

AUTHORITARIAN INSTITUTIONS

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Abstract

Political institutions of authoritarianism are designed to ensure the elite's lasting hold of power. They might be growth-enhancing at certain stages of a country's development and become a major obstacle to economic progress in other stages, but their primary role is to keep the elite unaccountable. Thirty years ago, the economic collapse of the USSR-led communist system gave a hope for the "end of history", the convergence of all political systems to a democracy. Since then, the share of non-democracies has stabilized after a dramatic fall; their share of the world's GDP has been increasing, largely due to China's enormous contribution. In this essay, we focus on institutional connections between the monopoly on political power and the monopolistic, centralized organization of economic life under authoritarianism.

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Introduction

Authoritarianism has been the dominant form of government throughout human history. With the gradual increase of franchise over the 19th and 20th centuries, democratic institutions have replaced authoritarian ones in dozens of countries. By now, in polities as different and diverse as India, the United States, Sweden, Chile, Philippines, Switzerland, and many others, citizens have been replacing their leaders at the voting booth for decades. The end of the 20th century saw a remarkable one-time switch from authoritarian form of government to democracy with the demise of the Soviet Union and the satellite communist dictatorships. Fukuyama (1992) famously suggested that this marks “the end of history”, the ultimate win of democracy as a form of government.

Yet authoritarian political institutions are still a widely used form of government: nearly half of the world population lives under some form of non-democratic rule today. After thirty years of transition, many formerly communist countries are hybrid regimes or full-blown dictatorships. The phenomenon is hardly limited to new democracies: for example, Venezuela’s periods of competitive, democratic elections spanned decades, yet this did not prevent the country from sliding into autocratic rule in the 21st century. Largely due to the China’s enormous contribution, the authoritarian countries’ share of the world’s GDP has been constantly increasing. (See Shirley and Xu, 2024, a chapter in this volume, for an extended discussion of institutional foundations of China’s economic development.) In China itself, the hopes that the pressure of the expanding economy and trade and the improving quality of life will lead to democratization have largely dissipated as the government gradually tightened its grip over the society and eliminated restrictions on the paramount leader’s power.

In this chapter, we reflect on the growing literature on authoritarian institutions. In doing so, we do not focus on those institutions that play similar roles in dictatorships and democracies. We discuss them only if there is a major difference between the function they serve under a democracy and under an autocracy. Electoral institutions are a prime example here. In a democracy, elections is a key mechanism of political selection and an instrument, with which people hold the rulers accountable. In authoritarian regimes, these institutions serve different functions: dictators use elections to gather information, discipline bureaucrats, re-

align their coalitions, or project strength, but *not* to give the population an opportunity to replace them. Other institutions are specific to and characteristic of authoritarian regimes and have virtually no democratic counterparts; we discuss such institutions as well.

While we pay as much attention to empirical work on authoritarianism, there is a point to be made about theoretical models. Sometimes, formal models of politics seem to overemphasize the role of significant individuals as they invariably feature a small number of actors set to play a game, a now-standard way to model strategic interactions in economics and political science. When modeling non-democratic politics, there is a special temptation to focus on few individual decision-makers: many dictatorships are organized, either formally or informally, in a way that the individual at the top or a small junta has a lot of power. The analytical convenience of using game-theoretic apparatus should not be confused with a description of an actual dictatorship. The institutional structure of a dictatorship is as much represented by a game of two players, a dictator and a subordinate, as the structure of a large firm is represented by a game of a principal and an agent. In other words, game-theoretic models are merely instruments to study what matters in non-democratic politics: institutions, organization, networks, social relations, etc.

To make the discussion more systematic, we make a distinction between two types of authoritarian institutions. Some institutions are designed and built by dictators in order to survive challenges, maintain control, or enrich themselves. Other institutions are part of the autocratic environment: they describe the rules of the game where dictators – actual and potential; past, present, and future – are players, not designers. Institutions that limit citizens participation in the government – repression, disenfranchisement, censorship, etc. – is an example of the former. They reduce the government accountability, and allow the regime to pursue its preferred, unpopular (or, at least, lacking a majority support) policy. If the dictator cannot repress the opposition and make elections noncompetitive, he would have to either distribute resources or make policy concessions. Instead, authoritarian regimes build up institutions to carry out repressions and to effectively disenfranchise the majority of the population. (See Section 3.)

The other group of authoritarian institutions, designed by autocrats, is primary concerned with information manipulation (Section 4). Dictators censor news and feed citizens

with propaganda. At the same time, a major prerequisite for efficient governance and, ultimately, for the dictator's political survival is his ability to gather and process information. To keep power, even the most sultanistic of dictators need to know the ever-changing needs of their subjects. This makes it even more surprising that, almost as a rule, dictators end up in an informational vacuum, surrounded by loyal yet incompetent subordinates. Organizations that are responsible for gathering, screening, aggregating, and processing information in democratic systems – various ministries, committees, advisory bodies, intelligence services, military units – fail to do their job in authoritarian regimes. In fact, they are often structured to do the opposite.

For an individual autocrat, the key element of survival in power is building a support coalition. One form of organizing a machine of patronage and repression that keeps leaders in power is via an institutionalized ruling party such as the Communist Party of the Soviet Union, the Chinese Communist Party, or the Institutional Revolutionary Party of Mexico, each of which was the primary governing mechanism in their country for the large part of the 20th century. Absent a well-institutionalized government structure, the authoritarian equilibrium might feature a balance between different factions that are unable to defeat each other (Newson and Trebbi, 2018).

Applying Douglass North's definition of institutions as "the rules of the game in a society, or more formally, the humanly devised constraints that shape human interaction" (North, 1990), we also discuss those authoritarian institutions that are not a result of elite's optimizing designs, but rather institutions that are a result of their interaction with their competitors in the power struggle. To take an extreme example, if the current way of dealing with ousted leaders is to execute them, and new leaders follow this pattern, this is certainly not an institution that the incumbent has designed. However, it is "humanly devised constraints that shape human interaction".

This chapter does not aim to be an all-encompassing survey of non-democratic politics. Gehlbach, Sonin and Svobik (2016) is a survey of formal models in nondemocratic politics with emphasis on the critical role that institutions play. For a survey on long-term institutional change, which necessarily deals with long-term institutions of non-democracies, we refer to Acemoglu, Egorov and Sonin (2020). In Egorov and Sonin (2024), we paid special

attention to dictators' survival strategies such as purges, election results falsification, censorship, propaganda, etc., and citizens' responses such as protests and revolutions.

The rest of this essay is organized as follows. In Section 2, we discuss the current consensus model that relates economic and political institutions and development. In Section 3 we discuss political *institutions of disenfranchisement* that autocrats construct to prevent accountability by citizens. Section 4 deals with institutions of information control, while Section 5 focuses on institutions that prevent collective action such as inside coups, mass protests, and revolutions.

