Which merits matter? Political performance, economic meritocracy, and elite loyalty in authoritarian states

Thomas Hazell*

17 June 2025

Which merits do autocrats care about when selecting officials? In some contexts, regimes prioritise economic competence and promote based on growth or unemployment figures. In other cases, political stability is more important. Officials are incentivised to improve turnout and the proregime vote. These effects may be conditional or—in many cases performance may simply not matter for appointments. Work on autocratic meritocracy, nonetheless, should consider wider operationalisation of political merit, provide stronger evidence of merit not mattering, and study cases beyond China and Russia. I advance the literature using newly collected evidence on governors' career trajectories in Kazakhstan paired with economic, electoral, and protest data. I use an equivalence testing approach to provide strong evidence that economic merit—even exceptionally good performance—does not matter in this case, while good political performance can somewhat increase a governors' prospects of promotion. I contribute to work on promotion tournaments and performance incentives under autocracy, while presenting new data from an important but understudied case of hegemonic electoral autocracy.

^{*} DPhil (PhD) candidate, Department of Politics and International Relations, University of Oxford https://t-hazell.github.io/, thomas.hazell@politics.ox.ac.uk.

1 Introduction

Much research studies the role of performance in the career paths of officials in authoritarian states. The question of whether appointments depend on past performance is key in understanding state effectiveness and development, since officials are incentivised to produce better outcomes when their promotion or demotion depend on those outcomes. Work in this literature tests for associations between some form of observed success in an official's area of responsibility and the official's odds of a career reward.

Arguments that regimes should condition appointment decisions on performance draw on their demand for better outcomes. Regimes might seek to drive economic development or garner performance legitimacy among their population. Then, research finds that officials may be judged on their observed success in promoting economic outcomes (e.g., Li and Zhou 2005). Officials are appointed based on how well they are able to boost growth or other economic outcomes in the units they are responsible for. Regimes might also be directly focused on political stability. In these cases, research argues that political factors are the main criteria in appointment decisions (e.g., Reuter and Turovsky 2022). The performance that counts depends on officials' ability and effort to solve political problems. In the case of subnational officials, for example, relevant measures include electoral turnout, proregime vote shares, or—as I suggest—protest levels.

Alternatively, the importance of merit for career paths may vary depending on context or—as some work finds—be negligible. In some areas of a country, for example, higher levels of opposition or competition may lead the regime to promote officials who show they can win elections over those with a history of boosting growth (Buckley and Reuter 2019). Regimes facing national crisis or external threat may drop their emphasis on results entirely (Aaskoven and Nyrup 2021). Other regimes do not appear to appoint in a systematically meritocratic or performance-based fashion at all. In these cases, appointments may be driven by the regimes' demand for loyalty. Classic works in political economy highlight how appointments based on loyalty can be orthogonal to competence (Egorov and Sonin 2011; Zakharov 2016). Alternate appointment motivations, for instance, include promotion of the leader's preferred faction or efforts to promote minority co-ethnics (Chen and Hong 2021; Francois, Trebbi, and Xiao 2023; Shih, Adolph, and Liu 2012; Hassan 2020; Carter and Hassan 2021).

Thus literature provides important evidence about just when performance matters for officials in authoritarian regimes. Still, further work is possible to improve on and confidently generalize the empirical claims it makes. A first set of problems relates to the unreliable data inherent to autocracies and subjective coding of when officials are 'promoted' or 'demoted' (Wiebe 2024). Second, negative findings that particular merits do not matter (or only matter in certain contexts) are often based on weak claims. Existing work largely only does not reject the null of performance-based promotions, rather than explicitly showing that meaningful effects are implausible (Trinh 2025). This problem is acute in contexts of poor and variable data. Third, claims that political merits do not matter should go beyond electoral outcomes,

especially in contexts where elections are entirely non-competitive. Finally, the vast majority of work focuses on China, Russia, and historical cases. Work on other—perhaps more 'typical'—autocracies is necessary to make broader claims.

