Online Appendix

Henry Thomson, "The Bureaucratic Politics of Authoritarian Repression: Intra-Agency Reform and Surveillance Capacity in Communist Poland", *Political Science Research and Methods*.

Contents

1 Matching Pre- and Post-Reform Districts **2**

2 Descriptive Statistics **5**

3 Parallel Trends Assumption **9**

4 Covariate Balance Tests **9**

5 Full Results of Event Study 1957–80 **12**

1 Matching Pre- and Post-Reform Districts

To construct my dataset and the *District Split* variable, I match post-reform voivodships to the territory of pre-reform administrative districts. I do so using maps by Martí-Henneberg (2005) shown in Figure A1. I match post-reform voivodships to pre-reform units by assigning the new regional municipal administrative centers to their respective pre-reform voivodships. For example, the post-reform voivodship of Elblag on the Baltic coast in northern Poland is matched to the pre-reform unit of Gdansk, because its municipal center lay within the old borders of that voivodship, although part of its territory lay in post-reform Olstyn. This logic of matching follows the location of the new state security organizations, while also prioritizing the largest and most important urban areas, which became the municipal administrative centers hosting the organizations after the reform. It generates the coding presented in Table A1.

In many cases, the matching of smaller post-reform voivodships to the larger pre-reform voivodships was unproblematic. For example, Zielona Gora on the country's western border was essentially divided in two after 1975, with only a very small overlap between the new unit of Gorzow Wielkopolski and the older voivodship of Szczecin. Three voivodships were not divided at all through the reform and their boundaries remained very similar, for example Opole in the south. In some cases, however, the matching of pre- and post-reform units based on the location of administrative centers was problematic, most notably in the south-east of the country. The new voivodship of Tarnobrzeg was created from almost equal shares of three pre-reform units' territory, and the new unit of Bielsko-Biala was created from equal shares of the Krakow and Katowice voivodships. Because I have less confidence that matching the administrative centers of these areas to their pre-reform voivodships accurately matches the pre-reform and post-reform populations under surveillance, I exclude four south-eastern pre-reform voivodships—Katowice, Kielce, Krakow and Rzeszow—from my analyses, except

where I explicitly state otherwise.

Table A1: Matching Polish Voivodeships (*Województwo*) Pre-1975 and Post-1975

Pre-1975	Post-1975	Split	Magnitude	Problem
Bialystok	Bialystok, Suwalki, Lomza	Yes	2	No
Bydgoszcz	Bydgoszcz, Torun, Wloclawek	Yes	2	No
Gdansk	Gdansk, Elblag	Yes	1	No
Koszalin	Koszalin, Slupsk	Yes	1	No
Lublin	Lublin, Chelm, Biala Podlaska, Zamosc	Yes	3	No
Lodz, Lodz (Rural)	Lodz, Skierniewice, Sieradz, Piotrkow Tryb	Yes	2	No
Olsztyn	Olsztyn	No	0	No
Opole	Opole	No	0	No
Poznan	Poznan, Konin, Leszno, Kalisz, Pila	Yes	4	No
Szczecin	Szczecin	No	0	No
Warsaw, Warsaw (Rural)	Warsaw, Ostroleka, Ciechanow, Plock, Siedlce	Yes	3	No
Wroclaw	Wroclaw, Jelenia Gora, Legnica, Walbrzych	Yes	3	No
Zielona Gora	Zielona Gora, Gorzow Wlkp	Yes	1	No
Katowice	Katowice, Czestochowa, Bielsko-Biala	Yes	2	Yes
Kielce	Kielce, Radom	Yes	1	Yes
Krakow	Krakow, Tarnow, Nowy Sacz	Yes	2	Yes
Rzeszow	Rzeszow, Krosno, Przemysl, Tarnobrzeg	Yes	3	Yes

Figure A1: Map of Polish Voivodships Pre- and Post-1975 Reform

2 Descriptive Statistics

Collaborators is the annual number of secret collaborators registered with the Security Service of the Polish Ministry of Internal Affairs in each voivodship, collected from Ruzikowski (2003). These data are based on internal reports that have been made available to researchers in the archives of the former secret police agency in Warsaw. They are summaries of the numbers of private citizens providing information and assistance to the state security apparatus in domestic surveillance and repression. They exclude those employed in foreign and military intelligence or counter-intelligence, professionals used in surveillance operations, and individuals working within the state security bureaucracy, for example in the passport or censorship office.

