

Preventive Repression: Two Types of Moral Hazard

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Authoritarian leaders maintain their grip on power primarily through preventive repression, routinely exercised by specialized security agencies with the aim of preventing any opponents from organizing and threatening their power. We develop a formal model to analyze the moral hazard problems inherent in the principal-agent relationship between rulers and their security agents in charge of preventive repression. The model distinguishes two types of moral hazard: “politics,” through which the security agents can exert political influence to increase their payoff by decreasing the ruler’s rents from power, and “corruption,” through which the agents can increase their payoff by engaging in rent-seeking activities that do not decrease the ruler’s rents from power. The surprising conclusion is that both the ruler and the security agent are better off when the only moral hazard problem available is politics rather than when the agent can choose between politics and corruption. We also show that the equilibrium probability of ruler’s survival in power is higher when politics is the only moral hazard available to the agent. These findings lead to our central conclusion that opportunities for corruption undermine authoritarian rule by distorting the incentives of the security agencies tasked with preventing potential threats to an authoritarian ruler’s grip on power.

INTRODUCTION

How do authoritarian leaders protect themselves from potential opponents? Their first line of defense is preventive repression, routinely exercised by specialized security agencies, institutions often called simply “Security.” While many autocracies build “seemingly democratic institutions” (Gandhi and Przeworski 2007; Svoboda 2012), the quintessential institution of such regimes is the security apparatus, mainly in the form of secret police. Hence, to understand the repressive foundations of authoritarian regimes, we must consider the relations between the rulers and the security agents charged with preventing any potential opponents from organizing and threatening the ruler’s grip on power.

This is easier said than done. By their very nature, information about these relations is closely guarded so that we have only scattered, anecdotal glimpses of evidence, often made public only after a regime has fallen (Barros 2016). Yet despite the opacity of these regimes, it is clear that these relationships are often uneasy, as manifested by instances in which the secret police spied on their political principals or a ruler purged his own security apparatus. Hence, what follows should be viewed as a preliminary analysis of the relationship between rulers and their security agents.

With this caveat, we think as follows. Political power gives the incumbent ruler, individual or collective, access

to some resources. To protect this power, the ruler employs security agents. In turn, to perform their task, security officials need the requisite means—buildings, vehicles, arms, spying equipment, and funds to pay informers—so that the ruler must provide them with operational resources in addition to giving them incentives to protect his or her survival in power. Yet the security agents can divert a part of these resources to activities other than protecting the ruler, which can in turn make the ruler more vulnerable to being overthrown. Therefore, rulers face moral hazard problems with respect to their own security agents. Moreover, the relation between the rulers and their security agents entails two distinct forms of moral hazard: politics and corruption.

Preventive repression brings into politics an important political force: the security apparatus which may seek to extend its grasp inside the regime by engaging in political activities and power struggles. Specifically, security agents can divert some of their resources to extract benefits from the political leaders they are supposed to serve. We label this kind of moral hazard “politics”: when they engage in politics, security agents can increase their payoff at the expense of their political principals. Ever since Edward Gibbons ([1896]2001) vividly described how the Praetorian Guards of the Roman Empire used their power to influence the selection of emperors, the fact that security agents can yield significant influence over their political principals has been the focus of studies concerning the relationship between rulers and their security agents. This political hazard problem features prominently in almost all work on this topic (Huntington 1957; Nordlinger 1977; Wintrobe 1998; Finer 2002, among others) and is indeed a difficult agency problem to contend with, as illustrated by the fact that in almost every autocratic regime relations between rulers and their security agents are perennially tense (Plate and Darvi 1981; Adelman 1984). A powerful security apparatus is a double-edge sword for political elites: it can be more effective in

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protecting the regime but it also creates a moral hazard problem by virtue of its de facto control over violence and information.

Yet political infighting is not the only danger rulers face from their security agents. Similarly to other bureaucratic agencies, the security apparatus can also divert its effort and resources to increasing its consumption by engaging in rent-seeking activities that do not reduce their principals' rents from power. Secret police agents can engage in graft, shirk their duties, pad their expenses, sell their services to private actors, or invest in private economic ventures. We label this kind of moral hazard "corruption."

We develop a formal model to analyze these moral hazard problems inherent in the principal-agent relation between rulers and the agents in charge of preventive repression. It seems plausible that, all else equal, rulers would be better off when their agents quietly misuse resources, i.e., engage in corruption, rather than when they use those resources to increase their privileges at the ruler's expense, i.e., engage in politics. Yet our model generates the surprising conclusion that both the ruler and the security agents are better off when the only moral hazard problem is that the agent can engage in politics rather than when the agent can choose between diverting efforts to politics or corruption. We find that when, in addition to seeking political influence, agents have opportunities for corruption, and they have weaker incentives to protect the regime. In turn, anticipating that the agents would divert a larger share of their resources away from prevention, rulers give them fewer resources, with the net effect that the ruler's grip on power ends up being more fragile. We also show that the equilibrium probability of ruler survival in power is higher when politics is the only moral hazard problem than when the agent can choose between politics or corruption. Therefore, opportunities for corruption by the security apparatus undermine authoritarian regimes. This is our central conclusion about the relation between rulers and the security agents charged with preventing any opposition to a ruler's grip on power.

The paper contributes to the literature concerning the relationship between authoritarian rulers and their security agents (Finer 2002; Geddes, Frantz, and Wright 2014b; Myerson 2015; Nordlinger 1977; Wintrobe 1998). Methodologically, the literature has analyzed the agency problems arising from the fact that those armed to protect the regime can threaten the powers of political elites either as a stand-alone moral hazard problem or coupled with adverse selection issues arising from incomplete information about the magnitude of potential threats to the regime. Substantively, the literature has investigated the determinants of military dictatorship (Acemoglu, Ticchi, and Vendini 2010; Besley and Robinson 2010), the loyalty-competence trade-off in dictatorial environments (Egorov and Sonin 2011; Zakharov 2016), military intervention in politics when the military is uncertain about government policy (Svolik 2013), and various coordination and commitment problems between political rulers and their agents (Cox 2011; Dragu and Polborn 2013; Myerson 2008; Wintrobe 1998). Yet no work has analyzed the

principal-agent relationship when security agents have an opportunity to engage in corruption in addition to exerting political influence over their principals. We present the first formal model to assess how these two moral hazard problems affect the equilibrium payoffs of players and the equilibrium probability of regime survival. Our results are relevant for understanding the principal-agent relationship between rulers and security agents in nondemocratic polities and the repressive foundations of authoritarian government more generally.¹

Next we describe in more detail the strategy of preventive repression, analyze the problems associated with relying on security agencies for preventive repression, and conclude.

