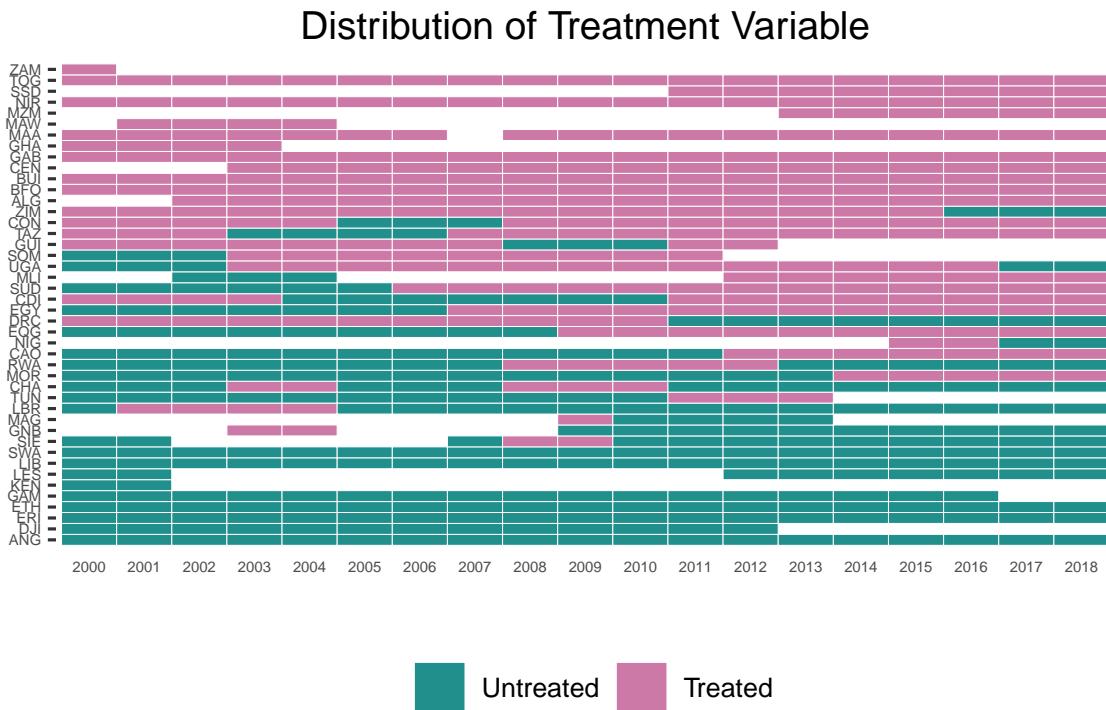
	Share of Foreign ISPs	Share of Foreign Autocratic ISPs	Share of Foreign Democratic ISPs			
	(1)	(2)	(3)	(4)	(5)	(6)
Repression (V-Dem)	0.020 (0.015)	0.029 (0.017)+	0.008 (0.014)	0.036 (0.019)+	0.012 (0.013)	-0.005 (0.017)
Tot. Population (log)		0.383 (0.163)*		0.072 (0.186)		0.314 (0.173)+
Rural Population (% of total)		-0.082 (0.062)		0.292 (0.071)***		-0.115 (0.066)+
Military Control		-0.007 (0.008)		0.009 (0.009)		-0.020 (0.008)*
Hereditary Control		-0.090 (0.100)		-0.076 (0.097)		-0.203 (0.090)*
GDP pc (log)		0.067 (0.032)*		-0.121 (0.034)***		0.127 (0.031)***
GDP pc growth		-0.009 (0.006)		-0.007 (0.007)		-0.002 (0.006)
Natural Resources (% of GDP)		0.018 (0.018)		0.005 (0.018)		-0.008 (0.017)
Trade (% of GDP)		0.037 (0.015)*		-0.033 (0.018)+		0.073 (0.017)***
Legal Transparency		0.015 (0.018)		0.068 (0.021)**		-0.033 (0.019)+
State-owned ISP		-0.135 (0.010)***		-0.069 (0.011)***		-0.036 (0.010)***
Constant	0.390 (0.043)***	0.154 (0.129)	0.444 (0.044)***	0.638 (0.145)***	-0.097 (0.041)*	-0.456 (0.135)***

	Share of Foreign ISPs		Share of Foreign Autocratic ISPs		Share of Foreign Democratic ISPs	
	(1)	(2)	(3)	(4)	(5)	(6)
Num.Obs.	608	494	726	593	726	593
R2	0.849	0.896	0.635	0.687	0.780	0.817
R2 Adj.	0.832	0.879	0.599	0.646	0.758	0.793
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes

