

**States, the Security Sector, and the Monopoly of Violence:
A New Database on Pro-Government Militias**

Sabine C Carey, University of Mannheim & Centre for the Study of Civil War (CSCW) at PRIO

Neil J Mitchell, University College London

Will Lowe, Mannheimer Zentrum für Europäische Sozialforschung (MZES), University of Mannheim

Abstract

This article introduces the global Pro-Government Militias Database (PGMD). Despite the devastating record of some pro-government groups, there has been little research on why these forces form, under what conditions they are most likely to act, and how they affect the risk of internal conflict, repression, and state fragility. From events in the former Yugoslavia, Iraq, Sudan, or Syria and the countries of the Arab Spring we know that pro-government militias operate in a variety of contexts. They are often linked with extreme violence and disregard for the laws of war. Yet research, notably quantitative research, lags behind events. In this article we give an overview of the PGMD, a new global dataset that identifies pro-government militias from 1981 to 2007. The information on pro-government militias (PGMs) is presented in a relational data structure, which allows researchers to browse and download different versions of the dataset and access over 3,500 sources that informed the coding. The database shows the wide proliferation and diffusion of these groups. We identify 331 PGMs and specify how they are linked to government, for example via the governing political party, individual leaders, or the military. It captures the proximity of the groups to the government by distinguishing between informal and semi-official militias. It identifies, among others, membership characteristics and the types of groups they target. These data are likely to be relevant to research on state strength and state failure, the dynamics of conflict, including security sector reform, demobilization and reintegration, as well as work on human rights and the interactions between different state and non-state actors. To illustrate uses of the data, we include the PGM data in a standard model of armed conflict and find that such groups increase the risk of civil war.

Keywords: pro-government militias, dataset, conflict, armed groups

Corresponding author: sabine.carey@uni-mannheim.de

Introduction

The activities of pro-government militias have been a feature of recent uprisings, as illustrated by events in Libya, Bahrain, and Syria. Pro-government militias have been active in many different contexts around the globe, but research has not kept pace with this development, largely due to lack of systematic data. The Pro-Government Militias Database (PGMD) intends to fill this gap by identifying these militias and irregular armed groups that are linked to government authorities between 1981 and 2007.

The PGMD enables research on state capacity, human rights, and civil war to address new questions. While we know of the impact of poverty, natural resources, terrain, regime type, and ethnicity on armed conflict (e.g., Collier & Hoeffler, 2004; Fearon & Laitin, 2003; Hegre & Sambanis, 2006), less attention has been paid to agents and organizations that carry out the violence - although the importance of the organization of the security sector is recognized (Toft, 2009). Recent research has examined the fragmentation of rebel groups (e.g., Bakke, Cunningham & Seymour 2012; Cederman & Gleditsch, 2009; Cunningham, 2011), but the government usually is assumed to be a unitary actor. Case evidence suggests that this conceptualization is often misleading. Despite the effect that pro-government militias can have on the political, economic, and social stability and security of civilians, with the notable exception of Ahram's (2011a) analysis of Janowitz (1977) data, there is little quantitative research on these groups. It lags behind the case study literature in analyzing the impact of these groups with, for example, studies of death squads in El Salvador (Stanley 1996) and paramilitary groups elsewhere in Latin America (Centeno, 2002; Mazzei, 2009), the military's arming of political party organizations in Indonesia (Cribb, 2001, 233; see also Robinson's (1995, 228) discussion of "semi-official armed gangs"), or the use of the Bakassi Boys by a state governor in Nigeria (Reno, 2002).¹ There are currently no systematic measures of these informal violent organizations that act on behalf of the government.

¹ For a historical discussion of pirates and mercenaries see Thomson (1996). For a discussion of death squads see Campbell & Brenner (2000). For a discussion of Indonesia, Iraq, and Iran see Ahram (2011b).

