Political Connections and Purges of State Security Officials Under Stalin

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Abstract

Insofar as state capacity is fundamentally a measure of a state’s power, its ability to effectively organize and deploy coercion is an integral part of building state capacity. This paper seeks to uncover and test the micro-level implications of theories of authoritarian consolidation and elite interaction by exploring the patterns of political purges among low to mid-level state security workers and how they connect to ties with higher-ranking officials. An analysis of a historical dataset consisting of NKVD workers in the 1930s reveals that low-ranking officials with connections to purged officials were more likely to be purged themselves.

1 Introduction

How does an autocratic principal construct organs of repression to bolster his coercive state capacity while preventing the selfsame apparatus from turning against him? The autocrat must organize domestic security organs to prevent the population and other

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elites from plotting against him. Yet, in constructing this apparatus, the principal endows regime elites within these organs with coercive capacity that has the potential to overthrow the principal. This constitutes a fundamental principal-agent problem of building coercive state capacity. Unlike typical principal-agent problems involving officials refusing to exert effort or the problem of aligning policy preferences, the agency problems between an autocrat and his security organs is an immediately existential one for both parties.

I argue that one manner in which an autocratic principal may solve this problem without excessively undermining coercive capacity is through purging his security apparatus, specifically targeting both high-ranking and low-ranking individuals so as to preemptively undermine collective action capacity among factional groups in the organ’s hierarchy. My analysis confirms this idea, demonstrating that a purge of low-ranking state security workers in the Soviet Union under Stalin was driven by factional ties to purged high-ranking workers, rather than purges as motivating instruments of random terror.

This work contributes to the literature on authoritarian institutions, authoritarian elite coalitions, coup-proofing, bureaucratic promotion, and state capacity literatures. It provides a micro-level test of the implications of existing elite coalition theories, as well as illustrating a specific mechanism through which principals may resolve agency problems inherent in building coercive capacity. It also provides a first glance into the political purge, a phenomenon that has been understudied on a systematic basis.

The ”institutional turn” in authoritarian politics has provided key insights into the function of ”seemingly democratic” authoritarian institutions once thought to be mere window-dressing, such as parties, parliaments, judiciaries, and elections. However, as Pepinsky (2014: 650-651) notes, authoritarian regimes do a lot more than ”regime survival and general public policies”, and unpacking the mechanisms of managing the repressive organs is understudied in this literature. Exceptions include Greitens (2016), which explores how leaders designs and builds their coercive organs in response to
the types of threats (external/internal, peripheral/central, popular/elite) and Policzer (2009) examines the problem of organizing coercion, and explores the strategies used by Pinochet to impose accountability on his repressive apparatus.

The coup-proofing literature has extensively studied the institutional and personnel countermeasures autocrats take with regard such threats arising from the military. Leaders employ measures such as dividing the armed forces and creating parallel units outside of the normal hierarchy (Quinlivan 1999; Svolik 2013; Belkin and Schofer 2005; De Bruin 2018), as well as entrusting command to individuals with shared identities (Harkness 2016) can be effective in preventing coups, though these measures can come at the cost of competence (Pilster and Böhme 2011). While macro-mechanisms of coup-proofing and their effects have been well studied through comparative methods, how principals may address agency problems within a single bureau has been under-explored.

This work also touches on the authoritarian elite coalition literature (Mesquita et al. 2005; Svolik 2012, 2009; Egorov and Sonin 2011; Boix and Svolik 2013; Zakharov 2016). One relevant aspect is the theory on authoritarian consolidation, where a leader in an oligarchic autocracy is able to concentrate power to himself over time and decrease the influence of other elites in government (Svolik 2012, 2009), as Stalin did through the 1930s. Svolik (2012) argues that leaders and elites are in a repeated signaling game, which starts out as a contested autocracy where the elites threat to rebel is a credible one, but a leader is able to contest his ruling coalition with a positive probability of success. If the leader is lucky enough to repeatedly contest his elites, then the regime becomes a established autocracy and the elites cannot credibly threaten to rebel against the elite (Svolik 2012, 62-63). In addition, Woldense (2018) demonstrates that during King Heile Selassie’s reign in Ethiopia sought to prevent the formation of threatening cliques through shuffling officials, albeit within “clusters of different branches” to encourage expertise.

A key moving part of these theories is the collective action capacity of regime elites, as well as their power. How authoritarian leaders may undermine the collective action
capacities of regime elites, and on what basis such elites may constitute their power on, has been under-explored.