PREVENTIVE REPRESSION

Threats to authoritarian rulers originate from two sources: the fellow members of regime elites, their closest collaborators, or from individuals potentially willing to engage in public actions against the regime (Bueno de Mesquita and Smith 2017; Geddes, Wright, and Frantz, 2014a; Greitens 2016; Svolik 2012). No authoritarian ruler wants to face a situation in which their rivals become powerful enough to organize and threaten the ruler's grip on power from the inside. Coup plots that are already hatched expose the rulers to the danger of having to engage in internal purges that undermine the cohesion of the elite and provide a signal of internal divisions to the potential opponents of the regime. In turn, no authoritarian leader wants to face a situation in which public dissent had grown sufficiently powerful to necessitate large-scale military intervention in order to keep power. First, in such endgame scenarios, the leader must rely on the obedience of common foot-soldiers, which can be costly and ineffective. The military is neither trained, specifically equipped, nor motivated to engage in domestic repression so that using them to squelch protests typically becomes a last resort.² Second, calling upon and relying on the military involves considerable political risks in terms of ruler survival in power both because the military might simply refuse to obey an order to repress (Dragu and Lupu 2018; Pion-Berlin and Trinkunas 2010) or because the military may exploit the vulnerability of the regime to overthrow it (Acemoglu, Ticchi, and Vendini 2010; Albrecht and Ohl 2016; Besley and Robinson 2010; Svolik 2013).

An ounce of prevention is worth of a pound of cure. Preventive repression is aimed to impede potential opponents from acting against the ruler or the regime. In this sense, preventive repression is *ex ante* with regard

¹ The paper also contributes to the literature on bureaucratic politics that documents a variety of principal-agent problems and bureaucratic biases (Baliga and Ely 2016; Bueno de Mesquita and Stephenson 2007; Dragu 2011, 2017; Gailmard 2010, 2017; Moe 2006; Stephenson 2008; Ting 2003).

² As Hannah Arendt notes "The military forces, trained to fight a foreign aggressor, have always been a dubious instrument for civil-war purposes; even under totalitarian conditions they find it difficult to regard their own people with the eyes of a foreign conqueror" (Arendt 1973, 420).

to manifest opposition and is distinct from remedial repression which occurs *ex post*, after prevention repression has failed. Consequently, authoritarian rulers primarily utilize and depend upon preventive repression, routinely exercised by specialized security agencies. The security apparatus typically includes three, not always institutionally distinct, bodies: ordinary police, secret police, and the *germanderie*. The secret police is sometimes euphemistically referred to as an “intelligence” agency, as in the Chilean Dirección Nacional de Inteligencia (DINA, 1973–77), or an “information” agency, as in still Chilean Central Nacional de Información (CNI, 1973–90), but often it is officially denominated “Secret Police.” The secret police employs professional spies and part-time informants to detect any potential opposition and “nip it in the bud,” in the language of the Paraguayan Stroessner regime. It seeks to identify dissatisfied individuals who are the center of larger communication networks (Perez Oviedo 2015; Siegel 2011) by relying on informers, intercepting communications, planting listening devices, and the like. The “nipping” may entail physical elimination of potential adversaries (Gregory 2009), imprisonment, economic sanctions, prohibitions to travel, intimidation, blackmail, psychological and physical harassment, and the like (Plate and Darvi 1981; Adelman 1984; McMillan and Zoido 2004; Dobson 2012). Prevention may also include censorship, dissemination of false information and rumors, and distorting communication among the potential opposition (Guriev and Treisman 2015; Koehler 2008; Perez-Oviedo 2015; Puddington 2017).

The first institutionalized secret police force in the modern era was the Tsarist Department for Protecting the Public Security and Order (Okhrana), established in 1866 originally to spy on Russian emigrés (Zuckerman 1996). The Soviets reproduced this institution immediately after taking power under the name of Cheka, which over time evolved into “State Political Directorate” (GPU), “Joint State Political Directorate” (OGPU), “People’s Commissariat for Internal Affairs” (NKVD), “People’s Commissariat for State Security” (NKGB), “Ministry for State Security” (MGB), and “Committee for State Security” (KGB), where “GB” always stood for “state security.” The history of secret police institutions under Hitler is equally convoluted, with constant reorganizations and several agencies competing: the “Secret State Police” (Gestapo), the “Assault Division” (SA), and the “Security Service” (SD). Similar organizations existed under the fascist regimes of Mussolini in Italy, Franco’s Spain, and Salazar’s Portugal (Bramstedt 2013; Gallagher 1979). Secret police was the central instrument of communist rule in Eastern Europe,³ again with frequent reorganizations and changes of names. The military regimes in Latin America also used security agencies independent

of the armed forces (Plate and Darvi 1981; Policzer 2009).

Two aspects of the history of these agencies bear emphasis. One is the frequent multiplication of the agencies, reorganizations, and changes of their names as well as of their leaders.⁴ The second is that most regimes strictly separate the security apparatus from the armed forces. Both indicate that the relations between rulers and their security agents are perennially tense. Frequent reorganizations are evidence of the fact that the rulers find it difficult to control these agencies. The careful separation of civilian from military functions and positions shows that the rulers are afraid of the concentration of power among their agents. Why are these relations so difficult?

The main problem appears to be that security agents can use their tools and resources to engage in political battles inside the regime and to increase their political power (and the perks associated with that power) vis-à-vis their political principals. Examples of such potential agency problems abound. In the USSR, under the leadership of Menzhinsky, the GPU began to play a large role in the internal factional disputes within the Communist party that arose after Lenin’s death⁵; in Poland during the Stalinist period, secret police included a separate department charged with overseeing the ideological loyalty of the leaders of the Communist Party (Czubinski 1992), while in the 1960s, the Minister of Interior, General Moczar attempted to staff positions at all public institutions with his supporters, over the bitter opposition from other Politburo members (Plate and Darvi 1981; Adelman 1984); in Yugoslavia, Alexandr Rankovic, the secret police chief, was purged after he bugged President Tito’s apartment;⁶ while Erich Mielke, the chief of Stasi, the omnipotent Ministry for State Security in the former East Germany, kept a secret dossier on the country’s leader, Erich Honecker.⁷ The real and potential power of the secret police can also be implicitly inferred from the fact that Hua Guofeng in China, Eric Honecker in Eastern Germany, Stanisław Kania in Poland, Yuri Andropov in USSR, and Saddam Hussein in Iraq all directed the internal security affairs of their respective countries before they eventually took power (Adelman 1984; Koehler 2008; Sassoon 2011; Schoenhals 2013).