Regression Analysis V-Dem (2 Year Lag)

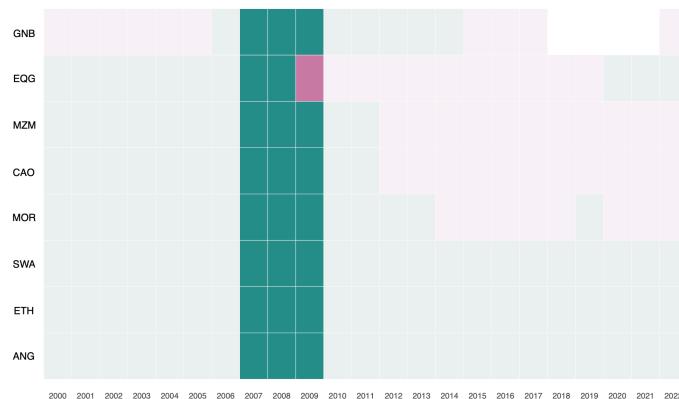
	Share of Foreign ISPs		Share of Foreign Autocratic ISPs		Share of Foreign Democratic ISPs	
	(1)	(2)	(3)	(4)	(5)	(6)
Repression (V-Dem)	0.016 (0.016)	0.032 (0.017)+	0.003 (0.016)	0.020 (0.019)	0.015 (0.014)	0.004 (0.018)
Tot. Population (log)		0.464 (0.170)**		0.062 (0.198)		0.335 (0.183)+
Rural Population (% of total)		-0.077 (0.064)		0.313 (0.076)***		-0.128 (0.071)+
Military Control		-0.010 (0.008)		0.004 (0.010)		-0.021 (0.009)*
Hereditary Control		-0.082 (0.098)		-0.030 (0.099)		-0.225 (0.092)*
GDP pc (log)		0.066 (0.032)*		-0.129 (0.035)***		0.123 (0.033)***
GDP pc growth		-0.007 (0.006)		-0.005 (0.007)		-0.001 (0.007)
Natural Resources (% of GDP)		0.019 (0.018)		0.010 (0.019)		-0.014 (0.018)
Trade (% of GDP)		0.034 (0.016)*		-0.033 (0.019)+		0.072 (0.017)***
Legal Transparency		0.019 (0.018)		0.054 (0.021)**		-0.020 (0.019)
State-owned ISP		-0.130 (0.010)***		-0.070 (0.011)***		-0.031 (0.010)**
Constant	0.373 (0.043)***	0.083 (0.135)	0.427 (0.045)***	0.638 (0.156)***	-0.089 (0.041)*	-0.471 (0.145)**
Num.Obs.	576	470	686	563	686	563
R2	0.856	0.901	0.639	0.690	0.786	0.822
R2 Adj.	0.839	0.884	0.601	0.648	0.764	0.798
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes

8 Distribution of treatment variable



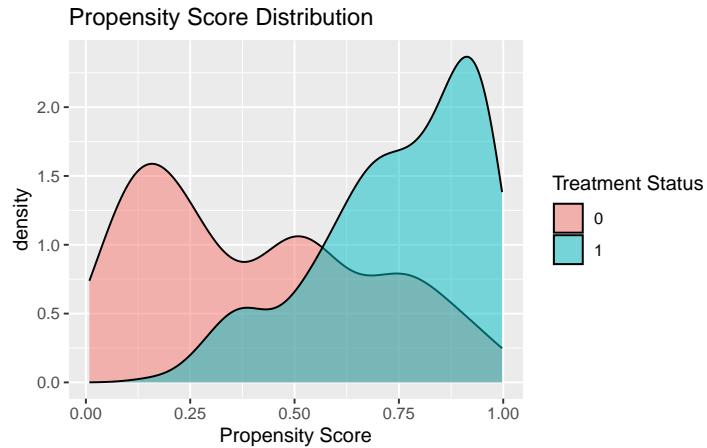
Distribution of the treatment variable across cases and time. White fields are missing data.

