

# Online Appendix for: 'Understanding journalist killings'

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## A Coding Journalist killings

### A.1 The link between unconfirmed perpetrators and state authorities

For many murders of journalists, NGOs on the ground that collect such information cannot unequivocally confirm who was responsible for the killings. In these cases no specific group can unambiguously be held accountable. But even for these cases details about the circumstances of the killing are frequently known. For example, data collected by CPJ show that most victims reported on political issues, including corruption of local politicians (See: [Committee to Protect Journalists](#)). Members of government are best placed to organize murders without being linked to them and to avoid prosecution, while having a particularly high incentive to avoid being identified. CPJ reports on the killings oftentimes hint at possible involvement of a state-related actor even if the perpetrator cannot be clearly confirmed.

While we cannot provide more details on the killings than the NGOs dedicated to recording such atrocities, we can make informed guesses on who the most likely perpetrators are, based on the information we have. It seems unlikely that criminal gangs are responsible for the majority of these murders for which the perpetrator cannot be clearly confirmed. Particularly in democracies politicians are keen to identify and punish those responsible for crimes to maintain legitimacy. Uncovering murders committed by drug gangs or other non-political groups is probably high on the agenda of politicians as they can increase their legitimacy by doing so. Therefore, it seems unlikely that most unconfirmed perpetrators in democratic countries are criminal groups. It seems also unlikely that political groups that oppose the government are behind the majority of killings for which the perpetrator cannot be confirmed. If political opponents are responsible for the killing of journalists, the government is likely to put even greater efforts into bringing those to justice. Additionally, such actors often claim responsibility for murdering journalists and use this as propaganda for their purpose and strength.

Politicians are keen not to be linked to the killing of a journalist, and, when compared to non-political actors, are more likely to have the appropriate networks to hide or obfuscate such links and to evade accountability. The 2006 killing of Russian journalist Anna Politkovskaya, who was famous for criticizing Kremlin policies, shows how difficult it is to establish who orchestrates the murders. Former exiled Russian interior ministry officer Alexander Litvinenko suspected President Putin to be behind the murder of Politkovskaya; Litvinenko himself died later that year from being poisoned.<sup>15</sup>

Some scholars suggest that not only the killings without confirmed perpetrator are linked to political authorities, but even many of those pinned to criminal groups. Studying violence against journalists in Latin America, Waisbord (2002, 104) draws a wide circle of perpetrators that have connections to the state:

Some cases show that governments have been directly responsible for the attacks. Others, instead, attest to the privatization of violence, that is, the existence of hit men and death squads in the service of powerful bosses and

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<sup>15</sup>See Mary Dejevsky, '[Who really did kill Russian journalist Anna Politkovskaya](#)', The Independent, June 13, 2014.

drug lords. State-Sponsored violence and privatized violence are not separate but related phenomena. Not only can the state not put an end to the autonomization of violence, it was originally responsible for granting 'licenses to kill' to police and military officers as part of the repression of guerrilla movements and political dissidents.

Waisbord (2002) argues that the state had itself initiated this 'autonomization of violence' and is not trying to reign in those agents of violence. Looking beyond Latin America, Heyns and Srinivasan (2013, 311) conclude that 'often the suspects are drawn from the very institutions and authorities responsible for upholding and enforcing a protective regime.' This further supports our assumption that members of the state are behind most killings for which the perpetrators remain unconfirmed.

## A.2 Codebook

### A.2.1 Definition of journalist

We follow the Committee to Protect Journalist's definition (Committee to Protect Journalists, 2019*d*): 'Journalists [are] people who cover news or comment on public affairs through any media – including in print, in photographs, on radio, on television, and online. [This includes] staff journalists, freelancers, stringers, bloggers, and citizen journalists.' We also include media support workers in our database. The definition for media support worker follows CPJ's definition and includes translators, drivers, fixers, and administrative workers. Information for this variable is coded using the circumstantial information provided

### A.2.2 Variables to be coded

1. **gwno**: Gleditsch Ward Country identifier
2. **Country**: Country name
3. **Year**: Year of killing/death
4. **in\_rog**: Found in database of Reporters without Borders (0/1)
5. **in\_cpj**: Found in database of Committee to Protect Journalists (0/1)
6. **in\_ipi**: Found in database of International Press Institute (0/1)
7. **date**: Full date of killing/death (if available) (day/month/year)
8. **name**: Name of killed/dead journalist. If the journalist is reported in more than one source, this field lists all names (as found in each data source), separated by a semicolon
9. **dataset**: Lists all sources for each journalist, separated by a semicolon (RoG;CPJ;IPI)
10. **circumstances**: Open text field with information on the circumstances of each killing/death. The information is gleaned from CPJ, IPI, and RoG, as well as Wikipedia, news reports, and other online sources (e.g. IFEX, Article 19, Global Voices Online).

11. **media name:** Name of the (main) media outlet the journalist worked for.
12. **media type:** Information on the type of media outlet the journalist worked for. If the journalist worked for two different types of media, separate by semicolon. This includes:
  - Radio
  - Magazine
  - Newspaper
  - Television
  - News/media agency
  - Online
  - Other: (add details)
13. **media reach:** (international/national/regional). Is the (main) media outlet the journalist worked for an international, national or regional (i.e. subnational) media source? If the journalist worked for more than one outlet, and e.g. one was regional and one was international, separate by semicolon (regional; international).
  - **regional:** If the media outlet has a sub-national reach (e.g. a local newspaper, or a radio station focusing on a certain province...), then the media reach is regional. This includes local media (e.g. if you find mention that the media outlet is a local paper, or magazine, or radio station). This also includes regional media outlets, such as regional weekly paper (oftentimes it mentions the region). If no information on the media outlet can be found on the internet, then we assume the media reach is regional. Note that in large and/or decentralized countries (e.g. India, Russia, Philippines) most radio stations are likely to be regional. Likewise, if online media outlets are published in the local language (and not e.g. English), and no further information is available, they are likely to be regional. We also code local affiliates of larger national media companies as regional, for example if it is a regional newspaper or radio station that is owned by a large national outlet. This is not to be confused with local correspondents working for national outlets.
  - **national:** If the media outlet has national reach (i.e. national coverage) that it should be coded as national. This includes media outlet that include 'national' in their names, but also includes newspapers based in the capital. This also includes local correspondents working for national outlets. Capital radio stations are also coded as national, unless there is explicit mentioning that the radio station only has regional coverage. When newspapers (e.g. in Pakistan or India or Ethiopia or Kenya) are in English, then we usually code them as national.
  - **international:** If the media outlet has reach beyond national borders (e.g. it is broadcast in more than one country) then it is international. This also includes large news outlets such as the New York Times, or Al Jazeera, but also more specific outlets that e.g. to cater to certain Latin American countries, or South East Asia, or German-speaking European countries. We also code diaspora media as international.