While not as glamorous as exerting political influence, there is another agency problem inherent in the functioning of preventive agencies, or any bureaucratic agency for that matter: rather than performing their

³ For example, on the eve of Prague Spring in Czechoslovakia the security apparatus included the State Secret Security Forces (STB), employing more than 20,000 full-time and 147,000 part-time agents, the Committee of Defense Security (OBZ), and the People’s Militia (Ekier 1996, 148).

⁴ According to Szlachta (interviewed by Mac 1990, 33), in the Soviet Union, there were 12 chiefs of the security apparatus before 1980, in Poland between 1945 and 1980, there were 10, in the remaining countries of the Warsaw Pact, there were 42 during the same period. Rough calculation shows that each top ruler (Communist Party Secretary) changed about three heads of security apparatus.

⁵ For example, when Stalin wanted Trotsky and Zinoviev expelled from the Central Committee in October 1927, Menzhinsky produced a report implicating them in a fabricated military plot (Rayfield 2003).

⁶ New York Times, “Aleksandar Rankovic, Once Tito’s Chief Aide,” August 20, 1983.

⁷ New York Times, “Erich Mielke, Powerful Head of Stasi, East Germany’s Vast Spy Network, Dies at 92,” May 26, 2000.

tasks, security agents can instead engage in graft, shirk their duties, pad their expenses, sell their services to private actors, or invest in private economic ventures. In other words, they can engage in corruption—in common definition, misuse of public funds for private gain—diverting resources to outside rent-seeking activities (without directly decreasing the power rents of their principals). For instance, the Polish Communist secret police invented informers and pocketed their putative pay. Indeed, according to Franciszek Schlachta, lifelong secret police functionary and at one time the Minister of Interior, “To fraud, there was no end. An entire mechanism of cheating the institution was created by its employees. They falsified lists of informants, themselves wrote reports from fictitious agents, signed by colleagues, sister, or brother-in-law....I think that more than one-third of informers were a scam.” (Interview by Mac 1990, 33). Corruption may assume a variety of forms: The Jakarta police are said to run brothels; members of the Federal Security Service (FSB) in Russia in the 1990s used public resources to moonlight as private guards and help businessmen and oligarchs fight their competitors (Soldatov and Borogan 2010); money from unsupervised budgets enabled Pakistan’s Inter-Services Intelligence, a powerful and independent security agency, to control large industrial, banking, and landowning bodies in Pakistan. Perhaps no example paints a better picture of secret police corruption than that of Vladimiro Montesinos, the head of the intelligence service in Peru during Fujimori’s short authoritarian rule, who was eventually revealed as the mastermind behind a sophisticated network of corruption that penetrated virtually every sector of society. Investigations revealed Montesinos to be at the center of a web of illegal activities, including embezzlement, graft, and drug trafficking (McMillan and Zoido 2004).

In what follows, we develop a formal model to analyze how the opportunities for engaging in politics or corruption activities by security agents affect the stability of authoritarian regimes. The relation between rulers and the agents in charge of preventive repression is not a usual one between principals and agents in economic settings. In standard principal-agent models, the principal hires an agent to perform tasks that increase the principals’ wealth rather than to protect the wealth they already hold. Moreover, in most models, the agent is assumed to have an installed capacity to perform the task.⁸ The classic example is the relation between landlords and peasants: a landlord hires a peasant to produce on a particular plot of land, with resources already fixed, and compensates the peasant for the disutility of his effort depending on his output. The purpose of security agencies, however, is to protect the already existing resources, wealth coming from controlling power, while the agent’s capacity to perform the task must be provided by the principal. This relation creates mixed motives both for the principals and the agents: both want to maximize their payoffs but both can consume only if the ruler survives so that the principal

must sacrifice his consumption by financing the capacity of the agents to perform their tasks while the agents must limit their rent-seeking to protect the ruler’s grip on power. We show that the temptation of the security agents to engage in corruption generates a commitment problem, in which the agents divert too much from protecting the ruler’s regime and the principal, anticipating this temptation, allocates too few resources for preventive repression to the agents.

MODEL

To elucidate the principal-agent relation between rulers and their security agents, we model it in the simplest way possible. Assume that the wealth accessible to the ruler is W , which we normalize to one. The ruler allocates an amount $B < 1$ of resources to protection and also sets the share, $s \in [0, 1]$, of the remaining wealth, $R = 1 - B$, to be paid as official compensation to the security agents. The agent chooses a part of the allocated resources to use for protection and a part to divert so that $B = p + d$, where p is used for protection and d is diverted. The probability that the ruler survives in power is simply p . If the ruler falls out of power, which happens with probability $1 - p$, the ruler and the agent get a payoff of zero. If the ruler survives, the payoffs of players depend on how the security agents divert resources from protection to other activities, as described below.

Diversion activities can assume two forms, politics and corruption, so the agent also makes a choice regarding the fraction of diverted resources d to allocate to politics or to corruption, where $\sigma \in [0, 1]$ represents the fraction of diverted resources the agent allocates to politics. The key difference between diverting to politics or to corruption is that the resources allocated to politics increase the agent’s payoff at the expense of the principal’s share of rents, whereas the resources diverted to corruption do not affect the principal’s share of rents. If the agent were to divert all resources d to politics, the agent would receive a share $s + d$ of rents R and the principal would retain a share $1 - s - d$. In turn, if the agent were to allocate all resources d to corruption, the agent would increase her payoff without decreasing the principal’s rents from power: the payoff of the agent would be $sR + \gamma d$, where $\gamma \in [0, 1]$ is the rate of return to corruption activities, and the principal’s payoff from rents would remain at $(1 - s)R$. We assume that when the agent diverts to corruption, the agent engages in activities which cannot be contracted directly by the ruler.

Given these specifications, the ruler’s expected payoff is

$$U_R = p(1 - s - \sigma d)R,$$

and the agent’s expected payoff is

$$U_A = p[sR + \sigma dR + (1 - \sigma)\gamma d].$$

The timing of the game is as follows: First, the ruler decides how to allocate the unit of resources, such that $1 = B + R$, and also chooses the distribution of rents $s \in [0, 1]$. Second, given the ruler’s decisions, the agent decides what amount of resources p to put into

⁸ Some exceptions are the principal-agent models in finance, e.g., Hölmström and Tirole (1997).

protection and what amount d to activities other than protection, $B = p + d$, and also chooses what the fraction $\sigma \in [0, 1]$ of the diverted resources d to put into politics and what fraction $1 - \sigma$ to allocate to corruption.