2 Why Nations Fail

From an institutionalist perspective, the field of political economics is currently close to a consensus view that secure property rights and democracy are critical for development. The general approach, which builds upon foundation work in the New Institutional Economics, is best expressed in [Acemoglu and Robinson \(2005\)](#), a graduate-level textbook by Daron Acemoglu and James Robinson, and widely popularized in their *Why Nations Fail* magnum opus ([Acemoglu and Robinson, 2012](#)). It makes good institutions of property rights protections the critical element of development on the economic side; the effective access to vote is the critical element on the political side.

The main concepts that Acemoglu and Robinson use to explain economic development are that of *inclusive institutions* that allow for broad participation in value-enhancing economic activity and provide incentives for creative destruction and development and *extractive institutions* which hinder economic growth. Inclusive institutions allow citizens to participate in the shared prosperity. Inclusive political institutions allow citizens to play a role in creating rules of the economic game. Democracy often, though not always historically, provides the political foundation for inclusive economic institutions. In contrast, extractive institutions benefit a small elite holding monopoly over political power. The elite is interested in protecting its political power as political power allows them to extract disproportionate rents from economic activity via monopolies protected by law, tradition, or force. By its nature, extractive political institutions are authoritarian.

The extractive vs. inclusive institutions model, a synthesis of decades of research by nu-

merous economists and political scientists, is deeply rooted in the New Institutional Economics. The ideas of multiple equilibria and path dependence were formulated by Douglass North in [North \(1981\)](#). The theory of social orders in [North, Wallis and Weingast \(2009\)](#) is, in many respects, another version of the inclusive *vs.* extractive institutions theory. North, Wallis, and Weingast define a set of institutions to be a *limited access order* if they serve the purpose of keeping the elite's control over political and economic rents, which closely corresponds to the Acemoglu and Robinson's extractive institutions. Both big theories are results of decades of research on the role of commitment and institutions of property rights protection initiated in [North and Weingast \(1989\)](#).

Below, we start with the credible commitment paradigm in analysis of institutions. The current consensus, building on work of North, Weingast, Acemoglu, Robinson, and others, considers institutions a product of political process in the society. Even if the process is very long-term, it is ultimately a result of choices made by rational agents at some point in time ([Acemoglu, Egorov and Sonin, 2011](#)). Identifying an inability to commit to a certain course of actions and analyzing institutions that compensated for this inability has become a standard approach for institutional economists over the last decades. Then, we turn to the concepts of multiple equilibria and path dependence, which are critical to explain why extractive (and so authoritarian) institutions are persistent.

2.1 The Problem of Commitment

Over the last 40 years, the *credible commitment paradigm* proved immensely fruitful in many areas of economics. Institutionalist Yoram Barzel highlighted the lack of commitment as a central problem in his analysis of slavery ([Barzel, 1977](#)). Macroeconomists Finn Kydland and Edward Prescott used it in their groundbreaking discussion of rules *vs.* discretion in monetary policy ([Kydland and Prescott, 1977](#)). Scholar of socialism János Kornai focused on the inability of a socialist government to commit, which he dubbed *the soft budget constraint*, to explain the ills of planned economies ([Kornai, 1986](#)). Working on a theory of the firm, Oliver Williamson invoked the Thomas Shelling's metaphor of credible commitment to differentiate between types of investment ([Williamson, 1983](#)). Douglass North and Barry Weingast analyzed the consequences of the Glorious Revolution, opening up a whole new world

of applications (North and Weingast, 1989). Political scientist Kenneth Shepsle applied the commitment approach to analysis of government structures (Shepsle, 1991). In his studies of conflict, James Fearon identified the countries' inability to commit to a certain course of actions as one of the major causes of war (Fearon, 1995).

Yet nowhere the commitment paradigm was as fruitful as in explaining why some institutions have formed in the ways they have formed. In North and Weingast (1989), the transition of the authority over the standing army from the crown to the parliament was the way for the new sovereign to resolve the commitment problem and gain the necessary support. This in turn led to secure property rights for would-be entrepreneurs and, eventually, laid institutional foundations for the Industrial Revolution. In Acemoglu and Robinson (2000), the inability of the elite to commit to future payments to the commons is resolved by the extension of the franchise. The rich elite agrees to establishing democratic institutions, because otherwise it cannot commit not to exploit the opportunities to expropriate the poor. By similar logic, in Acemoglu and Robinson (2001) the inability of the rich to commit to redistribution and the inability of the poor to commit not to revolt lead to full democratization in some circumstances. In other circumstances, it is the inability of a democratic government to commit not to increase taxes results in the rich elite launching a coup.

For authoritarian regimes, the problem of commitment is exacerbated because authoritarian leaders, by definition, face less constraints on their power. With less constraints, they are bound to have more severe commitment problems than their democratic counterparts. For example, a US president has not, with a few exceptions, had problems committing to leave their post after their two terms. With less mature institutions, a leader has incentives to stay in power inefficiently long. Of course, no ruler has absolute power – and dictators sometimes operate under stringent constraints – yet consolidated authoritarian regimes typically have less checks and balances than democratic ones. Thus, the commitment problem that they have manifests itself in what institutions they construct. We will see this below discussing the succession problem, nearly unsolvable in a personalistic dictatorship. Yet the foremost commitment issue in non-democracies is their inability of partial concessions and gradual democratization.

There are many reasons why an authoritarian regime might turn to democratization. (See

the chapter on regime change in this volume, [Treisman, 2024](#).) Democratizations themselves do produce growth benefits in both short- ([Rodrik and Wacziarg, 2005](#)) and long-run ([Papayannou and Siourounis, 2008](#)). Even if he does not care about broad prosperity, a dictator might want to democratize to avoid facing mass protests or internal coups, which are costly even when unsuccessful ([Balima, 2020](#)). Partial democratization might be desirable if it provides a commitment device to protect property rights and thus improve agents' incentives to involve in productive activities ([Acemoglu and Robinson, 2005](#); [Myerson, 2010](#)).

Naturally, a dictator might not relinquish power, even partially, unless he is pressured to do so. Yet why do so many dictators fail to democratize even when the pressure is very strong? The commitment perspective offers an answer in a general model of strategic enfranchisement and disenfranchisement with forward-looking agents ([Acemoglu, Egorov and Sonin, 2012, 2015](#)). In the simplest possible version, the current decision-maker, e.g., a unitary dictator or the median voter of the enfranchised coalition, makes two decisions. First, she chooses this-period policy. Second, she determines who is going to be the decision-maker in the next period. Suppose that someone else's rule in the future is preferred by the current decision maker.¹ This is a major general rationale for enfranchisement: e.g., with a dictator in power, the middle class fears expropriation, thus providing low efforts and generating small surplus. When enfranchised, the middle class has its property rights protected better, and exerts high efforts. Thus, the dictator would prefer to transfer power (to democratize) and benefit from citizens having secure property rights in the future. However, the dictator might dislike the consequences of the political choices by those whom she transferred power to. As a result, the country is stuck with an inefficient autocratic rule despite the fact that the autocrat herself would prefer partial democratization. In other words, a rational dictator would not want to partially relinquish her power, fearing that this will lead to her ouster through the "slippery slope" ([Schwarz and Sonin, 2008](#)). The prospects of slippery slope might be highly uncertain, but the fear is certainly real. With forward-looking decision-makers, the country is stuck in a bad equilibrium.