To evaluate the conditions under which these groups form, to understand the relationship between them and the governments of the countries in which they operate, to know what is case specific and what is more general about them, and to analyze their consequences for the nature of conflict and for the prospects for peace we need such measures. The PGMD allows researchers to examine under what conditions these informal actors form and operate. It provides a missing element useful for the study of state strength, violence and human rights violations, security sector issues and the prospects for peace, and possibly political cleavages and electoral violence. As case researchers (Staniland, 2012, 23) note, there are “daunting” challenges to collecting such data. The data collection is an observational process designed to capture the variety of informal armed groups across continents while organizing knowledge of them in a coordinated and systematic way. A complete listing of all such groups would be ideal, as would comprehensive listings of all episodes of political violence or human rights violations (see Morrow, 2007, 563). Our data provide a basis for examining patterns and associations and a platform for further observations. In this article we give an overview of the theoretical argument that initiated the project, the data collection procedure and its challenges, and the features and limitations of the database. We show how the data can usefully be added to standard models of armed conflict.

Pro-government militias (PGMs)

The project stems from the puzzle of why governments with regular forces delegate to informal groups. Governments face more severe agency problems with militias, yet may be tempted to use these groups to add numbers, local knowledge, or to evade accountability for strategically useful violence as in the Sudan. The question is whether governments *can't control* or *won't control* these groups (Mitchell, 2004). This logic offers a general explanation of these groups beyond cultural explanations or Weberian accounts of militias as constitutive of state failure (Bates, 2008). We distinguish the formation of these groups from a particular condition of a country, such as disorder, civil war, or state failure. If there are general incentives to delegate to these groups (e.g. increasing deployed forces or avoiding accountability) we expect them to work across cultural, geographical, and even political systems and these groups to be more numerous and more widely distributed than Weberian conceptions of

states seeking to monopolize violence would suggest. Our data collection supports this assumption. We have identified 331 pro-government militias distributed across all continents (Antarctica excepted) between 1981 and 2007. The relationship between these groups, disorder, civil wars, and state failure are empirical questions that can be evaluated with this new dataset.

We define a PGM as a group that

1. is identified as pro-government or sponsored by the government (national or sub-national),
2. is identified as not being part of the regular security forces,
3. is armed and
4. has some level of organization.

Criterion 1: The group is identified by the media source, which is discussed in more detail below, as pro-government or sponsored by the government, either on the national or sub-national level. There are a variety of possible links between the group and the government, including information sharing, financing, equipping, training, and an operational link. We adopt a conservative approach. Simply sharing an enemy with the government or evidence that a group does not oppose the government or is simply tolerated by the government is insufficient for the group to be considered as pro-government. Depending on the available information, the data include more details on the nature of the link to government.

Criterion 2: The group is not part of the regular state security force. However, the PGM may operate with the regular forces, or even be composed of members of the security forces organized clandestinely as an unofficial or informal group (death squads). This relationship with the regular forces might include, in addition to sharing of personnel, information sharing, joint operations or training.

Criterion 3: The group is equipped for violence, but does not have to commit violence to be included. This criterion is not limited to firearms, some groups are equipped with machetes or clubs.

Criterion 4: The group has some evidence of organization, for example an identifiable leader, name, or a geographical, ethnic, religious or political basis. We exclude ‘flash’ or spontaneous mobs.

We do not select groups on how long they are pro-government, only on these four criteria. When a group fails to fulfill these, then the group is coded as terminated as a PGM according to our definition. This includes the disarmament or banning of the group by the government or its integration into the regular security forces. If a president or party ceases to be in government, then the PGMs affiliated with them also cease to be PGMs. Groups can also cease to be classified as PGMs as a result of a border change. For example, armed groups linked to the Indonesian government were active in East Timor, fighting the independence movement. These pro-Indonesia groups end in our dataset with the transition government that was put in place in East Timor in December 1999, although some of these groups were still active within Timor-Leste after 1999. But they were then linked to the Indonesian government, so no longer fit our definition of a domestic pro-government militia.