I demonstrate potential solutions to these issues by examining an understudied example of resource rich electoral autocracy, Kazakhstan. I collect novel data on the country's regional governors and their career trajectories, and combine it with measures of economic and political performance. After arguing that neither type of performance is likely to be especially important, I examine the relationship between performance and appointment with an equivalence testing approach (Rainey 2014; Hartman and Hidalgo 2018; Trinh 2025). I show that economic performance robustly does not shape promotion and demotion. The evidence on political performance is more mixed, with a plausible but weak effect of electoral outcomes. More work is necessary to draw conclusions about the importance of protest, by initial tests show they plausibly matter. Future versions of this paper will extend this analysis by (a) testing more 'objective' nightlight measures of economic performance, (b) collecting further protest data, and (c) applying the equivalence testing approach as well as testing the importance of protest control in a reanalysis of existing data from Russia.

This paper, first, discusses the literature's operationalisation of 'merit' and synthesis its expectations of when an autocratic regimes should prioritize particular forms of performance. Second, it discusses what existing research can and cannot conclude given their empirical designs. Third, it notes how I build on this existing research. In the empirical section, fourth, I apply this design to new data on a case where claims of meritocracy have yet to be systematically tested, Kazakhstan. Fourth, I discuss my findings from this case, conclude, and further outline the direction of future work on this paper.

2 Performance-based autocracy

2.1 Defining and identifying performance

In this literature, appointments are performance-based—or 'meritocratic'—when they are systematically decided on the basis of officials' observed ability. Officials who are responsible for better outcomes than their peers are promoted ahead of those peers. Those with relatively worse outcomes do not receive promotions, or are demoted or fired. 'Merit' in this definition refers specifically to demonstrated ability for producing good outcomes.¹ In particular, it assumes that officials with merit are competent and are able to apply that competence to produce good outcomes—they can draw on both expertise and capacity (Gailmard and Patty 2012). By contrast, some work studying regimes' selection on competence highlights officials'

¹On initial entry to the system, before they have had a chance to influence economic or political outcomes, regimes may rely on measures such as test scores to select on merit (H. Liu 2023).

characteristics, such as their education and other 'human capital' indicators (e.g., Buckley et al. 2014; Rochlitz et al. 2015; Jia, Kudamatsu, and Seim 2015; Lee and Schuler 2020; Reuter 2023). While these background characteristics may suggest an ability to promote good outcomes, a system is only performance-based when it principally relies on those actual outcomes being achieved.

The sorts of merit that a regime prioritises can vary, although the underlying competence required by officials to succeed may be similar. I focus on the two overarching 'types' of merit studied by the literature so far. First, some regimes may focus on merit in terms of managing the economic situation. The motivation here might be so-called 'authoritarian developmentalism', a search for economic legitimacy among the population, or to enable regime figures to collect more graft (Landry, Lü, and Duan 2018; Buckley and Reuter 2019; Trinh 2025). Outcomes that we would expect officials to succeed in might then include economic growth, unemployment, or wages. Many empirical studies of autocratic meritocracy, for instance, focus on the subnational officials who control state structures in territorial units. These officials demonstrate economic merit when their district sees economic growth or declining unemployment. Second, in other contexts, regimes may focus on promoting officials who can deal with political problems (Reuter and Turovsky 2022; Magiya, Popescu, and Tezcür 2023). This may be motivated by the more direct demand for social stability, especially where the regime party is struggling to demonstrate popular support or where protests threaten to get out of control. Officials may be promoted if they demonstrate they can skillfully manipulate election results (Rundlett and Svolik 2016) or suppress protests (Tertytchnaya 2023).

Scholars identify whether and which merit(s) matter by showing associations between the relevant outcomes and officials' prospects of promotion and/or demotion. Most work does this by testing the determinants of promotion or demotion. Some work tests the determinants of being removed from office and demoted (e.g., Buckley and Reuter 2019; Reuter and Turovsky 2022) or simply all turnover (Magiya, Popescu, and Tezcür 2023). In line with this definition of merit and meritocracy, this work then operationalizes merit in terms of observed outcomes. Almost all this work studies subnational officials with regional- or district-level data. In the same way as I do later on, they use a time-series design to show that lagged outcomes predict whether or not an official is predicted in a particular time period. Some work goes beyond basic outcome variables to explicitly model the notion of a promotion tournament (Li and Zhou 2005). Here, since officials are seen as competing with their peers (those holding the same position in a different territorial unit), outcomes in a particular unit are calculated relative to those elsewhere.