- **unclear:** If media reach is unclear, leave it blank. This is most likely the case for online media sources.

14. **killed in capital:** (yes/no). Was the journalist killed in the capital city of the country?

15. **killed in conflict setting:** (yes/no). Was the journalist killed in a situation that indicates the death was part of a larger violent event not directly aimed at the journalist? Information on whether the journalist was killed during an assignment amidst an armed military conflict (for example: killed in crossfire while covering a conflict, stepped on a landmine, killed in bombardment while covering a warzone). Conflict settings also include journalists who were killed in cross-fire, suicide bombings or e.g attacks on public buildings. Note that suicide attacks directly aimed at journalists (e.g. Charlie Hebdo) are not coded as a conflict setting. It is also possible to be killed outside of conflict settings in conflict countries, for example when a journalist dies in prison, or is explicitly targeted outside of a crossfire situation. If the journalist is targeted individually (e.g. there is a bomb planted under his/her car), then it is not a conflict setting.

- Notable event: on November 23 2009, at least 58 people were kidnapped in Maguindanao, Philippines. The victims were later killed, and the event has become known as the Maguindanao massacre. Of the 58 victims, 34 were journalists. This event is particularly notable as CPJ called it the ‘single deadliest event for the press since 1992, when CPJ began keeping detailed records on journalist deaths.’<sup>16</sup> In this database, the journalists killed in this massacre are coded as having died in a conflict setting, as the victims of this event included more than a dozen individuals who were not working as journalists.

16. **perpetrator known:** (yes/no/accident). Information on whether the perpetrator is known or not. By perpetrator we do not mean the actual identity of the person (or persons) who killed the journalist. We instead mean whether the individual, group, organization or institution who is responsible for the killing of a journalist (for example by ordering it) is known. Note that in many cases, the perpetrator is unclear, or multiple sides accuse each other. The variable perpetrator information type is intended to capture uncertainty surrounding the perpetrator. Perpetrator known should only be recorded yes/no/accident. A note on robberies: In situations where the circumstances are unclear (e.g. if a journalist was robbed in their home but there are no signs of forced entry), we code the perpetrator not known. If no information on prior threats against the journalist is available and if there were no eyewitnesses, or when reports say the perpetrator could either be government or anti-government, or ‘killed by drug cartel or local politicians’ we also code the perpetrator as unknown.

- no: If no indication of who the perpetrator might be is available, then the perpetrator is not known. This also includes cases where the only information available is that e.g. unidentified gunmen killed the journalist (and possibly robbed him/her), but no indication of a possible larger motive is available.

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<sup>16</sup><https://cpj.org/2009/11/maguindanao-death-toll-worst-for-press-in-recent-h/>

- yes:: If a perpetrator can clearly be identified (e.g. police, hired gunmen for local politician, rebel group, gunmen hired by drug cartel) then the perpetrator is known. If a probable motive is mentioned (e.g. the family reports that the journalist previously received threats from local politicians, or from a drug cartel), then the perpetrator is also coded as known.
  - accident: If the journalist was killed in an accident (e.g. helicopter crash, Malaria, drowned, killed in airplane crash, etc) then the perpetrator is coded as accident. If the journalist was killed in an accident, then perpetrator category, perpetrator and perpetrator information type do not have to be coded (leave empty)
17. **perpetrator category:** (if perpetrator known = yes): Details on who the perpetrator is. A note on foreign governments: We code foreign governments contingent on their relationship with the domestic government. For example, the Russian government would be coded as government in the Syrian conflict, but the US government would be coded as anti-government. In both cases, foreign government should then be coded in the perpetrator category below. *Note that when the government has convicted someone and there is doubt about who the perpetrator is, we need to look at the cases individually.* This category distinguishes between:
- government: government (or pro-government) actors, include military and security forces
  - anti-government: groups or actors (e.g. rebel groups, terrorist groups or opposition parties/groups).
  - non-political: groups or actors (e.g. influential families or drug cartels)
18. **perpetrator (if perpetrator known = yes):** Details on who the perpetrator is. If information on specific group names, government branches, family, or gang names is available it is included here. Examples include:
- Government officials
  - Military officials
  - Security forces
  - Paramilitary groups
  - Police
  - Local politician (possibly including name)
  - Local authorities
  - Foreign government
  - Rebel groups (possibly including group name)
  - Organized criminal groups (possibly including group name)
  - Political Group (possibly including group name)
  - General crime (possibly including group name)
  - Radical nationalists (e.g. nationalist Turks, nationalists Russians)
  - Religious (non-political) groups (possibly including group name)

19. **perpetrator information type (if perpetrator known = yes):** Codes the quality of the information used to determine the perpetrator. The information can be:
- given: the perpetrator is generally known. Note that this does not mean the perpetrator was held accountable. For example, there is eyewitness evidence, or other evidence. Note that we code the information as given when journalists died e.g. in police custody or in prison.
  - inferred: it is not entirely clear who the perpetrator is, but there is information on the most probable motive. Information on the alleged perpetrator is available and given the circumstantial information and the topics covered by the journalist, the perpetrator can be inferred. Probable motive needs to be mentioned. Inferred is also if other parties 'blame' a specific party.
20. **comments:** open text field for comments.