Proximity to government: Informal and semi-official PGMs

While all groups in the database are pro-government, their proximity to government varies. In some instances the government tries to keep the group at arm’s length, while in other cases governments openly create, train, and pay such groups. For example, village defense forces that have been created by governments fall under this second category, where the link to the PGM is far more open and institutionalized than in the case of the Janjaweed. As an initial effort to capture proximity to the government we use two categories, informal and semi-official PGMs.

Informal PGMs are armed, supported by or act on the side of the government and are described as pro-government, government militia, linked to the government, government-backed, or government-allied. Examples include the Young Patriots in Cote d’Ivoire, the Ansar-e Hezbollah in Iran, and the Interahamwe Militia in Rwanda during the early 1990s. ‘Death squads’, even when closely linked to the government, are normally informal and clandestine, and are categorized as informal PGMs.

A semi-official PGM has a recognized legal or semi-official status, in contrast to the looser affiliation of informal PGMs. A semi-official PGM is separate from the regular forces and identified as a distinct organization. Examples of semi-official PGMs include Village Defence Committees in India, the Revolutionary Committees in Libya under Gaddafi, and the Rondas Campesinas in Peru. In many countries, the term ‘paramilitary’ refers to regular forces, or police units with some military status and so do not enter the PGM dataset.

Overview of the PGMD

The PGMD contains open source information about pro-government armed groups obtained from LexisNexis searches of news sources from around the world. The sources include transcripts translated into English in BBC World Summaries of local news, Agence France Presse, Xinhua General News Service, and major international newspapers. Search terms included ‘government militia’, ‘paramilitary’, ‘government death squads’, ‘government irregular forces’, and ‘vigilante’ and returned numerous documents, many of them off-topic. While this broad search strategy was heavily labour-intensive, we reduced the risk of missing information. Users of the data have access to over 3,500 key sources that informed the coding decisions. The dataset covers 178 countries for the time period from 1981 to 2007, and for 88 countries we found evidence of at least one PGM during this time period.² We focus on pro-government groups active within their own borders. Acknowledging the scope of the dataset, the dynamic nature of the relationship between groups and governments, and the complicated task of imposing a uniform coding scheme on disparate open source information on a global scale, researchers made a concerted effort to cross check the information to ensure consistency. The coding has been checked independently by at least three researchers, more in most cases. But no further claims are made about the accuracy of this information.

The PGMD consists of a relational data structure that links sixteen tables representing aspects of the data, from armed groups themselves and their membership and target characteristics, to group actions, to the documentary evidence researchers used to create the dataset. Although we focus here on combinations of groups, countries, and

² We have excluded Lebanon and Somalia due to difficulties in identifying governments over the time period.

years as units of analysis, the relational structure allows separate data matrices to be constructed for any combination of our sixteen tables of information. The data structure is realized as a Sqlite database.³ The database supports distributed web-based coding and a searchable website that can be used to browse and download the PGM data.

In the following, we discuss the key variables and provide details on specific datasets drawn from our database. The data that use the pro-government militia as the unit of analysis includes variables on their links to their government and membership characteristics. The database contains information on the alleged targets and purpose of the PGMs, as well as other information discussed below.

Origin and termination

For each PGM we recorded formation and termination dates. When no such date was given in the sources, we recorded the date the group was first mentioned.⁴ As a termination date we coded the date when a group ceased to be a pro-government militia according to our definition. One difficulty was patchy information on termination. In many instances, the groups simply ceased to be mentioned in the news reports. Therefore, there is often missing data on group termination. This problem of establishing group ‘life-cycles’ is not a problem particular to PGMs, but extends to research on groups more generally (e.g., Berkhout & Lowery, 2008).

PGM characteristics

As outlined above, we distinguished between informal and semi-official PGMs. Furthermore, we identify how the PGM is linked to the government, e.g. to the state or military institution, an individual person, such as the president or a minister, a political party, or the sub-national government. We recorded all links that are identified in the sources.

³ See <http://www.sqlite3.org>. Sqlite is free relational database system that may be queried using SQL, for example via R or directly. The software necessary to query Sqlite databases directly is built into computers running Mac OSX and Linux, and is available for Windows. Sqlite databases are contained in a single file that can be easily transported between different operating systems and requires no complicated installation procedures.