The dictator's unwillingness or inability to have committed to a certain course of actions might result in a different kind of an inefficient outcome. [Greif \(1998\)](#) analyzes *podesteria*,

¹[Lizzeri and Persico \(2004\)](#) apply this logic in a model of franchise extension to discuss the evolution of public spending.

the institute of delegation of power by a group of competing oligarchs in medieval Venice, as an instrument to resolve their common pool problem. Without an arbitrator, the oligarchs would spend an inefficiently large amount of resources on competing against each other. Focusing on the experience of transition from socialism to market, [Gurieva and Sonin \(2009\)](#) argue that even if oligarchs are interested in appointing a leader who can contain destructive rent-seeking, they would opt for a weak dictator fearing that a strong one will end up expropriating their property. Thus, an efficient outcome is not achieved. In a democracy, institutions of reputation, political parties, etc. make the problem far less severe.

As our discussion of the commitment problem above emphasized, dictators avoid creating institutions that constraint their own freedom of choice. In a democracy, the new leader has limited or no power over the fate of the predecessor. In an autocracy, a successor might have a lot of power over the former dictator's fate. Therefore, the loyalty of a possible successor is critically important for autocrat. At the same time, not having a successor has always been considered a destabilizing factor, threatening the incumbent regime. (See [Kurrild-Klitgaard, 2000](#), and [Kokkonen and Sundell, 2014](#), for empirical evidence on advantages of European monarchies in solving the succession problem.) Not surprisingly, few dictators have truly solved the succession problem ([Herz, 1952](#); [Konrad and Mui, 2017](#); [Bueno de Mesquita and Smith, 2017](#)). In the 21st, the aging leaders of Egypt, Libya, Malaysia, Tunisia, Turkmenistan, Uzbekistan, Yemen, Zimbabwe and other countries for years failed to delegate any power to designated successors; ultimately, their succession plans failed.

One governing mechanism that does solve the succession problem is an *institutionalized ruling party*, which we discuss below in Section 5. With a party calling the shots, both the commitment and the loyalty problems become less acute for the incumbent. Authoritarian parties that were able to ensure regular rotation at the top such as Mexico's PRI in 1930-1994 or the Chinese Communist Party in 1976-2019 were able to deal with the succession problem.

2.2 Multiple Equilibria and Path Dependence

Douglass North made the concept of multiple equilibria central in the institutional theory of economic development. The idea is straightforward: it is possible to have very different sets of institutions, created by the people, in otherwise identical countries. Over time pe-

riods that span decades of even centuries, there is no visible convergence of institutions. Countries could have the same climate, the same reserves of natural resources, the same neighbors and international ties, the same history prior to the bifurcation point, the same anything which was already baked in before the paths have diverged, and yet end up living with different institutions and, as a result, be on different paths of development.² The development of this theory was warranted as economists have repeatedly hit dead-ends in their quest for determinants of growth failures.

If two equilibria with the same fundamentals are possible, and one equilibrium is vastly preferable to the other – as it is, for example in [Murphy, Shleifer and Vishny \(1993\)](#) – the natural question is: why would not the country move from the bad equilibrium to a good one? The theory of inclusive vs. extractive institutions provides an answer: the extractive institutions, often very inefficient, is a mechanism of protecting economic rents of the narrow elite. Authoritarian political institutions are, in short, the political institutions that allow the elites to keep political power, which in turn, allows them to extract rents. In other words, the main purpose of authoritarian institutions is to perpetuate the political status quo, the rule by a narrow elite.

Consider the following highly stylized example. Suppose that in some country economic agents have a chance to invest in productive activities, but also need to spend resources on private protection of their property rights. The resources that are spent on protection – building private armies or corrupting public officials – could also be used to prey on others' productive capital. In [Sonin \(2003\)](#), there might be multiple equilibria: in one equilibrium, with low productive investment and low growth, agents spend a lot of resources on unproductive protection and redistribution from each other. In another, “good”, equilibrium, there is little unproductive investment in redistribution, and the growth rate is high. The wealthiest members of this societies are the primary beneficiaries of private protection of property rights as maintaining a private army or political connections have, naturally, high returns to scale. So, the rich are better off in the bad equilibrium, than in the good one. Thus, in contrast to the naive intuition and in alignment with the logic of the extractive institutions, it is the

²North's argument was developed in numerous works; [Murphy, Shleifer and Vishny \(1993\)](#) is perhaps the simplest possible formal model. [Acemoglu, Egorov and Sonin \(2020\)](#) discuss the necessity of multiple-equilibria approach in studies of institutional development.

rich who are the source of political demand for bad institutions – they are interested in poor *public* protection of property rights.³

The concept of *path dependence* is intimately linked to the concept of multiple equilibria. If a nation stays in a bad equilibrium, while a good equilibrium potentially exists as in the model described above, why would not it move to a good equilibrium? (In a simplistic setting of [Murphy, Shleifer and Vishny, 1993](#), every citizen would benefit from moving to a good equilibrium.) Path dependence refers broadly to situations, in which a move to a good equilibrium is constrained by the past choices on the country's trajectory. In many models, the stability of a bad equilibrium hinges upon the assumption that switching to a better equilibrium requires a coordinated action of a mass of citizens.

Path-dependence does not need to rely on coordination failure of a large number of agents. Let us consider a game in which a succession of potential challengers fight for power against the incumbent dictator. After the fight, the winner of the fight decides whether or not to repress the loser. We allow players' strategies – what do to with losers of the power fight – to depend on the “reputation”, the number of killings that have been ordered by the loser in question during her tenure in power.⁴

The welfare-maximizing equilibrium in this game is such that each winner spares the loser. There is no repression on the equilibrium path: leaders replace each other and exit the game only because of a natural death. However, there is another, “killing” equilibrium in this game, in which the winner always represses the loser. The mechanism at work is as follows. If the current dictator executed her predecessor, then the challenger has stronger incentives to execute the overthrown incumbent fearing that, if not executed, he will be a challenge in the future, and, if he returns back to power, would execute then-defeated current decision maker. This results in path-dependence of repressive regimes: the winner of a power fight

³The first model with the rich interested in poor protection of property rights is [Polishchuk and Savateev \(2004\)](#). The reason is that poor public protection of property rights make it easier to benefit from rent-seeking, which exhibits relatively high return to scale; thus, the rich prefer poor protection of property rights (see also [Hoff and Stiglitz, 2004](#)). [Sonin \(2003\)](#) extends this logic to a dynamic setting and a range of voting rules over institutions of property rights protection and demonstrates the possibility of multiple long-term equilibria.

⁴The “killing game” in [Egorov and Sonin \(2015\)](#) is a complete information game. The “reputation” is understood as a characteristic of an equilibrium strategy; there is no learning along the way. It is straightforward to extend the logic to a model of commitment-type-based reputation in an imperfect information game ([Kreps et al., 1982](#)).

values his options differently depending on the type of his fallen enemy. If somebody takes over from a bloody dictator, he is more likely to become a bloody dictator himself than if he comes to power after a natural death of the previous ruler. Thus, the new ruler cannot switch to another equilibrium path, even though he knows that he would be better off in a “peaceful” equilibrium path. Killing predecessors becomes, effectively, an institution.