## B Descriptive Statistics

Statistic	Min	Pctl(25)	Mean	Pctl(75)	Max	Median	St. Dev.
state journ. killings	0	0	0.07	0	1	0	0.25
unconfirmed journ. killings	0	0	0.09	0	1	0	0.29
BMR Democ (0/1)	0.00	0.00	0.56	1.00	1.00	1.00	0.50
Elected local gov	0.00	0.23	0.61	0.94	1.00	0.78	0.37
Judicial corruption	-3.29	-1.28	0.03	1.22	3.13	0.51	1.54
Public sector corruption	0.005	0.20	0.51	0.77	0.98	0.58	0.30
log Pop (lag)	11.30	15.02	15.99	17.11	21.04	16.06	1.69
log rGDP (lag)	5.27	7.04	8.36	9.53	11.62	8.30	1.55
Armed Conflict (0/1)	0	0	0.15	0	1	0	0.36
PTS (lag)	1.00	2.00	2.57	3.00	5.00	3.00	1.11
Electoral dem. index	0.01	0.31	0.54	0.78	0.95	0.54	0.26

Table A1: Summary Statistics

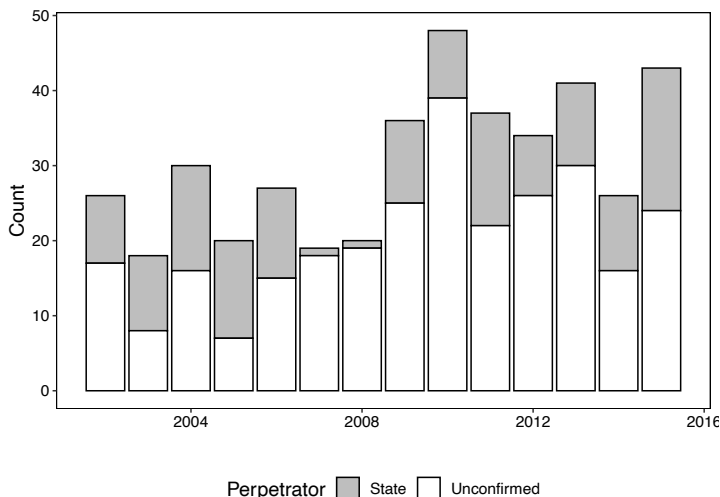


Figure A1: Journalists killed in democracies, outside of conflict settings, 2002-2016. Note that the analysis only includes observations through 2015

### B.1 Details on VDEM’s public sector corruption index and judicial corruption measure

The public sector corruption index codes answers to the question: ‘To what extent do public sector employees grant favors in exchange for bribes, kickbacks, or other material inducements, and how often do they steal, embezzle, or misappropriate public funds or other state resources for personal or family use?’ (Coppedge, 2019, 267). The judicial corruption variable codes answers to the question ‘How often do individuals or businesses make undocumented extra payments or bribes in order to speed up or delay the process or to obtain a favorable judicial decision?’ (Coppedge, 2019, 154). These ordinal response scales are aggregated across coders using a Bayesian item response theory measurement model, which provides an interval scaled measure (Coppedge et al., 2019a).



## C Analysis of democracies

### C.1 Replication of Table 1, including public sector corruption

	I-State	II-State-national	III-State-local	IV-Unconfirmed	V-Unconf-national	VI-Unconf-local
Intercept	-19.28*** (4.23)	-12.39** (4.03)	-23.96*** (4.07)	-27.13*** (3.14)	-23.83*** (3.79)	-29.09*** (3.32)
Elected local gov	6.13*** (1.85)	2.61 (1.59)	5.59** (1.87)	3.59** (1.32)	1.67 (1.05)	3.56* (1.41)
Public Sector Corr	2.04 (1.34)	0.78 (1.89)	2.24+ (1.36)	2.87** (1.02)	3.51* (1.38)	2.31* (1.05)
log Pop (lag)	0.37*** (0.11)	0.23 (0.15)	0.41*** (0.11)	0.72*** (0.10)	0.60*** (0.12)	0.78*** (0.10)
log rGDP (lag)	0.16 (0.18)	0.13 (0.25)	0.28+ (0.17)	0.41** (0.14)	0.39* (0.17)	0.39** (0.15)
Armed conflict	1.27** (0.46)	-0.10 (0.56)	1.16* (0.45)	0.06 (0.38)	-0.55 (0.52)	-0.18 (0.38)
PTS (lag)	1.14*** (0.20)	1.19*** (0.28)	1.17*** (0.21)	1.18*** (0.18)	1.07*** (0.25)	1.27*** (0.19)
Electoral dem. index	-1.21 (9.89)	-6.50 (11.83)	8.91 (8.74)	8.02 (6.78)	6.35 (8.51)	11.49 (7.41)
Electoral dem. index (squ)	-1.08 (7.98)	2.65 (10.01)	-8.65 (6.95)	-9.36+ (5.45)	-7.44 (7.31)	-12.53* (5.85)
AIC	397.88	268.84	382.31	477.95	328.80	445.91
BIC	512.26	383.21	496.68	592.33	443.17	560.28
Log Likelihood	-176.94	-112.42	-169.15	-216.98	-142.40	-200.95
Deviance	353.88	224.84	338.31	433.95	284.80	401.91
Num. obs.	1338	1338	1338	1338	1338	1338

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , + $p < 0.1$ . Logistic regression. Country-clustered standard errors. Year fixed effects not shown

Table A2: Journalist killings, state and unconfirmed killings, democracies only. State: state perpetrator. Unconfirmed: unconfirmed perpetrator. National: journalists with national reach. Local: journalists with local reach

## C.2 Alternative measures for subnational politics

	I-State I	II-State	III-State	IV-Unconfirmed	V-Unconfirmed	VI-Unconfirmed
Intercept	-12.84*** (3.65)	-14.40*** (3.76)	-15.26*** (4.14)	-20.39*** (2.64)	-22.44*** (2.79)	-22.36*** (2.90)
Regional gov index	1.65*** (0.46)			1.37** (0.43)		
Subnat. election unevenness		-1.18*** (0.24)			-0.62** (0.19)	
Local offices rel. power			1.73*** (0.32)			1.20*** (0.30)
Judicial Corr	0.48** (0.18)	0.36* (0.16)	0.41* (0.19)	0.75*** (0.16)	0.62*** (0.16)	0.64*** (0.18)
log Pop (lag)	0.13 (0.11)	0.34** (0.11)	0.40*** (0.11)	0.54*** (0.10)	0.67*** (0.10)	0.72*** (0.10)
log rGDP (lag)	0.40* (0.16)	0.37* (0.16)	0.09 (0.16)	0.53*** (0.14)	0.55*** (0.13)	0.30* (0.13)
Armed conflict	1.01** (0.38)	0.63+ (0.35)	1.38*** (0.41)	-0.06 (0.34)	-0.31 (0.34)	0.12 (0.35)
PTS (lag)	1.27*** (0.24)	0.91*** (0.19)	1.11*** (0.20)	1.29*** (0.20)	1.09*** (0.18)	1.21*** (0.19)
Electoral dem. index	-0.31 (9.56)	-5.88 (9.61)	0.49 (10.33)	2.77 (5.94)	2.88 (6.16)	5.16 (6.55)
Electoral dem. index (squ)	-1.48 (7.49)	5.19 (7.80)	-3.65 (8.19)	-5.26 (4.74)	-3.98 (5.10)	-7.96 (5.41)
AIC	405.05	393.09	384.33	470.78	473.53	459.06
BIC	519.18	507.42	498.19	584.91	587.86	572.92
Log Likelihood	-180.53	-174.54	-170.16	-213.39	-214.77	-207.53
Deviance	361.05	349.09	340.33	426.78	429.53	415.06
Num. obs.	1323	1335	1307	1323	1335	1307

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , + $p < 0.1$ . Logistic regression. Country-clustered standard errors. Year fixed effects not shown

Table A3: Journalist killings, state and unconfirmed killings, democracies only. State: state perpetrator. Unconfirmed: unconfirmed perpetrator.