⁴ Whenever we found evidence for groups preceding or succeeding other PGMs, we have recorded such links and possible name changes.

The database includes variables that capture various other characteristics including the sources of support for the groups, such as a foreign government, landowners, or being self-maintained through plunder and loot. We recorded the geographical location of the activities of the groups as precisely as possible and include a minimum and maximum headcount of each group where the sources provide these kinds of information. We recorded membership characteristics, e.g. whether it was ethnic or ideology-based, whether the group recruits children or adolescents, or whether their membership was urban or rural-based. We also coded alleged targets, such as armed and unarmed political opposition, criminals, and civilians, as well as group purposes, such as fighting insurgents, intimidating civilians, or gathering intelligence.

Procedures and missing data

Some countries or groups receive more attention than others in the news media. But we expect that the range of sources used and the length of the period for which data are collected reduce the problem of overlooking groups in less prominent countries or conflicts. Nevertheless, we expect that the dataset under-represents PGMs, which is partly a function of differences in the availability of sources across the time period.

As we rely on news sources to describe the link of a group to government, another difficulty is the potential misspecification of a PGM's relationship to the government. Using multiple sources through LexisNexis across time is likely to reduce this problem. If the source is ambiguous about the relationship between the national government and the group, or if different sources contradict each other in their classification of the link between the government and the group, more information is sought from country-specific sources and academic research. In cases where we could not establish the status of the group as separate from regular forces, we noted the group in the codebook but did not include it in the database.

The data

Between 1981 and 2007 we have coded 331 PGMs. As shown in Table I, about two thirds are classified as informal PGMs, which are loosely affiliated with and linked to the government, one third are identified as semi-official PGMs.

Table I about here

Table II about here

In Table II we identify four possible links between the militias and the government: to an institution of the state or the military, to individual members of the state apparatus, to the governing political party, or to a sub-national government. Groups can have more than one link to government. For 63% of PGMs the link was to an institution, either to the state or to the military. About a third of PGMs are linked to an individual, such as the president, prime minister or another government minister. In 16% the PGM is connected to the political party in power and in only 10% to the sub-national government. More localized groups may be less easy to observe using our search procedure.

Table III about here

Tables III and IV show common membership characteristics as well as the most frequently reported targets. Members of PGMs have a range of characteristics, without one characteristic being particularly dominant. Member characteristics were drawn inductively from the available sources. The most common characteristic, although applying to less than one third of the groups, was belonging to an ethnic group. For 22% of the groups the sources reported that ‘volunteers’ had joined the government militias, while 20% of PGMs were made up of villagers, 17% were ideology-based and also for 17% of PGMs adolescents belong to these groups. Other membership groups include former soldiers or former rebels. Staniland (2012) analyzes insurgents defecting to the government and such groups are also included in the database from the time they become pro-government.

Table IV about here

For alleged targets, we coded one or more mentions of any alleged target. Just over 60% of PGMs targeted armed opposition groups. In most cases, governments use informal armed groups to counter a threat to their rule in the form of armed opposition. At some distance, unarmed opposition, such as members of opposition

parties or outspoken government critics (in 37% of cases) and civilians (in 35% of cases) emerged as the next most common targets of PGMs. Our data collection also shows that ordinary civilians were often targeted by PGMs. Ethnic groups were also frequently identified as targets, but at 17% ethnic groups appear to be a less frequent target. It may be that opposition groups have an ethnic dimension that is not picked up in the reporting of the conflict.

In addition to the data that uses the group as unit of analysis, we provide datasets with the country-year as unit of analysis, containing basic information on the number of active PGMs and the number of countries with at least one PGM in a particular year between 1981 and 2007. To capture the duration of the militias, we used the information on origin and termination as discussed above. To circumvent the problem of missing data on termination, we recorded the years during which these groups have been found to be active. Examples of such activities could include anything from training exercises, to operations, and acts of violence. Whenever we were unable to identify a termination date for a militia, we used the last year of recorded activity as a proxy for termination.⁵ In these cases, the militia group is assumed to exist for all years between the date of origin and last year of recorded activity.