I aggregated annual data on the number of collaborators per voivodship following the coding scheme laid out in Table A1. All collaborators registered with a post-reform voivodship state security office are therefore assigned to the pre-reform voivodship within which that office was located. In this way, I create a balanced voivodship-year panel dataset from 1950-1984, where the units of analysis are pre-reform voivodships. As I show in the left-hand panel of Figure A2, the *Collaborators* variable is right-skewed. It ranges from 74 to 2,752, has a mean of 844 and a standard deviation of 429. In the right-hand panel of Figure A2, I show that the number of collaborators in an area is positively correlated ($r = 0.57$) with the population of the voivodship during the period under analysis.

The 1975 administrative reform affected all but three voivodships. The binary *District Split* variable therefore takes a value of one after 1975 for all areas except Olsztyn on the Baltic coast, Opole in the south, and Szczecin on the north-western border. These are the control cases for my analysis, and contribute 66 (20%) of the 336 observations included in my main models.

The binary *District Split* variable obscures significant variation in the number of new

administrative units created in the pre-1975 voivodships. The *Split Magnitude* variable captures the increase in the number of regional state security organizations created through the administrative district reform. Before the reform, the districts of Łodz and Warsaw included both municipal and rural divisions, so had two state security organizations, while all other voivodships had only one. The increase in the number of state security offices in each voivodship in 1975 ranged from zero in the three cases described above to four in Poznań. Four voivodships saw an increase of two offices, while increases of one and three were both seen in three cases. There is therefore a relatively equal distribution of observations across the five categories of the *Split Magnitude* variable.

To give an indication of the magnitude of threats' effect on the development of the Bezpieka's secret collaborator network, I created a binary variable *Unrest 1976*. This variable is coded as one if a pre-reform voivodship experienced a strike or more violent form of social unrest during the wave of mass anti-regime contention in June 1976. I collected this data from Bernhard (1987). The 1976 uprising was a response to announced food price increases and most intense at the Ursus tractor works outside Warsaw and the General Walter weapons factory in the city of Radom in the Kielce district. However, it spread to generate strikes in Gdansk and numerous other centers across the country. The *Unrest 1976* variable is coded as one for eleven districts and zero for six. I only include this variable in Model 1.6 in Table 1. Readers should note that the inclusion of this post-treatment control does raise endogeneity concerns, specifically if there was a direct or indirect effect of the 1975 reform on the likelihood of unrest in 1976—which cannot be ruled out. Readers therefore should interpret the results of Model 1.6 with caution. I base my strongest conclusions on the causal effect of intra-agency reforms on collaborator network density on models which do not include the *Unrest 1976* variable.