We use three alternative measures for subnational politics. First, we capture the power of elected versus non-elected offices at the *regional* level (Coppedge, 2019, 50) with the *regional government index*: Are there elected regional governments, and — if so — to what extent can they operate without interference from unelected bodies at the regional level (Coppedge, 2019, 50)? The results suggest that there is a positive and statistically significant correlation between regional elected governments that can operate without interferences from unelected bodies at the regional level, and the probability of a journalist being killed by either a state or unconfirmed perpetrator.

Second, we account for *subnational election unevenness*: (Coppedge, 2019, 67): Does the freeness and fairness of subnational elections vary across different areas of the country (Coppedge, 2019, 67)? The lowest value indicates that subnational elections in some areas of the country are significantly less free and fair than subnational elections in other areas of the country. Higher values indicate that subnational elections are generally equally free and fair (or equally not free and fair). The results suggest that countries with more uneven subnational elections - meaning that the quality of the electoral process in terms of being free and fair - is statistically significantly correlated with an increased probability of journalists being killed by either a state or unconfirmed perpetrator.

Third, we measure *local offices relative power*: How would you characterize the relative power, in practice, of elected and non-elected offices at the local level (Coppedge, 2019, 66)? Lower values indicate that non-elected offices at the local level hold all or most of the power, whereas highest values indicate that elected offices hold the majority

of power, which suggests that non-elected offices are subordinate. The results suggest that countries where the majority of the political power at the local level is held by elected officials are significantly correlated with an increased probability of journalists being killed by either a state or unconfirmed perpetrator.

### C.3 Alternative measures for state capacity

To assess the impact of different types of state capacity, we replace per capita GDP as a measure for ability and resources to protect journalists with two measures for the rule of law as an indicator for the state’s willingness to ensure journalists’ safety.

The *Freedom House Rule of Law* measures (Coppedge, 2019, 315): ‘the independence of the judiciary; the extent to which rule of law prevails in civil and criminal matters; the existence of direct civil control over the police; the protection from political terror, unjustified imprisonment, exile and torture; absence of war and insurgencies; and the extent to which laws, policies and practices guarantee equal treatment of various segments of the population.’

The *World Bank* measures (Kaufmann, Kraay and Mastruzzi, 2009, 7): ‘perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.’

Both measures are likely to be endogenous to the killing of journalists, either through the presence of violence (Freedom House) or perceptions related to the likelihood of crime and violence (World Bank). Table A4 shows that both measures are statistically significant. Importantly, the measure for locally elected governments remains statistically significant.

	I-State I	II-Unconfirmed	III-State	IV-Unconfirmed
Intercept	-11.05*** (3.16)	-16.21*** (2.67)	-15.44*** (3.50)	-21.12*** (2.78)
Local gov index	5.72** (2.03)	3.71* (1.47)	6.21*** (1.80)	3.75** (1.28)
Rule of Law (Freedom House)	-0.40*** (0.08)	-0.45*** (0.08)		
Rule of Law (World Bank)			-1.19*** (0.34)	-1.42*** (0.32)
log Pop (lag)	0.38** (0.12)	0.66*** (0.11)	0.34** (0.11)	0.71*** (0.10)
Armed conflict	1.29** (0.40)	0.00 (0.35)	1.75*** (0.42)	0.56 (0.36)
PTS (lag)	0.71** (0.26)	0.86*** (0.21)	1.03*** (0.22)	1.02*** (0.18)
Electoral dem. index	-5.32 (8.71)	2.55 (7.18)	-7.44 (9.09)	0.86 (6.68)
Electoral dem. index (squ)	4.16 (6.77)	-2.37 (5.61)	5.29 (7.15)	-1.78 (5.29)
AIC	310.18	379.56	386.71	466.29
BIC	399.34	468.73	495.89	575.47
Log Likelihood	-137.09	-171.78	-172.36	-212.14
Deviance	274.18	343.56	344.71	424.29
Num. obs.	1047	1047	1338	1338

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , † $p < 0.1$ . Logistic regression. Country-clustered standard errors. Year fixed effects not shown

Table A4: Number of journalist killings (log), state and unconfirmed killings, democracies only. State: state perpetrator. Unconfirmed: unconfirmed perpetrator.

## C.4 Dependent variable: Number of journalist killings

	I-State I	II-State	III-State	IV-State	V-Unconfirmed	VI-Unconfirmed	VII-Unconfirmed	VII-Unconfirmed
Intercept	-0.28 (0.17)	-0.18 (0.18)	-0.26 (0.17)	-0.28 (0.17)	-0.50*** (0.15)	-0.46** (0.15)	-0.56*** (0.15)	-0.51*** (0.15)
Elected local gov	0.09*** (0.02)				0.03+ (0.02)			
Regional gov index		0.08*** (0.01)				0.04*** (0.01)		
Subnat. election unevenness			-0.02** (0.01)				0.00 (0.01)	
Local offices rel. power				0.05*** (0.01)				0.03*** (0.01)
Judicial Corr	0.01** (0.01)	0.01** (0.01)	0.01* (0.01)	0.02*** (0.01)	0.02*** (0.00)	0.02*** (0.00)	0.02*** (0.00)	0.02*** (0.01)
log Pop (lag)	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.02*** (0.00)	0.01*** (0.00)	0.02*** (0.00)	0.02*** (0.00)
log rGDP (lag)	0.01+ (0.01)	0.02* (0.01)	0.02** (0.01)	0.01 (0.01)	0.02*** (0.01)	0.02*** (0.01)	0.02*** (0.01)	0.02** (0.01)
Armed conflict	0.23*** (0.05)	0.22*** (0.05)	0.22*** (0.05)	0.24*** (0.05)	0.10** (0.03)	0.09** (0.03)	0.09** (0.03)	0.10** (0.03)
PTS (lag)	0.05*** (0.01)	0.06*** (0.01)	0.05*** (0.01)	0.06*** (0.01)	0.05*** (0.01)	0.06*** (0.01)	0.05*** (0.01)	0.05*** (0.01)
Electoral dem. index	-0.12 (0.41)	-0.12 (0.42)	-0.16 (0.42)	-0.05 (0.42)	-0.05 (0.36)	-0.04 (0.36)	0.04 (0.36)	-0.04 (0.36)
Electoral dem. index (squ)	0.07 (0.31)	0.09 (0.32)	0.17 (0.32)	0.00 (0.32)	-0.05 (0.27)	-0.05 (0.26)	-0.12 (0.27)	-0.06 (0.27)
R <sup>2</sup>	0.24	0.24	0.23	0.25	0.28	0.28	0.28	0.29
Adj. R <sup>2</sup>	0.23	0.23	0.22	0.24	0.27	0.27	0.27	0.28
Num. obs.	1338	1323	1335	1307	1338	1323	1335	1307
RMSE	0.21	0.21	0.21	0.21	0.17	0.17	0.17	0.17