Figure 1 about here

Figure 1 presents the total number of active groups annually from 1981 to 2007. The figure shows a general upward trend throughout the 1980s and 1990s. The number of pro-government militias peaks in 1999 and then drops off substantially. We are not yet sure of the reasons behind the sharp decline of PGMs. In part this pattern could be a result of lagged reporting. Sometimes news reports published several years after the event provide further details on PGMs and their activities in earlier years.

Figure 2 about here

⁵ When neither date was available the group was considered to exist until the end of the reporting period.

Figure 2 graphs the total number of countries with at least one PGM per year. As for the data presented in Figure 1, groups with unspecified dates of dissolution are estimated to have ended in the year of their last recorded activity. Our data show a slight downward trend of the number of countries with PGMs during the 1980s, and a drop after a small increase in 2004. Again the decline towards the end of the data collection could partly be due to limited information available for the most recent time period. Countries with the highest number of PGMs are Indonesia with 37, Sudan with 21, and the Philippines with 19, possibly suggesting an “archipelago effect” where difficult terrain induces a government to rely on local forces.

Table VI about here

Table VI shows the correlation of PGMs with civil war, using the 25 battle-deaths threshold from the UCDP/PRIO Armed Conflict Dataset (ACD) (Gleditsch et al., 2002). Using country-years as the unit of analysis, 35% of PGMs are present in countries experiencing civil war. Most of the time PGMs are found outside of armed conflict. Focusing on civil wars, most civil wars are characterized by the presence of militias (64% of civil wars). In short, accounting for militias fighting on the government side is likely to be important for capturing the dynamics of internal conflict and the prospects for peace, but these groups cannot be treated as simply epiphenomenal to civil wars.

Usefulness of the data

To illustrate uses of the data, we analyze civil war, adding our PGM measure to a standard model of armed conflict. We expect PGMs to increase the risk of armed conflict because they offer governments a low-cost response to insurgents while complicating the incentive structure on which a settlement of the conflict might be built. Based on the large quantitative literature (e.g., Fearon & Laitin, 2003; Hegre & Sambanis, 2006; Ross, 2006; Wimmer, Cederman & Min 2009), the model includes mountainous terrain, ethnic exclusion, natural resources, democracy, economic development, and population size. We model the incidence of civil war not onset due to the extremely small number of onsets in our dataset, which is restricted to start in 1981. We operationalize incidence with the ACD measure mentioned above. The data

on terrain come from Fearon & Laitin (2003), resources are measured with oil production figures from Ross (2011) and GDP per capita and population size are taken from the World Bank. For ethnicity, we use the ethnic exclusion measure from Wimmer, Cederman & Min (2009) and for democracy the *xpolity* measure (Vreeland, 2008).⁶ We use a logit model with robust standard errors, clustered on countries. Similar to Ross' study (2006) on civil war, we include a counter for the peace years and three cubic splines to correct for serial correlation (Beck, Katz & Tucker, 1998). Due to data availability, our analysis covers 1981 to 2005. The first model in Table VII analyzes civil war with the standard set of explanatory variables. In the second model we add the PGM dummy variable indicating whether a country in a particular year had at least one pro-government militia (coded 1) or not (coded 0). In the third model we separate this PGM variable into two separate indicators, distinguishing between informal and semi-official pro-government militias. The findings of the first model match current research on civil war with the exception of *Mountainous terrain* and *Oil production* not being statistically significant, which might be due to the restricted time period of the analysis. The fit of the model with the PGM variable appears to be better, given the larger Wald χ^2 and pseudo R^2 statistics. The PGM dummy variable is highly statistically significant and positive. Converting the logit coefficient gives an odds ratio of 4.896; the risk of civil war occurrence is five times larger when PGMs are present. When distinguishing between informal and semi-official PGMs in the third model, again both militia variables are statistically significant at $p < 0.001$. Converting the coefficients into odds ratios, the probability of civil war is just over 2.5 times greater in countries with informal PGMs and 4 times greater with semi-official PGMs.