2.2 When merit should and should not matter

2.2.1 Economic meritocracy

Existing scholarship suggests that regimes aiming to improve economic results orient management of officials around economic merit. In line with the classic image of some authoritarians as leading 'technocratic' or performance-centric states, a focus on economic merit means that only officials able to promote development receive promotions. Meritocratic appointment decisions filter out incompetent officials without the necessary skills while incentivising other officials to direct effort toward economic development (Jiang 2018; Khan, Khwaja, and Olken 2019). Individual ability is a crucial driver of development (Best, Hjort, and Szakonyi 2023; Barteska and Lee 2024). Incentives, such as those arising from a bureaucrat's relationship to their political superiors, also moderate outcomes (e.g., Gulzar and Pasquale 2017; Williams 2017; Bhavnani and Lee 2018; Rivera 2020; Xu, Bertrand, and Burgess 2023; Spenkuch, Teso, and Xu 2023; Toral 2024). In line with these findings, to extent that economic meritocracy triggers these selection and incentive mechanisms, it may be one driver of development (Besley et al. 2022).

The classic case in the literature of economic meritocracy under authoritarianism is China (as initially illustrated by Li and Zhou 2005). This work typically focuses on growth in gross regional product (GRP) (e.g., Li and Zhou 2005; Landry 2008; Choi 2012; Rochlitz et al. 2015; Pang, Keng, and Zhong 2018; Landry, Lü, and Duan 2018; Bulman and Jaros 2020). Other research highlights incentives around alternative indicators, such as revenue collection (Lü and Landry 2014).² It casts the Chinese cadre system as a promotion tournament centred around economic outcomes. In some results, higher growth predicts promotion, especially at the lower levels of subnational governance. These results add some credence to claims by the Chinese central government that it judges its cadre partially on economic measures (Pang, Keng, and Zhong 2018). Illustrating the core theoretical claim that meritocracy is a tool of developmental regimes, this literature then typically links these findings to claims that the Chinese regime has been able to generate economic success, especially compared to other autocracies. Highlighting some potential shortcomings of the standard approach to testing for meritocracy, however, these results appear—at best—robust only under certain general secretaries (Sheng 2022; Wiebe 2024).

Indeed, more recent work testing for economic meritocracy beyond China similarly finds that context is highly important in moderating when regimes feel comfortable engaging in economic meritocracy. For example, Aaskoven and Nyrup (2021) demonstrate that decreases in provincial unemployment explains governor promotion in pre-war Nazi Germany. However, following the onset of war, the increased vulnerability of the Nazi regime lead it to prioritise officials' loyalty over demonstrated ability to boost performance. Buckley and Reuter (2019) find that regional economic officials in Russia are only judged on growth in the least electorally

²See also Choi (2012, 975), which finds that revenue and growth are highly correlated and have similar effects.

competitive regions. Elsewhere, the regime may be more interested in political stability and the success of the ruling United Russia party.

2.2.2 Political performance

The second sort of merit, then, that the literature considers regimes might consider is an official's ability to manage political situations. For well-known reasons, many regimes find themselves focused on ensuring on the problem as mass control as they look to deal with the risk of being removed from below (e.g., Svolik 2012; Gerschewski 2023). Just as economic meritocracy may enable selection of competent managers and incentivise officials to focus their efforts on development, a focus on political performance should increase the capacity of the state to deal with political problems.