Before proceeding with the analysis, two observations are in order. First, the agent's payoff depends on the ruler's survival. If the agent were to get her payoff regardless whether or not the ruler stays in power, she would have no stake in ruler's survival and would divert all resources to either corruption or politics, depending only on which of these activities is more attractive. The ruler, in turn, would receive no benefit (in terms of increasing his likelihood of survival) from giving the agent any resources. The principal-agent problem we describe is of theoretical and substantive interest only when there is some common interest between the ruler and the agent, which we capture by the assumption that both players have a stake in increasing the likelihood of ruler's survival in power. In fact, when new authoritarian leaders come to power, they typically purge their predecessors' high-level security officials. For example, in Argentina, during the 1966–73 military dictatorship, there were three rulers and each put in a new Minister of Interior when coming to power, while during the 1976–83 period, there were four rulers and again each put in a new minister.

Second, notice that, given the choices made by the ruler, if the agent diverts any resources from protection (i.e., $d > 0$), the ruler is strictly better off if the agent diverts all resources to corruption (i.e., $\sigma = 0$) rather than diverts some resources to politics (i.e., $\sigma > 0$). Moreover, for the same values of p and R , the sum of the ruler's and the agent's payoffs is strictly higher if the agent chooses to divert all resources to corruption rather than divert any resources to politics. This is the case because $U_R + U_A = pR + (1 - \sigma)p\gamma d$ if the agent diverts some resources to politics (i.e., $\sigma > 0$) and $U_R + U_A = pR + p\gamma d$ if the agent diverts all resources to corruption (i.e., $\sigma = 0$). Of course, p and R are equilibrium choices and, as we show, both the ruler and the agent would be better off if corruption were not a choice available to the agent. In other words, perhaps surprisingly, we show that, in equilibrium, the expected payoff of both players is smaller when the agent can choose between diverting to corruption or to politics than when politics is the only moral hazard problem.

For simplicity of exposition, we first analyze the scenario in which the only choice for the agent is to divert to politics, then the scenario in which the agent can only divert to corruption, and finally the game in which the agent can divert to politics or to corruption.

THE POLITICS GAME

We first find the equilibrium of the game in which the agent can only divert resources to politics (diverting to corruption is not an available option): situations in which opportunities for corruption are minor, in the extreme nonexistent, so that the only way security agents can improve their material conditions is by extorting higher wages, perks, or privileges from and at

the expense of the ruler. Such situations are more likely to arise when the private sector is small and the only corruption in which the security agents can engage is petty, say bribes for traffic offenses, illegal street trade, prostitution rings, and the like. Cuba before 1989 may be a prototypical case in point.

Given that $R = 1 - B$, for any B and s chosen by the ruler, the agent's optimization problem is

$$\max_{p,d} \{p(s+d)(1-B)\} \text{ s.t. } p+d=B.$$

Given this problem, we have the following result:

Lemma 1. *In the politics game, for any B and s , the agent's optimal decisions are*

$$\begin{aligned} \hat{p}(B,s) &= \begin{cases} \frac{1}{2}(B+s) & \text{if } s \leq B \\ B & \text{if } s \geq B \end{cases} \quad \text{and} \\ \hat{d}(B,s) &= \begin{cases} \frac{1}{2}(B-s) & \text{if } s \leq B \\ 0 & \text{if } s \geq B. \end{cases} \end{aligned} \quad (1)$$

Lemma 1 shows that the agent's optimal division of resources between protecting the regime and diverting resources to politics depends on the size of the resources allocated to protection relative to the repressive agent's fraction of rents.⁹ If the *politics constraint*

$$s \geq B,$$

is satisfied, the agent does not divert any resources to politics and allocates all of them to protection. However, if this constraint is not met, the agent finds it in her interest to divert some resources to politics increase her share of rents.

A simple inspection of lemma 1 shows that optimal levels of p and d increase in the resources the ruler allocates to protection, B . In turn, the effect of an increase in the agent's share of rents, s , on p and d is dissimilar: a higher s increases the optimal p and decreases the optimal d . This result is intuitive because if the agent gets a higher share of rents to begin with, the agent has less of an incentive to divert resources to politics.

Given the agent's optimal decisions, we next find the ruler's optimal allocation of resources to protection, B , and the optimal distribution of rents, s . We have to consider two scenarios, one in which the politics constraint is satisfied and the other in which it is not met. Because the agent's optimal actions are different in these two situations, the ruler's payoff is also different.

In the first case, the ruler's optimal allocation of resources to protection and the optimal distribution of rents are the solutions to the following constrained maximization problem:

$$\max_{B,s} \{B(1-s)(1-B)\} \text{ s.t. } s \geq B.$$

In the second scenario, the ruler's optimal decisions are the solution to the problem:

⁹ Note that when $s = B$, the values of \hat{p} in the two cases of lemma 1 are identical (the same holds for \hat{d}). The same is true for similar expressions involving step functions throughout the paper (i.e., the expressions involving step functions are continuous).

$$\text{maximize}_{B,s} \left\{ \frac{1}{2}(B+s) \left[1 - \frac{1}{2}(B+s) \right] (1-B) \right\} \text{ s.t. } s \leq B.$$

In both of these maximization problems, the constraint is binding, that is, $s = B$ (we prove this result in the Appendix). Because the two maximization problems are the same when the politics constraint is binding, the equilibrium level of B is the solution to maximizing the ruler's payoff given that $B = s$:

$$\text{maximize}_{B \in [0,1]} \{B(1-B)^2\}.$$

The optimal solution to this maximization problem is $B^* = \frac{1}{3}$, which implies that the optimal distribution of rents is $s^* = \frac{1}{3}$. The following proposition characterizes the ruler's and the agent's equilibrium behavior in the politics game.