There are further issues to investigate including likely endogeneity between PGMs and conflict, yet this brief analysis of intrastate conflict suggests that information on PGMs may provide valuable insights beyond the standard models. For conflict scholars, informal actors are likely to influence the nature and duration of conflict. They may have incentives to act as 'spoilers' and prolong the conflict. The consequences of governments deciding to use these sorts of groups may be assessed in terms of their impact on the well-being of civilian populations and on human rights

⁶ We transformed the three transitional codes -66, -77, and -88 in line with the transformation done in the *polity2* measure (Marshall, Gurr & Jaggers, 2010).

protection using the new PGM dataset. For scholars interested in the well-being of the state, ethnic and political cleavages and the institutional bases of collective action, party politics and election violence, these groups provide an opportunity for empirical analysis.

Conclusion

Despite the sometimes highly visible activities of pro-government militias in Europe, Latin America, Asia and Africa, there has been no large-scale systematic comparative research on why these forces form and how they affect the risk of internal conflict, civil war and harm to civilians. Because of the increasing role of non-state actors generally, and the significant presence that they have had in conflicts across countries, it is important to collect information on these groups and to seek to improve transparency on their links to governments, assuming that governments that back these groups have a responsibility for their actions. The PGMD enables the academic community to investigate the conditions under which these groups are formed and dismantled and what impact they have on the security and stability of their host countries. The data will likely be useful to scholars working on state capacity and control, conflict and repression and collective action more broadly. Given the span across time and space, we expect our database to be more useful for making cross-country and cross-time comparisons than for carrying out in-depth qualitative case studies for specific countries - although given the amount of information we have gathered on the groups, we hope that our database will provide a useful starting point for such endeavours. We anticipate that the PGMD will also be of interest to policy makers, the media, and non-academic users concerned with conflict and human rights related issues. By focusing on these organizations, these data allow researchers and policymakers to obtain a more comprehensive estimate of the repressive apparatus of a country than that provided by relying on the size of formal security forces alone. Beyond the problem of theories focusing attention on state actors rather than non-state actors, there is simply a lack of available data on these groups. The Pro-Government Militias Database addresses this deficit.

Data Replication

The dataset, codebook, and do-files for the empirical analysis in this article can be found at <http://www.prio.no/jpr/datasets> and at <http://www.sowi.uni-mannheim.de/militias/>.

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Biographical Statement:

SABINE C. CAREY, b. 1974, PhD in Government (University of Essex, 2003); Professor, University of Mannheim (2010-); Research Professor, Centre for the Study of Civil War (CSCW) at PRIO; main research interests: violent conflict, human rights. Most recent book: *The Politics of Human Rights: A Quest for Dignity* (Cambridge University Press, 2010), with Mark Gibney and Steven C. Poe.

NEIL J. MITCHELL, b. 1953, PhD in Political Science (Indiana University, 1983); Professor, University College London (2011-); Associate, Centre for the Study of Civil War (CSCW) at PRIO; research interests: conflict, human rights, non-state actors. Most recent book: *Democracy's Blameless Leaders* (NYU Press, 2012).

WILL LOWE, b. 1973, PhD in Cognitive Science (University of Edinburgh, 2001); Senior Researcher, Mannheim Centre for European Social Research (MZES), University of Mannheim (2011-); main research interests: political methodology, text analysis. Work published in *Political Analysis*, *International Organization*, *Journal of Peace Research*, *China Quarterly*.

Table I. PGM types

Type	Freq.	Percentage
Informal PGMs	219	66%
Semi-official PGMs	112	34%
Total	331	100%

Table II. Links to government

Government Link	Freq.	Percentage
State or military institution	210	63%
Individual state official	117	35%
Political party	54	16%
Sub-national government	34	10%
Unclear	4	1%
No information	5	2%

The percentages do not add up to 100 since a group can have multiple links to government.