Figure A2: Collaborator Data, by Pre-Reform Voivodship

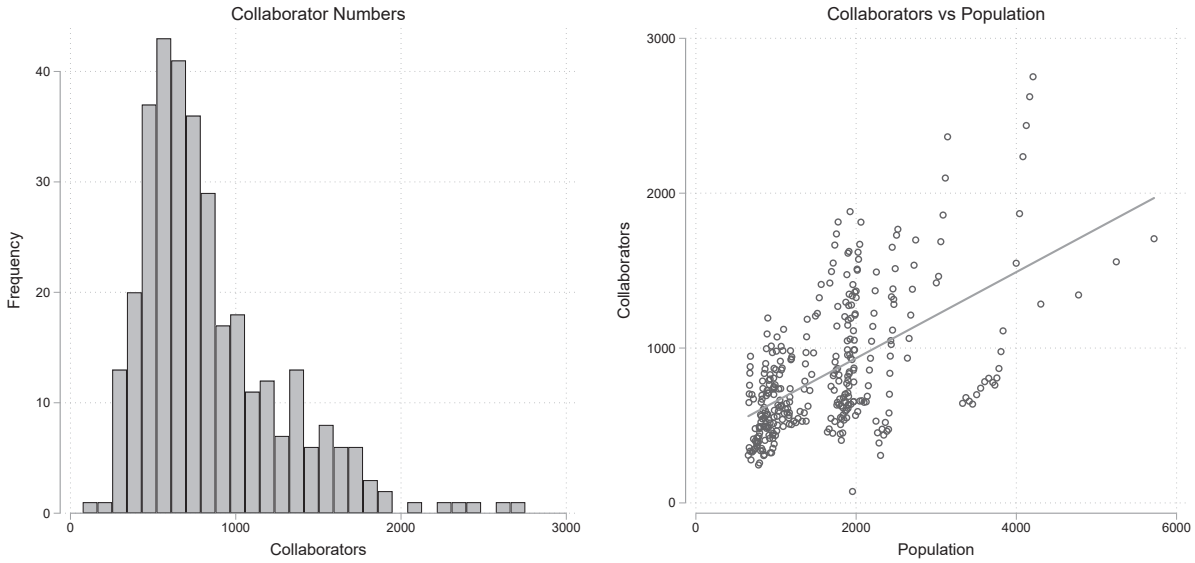
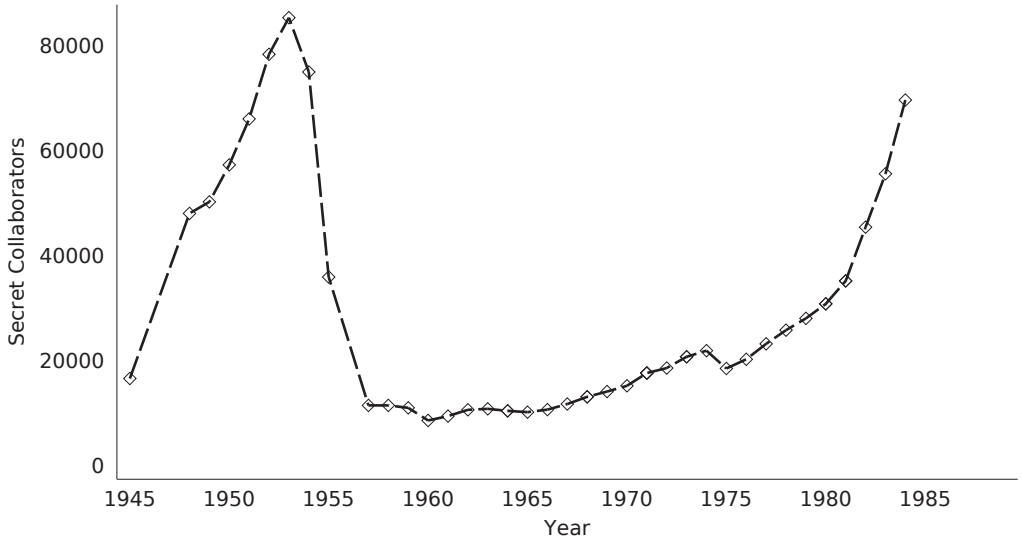


Table A2: Summary Statistics

Variable	**Mean**	**Std. Dev.**	**Min.**	**Max.**	**N**
Collaborators	1598.919	1525.76	28	9521	595
Split	0.824	0.382	0	1	595
Split Magnitude	1.824	1.151	0	4	595
Unrest 1976	0.647	0.478	0	1	595