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , + $p < 0.1$ . Linear regression. DV: Log number of journalist killings. Country-clustered standard errors. Year fixed effects not shown

Table A5: Number of journalist killings (log), state and unconfirmed killings, democracies only. State: state perpetrator. Unconfirmed: unconfirmed perpetrator.

## C.5 Types of media restrictions

	I-state	II-state	III-state	IV-unconf	V-unconf	VI-unconf
Intercept	-20.64*** (3.53)	-23.74*** (3.66)	-19.63*** (3.23)	-23.97*** (2.77)	-26.78*** (3.23)	-23.70*** (2.48)
Elected loc. gov	5.56** (1.76)	5.77** (1.75)	5.59** (1.97)	2.96** (0.99)	3.59** (1.35)	2.74* (1.18)
Judicial corruption	0.35+ (0.21)	-0.12 (0.22)	0.30 (0.21)	0.80*** (0.21)	0.24 (0.21)	0.67*** (0.19)
Econ Media Restrictions	0.49+ (0.25)			0.68** (0.26)		
Econ Media Restrictions squ	-0.02+ (0.01)			-0.03** (0.01)		
Pol Media Restrictions		0.62** (0.20)			0.24 (0.15)	
Pol Media Restrictions squ		-0.01* (0.00)			-0.00 (0.00)	
Legal Media Restrictions			0.49* (0.23)			0.56** (0.19)
Legal Media Restrictions squ			-0.01+ (0.01)			-0.02** (0.01)
log Pop (lag)	0.29** (0.11)	0.27* (0.11)	0.20* (0.10)	0.54*** (0.09)	0.69*** (0.10)	0.49*** (0.09)
log rGDP (lag)	0.07 (0.15)	0.07 (0.16)	0.12 (0.17)	0.18 (0.13)	0.25+ (0.14)	0.30* (0.13)
Armed conflict	1.53*** (0.37)	1.28*** (0.38)	1.65*** (0.37)	0.40 (0.35)	-0.03 (0.36)	0.55 (0.35)
PTS (lag)	1.13*** (0.20)	0.90*** (0.22)	1.19*** (0.20)	1.29*** (0.20)	0.87*** (0.20)	1.33*** (0.20)
AIC	391.97	374.01	387.68	462.32	423.63	462.04
BIC	506.12	488.16	501.82	576.47	537.77	576.19
Log Likelihood	-173.99	-165.01	-171.84	-209.16	-189.81	-209.02
Deviance	347.97	330.01	343.68	418.32	379.63	418.04
Num. obs.	1324	1324	1324	1324	1324	1324

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , + $p < 0.1$ . Logistic regression. Country-clustered standard errors. Year fixed effects not shown

Table A6: Determinants of journalist killings, state and unconfirmed killings, democracies only. Excluding the V-Dem Electoral Democracy Indicator, and instead including the Freedom House Measures on media restrictions. State: state perpetrator. Unconf.: unconfirmed perpetrator.

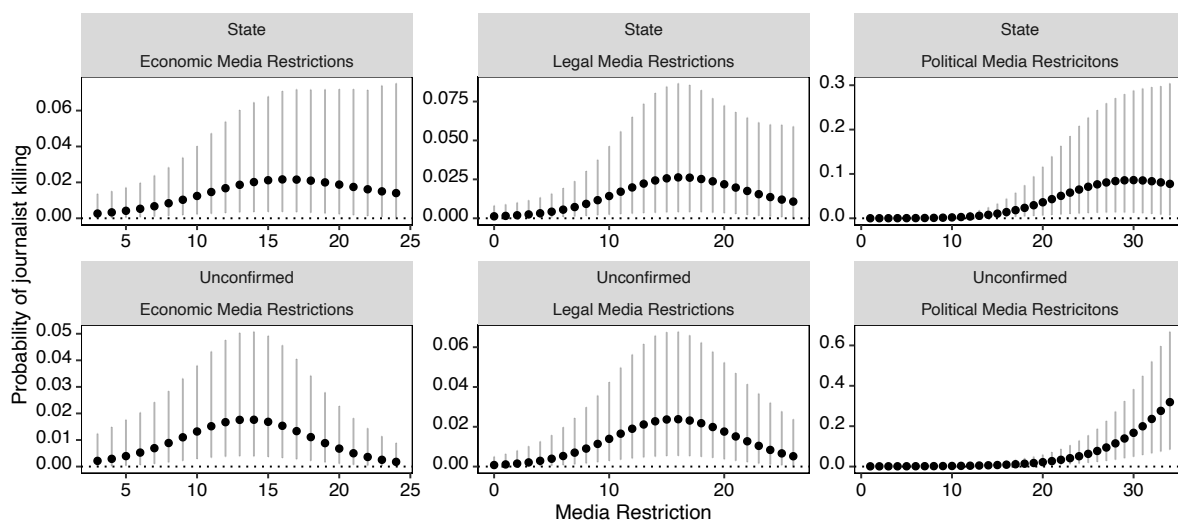


Figure A2: The relationship between economic, political and legal media restrictions and the probability of at least one journalist being killed.