The measure of performance typically used by this work—regime party vote share—is most relevant in electoral or 'competitive' autocracies (Levitsky and L. Way 2010). In these cases, the dominant party is nonetheless still vulnerable to opposition or where the regime wishes to signal strength. Officials' popularity—which depends on how well they govern in their citizens' eyes—is one driver of this vote share. Also, officials can vary in their success and effort in rigging the vote (Gehlbach and Simpser 2015; Rundlett and Svolik 2016). An alternative outcome, especially where regimes are concerned with some sort of signaling democratic legit-imacy, is turnout. Officials might attempt to boost this in a similar way to the regime vote. The clearest evidence of a political performance focus is from Russia, where officials have some responsibility for electoral fraud (Bader and van Ham 2015). There Reuter and Turovsky (2022) show that ruling party vote share is a good predictor of promotion, although turnover has only a weak association (see also Reisinger and Moraski 2013; Reuter and Robertson 2012). In the Ottoman empire and Turkey, Magiya, Popescu, and Tezcür (2023) similarly find that governors who secure higher pro-regime votes are less likely to be removed from office.³

A final outcome which may be important but that existing work on performance-based autocracy does not consider is protest level, a very clear manifestation of political discontent. Regimes may prioritise early and stringent control of local protests out of fear of them spiraling out of control, undermining nationwide political stability. Some of the so-called color revolutions in the early 2000s, for instance, began with regional protests that eventually converged on the capital (e.g., in Kyrgyzstan, Radnitz 2010). In the case I examine here, Kazakhstan, protests have frequently broken out in the fossil fuel-producing western regions before leading to disturbances in the main central cities. Regional officials may be able to reduce protests both through general popularity as well as their strategic use of enforcement powers (Tertytchnaya 2023). Regimes who are particularly focused on preventing protests then may use control of them as a proxy for officials' political ability.

³Unusually, Magiya, Popescu, and Tezcür (2023) predict all removal from office, without coding whether a governor's tenure ended with promotion, demotion, or otherwise.

An official's ability produce good political outcomes likely correlates with their ability to produce good economic outcomes. For instance, a region where a regime-aligned official is responsible for reduced unemployment will surely also have higher levels of support for the regime party. A focus on one sort of merit is not mutually exclusive from the other. For instance, Reuter and Turovsky (2022) focus on the importance of political ability but find some evidence that economic performance also reduces the chance of being removed from office. That said, there are different skills that are required for each—a technocrat may manage an economy well while lacking the charisma necessary for political leadership. Empirically, economic and political merit may be opposed to each other. This matches the finding in Buckley and Reuter (2019) that economic outcomes matter only in regions where the regime is less concerned about political issues.

2.3 Autocratic non-meritocracy

Yet there is reason to expect that autocrats should usually *not* pay much attention to officials' political or economic merit when making appointments. While performance-based strategies largely aim at aim solving the problem of mass control, regimes may be significantly more interested in maintaining official and elite loyalty (Svolik 2012). Regimes want officials who they trust not to defect and who will not abuse their positions at the expense of the centre. In the case of regional leaders, for example, disloyalty may manifest in governors' efforts to protect their region from central influence. Regimes are wary of governors abusing their powers to embed themselves, form regional patronage networks, and gain leverage over the centre (Tolstrup and Souleimanov 2022; Remington et al. 2022). 'Embedded' governors may use patronage to secure local popularity and the support of regional elites in order to demand more powers, money, or independence (Melnikov 2023). In the Soviet Union, for instance, long-serving regional first secretaries exploited their connections to run massive corruption schemes and defraud the planning system (Gorlizki and Khlevniuk 2020). Radnitz (2010) shows how regional elites instrumentalised their local ties to mobilise anti-regime protest in Kyrgyzstan.

Some officials have background characteristics that incentivise them to be loyal. Regimes searching for loyalty may focus on promoting this type of official. One strand of the literature suggests that co-ethnics appear more loyal to autocrats, perhaps because social ties incentivise them to support in-group members (Roessler 2011). Rulers in Iraq and Kenya preferred to appoint co-ethnics to roles in the security apparatus because of their perceived greater loyalty (Blaydes 2018; Hassan 2020; Carter and Hassan 2021; Hassan, Larreguy, and Russell 2024). Similarly, periods working together (Melnikov 2023), shared participation in revolutionary struggle (Levitsky and L. A. Way 2022), or family ties (cf. Wong and Chan 2021, 585–586)

⁴See also Magiya, Popescu, and Tezcür (2023) on governors in Turkey.