Proposition 1. *In the politics game, the ruler's equilibrium choices are $B^* = \frac{1}{3}$ and $s^* = \frac{1}{3}$ and the agent's equilibrium actions are $p^* = \frac{1}{3}$ and $d^* = 0$.*

The intuition for proposition 1 is as follows. First, the ruler is better off giving the agent a share of rents high enough to satisfy the politics constraint. Of course, the ruler won't pay the agent more than necessary, so the ruler sets the agent's share of rents at the threshold at which the agent is just indifferent between putting all resources into protection and diverting some resources to politics. Consequently, the ruler chooses the amount of resources devoted to protection so that the politics constraint is just met, inducing the agent not to divert any resources from protection. If the ruler were to put more resources into protection, given that the agent would not divert any of them, the probability of ruler's survival would increase, yet ruler's rents would decrease, both because the absolute amount of rents would be lower and because the ruler's share of them would be lower. Thus, the ruler sets the amount of resources for protection at the level at which the gains from increasing the probability of survival equal the losses from decreasing the ruler's payoff when in power. Second, given the ruler's optimal choices, the security agent's behavior on the equilibrium path is to allocate all the resources into protection.

THE CORRUPTION GAME

We next find the equilibrium of the game in which the agent can only divert resources to corruption (politics is not an available option). These are situations in which the leader is able to prevent infighting within the ruling elite, easily removing anyone engaging in internal politicking, while opportunities for extracting rents from economic activities are large. Drug trade, large private construction projects, or protection for private firms offer particularly attractive opportunities for corruption, as do public enterprises run by security agencies. Peru under Fujimori may be a prototypical case.

For any given B and s chosen by the ruler, the agent's optimization problem is

$$\text{maximize}_{p,d} \{p[s(1-B) + \gamma d]\} \text{ s.t. } p + d = B.$$

Given this problem, we have the following result:

Lemma 2. *In the corruption game, for any B and s , the agent's optimal decisions are*

$$\begin{aligned} \tilde{p}(B,s) &= \begin{cases} \frac{\gamma B + s(1-B)}{2\gamma} & \text{if } s \leq \frac{\gamma B}{1-B} \\ B & \text{if } s \geq \frac{\gamma B}{1-B} \end{cases} \text{ and} \\ \tilde{d}(B,s) &= \begin{cases} \frac{\gamma B - s(1-B)}{2\gamma} & \text{if } s \leq \frac{\gamma B}{1-B} \\ 0 & \text{if } s \geq \frac{\gamma B}{1-B}. \end{cases} \end{aligned} \quad (2)$$

Lemma 2 shows that the agent's optimal division of resources between protection and corruption depends on the agent's fraction of rents relative to the size of the resources allocated to protection and the rate of return to corruption, γ . If the *corruption constraint*

$$s \geq \frac{\gamma B}{1-B},$$

is satisfied, the agent does not divert any resources to corruption, placing all resources into protection. Otherwise, the agent finds it in his interest to divert some resources to corruption to increase her share of rents.

Given the agent's optimal decision, we next solve for the ruler's optimal allocation of resources, B , and the ruler's optimal distribution of rents, s . Similarly to the previous game, we have to consider two scenarios, one in which the corruption constraint is satisfied and one in which it is not met.

In the first case, the ruler's optimal allocation of resources to protection and the optimal distribution of rents are solutions to the problem:

$$\text{maximize}_{B,s} \{B(1-s)(1-B)\} \text{ s.t. } s \geq \frac{\gamma B}{1-B}.$$

In the second scenario, the ruler's optimal decisions solve the problem:

$$\text{maximize}_{B,s} \left\{ \left(\frac{\gamma B + s(1-B)}{2\gamma} \right) (1-s)(1-B) \right\} \text{ s.t. } s \leq \frac{\gamma B}{1-B}.$$

In both of these maximization problems, the corruption constraint is binding, that is, $s = \frac{\gamma B}{1-B}$ (shown again in the Appendix), which implies that the equilibrium level of B is the solution to maximizing the ruler's payoff given that $s = \frac{\gamma B}{1-B}$:

$$\text{maximize}_{B \in [0,1]} \left\{ B \left(1 - B \frac{\gamma}{1-B} \right) (1-B) \right\}.$$

The optimal solution to this problem is $B^* = \frac{1}{2(\gamma+1)}$, which implies that the optimal distribution of rents is $s^* = \frac{\gamma}{1+2\gamma}$. Putting together these results, the following proposition characterizes the ruler's and the agent's equilibrium behavior in the corruption game.

Proposition 2. *In the corruption game, the ruler's equilibrium choices are $B^* = \frac{1}{2(\gamma+1)}$ and $s^* = \frac{\gamma}{1+2\gamma}$ and the agent's equilibrium actions are $p^* = \frac{1}{2(\gamma+1)}$ and $d^* = 0$.*

The intuition for proposition 2 is as follows. First, as in the politics game, the ruler is better off setting the agent's share of regime rents high enough to meet the corruption constraint so that the agent would not have an incentive to divert resources. Clearly, because the ruler's share of rents decreases when the agent's share is

higher, the ruler would not want to give the agent more than necessary. Therefore, the ruler sets the agent's share of regime rents at the threshold at which the agent is just indifferent between putting all resources into protection and diverting some resources to corruption. Consequently, the ruler chooses the amount of resources for protection so that the corruption constraint is just met, inducing the agent to put all those resources into protection. Of course, if the ruler were to place more resources into protection, the ruler would increase the probability of survival but devoting more resources to protection decreases the ruler's payoff because both the amount of regime rents is lower and the ruler's share of rents is lower. Thus, the ruler sets the amount of resources for protection at the level at which the gains from increasing the probability of regime survival equal the losses from decreasing the ruler's payoff in the contingency that the ruler stays in office. Second, given the ruler's optimal choices, on the equilibrium path the agent puts all the resources into protection, without diverting any to corruption. Finally, notice how the rate of return to corruption activities, γ , affects the ruler's trade-off between putting more resources into protection to increase the probability of keeping his share of rents and setting the agent's share of rents high enough to satisfy the corruption constraint. If corruption is more tempting (i.e., γ is higher), the ruler needs to increase the agent's share of rents to satisfy the corruption constraint (i.e., s^* increases in γ) which, in turn, induces the ruler to lower the amount of resources allocated for protection (i.e., B^* decreases in γ).

DIVERTING TO POLITICS OR TO CORRUPTION

In most situations, the security agents have both the opportunity to pressure rulers for a higher share of rents and to extract private rents from the economy. Which they prefer depends on the relative effectiveness of the two activities. When the only forms of corruption are petty—again, taking minor bribes, inventing fictitious informers, or running prostitution rings—extorting rents from the ruler may be more attractive, but when drug money or private construction projects are at stake, rents that can be extracted from the ruler fade in magnitude. Hence, what is crucial is the relative rate of return from politics and from corruption.