The bad path-dependent equilibrium described above relies, ultimately, on the commitment problem. In many circumstances, the loser of an authoritarian power fight might be willing to commit not to be a contender in the future as such commitment would spare his life. Such commitment might be impossible for a dynastic ruler, whose rights to contend the throne are “divine” and thus virtually indispensable. Not surprisingly, countries with a limited and clear-cut set of contenders such as dynastic monarchies are more likely to have repressions of predecessors than, say, military dictatorships. [Egorov and Sonin \(2023\)](#) use this framework to explain why many personalistic dictatorships, even if highly institutionalized, end up in a vicious cycle, in which the leader ends up surrounded by incompetent loyalists as he fears betrayal and accelerates repressions to compensate for poor policy choices.

3 Institutions of Disenfranchisement

By definition, a nondemocratic government assumes that many citizens are excluded from having a say in political decisions. Dictators of the 20th century, such as Hitler, Stalin, and Mao, among others, as well as many lesser-known leaders, purged their political supporters and repressed millions who did not support their policies. In extreme cases like the totalitarian dictatorships of Stalin’s Soviet Union or Mao Zedong’s China, the entire population was effectively disenfranchised, having no say in policy choices or the selection of leaders. Many other dictatorships disenfranchised or purged entire social groups based on factors like wealth status, religious affiliation, or ethnicity ([Acemoglu, Egorov and Sonin, 2015](#)).

The key argument for why disenfranchisement benefits an autocratic leader comes from the standard spatial model of politics. In this model, candidates must commit to the median voter position as a policy platform to have any chance of winning. While it might not be the median voter playing the pivotal role in an authoritarian power contest, the general logic applies. The larger the share of the population that supports the dictator’s chosen pol-

icy over the opponent's alternative, the easier it is to stay in power. To make his hold on power stronger, the dictator does not need to shift their policy platform towards the median the way a democratic politician would. Instead, the dictator might "trim the electorate," making the median of the remaining population closer to the dictator's own preferred policy. Repressing those who are most opposed to the dictator's preferred policy—whether through imprisonment, violence, or disenfranchisement—makes it easier to implement the policy (Gregory, Schröder and Sonin, 2011).

Early economic theories of nondemocratic government focused on a simple trade-off: how to optimally allocate resources between repression and benefits (Wintrobe, 1990, 1998). Modern theories of repression assume strategic targeting and selection. For example, Myerson (2015) suggests that the best incentives for the autocrat's supporters are provided via randomized purges, combined with rewards for service. Tyson (2018) and Dragu and Przeworski (2019) combine an agency model of dictatorship with targeted repressions. Montagnes and Wolton (2019) and Rozenas (2020) use communist purges in Stalin's Russia and Mao's China to illustrate the effects of violence on performance and the selection of subordinates.

Regarding propaganda as a substitute for repression, Guriev and Treisman (2019) argue that the dictator uses either repression or persuasion for different social groups. Gitmez and Sonin (2023) suggest that repression and informational control could complement each other, with repression of skeptics allowing for increased manipulation of information for others. Initially, propaganda slant is limited by the incentive constraints of skeptics, but when the skeptics are repressed, the incentive constraint is relaxed, and the rest of the population receives more pro-regime information. In George Orwell's *1984*, the people of Oceania are forced to use the *newspeak*, a special language designed to limit their ability to articulate anti-government concepts, cannot switch off radio that translates propaganda, and are forced to participate in indoctrination meetings, yet what actually makes them love Big Brother is the physical torture.

Another form of effective disenfranchisement is electoral fraud. Stripping citizens from the opportunity to replace the incumbent at the ballot box is in the dictator's self-interest. In fact, it's a question why authoritarian regimes have elections at all. In a democracy, electoral fraud might tip the outcome of a close election. If citizens are unaware of the fraud

or consider its extent negligible, they may perceive the outcome as legitimate. Therefore, if the fraud remains undetected, it can influence the outcome. In non-democracies, electoral fraud is often extensive, and violations of due procedure are so numerous and transparent that it begs a question: why is it rational to hold fraudulent elections that citizens easily identify as such? Why organize such elections at all?

There is a substantial literature in political science that strives to explain elections held by autocrats. [Przeworski \(2009\)](#) describes “plebiscitary elections,” which the regime uses to demonstrate that it can “force everyone to appear in a particular place on a particular day and perform the act of throwing a piece of paper into a designated box”. [Egorov and Sonin \(2021\)](#) model dictators “projecting strength” by organizing authoritarian elections to prevent an insurrection. Though citizens know that elections are manipulated by the incumbent and realize that the reported outcome exaggerates the incumbent’s true popularity, they still interpret his overwhelming “victory” as a sign of genuine support. (See [Simpser, 2013](#), for empirical evidence on fraudulent elections from all over the world.)

Another explanation why autocrats organize elections is that they use them to gather information. Even if the dictator controls the voting process and has means to manipulate the announced final tally, she might be able to gauge the extent of citizens’ dissatisfaction or to learn about their specific concerns. [Martinez-Bravo et al. \(2022\)](#) argues that local (village-level) elections in China inform the central authorities about the peasants’ concerns. Using a data base on world-leaders’ exits from 1975 to 2004, [Cox \(2009\)](#) argues that elections help autocratic regimes to gather information that is needed to optimize succession. [Miller \(2015\)](#) finds that a negative shock to the election results prompts autocracies to spend more on education and social welfare. In [Little, Tucker and LaGatta \(2015\)](#), the results of an election convey the same information to the dictator and the citizens, yet the dictator uses this information to decide whether or not to step down voluntarily.

Authoritarian elections might play yet another role – they may define and enforce power-sharing or rent-sharing agreements among the elites ([Boix and Svulik, 2013](#); [Gandhi and Przeworski, 2007](#); [Magaloni, 2010](#)). In some circumstances, such agreements might help the authoritarian elite to survive a transition to competitive elections ([Martinez-Bravo, Mukherjee and Stegmann, 2017](#)). In [Gehlbach and Simpser \(2015\)](#), electoral fraud, modeled as

Bayesian persuasion, is the instrument the dictator uses to manipulate bureaucrats' incentives. This makes efforts of different bureaucrats complementary — they participate in fraud if they expect others to participate — and results in a high variance of the winning (or losing) margins. Finally, [Wig and Rod \(2016\)](#) document the risks associated with authoritarian elections: if the election outcome points to a possible revolution, it might trigger a preemptive coup.

Empirical literature on electoral fraud is growing fast, though most of the studies are focused on imperfect democracies rather than authoritarian regimes. [Enikolopov et al. \(2013\)](#) used a field experiment to estimate the extent of electoral fraud in the Russian parliamentary elections in 2011. [Rundlett and Svobik \(2016\)](#) used data from the same election to illustrate the mechanism of beliefs formation when citizens observe electoral fraud. [Cantu \(2019\)](#) described mechanisms of electoral fraud in a one-party dictatorship employing data on the Mexican presidential elections in 1988.