⁵Nevertheless, the social capital and independent patronage networks formed during revolutionary activities may make autocrats see co-revolutionaries as more of a threat (Goldring and Matthews 2023), as in the case of

may make a subordinate appear more trustworthy. Autocrats may also rely on membership in senior elites' 'factions', earned through similar shared experiences, to proxy for this. In the Chinese case, some research argues that economic performance is less important for promotions than factional ties (e.g., Shih, Adolph, and Liu 2012; Choi 2012; Chen and Hong 2021; Francois, Trebbi, and Xiao 2023).

By contrast work on purges—which may include demotion, removal from the state employment, or legal and physical punishment—highlights a focus on officials with attributes that signal propensity to disloyalty. Elites who have held roles since the founding of the regime may be more likely to be purged because their 'starting positions' and support bases make autocrats doubt their loyalty (Goldring and Matthews 2023). Officials with experience in the security forces are more likely to be violently purged since knowledge of regime abuses means their defection would be especially problematic (Matthews 2024). Security officials, along with figures who have held critical positions in former regimes, might be more likely or liable to launch a coup (Sudduth 2017; Ketchley and Wenig 2023).

Other officials may be able to demonstrate loyalty through sending costly signals. Costly signals have weight in that they involve especial effort, create a record of illegal action, or shut off alternative political options. These actions tie officials' prospects to the regime's survival. Public sycophancy or participation in a cult of personality may have these effects by prospectively undermining future involvement in an opposition movement or because of their psychological costs (Shih 2008; Crabtree, Kern, and Siegel 2020; Baturo, Khokhlov, and Tolstrup 2024). When an official carries out harsh repression or human rights abuses, they signal loyalty by risking their own exposure or prosecution should the regime fall (Hassan 2020; Qian and Bai 2024)

Finally, regimes may attempt to loyalty from officials through co-optation (Hazell 2025). Cooptation is the targeted distribution of money, policy-influence, and other benefits intended to incentivise membership in the ruling coalition (e.g., Gerschewski 2023, 2023; Meng, Paine, and Powell 2023). Much work highlights ruling parties and the 'mock democratic' institutions of elections and legislatures, casting them as a tool to distributing money, policy-making influence, and criminal immunity to the most threatening elites in arenas which are costly to shut down (e.g., Smith 2005; Magaloni 2008; Magaloni and Kricheli 2010; Reuter 2017; Lust-Okar 2006; Wright 2008; Gandhi 2009; Blaydes 2010; Boix and Svolik 2013; cf. Pepinsky 2014; Brancati 2014; Levitsky and L. A. Way 2022). An alternative variety of co-optation is the conditional distribution of state employment. States may employ swathes of the population through bureaucracies and state-owned enterprises (SOEs) (Rosenfeld 2021). A state's day-today operations create positions which can be used as part of patronage distribution (Ang 2016; Makarchev and Wieprzowski 2021). These positions provide patronage benefits such as wages, access to graft, or policy-influence opportunities (Xu 2018). By contrast, individuals in nonstate work become less reliant on the regime and less inclined to support it (Rosenfeld 2021). For those lower down the system, state employment should include prospects of promotion (cf. H. Liu 2023).

Mao's China (Bai and Zhou 2019; Shih 2022) or Stalin's purging of Old Bolsheviks.

A focus on loyalty implies that regimes are not appointing on a performance basis or that appointments are only slightly informed by merit. For one, the best performing officials have the greatest incentives to be disloyal (Egorov and Sonin 2011; Zakharov 2016; Abbott et al. 2020; Ketchley and Wenig 2023). This trade-off suggests that regimes demanding loyalty deliberately avoid promotion based on merit. For two, regardless of how sharp the loyalty-competence trade-off is in practice, regimes who promote based on loyalty are inherently unable to guarantee their appointments are made with a full focus. In line with this notion, some work that highlights regimes' demand on loyalty explicitly addresses a focus on performance as an alternative explanation. Thus, for example, some work on factions in China also seeks to show that economic growth does not predict promotion (Shih, Adolph, and Liu 2012).