9 Example of matched set



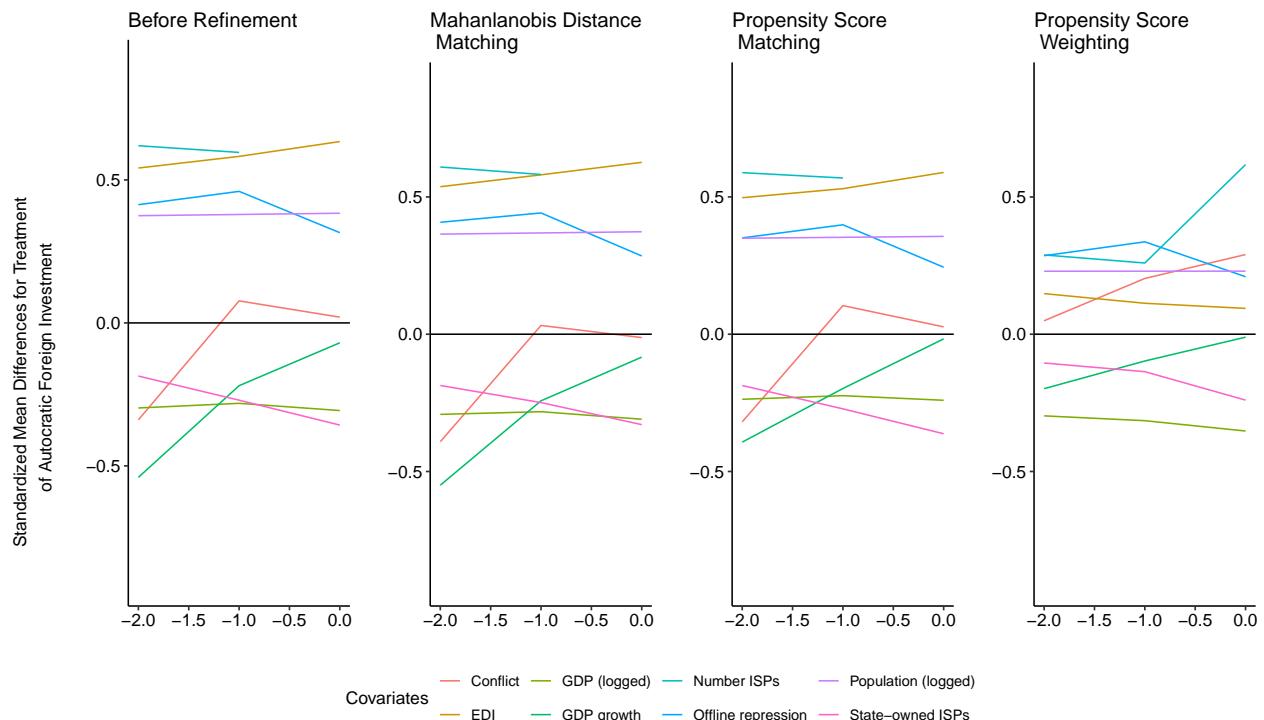
Example of a matched set with lag = 2 for the treatment “foreign-autocratic investment”. The example illustrates that Equatorial Guinea, prior to being treated in 2009, showed a similar non-treatment history in 2008 and 2007 with 8 other countries in our dataset.

10 Common support plot



Overlap in the distributions of the covariates' propensity scores between treated and control groups (common support).

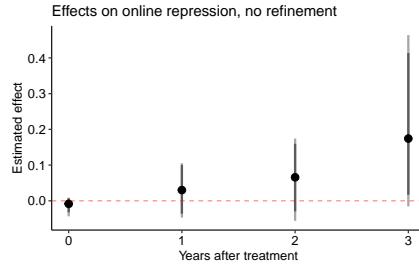
11 Diagnostic plots



Diagnostic plots to see how covariate balance improves due to various refinement techniques during matching with the treatment 'foreign-autocratic investment'. Propensity score weighting achieves the best balance. The covariate 'Coups' was removed due to little variation.

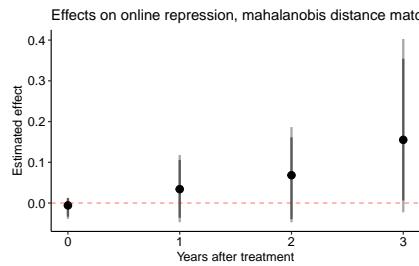
12 Alternative matching models

12.1 Excluding controls

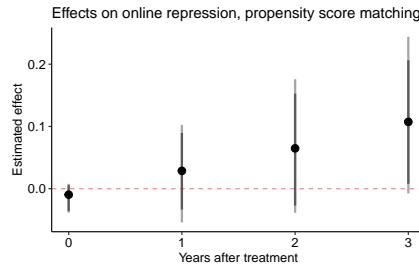


Foreign-autocratic investment and its effect on online repression, point estimates from matching that adjusts for the treatment and covariate histories during the 2-year period prior to the treatment ($L = 2$) and NO refinement (and no controls included). Asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars.