4 Censorship, Propaganda, and Information Control

Understanding the critical role of information in authoritarian politics was made possible by the development of modern contract theory and principal-agent models. Information control is critical to authoritarian government as any collective action of multiple agents requires them to coordinate. Individually, participating in a revolution is costly. However, when a mass of citizens participate, the costs are substantially lower and the chances of success are higher. Thus, *informational control* is a major part of any dictator's survival strategy.

Although informational control has arguably played as great a role for 1st-century emperors or 20th-century caudillos as for modern dictators, they were not conceptualized as such. Throughout centuries, authoritarian leaders used censorship, propaganda, and other forms of information manipulation to limit the reach of their competitors and mobilize the population. Still, histories and biographies that would analyze information management as a strategic tool that the political economists now consider one of the central mechanisms of maintaining control over the society are yet to be written.

Any authoritarian leader faces at least two major problems related to information flows. First, she has to design the optimal information structure that would determine how much

and what kind of information should be available to citizens. Second, she needs to organize the information flow in the other direction so that she can gather information, be it by allowing a certain degree of media freedom, relying on secret surveys and opinion polls, or inferring the public mood via organizing elections that she fully controls.

4.1 Censorship and Propaganda

We start with the simplest possible observation about information manipulation. An authoritarian leader chooses an information structure, under which information is released to citizens whose interests are not necessarily that same as that of the autocrat. Manipulating information in an optimal, from the dictator's standpoint, way requires providing truthful information with some positive probability. In other words, optimal propaganda is necessarily a mix of some truthful information with some information favorable to the dictator.

The first model of government censorship of media as Bayesian persuasion appeared in [Gehlbach and Sonin \(2008\)](#), subsequently published as [Gehlbach and Sonin \(2014\)](#). (See [Bergemann and Morris, 2019](#), for the general framework of Bayesian persuasion.) [Little \(2023\)](#) discusses theoretical models of information manipulation based on other communication protocols such as no-commitment persuasion in [Crawford and Sobel \(1982\)](#), verifiable messaging in [Milgrom \(1981\)](#), and signaling in [Spence \(1973\)](#). Across all communication protocols, Bayesian persuasion results in the maximum impact of information manipulation ([Kamenica and Gentzkow, 2011](#)). At the same time, using Bayesian persuasion to model information manipulation by the regime comes at cost as the mechanism requires to assume a significant commitment power on the sender's part. In some circumstances, this assumption is too strong to be realistic: a dictator's ability to commit to a certain signal structure might be limited compared to that of a democratic leader.

The theoretical observation that any targeted information manipulation should contain some truthful information has tangible empirical implications. Even the most authoritarian regime needs to structure institutions that govern media freedom, censor information, punish violators, etc. in a way that give the information that citizens' receive some credibility. The propaganda machine in the George Orwell seminal novel *1984* did not satisfy this criteria: it has always insisted on the party line. A more credible authoritarian propaganda

in USSR and other communist dictatorships last century or in Russia and China today has indeed contained a mix of truthful and manipulated information.

Naturally, the optimal slant in the propaganda messages decreases with the opportunity cost of getting information: if citizens do not pay attention to what the government says, the latter survives for a narrower range of parameters. [Knight and Tribin \(2018\)](#) demonstrate, in the context of Venezuelan dictatorship, that availability of propaganda-free channels reduced the impact of state propaganda. [Glaessel and Paula \(2020\)](#) confirm that access to alternative sources of information limits propaganda with 1989 data on German Democratic Republic television: recipients disapproved of censorship if they were able to use Western television to detect misinformation. Still, access to information is not sufficient unless citizens have incentives to consume information. [Chen and Yang \(2019\)](#) conducted a field experiment in China that provided citizens access to an uncensored internet. In a nutshell, the finding is that propaganda works: once citizens acquire new information, their knowledge, beliefs, attitudes, and intended behaviors change. At the same time, the demand for uncensored information is low; on their own, citizens do not look for additional information even if they have access to it.

The informational theory of modern dictatorships is growing fast. In [Shadmehr and Bernhardt \(2015\)](#), the state does not censor moderately bad news to prevent citizens from making inferences from the absence of news that the news could have been far worse. In different circumstances, the autocrat might prefer transparency to reduce the risk of an inside challenge ([Hollyer, Rosendorff and Vreeland, 2018](#); [Kosterina, 2017](#)) or to strengthen a power-sharing agreement ([Sheen, Tung and Wu, 2022](#)). In [Boleslavsky, Shadmehr and Sonin \(2021\)](#), the autocrat prefers transparency as it helps to mobilize citizens to protect him in the case of an inside coup.

[Guriev and Treisman \(2022\)](#) offer a sweeping theory of *spin dictators*, a modern form of authoritarianism, in which propaganda replace cruel repression as the main instrument of authoritarian control. Instead of glorifying the leader as the Stalin's or Hitler's cults did, modern dictators present themselves as steady and competent stewards of national prosperity. Subtle censorship and targeted propaganda make repression largely unnecessary. The book provides systematic evidence that violence is much less common in modern dictatorships

than in dictatorships of the past.

Relying on extensive archival data and modern methods of econometric inference, [Adena et al. \(2015\)](#) delved into the impact of Nazi propaganda. They confirmed a significant effect of radio propaganda post-consolidation of Hitler's regime: it incited anti-Semitic acts and led ordinary citizens to denounce Jews to authorities. Interestingly, the propaganda sometimes had unexpected outcomes: in areas with positive attitudes towards Jews, the anti-Semitic propaganda paradoxically strengthened these favorable views. Such propaganda could serve multiple purposes, targeting potential opponents or fueling totalitarian mobilization ([Arendt, 1951](#)). ([Zhuravskaya, Petrova and Enikolopov, 2020](#) provides a comprehensive survey of the empirical literature on the political effects of internet and social media.)

Empirical research on the role of propaganda in authoritarian regimes is rapidly expanding. (See [Rosenfeld and Wallace, 2024](#) for a recent survey of empirical work.) [Qin, Strömberg and Wu \(2018\)](#), utilizing data on government-owned newspapers in China from 1981 to 2011, demonstrated that market competition reduced political propaganda, confirming theoretical predictions in [Gehlbach and Sonin \(2014\)](#). Pioneering empirical analyses by [King, Pan and Roberts \(2013\)](#) and [King, Pan and Roberts \(2014\)](#) unpacked the strategic use of censorship by the Chinese government. They revealed that the government avoided censoring criticism but blocked information facilitating citizen coordination on grievances. Using daily news reports from Russia's largest state-owned television network, [Rozenas and Stukal \(2019\)](#) discovered that instead of censoring economic facts, the media attributed positive news to government officials' competence while attributing negative news to external factors.