In this section, we analyze the principal-agent problem when the agent has a choice of the fraction of resources d to divert to politics and to corruption. Recall that, for any B and s , if the agent diverts all resources d to politics her expected utility is $p(s + d)(1 - B)$, while if the agent diverts some resources to corruption, her expected utility is $p[s(1 - B) + \sigma d(1 - B) + (1 - \sigma)d\gamma]$. Note that if $1 - B \geq \gamma$, then $p[s(1 - B) + d(1 - B)] \geq p[s(1 - B) + \sigma d(1 - B) + (1 - \sigma)d\gamma]$ for all p, d , and σ . Therefore, if $1 - B \geq \gamma$, the best payoff from diverting some resources to corruption is (weakly) worse compared to that from diverting all d to politics.¹⁰

¹⁰ Notice that, when $1 - B = \gamma$, any $\sigma \in [0, 1]$ is optimal since the agent gets the same payoff from diverting to corruption or from diverting to politics.

In other words, the agent's optimal choice is to divert all d to politics if

$$1 - B \geq \gamma,$$

and to divert all d to corruption otherwise. Thus, we have the following:

Proposition 3. *The security agent's optimal decision regarding how to allocate the diverted resources d between politics and corruption is $\sigma^*(B, s) = 1$ if $1 - B \geq \gamma$ and $\sigma^*(B, s) = 0$ if $1 - B \leq \gamma$.*

Given the optimal σ , the agent's optimal allocation of resources between protection and activities other than protection is given by lemma 1 if $1 - B \geq \gamma$ and by lemma 2 if $1 - B \leq \gamma$.

To determine the ruler's optimal levels of B and s , we need to proceed as follows: (1) find the ruler's optimal allocations of resources in the politics game under the constraint that diverting to politics is the optimal choice for the agent; (2) find the ruler's optimal allocations of resources under the constraint that diverting to corruption is the optimal choice for the agent; (3) compare the ruler's equilibrium payoff under these two scenarios (as a function of γ) to see whether the optimal allocation of resources from the politics or from the corruption game gives the ruler a higher payoff for different values of γ . We relegate the proof to the Appendix and state the main result below.

Proposition 4. *The ruler's optimal decisions in the game in which the security agent can choose to divert to politics or to corruption are*

$$B^* = \begin{cases} \frac{1}{3} & \text{if } \gamma \leq \bar{\gamma}_1 \\ 1 - \gamma & \text{if } \gamma \in [\bar{\gamma}_1, \bar{\gamma}_2] \\ \frac{1}{2(\gamma+1)} & \text{if } \gamma \geq \bar{\gamma}_2 \end{cases} \quad \text{and} \quad s^* = \begin{cases} \frac{1}{3} & \text{if } \gamma \leq \bar{\gamma}_1 \\ 1 - \gamma & \text{if } \gamma \in [\bar{\gamma}_1, \bar{\gamma}_2], \\ \frac{\gamma}{1+2\gamma} & \text{if } \gamma \geq \bar{\gamma}_2 \end{cases}$$

where $\bar{\gamma}_1 = \frac{2}{3}$ and $\bar{\gamma}_2 = \sqrt{\frac{1}{2}}$.

The intuition for Proposition 4 is as follows. First, if the rate of return to corruption activities, γ , is below the threshold $\bar{\gamma}_1$, the ruler's optimal choices are the solutions to the politics game, $B^* = s^* = \frac{1}{3}$. This is the case because in the politics game the equilibrium level of rents is $R^* = \frac{2}{3}$ and, therefore, for any $\gamma \leq \frac{2}{3}$, the constraint $1 - B \geq \gamma$ is satisfied so that the agent prefers politics to corruption. The reason the ruler makes these choices of s and B is that, when γ is not too high, the agent prefers to engage in politics rather than corruption, so the ruler's optimal choices of B and s are set to meet the agent's politics constraint.

Similar reasoning applies when the value of γ is relatively high, i.e., $\gamma \geq \bar{\gamma}_2$. In this range of values of γ , the agent prefers to engage in corruption rather than politics. Because in the corruption game, the equilibrium level of resources is $B^* = \frac{1}{2(\gamma+1)}$, the constraint $1 - B \leq \gamma$ is satisfied if $\frac{1+2\gamma}{2\gamma+2} \leq \gamma \Leftrightarrow \gamma \geq \sqrt{\frac{1}{2}}$. Therefore, for $\gamma \geq \bar{\gamma}_2$, the ruler's optimal choices of B and s are the choices from the corruption game, $B^* = \frac{1}{2(\gamma+1)}$ and $s^* = \frac{\gamma}{2\gamma+1}$. Substantively, when diverting resources to corruption is

very tempting for the agent, the ruler anticipates these incentives in his optimal decisions and chooses the resources for protection and the distribution of rents to satisfy the agent's corruption constraint.

Finally, for values of γ in the middle range, i.e., $\gamma \in [\bar{\gamma}_1, \bar{\gamma}_2]$, the constraint for whether the agent engages in politics or corruption is binding. The optimal choices of B and s in this middle range are set to make the agent indifferent between engaging in politics or in corruption, $B^* = s^* = 1 - \gamma$. For these values of B and s , the politics and the corruption constraints are both binding and thus the agent is indifferent between putting all resources into protection or diverting any resources to either of the two activities (this is the case because the corruption indifference condition $s = \frac{\gamma B}{1-B}$ for $B = s = 1 - \gamma$ is satisfied and, obviously, the politics indifference condition $B = s$ is satisfied as well).

Given the previous results, we can investigate how the ruler's equilibrium payoff varies with changes in γ . The ruler's equilibrium payoff is

$$U_R^* = \begin{cases} \frac{4}{27} & \text{if } \gamma \leq \bar{\gamma}_1 \\ \gamma^2(1 - \gamma) & \text{if } \gamma \in [\bar{\gamma}_1, \bar{\gamma}_2] \\ \frac{1}{4(\gamma+1)} & \text{if } \gamma \geq \bar{\gamma}_2 \end{cases}$$

The ruler's equilibrium payoff is continuous in γ , and is constant in γ for $\gamma \leq \bar{\gamma}_1$ and is decreasing in γ for $\gamma \geq \bar{\gamma}_1$. Because the ruler's equilibrium payoff in the politics game is $4/27$, the ruler is (weakly) better off when diverting to corruption is not tempting for the agent and the only agency problem is that the agent can engage in politics. The rationale is that when the payoff from engaging in corruption is relatively high, diverting to corruption is the pressing agency problem, so the ruler has to put fewer resources into protection and more into rents to induce the agent not to divert resources into corruption. Furthermore, when γ is high, the agent has more incentives to divert resources from protection to corruption, so even if the probability of keeping the payoff is lower (i.e., p^* is lower), the agent's payoff is higher. Consequently, the ruler anticipates these incentives into his optimal choices of B and s , with the overall result of a decreased equilibrium payoff relative to the politics game.