	I-State	II-State-national	III-State-local	IV-Unconfirmed	V-Unconf-national	VI-Unconf-local
Intercept	-18.30*** (3.38)	-11.84** (4.22)	-19.51*** (3.56)	-19.72*** (2.30)	-14.01*** (2.57)	-20.60*** (2.27)
Elected local gov	6.40** (1.99)	3.40* (1.63)	6.06** (2.01)	3.59** (1.20)	2.36** (0.84)	3.66** (1.35)
Judicial Corr	0.40* (0.20)	0.02 (0.25)	0.38* (0.19)	0.91*** (0.19)	0.98*** (0.25)	0.80*** (0.20)
log Pop (lag)	0.27* (0.11)	0.05 (0.18)	0.32** (0.11)	0.52*** (0.09)	0.37*** (0.11)	0.56*** (0.10)
log rGDP (lag)	0.03 (0.15)	-0.12 (0.20)	0.10 (0.15)	0.13 (0.13)	-0.09 (0.16)	0.08 (0.14)
Armed conflict	1.47*** (0.38)	0.12 (0.47)	1.35*** (0.38)	0.25 (0.35)	-0.71+ (0.40)	0.11 (0.35)
PTS (lag)	1.18*** (0.20)	1.29*** (0.28)	1.21*** (0.20)	1.37*** (0.19)	1.34*** (0.29)	1.43*** (0.20)
FH Media Freedom - Econ	0.01 (0.06)	-0.09 (0.10)	0.03 (0.06)	-0.09+ (0.05)	-0.20** (0.07)	-0.08+ (0.05)
FH Media Freedom - Legal	0.06 (0.04)	0.16** (0.06)	0.05 (0.04)	0.07+ (0.04)	0.11** (0.04)	0.07+ (0.04)
AIC	393.68	264.42	381.63	468.86	322.74	443.38
BIC	507.83	378.56	495.77	583.00	436.89	557.53
Log Likelihood	-174.84	-110.21	-168.81	-212.43	-139.37	-199.69
Deviance	349.68	220.42	337.63	424.86	278.74	399.38
Num. obs.	1324	1324	1324	1324	1324	1324

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , + $p < 0.1$ . Logistic regression. Country-clustered standard errors. Year fixed effects not shown

Table A7: Determinants of journalist killings, state and unconfirmed killings, democracies only. Replicating the results from Table 1, but excluding the V-Dem Electoral Democracy Indicator, and instead including the Freedom House Measures of Legal and Economic Media restrictions. State: state perpetrator. Unconf.: unconfirmed perpetrator.

## C.6 Journalist killings by non-state perpetrators

	Non-state pol.	Non-state pol.	Non-pol.	Non-pol.
Intercept	-14.55*** (4.34)	-14.68** (4.53)	-22.81*** (3.50)	-27.14*** (3.72)
Elected local gov	-1.00 (0.96)	-1.06 (0.96)	2.69* (1.22)	2.79* (1.31)
Judicial Corr	-0.12 (0.28)		0.45*** (0.13)	
Public Sector Corr		0.26 (1.49)		2.62* (1.06)
log Pop (lag)	0.48** (0.18)	0.46** (0.18)	0.70*** (0.10)	0.73*** (0.11)
log rGDP (lag)	-0.03 (0.19)	0.00 (0.21)	0.13 (0.17)	0.24 (0.17)
Armed conflict	0.62 (0.50)	0.70 (0.52)	-0.18 (0.37)	-0.04 (0.42)
PTS (lag)	1.12** (0.37)	1.12** (0.38)	0.76*** (0.20)	0.74*** (0.20)
Electoral dem. index	5.70 (14.51)	4.77 (14.45)	5.31 (8.08)	11.07 (8.61)
Electoral dem. index (squ)	-8.15 (12.53)	-6.79 (12.40)	-4.56 (6.34)	-8.75 (6.86)
AIC	205.57	205.72	429.05	429.54
BIC	319.94	320.10	543.42	543.92
Log Likelihood	-80.78	-80.86	-192.52	-192.77
Deviance	161.57	161.72	385.05	385.54
Num. obs.	1338	1338	1338	1338

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , + $p < 0.1$ . Logistic regression. Country-clustered standard errors. Year fixed effects not shown

Table A8: Determinants of journalist killings by non-state perpetrators.  
Non-state pol.: Non-state political perpetrators. Non-pol.: Non-political perpetrator.

# D Replication of results using alternative democracy measures

## D.1 Democracy cut-off: Regimes of the World (V-Dem)

	I-State	II-State-national	III-State-local	IV-Unconfirmed	V-Unconf-national	VI-Unconf-local
Intercept	-14.40*	-6.80	-15.20**	-19.88***	-22.05**	-22.32***
	(5.65)	(7.71)	(5.65)	(4.73)	(6.91)	(4.87)
Elected local gov	3.78*	1.63	3.45*	2.81**	0.64	2.51*
	(1.56)	(1.36)	(1.53)	(1.08)	(0.97)	(1.16)
Judicial Corr	0.49*	0.02	0.47*	0.95***	0.72**	0.79***
	(0.21)	(0.24)	(0.21)	(0.19)	(0.24)	(0.18)
log Pop (lag)	0.33**	0.25	0.36***	0.65***	0.51***	0.74***
	(0.11)	(0.16)	(0.11)	(0.11)	(0.13)	(0.11)
log rGDP (lag)	0.26	0.20	0.34 <sup>+</sup>	0.41**	0.33	0.46**
	(0.18)	(0.26)	(0.18)	(0.15)	(0.20)	(0.16)
Armed conflict	0.69 <sup>+</sup>	-0.48	0.69	0.36	-0.42	0.16
	(0.42)	(0.49)	(0.42)	(0.37)	(0.49)	(0.37)
PTS (lag)	1.47***	1.48***	1.47***	1.17***	1.15***	1.22***
	(0.24)	(0.34)	(0.24)	(0.20)	(0.29)	(0.21)
Electoral dem. index	-10.80	-23.34	-11.13	-8.62	11.51	-5.67
	(13.72)	(20.33)	(13.78)	(12.87)	(18.47)	(13.16)
Electoral dem. index (squ)	6.27	13.06	6.22	5.05	-9.54	1.78
	(9.99)	(15.05)	(10.03)	(9.32)	(13.91)	(9.49)
AIC	366.47	228.24	356.34	432.59	288.62	408.14
BIC	487.07	348.84	476.94	553.19	409.22	528.74
Log Likelihood	-160.24	-91.12	-155.17	-193.29	-121.31	-181.07
Deviance	320.47	182.24	310.34	386.59	242.62	362.14
Num. obs.	1399	1399	1399	1399	1399	1399