4.2 The Costs of Information Control

Many decisions by authoritarian leaders seem to be appallingly misguided in retrospect. Decisions by Argentina's military junta led by General Leopoldo Galtieri to seize Falkland Islands, communist Romania's chairman Nicolae Ceausescu to call a mass meeting in December 1989 and, before that, to launch unrealistically ambitious economic reforms, Iraq's dictator Saddam Hussein to annex Kuwait in 1991 each caused a chain of events that led to their

regimes' demises.⁵ In each of these cases, the dictators failed to be well-informed about political developments of the first-order importance to them. Ceausescu, Mubarak, or Galtieri's failure to be properly informed is a consequence of the dictator's *informational dilemma*: to govern, any leader relies on institutions that collect, aggregate, and process information about the state of affairs and the attitudes of his subjects. If information is collected and aggregated by free media or some other sources independent from the dictator, then citizens might learn about leader's corruption or incompetence. Furthermore, they might learn about other citizens' attitudes and willingness to challenge the leader. On the other hand, if the dictator controls the sources of information, then the information these sources produce might not be reliable.

There are two very distinct broad types of institutions that autocrats use to collect information. First, the government can use public sources of information, relying on strong institutions that protect media freedom, freedom of speech and assembly, etc. Alternatively, the government can rely primarily on information gathered by various secret services or newer methods such as digital surveillance (Xu, 2021). With the former, the downside for the autocrat is that free media provides the same information to citizens, which reduces the impact of propaganda and might help to facilitate anti-government protest. With the latter, the problem is that relying on information from secret services is, effectively, sharing power and rents with them.

As we discussed above, censoring information flows increases the chances of an autocrat's survival. However, there might be efficiency costs associated with restrictions on media freedom. In Egorov, Guriev and Sonin (2009), a resource-poor dictator allows media freedom as he is concerned with providing his bureaucrats with proper incentives. The paper confirms empirically the relationship between oil wealth and media freedom: in dictatorships, more oil means less media freedom, whereas in democracies the effect disappears. An oil-rich dictator can afford to stay out of touch with reality, censor media and yet stay in power; an oil-poor dictator does not have this luxury. Similar efficiency vs. propaganda trade-offs appear in the model of strategic protest restrictions (Lorentzen, 2013) and censorship (Lorentzen, 2014). As a result, media freedom varies a lot across nondemocratic

⁵Egorov and Sonin (2023) focus on Russia's dictator Vladimir Putin's decision to invade Ukraine in February 2022 as another example.

regimes, from levels comparable to mature democracies to that of totalitarian regimes.

The most straightforward way to present the dictator's informational dilemma in a simple theoretical model is to focus on the loyalty vs. competence trade off that each dictator faces (Egorov and Sonin, 2011; Jia, Kudamatsu and Seim, 2015; Zakharov, 2016). A dictator needs a competent agent that controls the information flow. A more competent subordinate is more likely to differentiate a real threat to the dictator's power such as a change in public mood, a need for an economic reform, an emergence of a new opposition leader, or even a looming foreign invasion. At the same time, a more competent subordinate is more likely to side with the dictator's enemies when the dictator is vulnerable, i.e., exactly when the subordinate's loyalty is critical. An insecure or cautious dictator will therefore choose incompetent loyalists as ministers because he fears that a competent minister will betray him more easily than an incapable one. In other words, a rational dictator ends up in an informational bubble of her own choice: though the dictator is free to choose an agent of any competence in this model, the choice is incompetent.

The informational model of loyalty and competence provides a partial answer to the following puzzle. It is only natural that countries that have frequent coups and recurrent revolutions exhibit poor economic performance. Yet why do countries that have the same leaders for decades provide a disproportional number of growth failures (Bueno de Mesquita et al., 2003; Besley and Kudamatsu, 2009)? Jones and Olken (2005) demonstrated, using unexpected deaths of leaders in office as a source of exogenous variation in leadership, that leaders matter for growth, and negative effects of individual leaders are strongest for unconstrained autocrats.⁶ Mançur Olson has offered a powerful metaphor of "roving vs. stationary bandit" (Olson, 1991), further developed in the concept of "encompassing interest" (McGuire and Olson, 1996). The power of this metaphor is in its consistency with a basic premise of economics: incentives matter. The higher the leader's stake in the country's welfare and the longer his horizon, the more interested she should be in the country's prosperity.

A major problem with the Olson "stationary bandit" metaphor is that it contradicts the accumulated empirical evidence on modern dictatorships. The dictators who have had the

⁶Easterly and Pennings (2017) replicated, using an expanded data set, the Jones and Olken's results with respect to very high or very low growth episodes; they also confirmed that autocracies produce higher growth volatility than democracies as suggested by Rodrik (2000) and Besley and Kudamatsu (2009).

most power and, in Olson's model, the highest stake in their countries – Germany's Hitler, Russia's Stalin, China's Mao – have led their countries to massive humanitarian disasters and destruction of social welfare on a historic scale. In general, the longer a dictator's tenure is, which, presumably, means a higher stake in the country's fate, the lower were economic and societal benefits of his rule (Bueno de Mesquita et al., 2003). The loyalty vs. competence model demonstrates, theoretically, that stagnation might be a likely flip-side of the prolonged political stability under dictatorship. Loyalty at the expense of competence might be in part responsible for massive disasters such as the Great Famine in China (Meng, Qian and Yared, 2015) or Holodomor in the Soviet Union (Naumenko, 2021). In both cases, it was gross mismanagement, coupled with dictator's disregard to human life and welfare, that caused deaths of millions. Inefficient government is the flip side of the strong authoritarian control.

Bai and Zhou (2019) confirmed the existence of the loyalty vs. competence trade-off using data on the Cultural Revolution in China (1966—1976), a Mao's successful attempt to renew his power coalition after the disaster of the Great Leap Forward. As it turned out, it was the most competent elite members who were purged and replaced by mediocre substitutes. Shih (2022) coined the term “coalition of the weak” for the appointment strategy Mao Zedong pursued in his last years. Not coincidentally, the Mao's years in power saw economic and societal stagnation, accompanied by renewed elite purges and mass repression. Focusing on the post-Mao period, Jia, Kudamatsu and Seim (2015) demonstrated that the Chinese Communist Party has avoided the “loyalty vs. competence” trap through a system of job rotation and promotion within the party. In contrast, Shih, Adolph and Liu (2012) provide evidence that nepotism plays a major role in promotions within the highest tier of the CCP hierarchy. Analyzing the data base of 12,000 appointments to the People's Liberation Army of China, Mattingly (2022) concludes that when an autocratic regimes faces a shift from concerns over the foreign threats to concerns about domestic threats, the balance of military appointments shifts towards appointment of politically loyal, rather than combat-experienced officers.

5 Institutions of Control over Collective Action

Since the classic work of Mancur Olson (Olson, 1965), preventing collective action by potential opposition has been well-understood as an important objective of authoritarian leaders. To control elite opposition, dictators employ both sticks, such as purging elites and punishing dissenters, and carrots, by making potential challengers beneficiaries of the status quo. For non-elites, repression and information manipulation are common tactics. While dictators may also "buy" support from non-elites, it's important to note that they maintain their subjects in a bad equilibrium. Thus, any benefits provided are arguably less than what citizens would receive in a good equilibrium. When people attribute their well-being to the dictator's actions, it is often a result of misinformation or information manipulation.