12.2 Alternative refinement methods

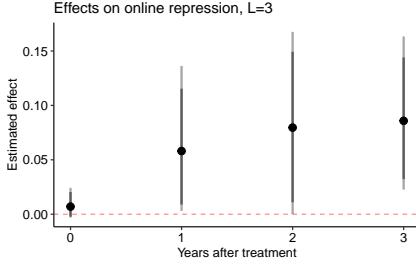


Foreign-autocratic investment and its effect on online repression, point estimates from matching that adjusts for the treatment and covariate histories during the 2-year period prior to the treatment ($L = 2$) and mahalanobis distance matching as refinement (controls included). Asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars.

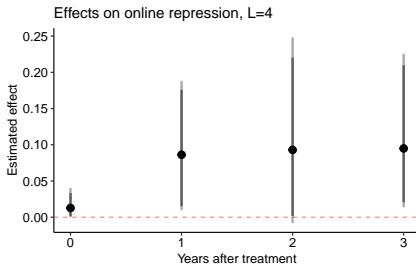


Foreign-autocratic investment and its effect on online repression, point estimates from matching that adjusts for the treatment and covariate histories during the 2-year period prior to the treatment ($L = 2$) and propensity score matching as refinement (controls included). Asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars.

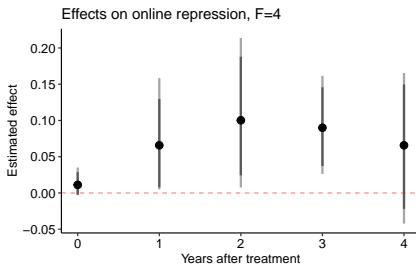
12.3 Alternative lags and leads



Foreign-autocratic investment and its effect on online repression, point estimates from matching that adjusts for the treatment and covariate histories during the 3-year period prior to the treatment ($L = 3$) and propensity score weighting as refinement method. Asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars. Controls: State-owned ISPs, GDP, GDP growth, population, levels of democracy (EDI), autocratization (ERT), coups, conflicts (PRIO), offline repression (V-Dem).

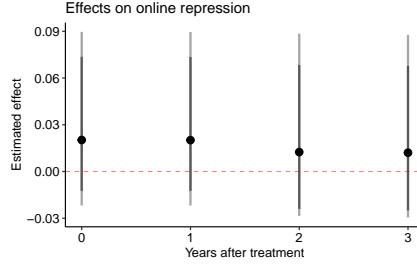


Foreign-autocratic investment and its effect on online repression, point estimates from matching that adjusts for the treatment and covariate histories during the 4-year period prior to the treatment ($L = 4$) and propensity score weighting as refinement method. Asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars. Controls: State-owned ISPs, GDP, GDP growth, population, levels of democracy (EDI), autocratization (ERT), coups, conflicts (PRIO), offline repression (V-Dem).



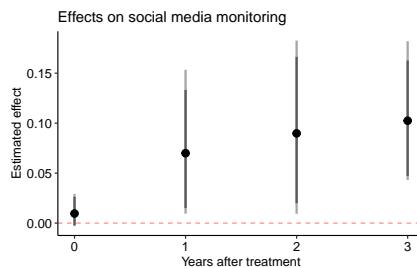
Foreign-autocratic investment and its effect on online repression, point estimates from matching that adjusts for the treatment and covariate histories during the 2-year period prior to the treatment ($L = 2$) and propensity score weighting as refinement method with a lead of 4 years ($F = 4$). Asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars. Controls: State-owned ISPs, GDP, GDP growth, population, levels of democracy (EDI), autocratization (ERT), coups, conflicts (PRIO), offline repression (V-Dem).

12.4 Effect of foreign-democratic investment

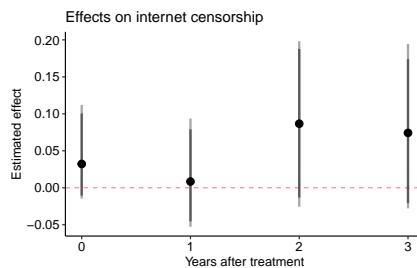


DEMOCRATIC foreign investment and its effect on online repression, point estimates from matching that adjusts for the treatment and covariate histories during the 2-year period prior to the treatment ($L = 2$) and propensity score weighting as refinement method. Asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars. Controls: State-owned ISPs, GDP, GDP growth, population, levels of democracy (EDI), autocratization (ERT), coups, conflicts (PRIO), offline repression (V-Dem).