To illustrate this logic, let us consider the scenario in which $\gamma = 1$. In this case, the ruler's optimal distribution of rents is $s^* = \frac{\gamma}{1+2\gamma} = \frac{1}{3}$ which is the same as the optimal distribution of rents in the politics game (in which diverting resources to corruption is not an available option for the agent). However, when the agent has the option to engage in corruption, the optimal allocation of resources to protection is $B^* = \frac{1}{2(\gamma+1)} = \frac{1}{4}$, which is lower than in the politics game. The reason is that, because the agent compares the relative payoffs from politics and corruption when deciding which activity is more lucrative the ruler needs to keep more resources for rents. If the payoff from corruption is relatively high, regime rents need to be high as well to induce the agent not to divert resources from protection to corruption. Therefore, we can see that even though the distribution of rents is the same as in the politics game, i.e., $s^* = 1/3$, the allocation of resources to protection is lower ($B^* = \frac{1}{4} < B^P = \frac{1}{3}$), while the allocation to rents is

higher ($R^* = \frac{3}{4} > R^P = \frac{2}{3}$) in the game in which the agent has a choice between corruption and politics as compared to the politics game. As a result, when $\gamma = 1$, the ruler's payoff is lower ($U_R^* = \frac{1}{8} < U_R^P = \frac{4}{27}$). The same holds for any case in which $\gamma > \bar{\gamma}_1$ and the agent has a choice of actions.

Similarly, we can investigate how the agent's equilibrium payoff varies as a function of γ . The agent's equilibrium payoff is

$$U_A^* = \begin{cases} \frac{2}{27} & \text{if } \gamma \leq \bar{\gamma}_1 \\ \gamma(1 - \gamma)^2 & \text{if } \gamma \in [\bar{\gamma}_1, \bar{\gamma}_2] \\ \frac{\gamma}{4(\gamma+1)^2} & \text{if } \gamma \geq \bar{\gamma}_2 \end{cases}$$

Perhaps more puzzling, the agent is better-off when diverting to corruption is not an available choice. Again, let us illustrate this result for $\gamma = 1$. The agent's payoff in the politics game is $U_A^P = \frac{2}{27}$ while when corruption is also a choice (and $\gamma = 1$) it is $U_A^* = \frac{1}{16}$. Notice that if the ruler were to offer $B = 1/3$ and $s = 1/3$, the optimal choices from the politics game, the agent's optimal response would be to divert some resources to corruption (the corruption constraint would not be satisfied), which would give the agent a higher expected payoff than if the agent were to choose $p = 1/3$ and $d = 0$, the optimal choices in the politics game. Anticipating this incentive of the agent, the ruler's optimal choices are $B^* = 1/4$ and $s^* = 1/3$. Consequently, the agent's equilibrium payoff is $U_A^* = \frac{1}{16}$, which is lower than the equilibrium payoff if diverting to corruption were not an available choice.

Essentially, there is a fundamental commitment problem here. Both the ruler and the agent would be better off if the ruler were to offer a higher B when diverting to corruption is an option for the agent. It is not sequentially rational for the agent, however, not to divert resources into corruption if the ruler were to offer a B such that the corruption constraint is not satisfied. We have the following result:

Proposition 5. *The ruler's and the agent's equilibrium payoffs are (weakly) higher in the politics game than in the game in which the agent can choose between politics and corruption.*

Similarly, we can investigate the effect of changes in γ on the equilibrium probability that the ruler keeps power, which is

$$p^* = \begin{cases} \frac{1}{3} & \text{if } \gamma \leq \bar{\gamma}_1 \\ 1 - \gamma & \text{if } \gamma \in [\bar{\gamma}_1, \bar{\gamma}_2] \\ \frac{1}{2(\gamma+1)} & \text{if } \gamma \geq \bar{\gamma}_2 \end{cases}$$

The equilibrium probability that the ruler keeps power is continuous in γ , and is constant in γ for $\gamma \leq \bar{\gamma}_1$ and is decreasing in γ for $\gamma \geq \bar{\gamma}_1$, which implies that this probability is maximized when $\gamma \leq \bar{\gamma}_1$ (since the equilibrium level of p is continuous in γ). Since the equilibrium level of p is $1/3$ in the politics game, the equilibrium probability of regime survival is also (weakly) higher if corruption is not an available choice for the agent. We have the following result:

Proposition 6. *The equilibrium probability of ruler survival is (weakly) higher in the politics game than in the*

game in which the agent can choose between politics and corruption.

Notice that we restricted our previous analysis to the case in which $\gamma \leq 1$. If $\gamma > 1$, then the agent never chooses to divert resources to politics since it will always be the case that $1 - B \leq \gamma$ regardless of what the ruler does. In other words, the ruler's allocation decisions do not affect the choice of the agent regarding whether to divert resources to politics or to corruption. Consequently, there is nothing to analyze in terms of the relative impact of the two moral hazard problems on the relationship between rulers and their security agents. Moreover, the analysis of the case in which $\gamma > 1$ is straightforward: the ruler's equilibrium choices are $B^* = \frac{1}{2}$ and $s^* = 0$ and the agent's equilibrium choices are $p^* = \frac{1}{4}$ and $d^* = \frac{1}{4}$. Intuitively, when the relative value of diverting to corruption is so high, the ruler does not find it worthwhile to induce the agent not to divert some resources to corruption, and, as a result, the ruler gives the agent no share of regime rents and chooses the optimal B taking into account that the agent will raise his payoff by diverting some resources from protection to corruption.¹¹

Notice as well that if we were to analyze the situation in which the ruler has any amount of resources W , the agent's optimal decision would be to divert resources into politics if $W - B \geq \gamma$ and to divert resources to corruption otherwise. What matters for our analysis is the magnitude of γ (the payoff from corruption activities) relative to that of W (the regime's wealth) because if $\gamma > W$ corruption is a dominant strategy for the agent and if $\gamma \leq W$ the agent's optimal decision about where to divert depends on the ruler's allocation decisions. Because our substantive interest is to assess the relative effect of the two moral hazard problems, for simplicity of exposition, we normalize W to one and interpret γ as the rate of return to corruption activities relative to that from politics.