The basic models of political dynamics assumed away the collective action problem. In Acemoglu and Robinson (2001, 2005), potential dissidents under the elite-controlled regime ("the poor") are able to overcome, from time to time, the collective action problem and coordinate on protests. In other circumstances, "the rich" would overcome the collective action problem and launch a coup.⁷ As a next step, Ellis and Fender (2010) added a model of mass protests as information cascades (Lohmann, 1994) to the Acemoglu and Robinson's framework. Shadmehr and Bernhardt (2011), in a two-person coordination game, demonstrated that limiting public information available to citizens might increase the likelihood of protests as each individual citizen is forced to rely on others' information to a larger extent. In an important theoretical contribution, Edmond (2013), the dictator has a costly technology to jam the signal available to citizens who might otherwise coordinate to protest.

Even if the majority of citizens desire the removal of the dictator, the absence of free elections can make it challenging for them to organize and coordinate protests and revolutions. One crucial aspect of collective action is the aggregation of information. For a citizen who seeks the leader's removal, it is vital to understand how many others share the same preferences, what information they possess, and what actions they plan to undertake.

The problem of collective action remains difficult to resolve even if the dictator does not directly manipulate people's beliefs. In protests and revolutions, citizens must be aware of

⁷Tullock (1971) argued that the coups d'état are more common in non-democracies than revolutions because the collective action problem is much less acute in the case of a coup.

what others intend to do: an individual's payoff depends critically on the actions of others. In such scenarios, controlling information regarding collective action involves manipulating the process of information exchange rather than providing manipulated information or censoring media. Furthermore, even in the absence of uncertainty, the collective action problem may persist: when others choose to stay at home, remaining at home might be the optimal strategy even for a dedicated opponent of the regime.

5.1 Authoritarian Coalition Formation

Assuming that there always exists a single incumbent leader who makes all critical decisions himself is analytically convenient, yet in reality, no dictator rules alone. Even the most personalistic of dictators need to resolve the problem of power-sharing to deal with elites and the problem of control over masses (Bueno de Mesquita et al., 2003; Svobik, 2012; Meng, 2020).

Political coalition-formation in a nondemocratic context is radically different from the democratic one. One important difference is that a dictator can share the country's resources with his supporters in ways in which democratic leaders cannot. For an authoritarian leader, the most obvious way to build a coalition of support is to buy allegiance by sharing rents or making policy concessions. Gandhi and Przeworski (2006) theorize that when a dictator faces a threat of rebellion, she makes larger policy concessions, but also shares more rents, and confirm this prediction using data on all dictatorships that existed between 1946 and 1996.

Bueno de Mesquita et al. (2003) organize their analysis of nondemocratic regimes using the "selectorate theory". The *selectorate* are those who participate in choosing the *winning coalition*, a subset of the selectorate that guarantees power control. It might consist of a single person in a personalized dictatorship or of all citizens eligible to vote in a perfect democracy. Members of the winning coalition stick to the current leader as they are not sure they will be included in the winning coalition of a challenger. Thus, any challenger who wants to upend the *status quo* has to offer a premium over what the members of the winning coalition receive from the incumbent.

Myerson (2008) offers a game-theoretic model, in which supporting the leader is a focal

point for his (would-be) lieutenants. Unless the leader agrees, *ex ante*, to limit his authority, the lieutenants cannot be sure that she would remunerate them for the past support. As a result, in any renegotiation-proof equilibrium, the leader offers some constitutional restrictions on his power and the lieutenants' support is conditional on the leader observing these restrictions.

Empirical research supports, broadly, the idea that autocrats buy their support. [Desai, Olofsgård and Yousef \(2009\)](#) use a panel of 80 non-democracies from 1975 to 1999 to demonstrate the existence of the "authoritarian bargain": autocrats pay off their citizens to surrender their political freedoms. [Caselli and Tesei \(2016\)](#) find that in moderately entrenched autocracies, windfalls significantly exacerbate the autocratic nature of the political system: when a dictator has more rents to share, he has more control. [Leon \(2014\)](#) demonstrates empirically that military coups are more likely in countries that spend a relatively low share of GDP on the military. That is, sharing the rents with the military does reduce the probability of a military revolt. Using unique archival data on the allocation of cars for mid-level bureaucrats, [Lazarev and Gregory \(2003\)](#) analyze the microlevel of the dictator's distribution of rents. Their evidence strongly suggests that the allocation of cars, a prized commodity in the Soviet Union, was primarily a purchase of the bureaucrat's political loyalty.

Another avenue of empirical research has tried to measure the value of political connections to autocratic leaders. In a pioneer contribution, [Fisman \(2001\)](#) demonstrated that the share price of firms connected to Indonesian dictator Suharto suffered more than that of less-connected firms in response to news about serious health issues of the dictator. [González and Prem \(2020\)](#) use firm-level data from Chile to document resource misallocation in favor of politically connected firms during the transition from dictatorship to democracy: firms linked to the Pinochet regime (1973–1990) were relatively unproductive and benefited from resource misallocation under dictatorship, but then, after learning that the dictatorship was going to end, firms in the dictator's network increased their productive capacity, experienced higher profits, and obtained more loans from the main state-owned bank.

5.2 Institutionalized Ruling Party

One important example of a government structure in a non-democracy is an institutionalized ruling party, a quasi-state body that is structured like a political party in a democracy, yet does not actually compete in elections. Instead, its main function is to maintain control over the rest of the society.

There have been relatively few attempts to build a model of an institutionalized ruling party and mechanisms that it uses to maintain discipline and cohesiveness inside and maintain control over the populace. [Francois, Trebbi and Xiao \(2016\)](#) model warring factions within the Communist Party of China. [Gehlbach and Keefer \(2011\)](#) suggest an informational approach toward understanding the size and scope of operation of a ruling party. Citizens are divided into two groups, the insiders and the outsiders. The difference between the former and the latter is that when the party leadership expropriates property from an insider, other insiders are informed. Therefore, they have incentives to protect each other against expropriation. In contrast, outsiders have their property expropriated with other agents unaware, thus creating a premium for belonging to the elite. As Vladimir Lenin, the founder of the Communist Party of the Soviet Union, put it in 1921, the fourth year of the Russian Revolution: "We need full and truthful information. And the truth should not depend upon whom it has to serve. We can accept only the division between the unofficial information (for the Comintern Executive Committee only) and official information (for everybody)."

The model of [Gehlbach and Keefer \(2011\)](#) and Example 4.1 in [Egorov and Sonin \(2024\)](#) are two examples of the Coasean approach to modeling a political party. Ronald Coase's celebrated theory of the firm puts emphasis on the distinction between in-house and out-sourced production, the difference being attributed to "transaction costs" (the agency problems). Similarly, an optimal organization of a political party would allocate some tasks in-house (what is done by party members) and some to outside producers (what is done by party supporters). The agency problems within the party would define the hierarchy of authority within the party the same way they define it in a firm. The promise of the Coasean approach is that it potentially encompasses political parties in both democratic and non-democratic environments.