Figure A3: Aggregate Secret Collaborator Numbers in Poland, 1950-1984



3 Parallel Trends Assumption

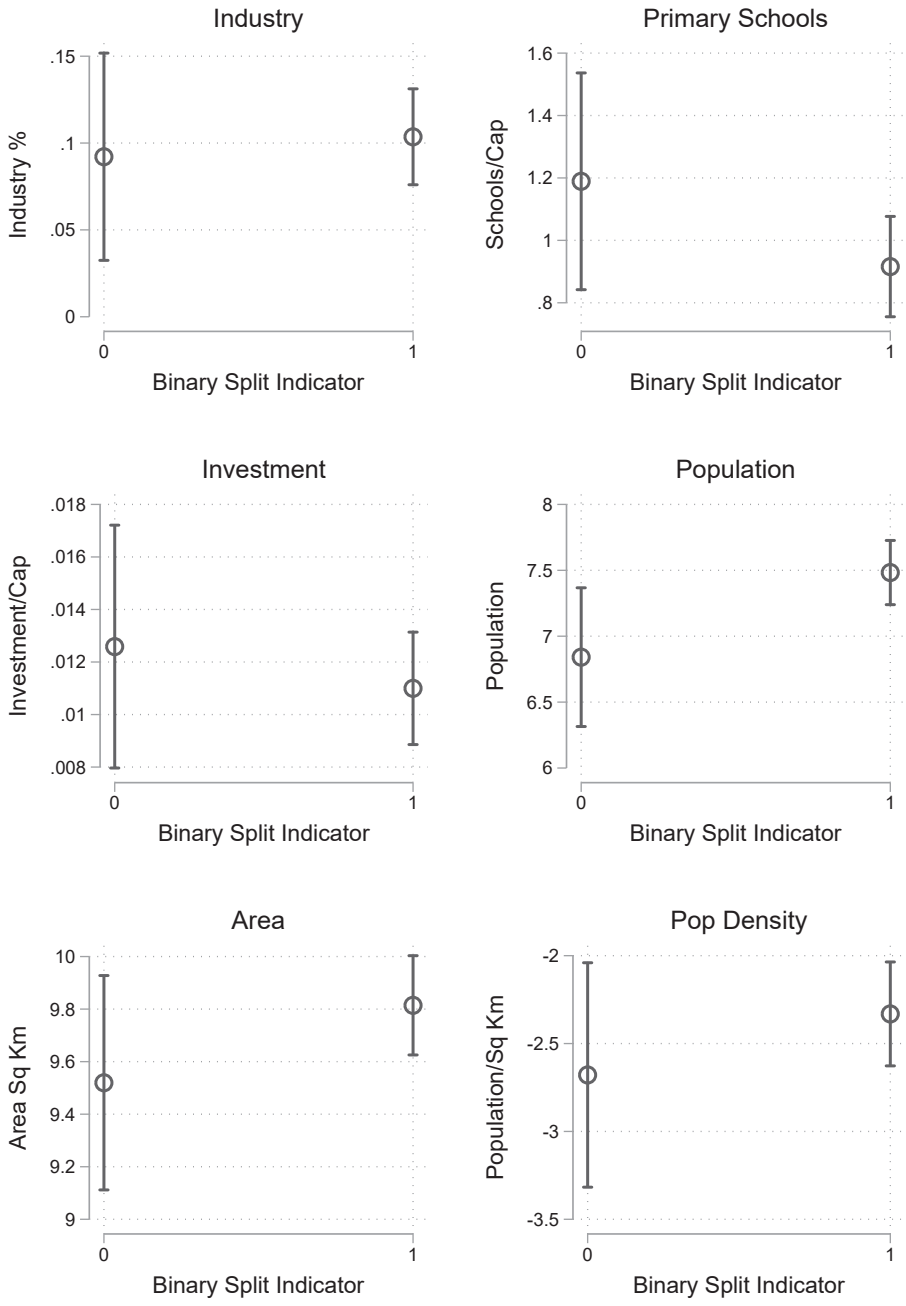
The causal effect of secret police offices on collaborator numbers can be estimated if the trends in collaborators across the two groups of districts—those that were split by the reform and those that were not—are parallel before the administrative reform (Angrist and Pischke, 2009, 230–31). In the left-hand panel of Figure 2, I show the trends in the average number of collaborators from 1970–80 for the districts that were split and those which were not. In both groups, average collaborator numbers were increasing at a very similar rate before the 1975 reform. They grew at an average of 7.4% per annum between 1960 and 1974 in unreformed districts, and 7.6% in reformed districts. There were fewer collaborators in those areas that were not split, which can be attributed to these districts' smaller average size. Both sets of districts experienced a sudden decline in collaborator numbers in the year the administrative reform was implemented, and this decline appears to have been somewhat more severe in the untreated areas. However, more striking is the divergence in the trends of average collaborator numbers after the 1975 reform. The treated, or split, districts' collaborator networks grew at 11% per annum between 1975 and 1980, almost double the 5.7% rate observed in those voivodships which were not divided into multiple administrative units with independent secret police administrators. In the right-hand panel of Figure 2 I present an identical graph, distinguishing by the magnitude of the voivodship split. Here, the parallel trends assumption also holds before 1975, and collaborator numbers increase at a faster rate after the reform for those areas which were split into more administrative units.