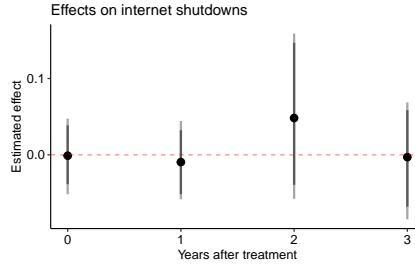
12.5 Individual outcome variables (forms of online repression disaggregated)



Foreign-autocratic investment and its effect on social media monitoring, point estimates from matching that adjusts for the treatment and covariate histories during the 2-year period prior to the treatment ($L = 2$) and propensity score weighting as refinement method. Asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars. Controls: State-owned ISPs, GDP, GDP growth, population, levels of democracy (EDI), autocratization (ERT), coups, conflicts (PRIO), offline repression (V-Dem).

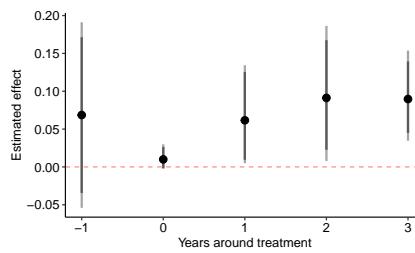


Foreign-autocratic investment and its effect on internet censorship, point estimates from matching that adjusts for the treatment and covariate histories during the 2-year period prior to the treatment ($L = 2$) and propensity score weighting as refinement method. Asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars. Controls: State-owned ISPs, GDP, GDP growth, population, levels of democracy (EDI), autocratization (ERT), coups, conflicts (PRIO), offline repression (V-Dem).

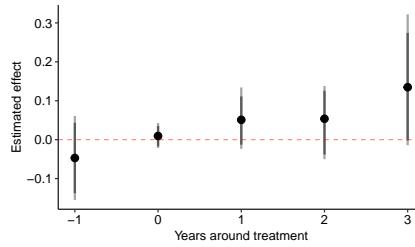


Foreign-autocratic investment and its effect on internet shutdowns, point estimates from matching that adjusts for the treatment and covariate histories during the 2-year period prior to the treatment ($L = 2$) and propensity score weighting as refinement method. Asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars. Controls: State-owned ISPs, GDP, GDP growth, population, levels of democracy (EDI), autocratization (ERT), coups, conflicts (PRIO), offline repression (V-Dem).

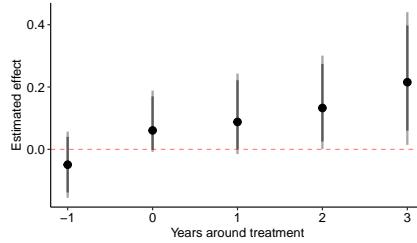
13 Different treatment thresholds



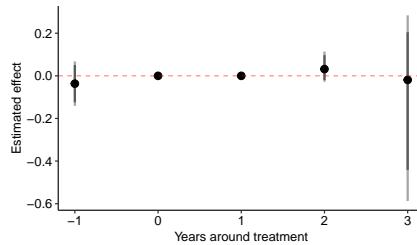
Alternative treatment threshold: 10% foreign investment from autocratic countries. Effects of foreign-autocratic investment on online repression. Point estimates from matching adjusting for treatment and covariate histories during the 2-year pre-treatment period ($L = 2$) and estimated with a lead of three years ($F = 3$), with propensity score weighting as refinement method; asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars. Estimates in the year before treatment ($t-1$) are based on a placebo test.



Alternative treatment threshold: 20% foreign investment from autocratic countries. Effects of foreign-autocratic investment on online repression. Point estimates from matching adjusting for treatment and covariate histories during the 2-year pre-treatment period ($L = 2$) and estimated with a lead of three years ($F = 3$), with propensity score weighting as refinement method; asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars. Estimates in the year before treatment ($t-1$) are based on a placebo test.



Alternative treatment threshold: 30% foreign investment from autocratic countries. Effects of foreign-autocratic investment on online repression. Point estimates from matching adjusting for treatment and covariate histories during the 2-year pre-treatment period ($L = 2$) and estimated with a lead of three years ($F = 3$), with propensity score weighting as refinement method; asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars. Estimates in the year before treatment (t-1) are based on a placebo test.



Alternative treatment threshold: 50% foreign investment from autocratic countries. Effects of foreign-autocratic investment on online repression. Point estimates from matching adjusting for treatment and covariate histories during the 2-year pre-treatment period ($L = 2$) and estimated with a lead of three years ($F = 3$), with propensity score weighting as refinement method; asymptotic confidence intervals of 95 (black) and 90 (grey) percent as vertical bars. Estimates in the year before treatment (t-1) are based on a placebo test.

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