Table III. Most common member characteristics

Member Characteristic	Freq.	Percentage
Ethnicity	91	27%
Volunteers	74	22%
Village/rural areas	58	18%
Ideology	55	17%
Adolescents	56	17%
Religion	42	13%
Security forces	41	12%
Party activists	40	12%

The percentages do not add up to 100 as a group can have multiple membership characteristics.

Table IV. Most common PGM targets

Target	Freq.	Percentage
Armed opposition	201	61%
Unarmed opposition	122	37%
Civilians	117	35%
Ethnic group	55	17%

A group can have multiple targets. The percentages do not add up to 100 as a group can have multiple membership characteristics.

Table V. PGMs and armed conflict

PGMs	Uppsala/PRIO Armed Conflict		Total
	0	1	
0	2,973	180	3,153
	94.29%	5.71%	100%
	83.14%	35.86%	77.32%
1	603	322	925
	65.19%	34.81%	100%
	16.86%	64.14%	22.68%
total	3,576	502	4,078
	87.69%	12.31%	100%
	100%	100%	100%

Table VI. Logit estimates on the incidence of intrastate conflict, 1981-2007

	Standard model	PGM variable	Two PGM types
Pro-government militias		1.588*** (0.212)	
Informal PGMs			0.966*** (0.258)
Semi-official PGMs			1.474*** (0.237)
GDP per capita ^a	-0.538*** (0.144)	-0.450*** (0.134)	-0.452*** (0.133)
Population size ^a	0.261** (0.099)	0.110 (0.104)	0.079 (0.104)
Regime type	0.063* (0.026)	0.046 (0.024)	0.047 (0.024)
Oil production ^a	0.012 (0.017)	0.003 (0.016)	0.004 (0.016)
Size of excluded population ^a	0.166*** (0.035)	0.129*** (0.033)	0.125*** (0.033)
Mountainous terrain ^a	0.087 (0.075)	0.099 (0.082)	0.134 (0.084)
Peace years	-2.376*** (0.200)	-2.143*** (0.192)	-2.114*** (0.194)
Spline 1	-0.196*** (0.024)	-0.175*** (0.023)	-0.172*** (0.024)
Spline 2	0.039*** (0.006)	0.035*** (0.006)	0.034*** (0.006)
Spline 3	-0.004* (0.002)	-0.003 (0.002)	-0.003 (0.002)
Constant	2.900* (1.329)	2.748* (1.331)	2.972* (1.318)
Wald Chi-squared	450.07***	482.11***	512.94***
Pseudo R-squared	0.56	0.59	0.60
Pseudo Log-Likelihood	-674.09	-624.72	-620.64
Number of clusters	144	144	144
Number of observations	3127	3127	3127

Values are coefficients with robust standard errors in parenthesis, clustered on countries.

* p<0.05, ** p<0.01, ***p<0.001

^a Natural log was taken of these variables, with 0.5 being added to all values beforehand.