Finally, notice that our result that the equilibrium probability of ruler survival is higher when politics is the only moral hazard problem than when the agent can choose between politics or corruption is in fact stronger than our previous analysis suggests. We restricted our analysis to a scenario in which the agent's payoff completely depends on the ruler's survival, whether the agent diverts resources to politics or to corruption. Of course, it is more realistic to think that gains from corruption activities are less dependent on the ruler's survival than gains from politics. Perks and privileges extracted from the ruler generally consist of a right to use so that they cannot be turned into assets,¹² while at

least some proceeds from corruption can be appropriated and accumulated as wealth that continues to be privately owned even if a regime dies. In this scenario, the commitment problem we previously identified is even more pressing because the agent is more likely to keep the resources diverted to corruption than resources diverted to politics if the ruler is out of power. Therefore our finding that corruption is a more serious moral hazard problem for the ruler is stronger when we consider the fact that, in relative terms, the resources diverted to corruption are less dependent on ruler's survival than resources diverted to politics.

CONCLUSIONS

In 2016, the Chinese Communist Party directed one of the country's largest state-run defense contractors, China Electronics Technology Group, to develop software that would allow them to collate data on the jobs, hobbies, financial transactions, and consumption habits of ordinary citizens. This request also included developing software to analyze citizens' online behavior and to use artificial intelligence to identify their faces on security camera footage.¹³ This new surveillance system would add to the already large body of data that the Chinese government collects on each citizen, allowing it to even better flag those that might be a potential threat. While the stated purpose of this new policy was to fight terrorism, commentators worried that its real purpose was in fact to help further strangle regime opposition in its infancy, i.e., to prevent another Tiananmen square. It is hardly surprising that the Chinese Communist Party is taking advantage of the latest developments in surveillance technology to strengthen its efforts at preventive repression.

Dobson (2012) observes that today's authoritarian regimes have replaced brutal forms of violence and mass killings with subtle methods of control and coercion: they have perfected the use of fear and intimidation to maintain their grip on power and have learned to rely on propaganda, censorship, and cooptation in place of large-scale repression of public dissent. Repression is indeed just one, even if essential, instrument by which authoritarian rulers maintain themselves in power (Gehlbach, Sonin, and Svoblik 2016). Autocrats can coopt some potential opponents (Bueno de Mesquita and Smith 2009; Gandhi and Przeworski 2006), engage in propaganda (Chen and Xu 2017; Edmond 2013; Little 2017), engineer elections to legitimize their power (Cox 2009; Gandhi and Lust-Okar 2009), or manufacture the semblance of a civil society by creating government-operated NGOs (Dobson 2012; Puddington 2017). But repression is not limited to the use of violence against already manifest opposition, which is the subject of most formal literature on this topic (Pierskalla 2010; Besley and Robinson 2010). Repression is most effective when it is invisible, when regimes survive without having to beat, tear gas, or

¹¹ Notice also that the ruler's payoff is continuous at $\gamma = 1$ since the ruler's payoff is the same if the ruler chooses $B^* = 1/2$ and $s^* = 0$ (and the agent chooses $p^* = 1/4$ and $d^* = 1/4$) or if the ruler chooses $B^* = 1/4$ and $s^* = 1/3$ (and the agent chooses $p^* = 1/4$ and $d^* = 0$).

¹² For example, security agents of communist regimes in Eastern Europe and Soviet Union held considerable political power and enjoyed a variety of fringed benefits for protecting the regime: free apartments and subsidized rents, access to free cottages in resort areas in which to vacation, access to special restaurants and shops with goods ordinarily unavailable to most citizens, among others (Plate and Darvi 1981; Adelman 1984), political benefits that were lost when the communist regimes fell in 1989.

¹³ Cara McGoogan, 'Minority Report'-style technology to predict crime in China, The Telegraph, March 9, 2016.

kill their citizens. As someone has said, “That streets are peaceful does not mean there is no violence” (Przeworski 2015, 249). Visible manifestations of opposition occur only if preventive repression has not been effective to begin with so that they represent failures of repressive regimes. And there is evidence (Dobson 2012; Puddington 2017) that while autocrats may have increased their use of ballot-box, cooptation, and control over information, they also learned to prevent public opposition from forming rather than having to squelch its visible manifestations. Hence, what we need to understand is the logic of operation of repressive systems designed to thwart all attempts to oppose the government.

Ours is but a first step in this direction. We do not claim that the probability of ruler’s survival is solely a function of the actions of their security agents. Ours is a partial equilibrium model so that the probability p in our framework should be interpreted as capturing only how much additional increase in the likelihood of survival can a ruler achieve by relying on preventive repression, given the use of other instruments and the eventuality of relying on remedial repression in need. The surprising conclusion of our analysis is that whenever the security apparatus has the option of engaging in corruption, it is a less effective instrument for defending the autocrat. The security agencies can and do engage in extorting perks and privileges from the rulers, but they can be bought off at a relatively low cost. Corruption is a more serious threat to the autocrat. If corruption is sufficiently rewarding to the security agents, the ruler knows that they will divert resources, so increasing their resources is pointless. As a result, the ruler allocates fewer resources to preventive repression, the regime is less likely to survive, and both the autocrat and its agents are worse-off than when corruption opportunities are not as rewarding. One should not be surprised, therefore, that autocrats engage in anticorruption campaigns and often purge their security apparatuses: the expected tenure of the heads of security agencies is short. The head of the Chinese security apparatus was among the first targets of Mr. Xi’s anticorruption campaign. But, as we know (Rose-Ackerman and Palifka 2016; Shleifer and Vishny 1993; Svensson 2005), controlling corruption is not an easy task. A corrupt security apparatus is the Achilles heel of an autocratic regime.

Extensions of our analysis can go in two directions. One is to incorporate preventive repression in a broader framework to investigate how it interacts with other contemporary methods of authoritarian control such as using modern propaganda, manufacturing a civil society, or allowing “controlled” elections to maintain a pluralist facade. The second is to examine the conditions under which autocrats shift resources from remedial to preventive repression, trying to avoid the use of violence against already formed opposition. Finally, while by construction any empirical study of preventive repression suffers from formidable selection problems, we need to sharply distinguish empirical manifestations of preventive from remedial repression, to get more systematic information about the security agencies, their actions, and the outcomes of their actions.

SUPPLEMENTARY MATERIAL

To view supplementary material for this article, please visit <https://doi.org/10.1017/S0003055418000552>.

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