This paper also builds upon the extensive literature on political selection, which largely studies the characteristics of bureaucratic promotion in Communist China; the literature found that while objective performance matters for promotion, factional ties to high-ranking patrons matters for political selection in China (Shih and Lee, 2016). Further work in this context demonstrates that the death of one’s patron can disadvantage his career prospects (Shih, Adolph and Liu, 2012; Jia, Kudamatsu and Seim, 2015).

More recent works focusing on the anti-corruption campaigns has begun to address the issue of political repression and purges of the party-state apparatus. For example, Shih and Lee (2018) shows that purges of patrons disadvantage their clients career prospects, and increases the likelihood of dismissal. Furthermore, Manion and Li (forthcoming) studies the effect of the new anti-corruption campaigns under Xi Jinping and finds that the purge environment induces officials to promote un-connected subordinates for the sake of signaling the center that they are not attempting to push their factional interests.

Much of the existing work on political selection focuses on the effects of promotion, and explores how ties are related to positive outcomes. Yet, there is a dearth in the negative consequences of cultivating ties with patrons who fall in factional politics or are purged by the center. Given that autocracies frequently engage in the repression of their own officials, both in the low and high ranks, it is vital to explore the mechanisms and patterns of purges in autocratic hierarchies.

Furthermore, most of these papers study civil officials, who do not constitute an immediate existential threat to the autocratic principal. Whether similar logics play out within the coercive organs, and whether this applies across cases is not clear. This study applies the methods developed in this literature to the understudied phenomenon of political purges within the coercive organs of the state. Furthermore, this study introduces the logic of undermining networks of collective action capacity throughout the coercive
Finally, this paper addresses a gap in the state capacity literature, which is the that the organization of *domestic* coercive capacity is under-studied. Much of the work on the relationship between infrastructural and coercive capacities have focused on the relationship between the two (Fortin-Rittberger, 2014). The agency problems entailed in building such capacity is left under-explored. Furthermore, much of the literature on coercive state capacity focuses on the military due to bellicist state formation theory, which stipulates that warmaking (sometimes in conjunction with the development of finance) led to enhancements in state capacity, especially fiscal capacity (Tilly, 1985, 1993; Besley and Persson, 2009; Queralt, 2018). While this may be true, the empirical analysis tends to focus on military capacity, which tends to be less than optimal for domestic coercion. In contrast, the qualitative and historical literature both point to the importance of policing and secret policing in the transition to modern regimes of state power which entail pervasive state penetration (Foucault, 2012; Gurr, 1988; Miller, 1986).

This study takes the first steps in dissecting the internal logic of an otherwise obscured type of modern state organ, the state security organ. This type of organization arose through French absolutism and was disseminated across European absolutist states such as Prussia and Imperial Russia (Liang, 2002). Through the turmoils of Jacobin terror and Napoleonic aggression, such organs were further developed and disseminated. They finally culminated in the state security apparatuses deployed by high modernist autocracies in the twentieth century, many of which continue operations to this day.

Past works that focus specifically state security organs have examined how autocrats may attempt to solve agency problems through re-organization and exposure, or how emerging autocrats designed their security organs according to the types of internal and external threats that they faced. This work focuses on the use of political terror within such organizations, specifically the terrifying situation of the political purge, and how they may be used to constrain agency problems through constraining collective action.
within a state security organ.

Such a focus is not constrained to the Stalinist case, or to twentieth century “totalitarian” regimes: the political purge has been going on in many autocracies with varying degrees of violence and thoroughness. Two recent examples include the purge of the security forces and the civil bureaucracy in Turkey under Recep Tayyip Erdoğan following the 2016 coup attempt, and the ongoing anti-corruption campaign in Communist China under Xi Jinping, which some argue is a purge event (Bekdil, 2017; Charting China’s ‘great purge’ under Xi, 2017).

This study finds that the patterns of low-ranking purges follows the theoretical logic of undermining collective action through purging not only high-ranking officials, but also key elements of their networks within the lower ranks, and corroborates the idea that state leaders can use the purge as a tool of undermining elite challenges.

The introduction follows with a brief discussion of the historical case background. The second part of this paper elucidates the theory, the third part describes the data, the fourth part demonstrates the analysis, and the fifth and final part concludes.