2.4 Building on existing empirical work

Empirically, one sort of claim is that changes in a particular variable tapping performance—perhaps relative to changes under other officials or in the past—predict changes in the like-lihood that the official responsible is promoted or demoted. For instance, the governor of a faster growing region is more likely to be promoted. A basic threat to inference is that misspecified models may lead to spurious claims if they fail to account for confounding variables, autocorrelation (in the typical panel set-up), or similar issues (Wiebe 2024). One key problem is selection bias. This is the issue that favored cadre may be given higher potential or already better performing regions (Landry, Lü, and Duan 2018, 1094–1096). Existing work tries to addresses through techniques including region fixed effects, but these biases remain difficult to parse out. Overall, given strengthening norms in political science around reporting multiple model specifications and robustness checks, and of providing data for replication, these threats should be relatively minimal. I do not focus on them here.

The second threat is one acute to all studies of autocracies—unreliable data. Officials have well-known incentives to inflate the statistics they report (Wallace 2016; Gao 2015; Garbiras-Díaz and Slough 2022; Trinh 2025). Regimes may be responsible for misreporting data as they attempt to improve domestic legitimacy or international perceptions (G. Liu 2024; Martínez 2022). If the data used in empirical models of performance appointments are, at best, a sanitized reality, it is unclear how much we can trust their results. Given that certain economic (GRP, unemployment) variables, especially, are likely to be highly correlated under conditions where data is not falsified, but may be drawn from different sources, results that find only one, specific measure of economic merit are particularly vulnerable to these concerns. One alternative is to use remote sensing data, such as nighttime light levels, and to proxy growth through changes in these (Martínez 2022). Landry, Lü, and Duan (2018, 1086) apply this approach in China and Trinh (2025) does so in his work on Vietnam. Still, such techniques cannot reveal whether outcome data is being inflated by the regime itself, or if the regime is genuinely being fooled by official misreporting.

A third, related problem particular to this literature is that scholars rely on subjective coding

of whether appointments are 'promotions' or 'demotions', even in highly regimented bureaucracies like China's (Wiebe 2024). Differences in coding may make-or-break conclusions about meritocracy. Wiebe (2024) shows that understandable heterogeneity in coding—especially how 'strict' researchers are in identifying promotion—is one driver of different findings in the literature on promotion tournaments in China.

A second sort of claim relates to the negative findings in this literature. Researchers sometimes argue that regimes are not meritocratic, that a particular form of merit does not matter, or that the value of merit is context dependent by showing that particular variables do not predict appointments. An important way that they suggest this is showing that those variables do not reach conventional significance levels, or that they are only significant when an interaction term with a variable representing context is introduced. The core concern here is that not being able to say for sure that a variable matters is not the same as showing that certainly does not matter (Rainey 2014; Hartman and Hidalgo 2018). Being unable to reject a null hypothesis of non-significance is entirely separate from being able to reject a different null hypothesis that performance does matter. That is, a measure of performance may not have a statistically significant association with promotion even if a substantively meaningful effect is well within the plausible estimate effects (confidence interval, in frequentist terms). Researchers then cannot rule out said effect. This concern is heightened given that data provided autocratic regimes may make precise estimate difficult. For instance, that might be due to artificially high variance due to misreporting in some periods.

One solution to this issue is to follow recent methodological work which outlines best practices when arguing for a null in political science (Rainey 2014; Hartman and Hidalgo 2018; Kane 2025). As Rainey (2014) argues, with a theory- and prior results-driven selection of a 'substantively meaningful' effect, showing that point estimates are statistically distinguishable from that effect allows more confidently claiming no effect. For example, Trinh (2025) has recently applied this equivalence testing approach to demonstrate that governor appointments in Vietnam are not based on economic or political performance. He shows that a 5% increase in promotion probability—his 'substantially meaningful effect—is not within the 90% confidence interval of the predicted effect of even 'major hypothetical achievements' such as the governor's region growing by 2%.