4 Covariate Balance Tests

It is important to consider whether the *District Split* variable represents an endogenous treatment, whereby the state was responding to opposition or other political objectives in carrying out the administrative reform. This does not appear to be the case. Districts

that were not split are distributed widely across the country and varied in their degree of urbanization and the presence of opposition to the regime. Olsztyn, for example, is a very rural northern district and was not a major site of opposition to the government. Opole is a more densely populated industrial southern district on the Czechoslovak border. Szczecin is a major Baltic port on the East German border, an industrial center and was the location of a major shipyard that staged a strike during the nationwide unrest of June 25, 1976 (Bernhard, 1987, 386). In Figure A4, I present the results of linear regressions modeling differences in six pre-reform (1965) characteristics across treated and untreated districts: industrialization, capital investment per capita 1961–65, primary schools per capita, total population, area and population density. These balance tests indicate no significant differences in these characteristics across the two groups of districts, except population. We therefore cannot say that there is a significant geographic, socio-economic or political bias in the areas that were subject to the treatment of an administrative reform in 1975. Administrative district proliferation was not confined to specific areas where we might expect the state to have intended significantly more state security collaborators or growth in the collaborator network.

Figure A4: Balance Tests. Differences Across Reformed and Non-Reformed Districts, 1965



5 Full Results of Event Study 1957–80

Figure A5: Effects of District Split Through Time, A3.4, Table A3

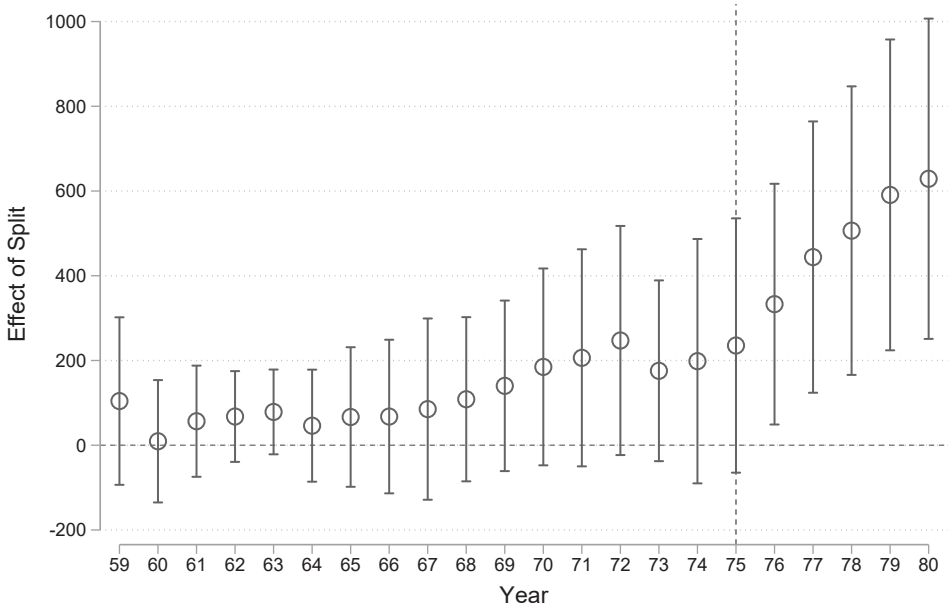


Table A3: Event Study Model Results

	(2.1) 1969-80		(2.2) All Dist		(2.3) Split ¡4		(2.4) All Years	
Split*1970	44.73	(28.51)	35.93	(27.25)	41.60	(29.17)	184.91	(107.52)
Split*1971	66.15	(57.77)	68.19	(52.11)	67.83	(60.88)	206.33	(118.58)
Split*1972	107.00	(84.58)	114.79	(77.16)	108.20	(89.05)	247.18*	(125.16)
Split*1973	35.55	(57.29)	52.21	(53.00)	29.90	(60.44)	175.73*	(98.75)
Split*1974	58.24	(94.62)	63.69	(89.75)	49.03	(97.85)	198.42	(133.48)
Split*1975	95.21	(90.01)	141.17	(92.91)	67.57	(93.70)	235.39	(138.92)
Split*1976	192.82	(111.50)	260.71*	(125.60)	170.00	(119.47)	333.00**	(131.49)
Split*1977	303.88**	(133.18)	380.48**	(155.66)	274.03*	(142.07)	444.06**	(148.20)
Split*1978	366.33**	(151.66)	477.12**	(177.33)	331.83*	(160.47)	506.52***	(157.61)
Split*1979	450.64**	(169.05)	578.43***	(197.77)	405.00**	(174.63)	590.82***	(169.78)
Split*1980	488.76**	(170.42)	621.74***	(196.40)	430.17**	(171.36)	628.94***	(174.95)
Observations	168		204		156		322	
Districts	14		17		13		14	

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$