1.1 Case Background

Following the murder of Old Bolshevik and Stalin associate Sergei Kirov, Stalin began the Great Terror, which was a bloody purge of both the party-state and of society, with many falsely accused and executed without trial (Getty et al., 2002, 71-73,209) The People’s Commissariat for Internal Affairs (NKVD), which ran police, security services, and the labor camps (along with many other functions), was the apparatus implementing this terror. As they were themselves purging the rest of the party-state and society, they too were purged, and many of them were also purged immediately following the end of the Great Terror. NKVD chiefs Yagoda and Yezhov were successively purged until Stalin settled on fellow Georgian Lavrenty Beria who kept his position until Stalin’s death. Under Yezhov, high-ranking security officials were also extensively replaced and many
were shot (Pringle, 2004).

Memorial’s study suggests that 2,273 security officers were arrested in the twenty-three months that Yezhov commanded the service, 1,973 for alleged counterrevolutionary crimes. Of the more than 250 senior Staire Chekisti (Old Chekists) identified in the Memorial study as members of the Yagoda generation, few survived the blood-letting of 1937–1938. (Pringle, 2004, 118)

Many low-ranking NKVD officials were also arrested and sent to camps or shot, though many were rehabilitated for the war. The official justification for these arrests were that these workers had contravened socialist legality;

We have purged the NKVD only of those who, in committing such offences, had demonstrated initiative and malice and were motivated by selfish and hostile intentions. (Khlevniuk, 2003, 32)

However, given that such abuses were universal within the lower ranks of the NKVD, one can reasonably suppose that they were all guilty of violating socialist legality. This provides a fruitful case with which to explore the theoretical question, since this implies that the purges were probably not due to performance. This analysis can therefore examine the effects of factional ties and other factors on these purges.

2 Theory

What actually happens when an autocrat contests his elites, or purges them? Formal models on elite-leader dynamics tend to endow elites with some attribute of power. Besides the obvious issue of collective action on the part of elites, the actual mechanism of how these elites are endowed with power is generally not addressed. This paper argues that one basis of elite power may be the ties that high-ranking elites construct and maintain with lower-ranking elites, which adds a key set of players to the theoretical
model, mainly the individuals who consist the actual threat of force that Svolik (2012) underlies authoritarian intra-elite politics. This concept that has been extensively explored in the Chinese bureaucratic promotions literature. If this were true, we would expect to see purges of lower-ranking security officials to be highly correlated to the degree to which they were affiliated with higher-ranked officials who were subject to purges, as leaders would have to disable both the individual rival and his network.

Another purpose of the purges might have been to solve the autocratic principal-agent problem between the leader’s policy prerogatives and the incentives of individual security workers, and to prevent them from individually joining plots against the leader. Herreros (2006) argues in a formal model that under certain circumstances, leaders may be able to dissuade ordinary citizens from joining rebellions by convincing them that the leader is repressing selectively, by repressing randomly and then convincing others that the repressed was actually guilty and that the process was more-or-less fair. Within the state security services, all were guilty of excess, and mutual denunciations were quite common, implying Stalin may not have had such accurate information about the loyalties of individuals and groups.

In this case, it would be rational for a leader to purge his security apparatus randomly, while loudly advertising the actual guilt of the repressed individuals. If a robust null result is found, it would be reasonable to characterize the situation as one in which Stalin is attempting to induce cooperation and effort from his coercive agents much like he is doing with the rest of the party/state organs as well as wider society, albeit with higher stakes due to the violent moral hazard of the repressive organs.

The empirical test in this study is able to distinguish between the alternative logics of using purges to resolve principal-agent problems, and relate the dynamics of organizing coercion at lower levels to elite leader-elite dynamics, and distinguish between low-level purges as a tool to undermine elite rivals or as a random repression tool to undermine individual incentives to join potential anti-leader plots.
When purging high-ranking regime elites, the leader must also disable the network that serves as the basis of power for the purged elite, and in general to keep a check on the personal collective action capacity of other elites. In the same way that political ties can predict promotions in China, they should be able to predict purges of lower-ranking individuals under Stalin. If lower ranking purges are largely unrelated to purges of higher ranked elites, then the evidence would point towards other reasons for purging, such as increased accountability and prevention of collusion on an individual level, fear of cliques among lower ranking individuals, or random repression out of paranoia or rational revolt prevention.

This yields the main hypothesis, which relates the political connection, contingent on a purge of the higher-ranking elite patron with potential purges for his clients.