Also often implicit in these claims is that a whole 'type' of performance does not matter. For instance, if vote count does not predict appointments, research may suggest that the regime is not making promotions based on officials' political skills. Such claims assume that there is not another plausible measure of that sort of merit that might be associated with appointments. There is, of course, many variables that scholars might think of and even more ways of measuring those variables. For example, they might construct measures relative to peers or performance by previous holders of the office (Sheng 2022). At some point, showing a new, similar variable does not influence promotion does not add much new evidence of non-meritocracy. Equally, only one of a number of similar variables being associated with promotion may not be convincing evidence of performance mattering. What is more important is showing that the set of plausible, qualitatively different ways of measuring the same sort of

merit also have no effect, especially if they are less correlated. For example, work on political performance focuses on regime vote share and electoral turnout. Yet, as I argue above, control of protest is another plausible measure of political ability that existing work does not tap.

Finally, evidence on meritocracy so far almost all comes from two cases. Economic performance is the subject of much research from China, while work on political factors is largely from Russia. Interestingly, much of the work in this literature not focusing on these cases examines historical examples of authoritarianism (on Nazi Germany, Aaskoven and Nyrup 2021; on the Ottoman Empire, Magiya, Popescu, and Tezcür 2023). Work on economic and political performance in Vietnam by Trinh (2025) is one of few exceptions. Yet China and Russia are atypical autocracies. They have unusual political systems and histories, are geographically large, and their regimes have important international as well as domestic problems. For example, China's focus on economic outcomes may be unique to its development path. A Russian focus on political performance may draw from the various moments of competitiveness and instability its regime has experienced. Without moving beyond these cases to study more diverse—and more typical—cases of autocracy, it is hard to say how well findings so far generalize.

3 Promotion and demotion in Kazakhstan

In this paper, I first test whether economic or political performance drove the promotion and demotion of regional governors in Kazakhstan with data from between 2000 and 2022. In this period, the country had the subnational divisions shown in Figure 1.⁶ I focus on the initial tier of subnational governance, the regional level. Between 1997 and 2022, Kazakhstan had 14 regions (in Kazakh, *oblysy*; in Russian, *oblast'*). These were joined at the regional level by the capital, Astana, and Almaty, a 'city of republican significance'. In 2018, South Kazakhstan oblast' was split into Turkestan oblast' and a new city of republican significance, Shymkent. My analysis therefore includes 17 top-level units (16 before 2018).

Each region has a provincial bureaucracy (akimat), led by a governor/mayor (akim) who is appointed and dismissed by the president (Onalbaiuly 2019). I focus on these region-level governors. Governors are supervised by an elected regional assembly (maslikhat). The maslikhat has nominal powers to approve governor appointments and local budgets, but in practice is generally subordinate to the governor (Junussova 2020, 21–23). Each region and major city is split into between three and twenty districts. These are either a district (audan/rayon), of which there are 177, or a city of region significance, of which there are 38. Mirroring the region-level structure, the respective regional governors appoints a junior akim to lead each district akimat, supervised by an elected district maslikhat. The fourth tier of governance

⁶Maps use 2018 data (Rodionov 2021).



Figure 1: The regions and districts of Kazakhstan (before reform in 2022)

includes akims of over 1,400 minor cities, towns, villages, and rural districts (Makhmutova 2006, 277–281). Since 2021, direct elections have been held for these posts.