Logistic regression. Country-clustered standard errors. Year fixed effects not shown

Table A9: Democracies only. Sample defined as countries defined as either ‘electoral democracies’, or ‘liberal democracies’ in the Regimes of the World Indicator by V-Dem. Determinants of journalist killings, state and unconfirmed killings, democracies only. State: state perpetrator. Unconfirmed: unconfirmed perpetrator. National: journalists with national reach. Local: journalists with local reach



## D.2 Democracy cut-off: Polity 2 values 7-10

	I-State	II-State-national	III-State-local	IV-Unconfirmed	V-Unconf-national	VI-Unconf-local
Intercept	-20.55*** (5.07)	-36.63*** (6.77)	-20.55*** (5.07)	-18.07*** (3.63)	-12.41** (4.54)	-21.07*** (3.56)
Elected local gov	9.84** (3.09)	8.71* (3.45)	9.84** (3.09)	5.25** (1.73)	3.68** (1.33)	5.73** (1.99)
Judicial Corr	0.72** (0.27)	0.08 (0.27)	0.72** (0.27)	0.77*** (0.21)	0.57* (0.27)	0.61** (0.19)
log Pop (lag)	0.58*** (0.16)	0.62** (0.21)	0.58*** (0.16)	0.68*** (0.13)	0.59*** (0.14)	0.75*** (0.14)
log rGDP (lag)	-0.06 (0.26)	-0.30 (0.31)	-0.06 (0.26)	0.26 (0.18)	-0.03 (0.20)	0.32+ (0.18)
Armed conflict	0.68 (0.53)	-1.54* (0.73)	0.68 (0.53)	0.03 (0.41)	-0.73 (0.49)	-0.08 (0.41)
PTS (lag)	1.46*** (0.27)	1.60*** (0.32)	1.46*** (0.27)	1.21*** (0.22)	0.97*** (0.28)	1.24*** (0.22)
Electoral dem. index	-17.30 (12.90)	-11.25 (15.87)	-17.30 (12.90)	-14.35+ (8.59)	-13.70 (10.61)	-11.63 (8.78)
Electoral dem. index (squ)	11.25 (9.84)	5.34 (12.35)	11.25 (9.84)	7.56 (6.58)	6.52 (8.77)	4.27 (6.52)
AIC	277.06	150.93	277.06	411.78	290.99	383.80
BIC	393.33	267.21	393.33	528.05	407.26	500.07
Log Likelihood	-115.53	-52.47	-115.53	-182.89	-122.49	-168.90
Deviance	231.06	104.93	231.06	365.78	244.99	337.80
Num. obs.	1159	1159	1159	1159	1159	1159

Logistic regression. Country-clustered standard errors. Year fixed effects not shown

Table A10: Democracies only. Sample defined as countries with a Polity 2 value of 7, 8, 9, or 10.

Determinants of journalist killings, state and unconfirmed killings, democracies only. State: state perpetrator. Unconfirmed: unconfirmed perpetrator. National: journalists with national reach. Local: journalists with local reach

## E Full sample analysis, including all regime types

### E.1 Journalist killings by state and unconfirmed perpetrators

To assess the impact of democracy on the killings of journalists, we use two alternative indicators for democracy. First, we rely on the minimalist dichotomous coding of political regimes by Boix, Miller and Rosato (2013). This measure allows us to clearly distinguish between countries that fulfil the basic features of democracies identified by Dahl (1971) and those that do not. As an alternative, we use a more fine grained measure for national levels of democracy with the electoral democracy index collected by V-Dem (Coppedge, 2019, 40). To account for possible non-linear relationships we include a square term of this electoral democracy measure. Models I and II use the binary regime measure from Boix, Miller and Rosato (2013) to capture the correlation between democracy and murders of journalists, Model III uses the V-Dem Electoral Democracy measure well as its squared term to account for a possible non-linear relationship, while Model IV includes various control variables. In all models we use country- and year fixed-effects to account for unobserved heterogeneity.

	I	II	III	IV
BMR Democ (0/1)	0.10* (0.04)	0.11** (0.04)		
Electoral dem. index			1.09*** (0.30)	1.06*** (0.31)
Electoral dem. index squ			-1.20*** (0.33)	-1.18*** (0.33)
Elected local gov		-0.02 (0.07)		-0.01 (0.06)
Judicial Corr		-0.01 (0.02)		-0.02 (0.02)
Armed Conflict (0/1)		0.18*** (0.03)		0.15*** (0.03)
PTS (lag)		0.04** (0.01)		0.03** (0.01)
log Pop (lag)		0.13+ (0.07)		0.07 (0.06)
log rGDP (lag)		-0.03 (0.04)		-0.06 (0.04)
Num. obs.	2390	2303	2576	2466

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , + $p < 0.1$ . Twoways fixed effects, DV: log(journalist killings)

Table A11: Determinants of journalist killings, state and unconfirmed killings (all regime types)

## E.2 Journalist killings by non-state perpetrators

	Non-state pol	Non-state pol	Non-pol	Non-pol
BMR Democ (0/1)	-0.01 (0.02)		0.04 <sup>+</sup> (0.02)	
Electoral dem. index		-0.13 (0.19)		0.10 (0.17)
Electoral dem. index squ		-0.02 (0.21)		-0.03 (0.19)
Elected local gov	-0.02 (0.04)	0.03 (0.04)	0.01 (0.04)	0.02 (0.04)
Judicial Corr	0.00 (0.01)	0.00 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Armed Conflict (0/1)	0.05** (0.02)	0.04* (0.02)	0.00 (0.02)	0.02 (0.02)
PTS (lag)	0.02** (0.01)	0.02* (0.01)	0.00 (0.01)	0.00 (0.01)
log Pop (lag)	0.04 (0.04)	0.05 (0.04)	0.05 (0.04)	0.04 (0.03)
log rGDP (lag)	-0.03 (0.02)	-0.04 (0.02)	0.03 (0.02)	0.02 (0.02)
Num. obs.	2303	2466	2303	2466

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , + $p < 0.1$ . Twoways fixed effects, DV: log(journalist killings)

Table A12: Determinants of journalist killings by non-state actors (all regime types). Non-state pol: Non-state political perpetrators. Non-pol: Non-state non-political perpetrators.