**Hypothesis 1** A lower-ranking security official is likelier to be purged if he is politically connected to higher-ranking individuals who are subject to a purge.

The second hypothesis is in some ways an inverse of the first. Yet, it would have to be more stringently shown that this really is as-if random, net of theoretical controls such as ethnicity and possibly education, which the historical literature has pointed out as factors in determining who was purged.

**Hypothesis 2** The likelihood that a lower-ranking security official will be purged should be uncorrelated with observables.

The methods used in the Chinese bureaucratic promotion literature can be re-purposed to explore the organization of coercion and explore the methods by which political leaders may seek to preserve themselves by forestalling potential collective action among his ruling coalition.
3 Data

The main source for my data comes from information on Great Purge era NKVD personnel compiled by NGO Memorial before Russia closed down most of its security archives (Memorial, N.d.). The data is compiled in wikipedia-format, with a page for each recorded individual, with career advancement and purge information available from digitalized personnel documents.

The dataset covers 41703 security personnel, and many of them are single mentions in documents and such which do not provide sufficient information for this study. Out of the total, 6693 have reasonably complete information on their career histories, locations, ranks, nationalities, birth days, party membership, and date of obtaining party membership to analyze. In the final analysis, 4116 individuals are used due to duplicates or data incompleteness.

The 41073 individuals represent a non-random subset of the entire universe of NKVD personnel during the period, and the 6693 with reasonably complete career data, and the 4116 actually used also represent a non-random subset of workers recorded in the Memorial dataset. However, it is reasonable to suppose that the relationship between political connections should not be systematically biased, since the memorial dataset was compiled from available official gazettes and internal personnel documents; there is no reason to think that the available gazettes for promotions should be correlated with individual purges or factors that affect individual purges (except that those who were awarded, transferred, or promoted more often would probably be more likely to show up at all). There is no reason to think that this sample systematically over-represents those who were unconnected to purged executives and not purged over those who were unconnected and purged, and those who were connected and purged over those who were connected and not purged.

The outcome variable is deduced from the grounds upon which an individual was dismissed. According to Nikita Petrov of Russian NGO Memorial, those purged according
Table 1: Summary Statistics

<table>
<thead>
<tr>
<th>Statistic</th>
<th>N</th>
<th>Mean</th>
<th>St. Dev.</th>
<th>Min</th>
<th>Pctl(25)</th>
<th>Pctl(75)</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purge Event</td>
<td>14,456</td>
<td>0.008</td>
<td>0.090</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Purged Boss Dummy</td>
<td>14,456</td>
<td>0.471</td>
<td>0.499</td>
<td>0.000</td>
<td>0.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Purged Boss Proportion</td>
<td>8,936</td>
<td>0.587</td>
<td>0.380</td>
<td>0.000</td>
<td>0.333</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Current Communist Party Member</td>
<td>14,457</td>
<td>0.447</td>
<td>0.497</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

...to Art.38 (a) and (b) of the Main Directorate of State Security regulations at the period were most certainly purged, while individuals dismissed according to other regulations may or may not have been repressed, which would be the case if this person had been arrested immediately after dismissal from the NKVD (Polozhenie o prohozhdenii sluzhby nachal'stvujushhim sostavom Glavnogo upravlenija gosudarstvennoj bezopasnosti Narodnogo komissariata vnutrennih del Sojuza SSR, 1935).

This provides a conservative measure of purge, since not all purged individuals would be recorded in this way. For example, if a worker was first dismissed according to other articles, and then shot, or purged extra-judicially, he would not show up according to this measure.

Of the 4116 individuals, there are 118 purge events according to this conservative measure.

Therefore, it makes sense to construct three alternative measures for the dependent variable, first according to the strict definition of “purged” which would be those who are directly cited in directives as having been dismissed according to the articles in question, and then a less stringent one for the first category and those who were dismissed according to other articles for which positive evidence of repression can be found, and then the least stringent one which would be dismissals in general, which would most certainly include innocuous dismissals including retirement and horizontal transfers into other organs of the Soviet state as active reserves.

1GUGB, the primary directorate within the NKVD.
2In addition, in some cases, the reasons for dismissal may be (a) the verdict of the court or the decision of the Special Meeting of the NKVD of the USSR (b) arrest by judicial authorities
I then obtain information on the identities and fates of most of the Krai/Oblast (sub-republican administrative units) level NKVD executives within the RSFSR and the Republic-level NKVD executives for other constituent republics of the Soviet Union during that period from printed and online resources.