5.3 Balancing Power

A classic method of nondemocratic control is “divide-and-rule,” whereby the leader maintains control by playing different factions of the society against each other. Structurally, this is similar to the pork-barrel model of democratic politics, in which the agenda-setter might build a coalition that comprises a majority in the parliament, imposing a tax on the rest. [Roemer \(1985\)](#) is an early model of coalition-building aimed at maintaining nondemocratic power: the challenger proposes income redistribution, the incumbent offers a list of penalties for joining the challenger’s coalition and then failing.

Still, the “divide-and-rule” framework misses another, perhaps more salient, form of authoritarian government. [Newson and Trebbi \(2018\)](#), analyzing authoritarian elites in such diverse polities as Sub-Saharan Africa and China, conclude that “the prevailing view of winner-take-all contests can be clearly rejected.” In an authoritative study of the last decade of Stalin’s rule, historians conclude that the most appropriate model would be that of balance-of-power, in which no individual politician, even Stalin himself, was able to move without building a temporary coalition of support ([Gorlizki and Khlevniuk, 2005](#)).

As we discussed at the beginning of this essay, the essential difference between democracies and dictatorships is that models of the latter cannot rely on commitment ensured by democratic institutions, established procedures, independent courts, etc. In the most extreme case, no commitment is possible at all. Next, we will use theoretical arguments from [Acemoglu, Egorov and Sonin \(2008, 2009, 2012\)](#) to illustrate what happens in an environment with total absence of commitment in nondemocratic politics. In this highly stylized example, a group that has sufficient number of votes within the ruling coalition can eliminate the rest. However, actors need to be strategic about participation in such a group, as there might be more than one round of eliminations. Being included in the initial winning coalition does not guarantee belonging to the ultimate winning coalition.

The fact that the losers of power struggle are eliminated forever, without a possibility of return, is a drastic departure from the theory of democratic coalition formation, where coalitions can be perpetually formed and dissolved. And assuming that loser of a power struggle in an authoritarian regime lose their lives as well is not far-fetched. The Soviet political history in 1919-1952 is the case in point. A small group of the Communist party officials, the

Politburo, was the effectively the ruling coalition. All top government positions were held by its members. Though formally its members were elected at the Communist Party meetings, for all practical purposes the Politburo determined the fates of its members, as well as those of ordinary citizens. Of 40 Politburo members (28 full, 12 non-voting) appointed between 1919 and 1952, only 12 survived through 1952. Of these 12, 11 continued to hold top positions after Stalin's death in March 1953. There was a single Politburo member (Grigory Petrovsky) in 33 years who left the body and survived. Of the 28 deaths, there were 17 executions decided by the Politburo, two suicides, one death in prison immediately after arrest, and one assassination.

Acemoglu, Egorov and Sonin (2008) use the following example to tell the story of Joseph Stalin's succession fight. Power configuration $\left(\frac{3}{42}, \frac{4}{42}, \frac{5}{42}, \frac{10}{42}, \frac{20}{42}\right)$ is stable as elimination of any single member results in further eliminations. As a result, in any coalition that has a majority, there is always a member who would not want to take part of it, expecting to be eliminated in the next round. Now, consider the demise of the strongest member with power $\frac{20}{42}$ (Stalin). The new power configuration is unstable. Then, the three weakest members, $\frac{3}{22}, \frac{4}{22}, \frac{5}{22}$, (Khrushchev, Malenkov, and Bulganin), eliminate the strongest of the remaining members, $\frac{10}{22}$ (Beria), and form a new stable coalition $\left(\frac{3}{12}, \frac{4}{12}, \frac{5}{12}\right)$. (The denominators change as the power of the eliminated member is re-distributed proportionally among those who voted for elimination.)

The above example demonstrates that nondemocratic stability might be an equilibrium outcome even if there is no single dominating force, e.g., a leader or an agenda-setter who punishes a deviator. In this equilibrium, the ruling coalition is not necessarily minimal, and the agent with the highest amount of individual power is not necessarily included in the ultimate winning coalition. Finally, this model squares well with evidence on some modern autocracies. **Francois, Rainer and Trebbi (2015)** show that African ruling coalitions are relatively large and ethnic groups are proportionally represented. **Newson and Trebbi (2018)** found similar results analyzing authoritarian elites in Sub-Saharan Africa.

6 Conclusion

There is little doubt that authoritarian institutions impede economic development. With very few and very special exceptions, nearly all of today's developed countries are democracies. Authoritarian institutions are designed to limit citizens' access to political and, ultimately, economic rents. They tend to preserve the status quo, as creative destruction is antithetical to them.

Drawing on an extensive global dataset, with some time series going back to the early 19th century, [Knutsen \(2015\)](#) reports robust evidence that democracy increases not only technology-induced growth but also net economic growth rates. Notably, the results hold when accounting for the endogeneity of democracy, country-fixed effects, and sample-selection bias. The mechanism of authoritarian failures is broadly understood as well: authoritarian institutions that keep dictators in power provide poor protection of property rights, which is critical for growth. [Duong et al. \(2022\)](#) confirms this general observation, finding a positive relation between democracy and shareholder protection, proxied by the difference between the initial price and the eventual market price of firm shares. Using data for political regimes, income, and human capital for a sample of 141 countries over 1500–2000, [Madsen, Raschky and Skali \(2015\)](#) find democracy, instrumented by linguistic distance-weighted foreign democracy, to be a significant determinant of income and growth, controlling for human capital, among other key variables. [Papaioannou and Van Zanden \(2015\)](#) present evidence that a dictator's long years in office reduce economic growth, increase inflation, and harm the quality of institutions. The negative effect is particularly strong in young states and in Africa and the Near East.

Still, there is some evidence that an authoritarian regime might be conducive to economic activity – perhaps at some stages of economic development or in some specific areas. ([Luo and Przeworski \(2019\)](#) attribute autocratic "growth miracles" to the fact that to grow very fast, a country needs to have a low starting point, and poor countries are typically autocratic.) For example, [Giavazzi and Tabellini \(2005\)](#) demonstrate, using difference-in-difference estimates, that countries that first liberalized their economies and then became democracies perform much better than countries that pursued the opposite sequence. (See [Riedl et al., 2020](#) for a recent review of the political science literature on authoritarian-led

democratizations.)

Even if concentrated political authority aids economic development at some stages, authoritarian institutions discourage innovation along various dimensions, and thus, impede modern technology-based growth. [Acemoglu and Robinson \(2005\)](#) argued that concerns about losing control slowed down the embrace of industrialization and railroads by the absolutist Russian and Hapsburg Empires in the early 19th century. The lesson gains new relevance now that the Chinese economy, after forty years of rapid growth under an authoritarian regime, is approaching the technological frontier. For decades, Chinese growth exploited the advantage of technological backwardness and access to enormous reserves of cheap labor. By the third decade of the 21st century, both resources have been depleted. Can China count on productivity-led growth without a dramatic expansion of democratic institutions? The country seems to be shifting from a regime structured around an institutionalized ruling party to a more personalistic, archaic regime, that is, in the direction opposing democratization. If there is any accumulated wisdom in the literature on non-democratic politics, it is that the emerging regime is inconsistent with fast growth and development.

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