## F Sensitivity to specific cases

To more systematically investigate the sensitivity of our results to specific cases we replicate the results of the six models presented in Table 1, excluding one country at a time. Figure A3 plots the coefficients (and 95% confidence intervals) of the elected local government' variable for each replication. The Figure indicates that the estimated coefficients remain stable, therefore suggesting that the results are not substantially influenced by dynamics in individual countries.

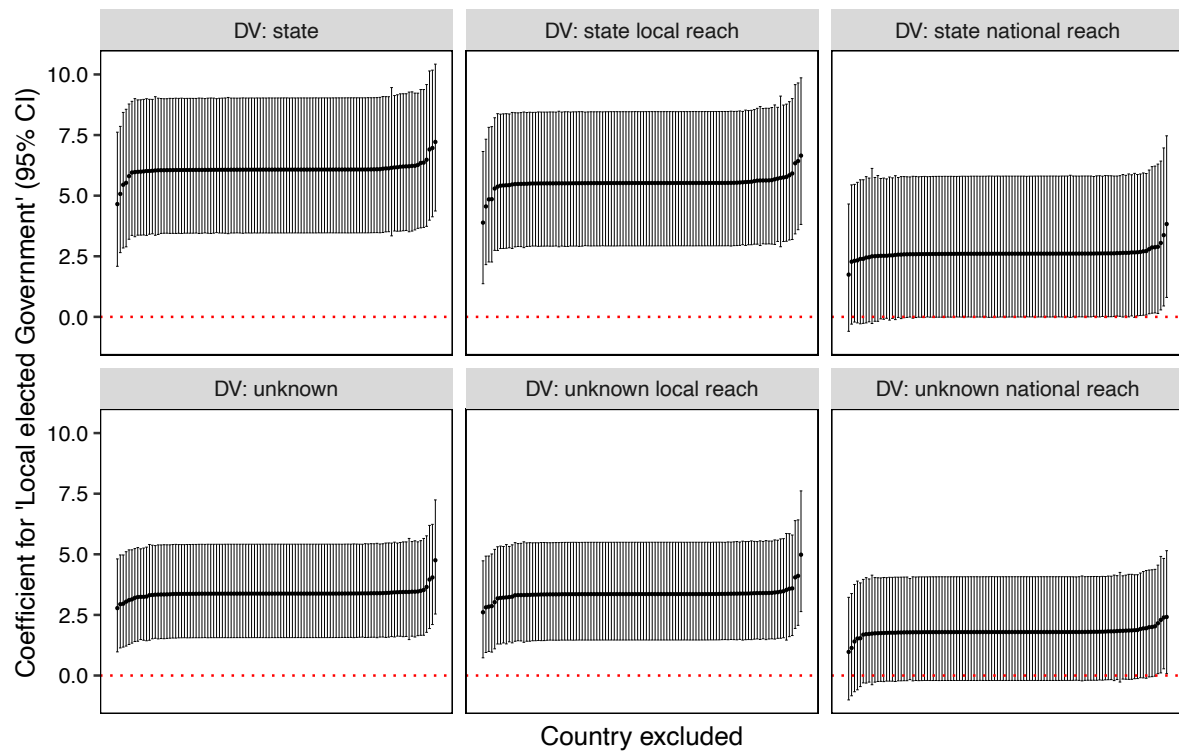


Figure A3: Coefficients of elected local government, including 95% confidence interval. Replication of models in Table 1, excluding one country at a time.

## G List of country-year observations included

Country	Years included	Country cont'd	Years cont'd
Albania	2002-2015		
Argentina	2002-2015	Macedonia	2002-2015
Australia	2002-2015	Madagascar	2002-2008
Austria	2002-2015	Malawi	2002-2015
Bangladesh	2002-2006;2009-2013	Maldives	2009-2011
Barbados	2002-2015	Mali	2002-2011
Belgium	2002-2015	Malta	2002-2015
Benin	2002-2015	Mauritius	2002-2015
Bolivia	2002-2015	Mexico	2002-2015
Bosnia & Herzegovina	2002-2015	Moldova	2002-2015
Botswana	2002-2015	Mongolia	2002-2015
Brazil	2002-2015	Montenegro	2007-2015
Bulgaria	2002-2015	Mozambique	2002;2003
Burundi	2005-2015	Nepal	2008-2015
Canada	2002-2015	Netherlands	2002-2015
Cape Verde	2002-2015	New Zealand	2002-2015
Chile	2002-2015	Nicaragua	2002-2015
Colombia	2002-2015	Niger	2002-2008;2011-2015
Comoros	2006-2015	Nigeria	2015
Costa Rica	2002-2015	Norway	2002-2015
Croatia	2002-2015	Pakistan	2008-2015
Cyprus	2002-2015	Panama	2002-2015
Czechia	2002-2015	Papua New Guinea	2002-2015
Denmark	2002-2015	Paraguay	2003-2015
Dominican Republic	2002-2015	Peru	2002-2015
Ecuador	2003-2015	Philippines	2002-2015
El Salvador	2002-2015	Poland	2002-2015
Estonia	2002-2015	Portugal	2002-2015
Fiji	2014;2015	Romania	2002-2015
Finland	2002-2015	Senegal	2002-2015
France	2002-2015	Sierra Leone	2002-2015
Georgia	2004-2015	Slovakia	2002-2015
Germany	2002-2015	Slovenia	2002-2015
Ghana	2002-2015	Solomon Islands	2006-2015
Greece	2002-2015	South Africa	2002-2015
Guatemala	2002-2015	South Korea	2002-2015
Guyana	2002-2015	Spain	2002-2015
Honduras	2002-2008;2010-2015	Sri Lanka	2002-2009
Hungary	2002-2015	Suriname	2002-2015
Iceland	2002-2015	Sweden	2002-2015
India	2002-2015	Switzerland	2002-2015
Indonesia	2002-2015	Sao Tome and Principe	2002-2015
Ireland	2002-2015	Thailand	2002-2005;2011-2013
Israel	2002-2015	Timor-Leste	2003-2015
Italy	2002-2015	Trinidad & Tobago	2002-2015
Jamaica	2002-2015	Tunisia	2015
Japan	2002-2015	Turkey	2002-2015
Kenya	2002-2015	Ukraine	2002-2015
Kosovo	2012-2015	United Kingdom	2002-2015
Latvia	2002-2015	United States	2002-2015
Lesotho	2002-2015	Uruguay	2002-2015
Liberia	2006-2015	Vanuatu	2002-2015
Lithuania	2002-2015	Venezuela	2002-2004
Luxembourg	2002-2015	Zambia	2008-2015

Table A13: Observations included in the analysis

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