Using these two sources of information, I replicate the measures used in the Chinese bureaucratic promotion literature to measure political connections between higher-ranked and lower-ranked individuals within a bureaucracy.

Jia, Kudamatsu and Seim (2015) measures political connections by examining whether two officials “used to work in the same branch of the Party or of the government at the same time”, while Shih, Adolph and Liu (2012) uses biographical data and qualitative information to sort individuals into factions. Shih and Lee (2016) predicts career prospects of lower-ranking Chinese bureaucrats based on their connections to purged higher-ranking officials and finds that such connections negatively affects lower-ranking officials’ career prospects.

Similarly to Jia, Kudamatsu and Seim (2015), Keller (2016) infers ties from promotion, coding a lower ranked higher ranked official as having ties if a superior promotes a subordinate. This measure (simultaneous subordination and promotion). Currently, the analysis is being conducted such that connections are inferred between a lower-ranking and a higher ranking official if the lower-ranking official has ever been under the jurisdiction of the higher-ranking official in the past.

Control variables include location information, ethnicity\(^3\), current party membership, and rank\(^4\). The location information records the individual’s location at the time, which is

\(^3\)The ethnicities in the dataset are Abazins, Abkhazians, Azerbaijanis, Armenians, Bashkirs, Buriyats, Beps, Georgians, Ingush, Kabardins, Kazakhs, Karelians, Latvians, Lezgins, Lithuanians, Mingrels, Mordvins, Ossetians, Uzbeks, Chubash, Estonians, Russians, Belarussians, Ukrainians, Jews, Germans, Greeks, Polish, Tatars, and Bashkirs.

\(^4\)Ranks are coded as NKVD service ranks, or their equivalents. NKVD service ranks included in the data are, from low ranking to high ranking, Sergeant of State Security, Junior Lieutenant of State Security, Lieutenant of State Security, Senior Lieutenant of State Security, Captain of State Security, Major of State Security, Senior Major of State Security, and Commissar of State Security Third Rank (there are higher ranks but they are not included in the data analyzed). They are operationalized as dummy variables, to control for the higher attrition rates for higher-ranking individuals.
either coded at the Republic level\textsuperscript{5}, which are high-level territorial administrations in the USSR), or at the Location of Branch, which classify the service that the individual belongs to at the time\textsuperscript{6} and if he belongs to the territorial organs of the NKVD (think of regional FBI offices), the lowest administrative level at which data is available, which for most cases are at the level of Krai/Oblast\textsuperscript{7}

4 Analysis

In order to predict individual purges based on political connections, I use the aforementioned measure of political connections (connection inferred for current and past bosses) as the main independent variable to estimate a Cox Proportional Hazards (CPH) Model. CPH models predict the time left until an event for individuals based on individual-variant characteristic, where the individual falls out of the sample once the event happens. CPH models are frequently used to predict the probability of time left to live in medical studies and is used to model the time remaining for an observation until some event, such as death, or in this case, a purge. Here, the unit of analysis is individual lower-ranked officials and the data is restricted to the period between 1935 and 1940.

The Cox Proportional Hazards model with time-variant covariates is specified as follows:

$$\lambda(t|Z(t)) = \lambda_0(t)\exp(\beta'Z(t))$$

Where $\lambda(t|Z(t))$ is the hazard at time $t$, which depends on the value of the covariates

\textsuperscript{5}Russian SSR, Ukrainian SSR, Belorussian SSR, Uzbek SSR, Kazakh SSR, Kirghiz SSR, Georgian SSR in the data.

\textsuperscript{6}The branch categories excluding territorial organs are as follows: NKVD Schools, Railways, Troops, Concentration Camps, Military Okrugs (war-time military districts), Central Organs, Political Officers attached to military units, Prison service, and Okrugs (Border Guards).

\textsuperscript{7}Krai and Oblast are at the same administrative level; other district categories at this level include Autonomous Oblast, and Autonomous Republic. These are roughly equivalent to counties in the United States.
at the time \(Z(i)\), and the effects \(\beta\) is constant over time [Zhang et al., 2018, 2]. Standard errors are clustered at the individual.