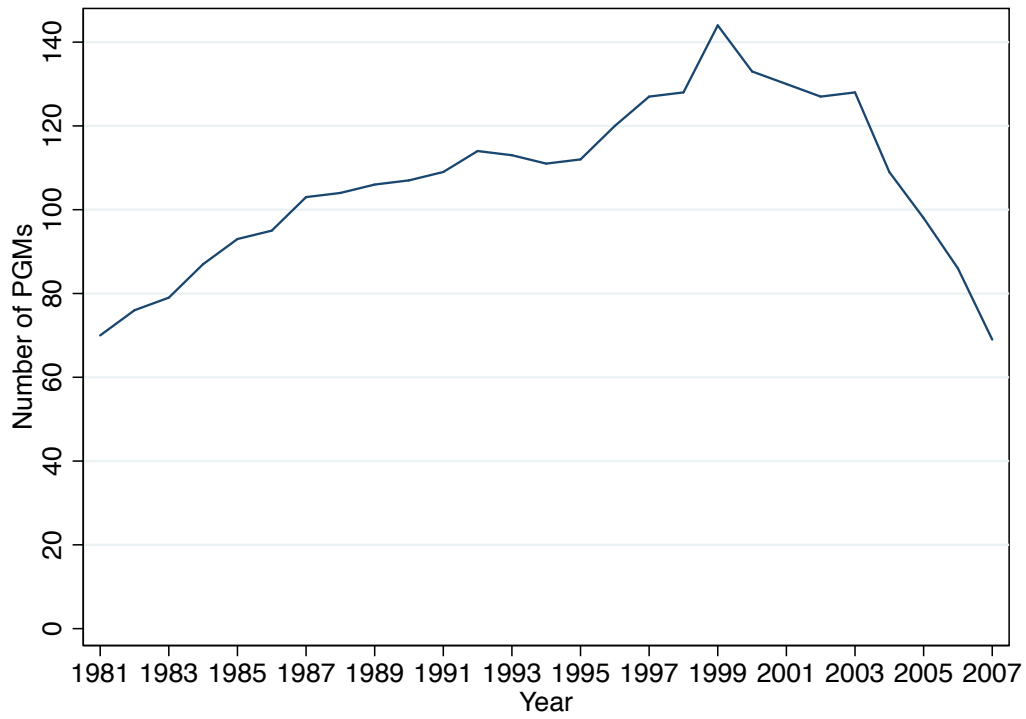


Figure 1. Number of PGMs worldwide, 1981-2007

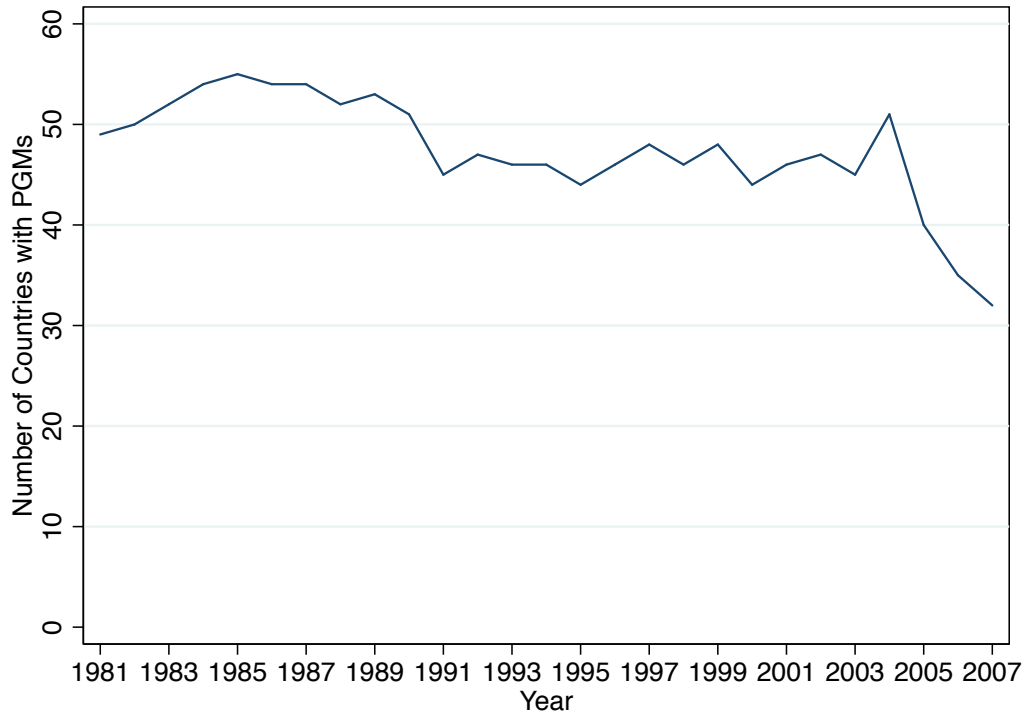


Figure 2. Number of countries with at least one PGM, 1981-2007