### 4.1 Preliminary Results

#### Table 2: Cox PH Model to Predict NKVD Member Purges

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Arrest under Art.38(a) or (b)</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of Connected Leaders Purged</td>
<td>1.588***</td>
<td>1.513***</td>
<td>1.298***</td>
<td>p = 0.00001</td>
<td>p = 0.003</td>
<td>p = 0.0149</td>
<td></td>
</tr>
<tr>
<td>Connected Leaders Purged (Dummy)</td>
<td>1.048***</td>
<td>1.244***</td>
<td>1.002***</td>
<td>p = 0.00000</td>
<td>p = 0.00003</td>
<td>p = 0.0013</td>
<td></td>
</tr>
<tr>
<td>Clusters at Individual</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Republics</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Location or Branch</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Ethnicities</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Party Membership</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Rank</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>8,940</td>
<td>14,426</td>
<td>5,714</td>
<td>9,191</td>
<td>5,714</td>
<td>9,191</td>
<td></td>
</tr>
<tr>
<td>Max. Possible (R^2)</td>
<td>0.186</td>
<td>0.145</td>
<td>0.158</td>
<td>0.148</td>
<td>0.158</td>
<td>0.148</td>
<td></td>
</tr>
<tr>
<td>Wald Test</td>
<td>21.866*** (df = 1)</td>
<td>24.940*** (df = 1)</td>
<td>45.378.297*** (df = 50)</td>
<td>55.353.500*** (df = 57)</td>
<td>196.353.500*** (df = 102)</td>
<td>122,958.700*** (df = 129)</td>
<td></td>
</tr>
<tr>
<td>LR Test</td>
<td>23.933*** (df = 1)</td>
<td>27.821*** (df = 1)</td>
<td>119.116*** (df = 50)</td>
<td>125.524*** (df = 57)</td>
<td>196.353.500*** (df = 102)</td>
<td>255.943*** (df = 129)</td>
<td></td>
</tr>
<tr>
<td>Score (Logrank) Test</td>
<td>21.208*** (df = 1)</td>
<td>27.425*** (df = 1)</td>
<td>494.281*** (df = 50)</td>
<td>55.353.500*** (df = 57)</td>
<td>196.353.500*** (df = 102)</td>
<td>255.943*** (df = 129)</td>
<td></td>
</tr>
</tbody>
</table>

Note: \(p<0.1, \quad p<0.05, \quad p<0.01\)

The preliminary results show a very robust relationship between the boss-subordinate tie measure, which are robust to multiple specifications. The dependent variables are either a dummy variable that is 1 if any past boss has been purged, or the proportion of past bosses who were purged.

The first two models hows that there is a strong correlation between the measure of connected bosses getting purged and the purge of low-ranking state security workers, absent other covariates. The third and fourth model specifies a model which controls for location at the republic level, ethnicity, current party membership, and rank dummies, and still finds significant results. The fifth and sixth model control for either the branch or the lowest available territorial location for workers appointed to territorial organs. The fixed effects for location should guard against for the possibility that Stalin was ordering the NKVD to simply purge by location (e.g. purge individuals stationed in some location

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8To illustrate the proportion measure, if the current year is 1939, and one has had four bosses including the current boss, and a person who was your boss was purged in 1938, and another past boss is purged in 1939, the measure would be \(\frac{2}{4} = 0.5\).
without worrying about who was connected to whom), which would result in similar correlations, since the boss would be purged along with his current subordinates. These results fail to reject Hypothesis 1, and thoroughly reject Hypothesis 2.

The prediction plots show that the predicted hazards increase significantly with the proportion of purged bosses and a dummy for having any past or current bosses that have been purged for models 3 and 4 in the table, with the rank held at Junior Lieutenant of State Security, in Russian SSR at 1938. These hazards can be interpreted as hazards ratios. For example, the likelihood of getting purged when three-fourths of past bosses have been purged is about 2 times the likelihood of getting purged when a quarter of past bosses have been purged.

5 Conclusion

As it stands, this study demonstrates that the purge of low-ranking security workers under Stalin were non-random; they purged those with connections to higher-ranking officials who were likewise purged. It is a first stab at unpacking the micro-foundations of coercive capacity, and how state leaders solve existential principal-agent problems in inherent in organizing and deploying a domestic coercive apparatus.

In order to fully flesh out the theory, it is necessary to use the existing data to implement a network analysis research design which I am working on right now.
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URL: https://www.meforum.org/6398/turkey-slide-into-authoritarianism

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