Governors play significant roles in national politics and regional economies (Cummings 2005). In the early 1990s, governors were key players in defining constitutional struggles between the regions and Nazarbayev's regime (Jones Luong 2002). By the mid-2000s, the regime was firmly established and regions' economic influence reduced by centralization (Sharipova 2018). Nevertheless, governors retain significant economic powers and policy influence, and are the key political figures in their regions. Governors have direct policy-making responsibilities over regional development, inter-regional trade, internal migration, and housing (Makhmutova 2006; Junussova 2020). They also implement national policy on transport, healthcare, and education. Governors shape implementation in these areas through channeling funding and appointing key bureaucrats. Governors also help maintain local order. Policing is run by the national Ministry of Internal Affairs, but governors support central crime and antiterrorism measures. They have responsibility for monitoring labour conflicts. Governors of cities of republican significance—district-level heads elsewhere—are directly responsible for issuing protest permits.

⁷Governors' key source of funding is the republican (national) budget. A range of taxes are automatically transferred directly to regional government after being collected by the central government at a nationally-determined rate. Additionally, regions receive or must pay re-distributive central subventions to make up for the difference in their revenue producing potential from locally collected taxes and regionally-owned state enterprises. The scale and share of most regions' reliance on these transfers has grown dramatically since the early 2000s. In 2000, eight regions were net contributors. By 2021, it was three.

3.1 Data

To study whether and which merits matter for the careers of regional governors in Kazakhstan, I collect a new dataset of governors' biographies and link them with regional-level economic and political statistics from 2000 to the beginning of 2022.

3.1.1 Coding promotion and demotion

To identify governors, I rely on an original dataset of governors' tenures, careers, and personal characteristics. My primary source of information is Zakon, a private legal news and information website hosting Russian-language biographies of political, business, and legal notables in Kazakhstan. Biographies include detailed work histories, often starting with the first posteducation job and continuing to retirement or the present day. I create my outcome variables by leveraging this information. I identify the governor's next job to manually code each of the 115 tenures as a promotion or demotion. What is a promotion or demotion is not always clear in this case, and so the coding is somewhat subjective. I follow work on China, such as Wiebe (2024), to account for this subjectivity by coding both looser and stricter categories.

I code for four overall categories based on the size and prestige of the governor's region and the prestige and centrality of their next job:

Promotion (68 cases). A plausibly more connected/central state role than the governor's current regional leadership position. For example, governor of a somewhat bigger region, more minor ministerial roles (e.g., minister for tourism), non-head leadership in a significant national SOE, or to lead a national SOE, diplomatic postings to large countries and regional neighbors. Includes 'clear promotions'.

Clear promotion (35 cases). A clearly more important state position. For example, important minister, governor of a region with 150% or more GRP/the capital, ambassador to Russia.

Demotion (27 cases). A somewhat worse state role than the governor's current regional leadership position. E.g., slightly smaller region, advisory role in the presidential administration, leadership role in a minor SOE. Also includes retirement

^{8&}quot;Spravki: Kto Est' Kto [References: Who Is Who]," Zakon, accessed February 24, 2024, https://online.zakon.kz/infowho.aspx. Zakon is missing month-level tenure information or work history for a few governors, mostly who started in the late 1990s. To include the universe of region-level governors, I use alternate sources in these cases: Daniyar Ashimbaev, "Kto est' kto v Kazakhstane [Who's who in Kazakhstan]," https://kazbio.info/, and "Cpisok akimov oblastey Kazakhstana [List of akims of the regions of Kazakhstan]," Wikipedia, https://ru.wikipedia.org/wiki/%D0%A1%D0%BF%D0%B8%D1%81%D0%BE%D0%BA_%D0%B0%D0%Bh.https://ru.wikipedia.org/wiki/%D0%B2_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D0%B5%D0%B9_%D0%B0%D0%B0%D0%B7%D0%B0%D1%85%D1%81%D1%82%D0%B0%D0%BD%D0%B0.

⁹A full presentation of the biography data is in Hazell (2025).

or leaving the civil service to take a senior private sector role. Includes 'clear demotions'.

Clear demotion (8 cases). A clearly worse state role, prosecution, or departure from the civil service without taking a private sector role. For example, vice governor of a smaller region, regional head of a minor national structure, minor international role (e.g., 'head of the Kazakh-Belarusian cultural exchange agency').

So, 20 tenures end with a role that I code as neither a demotion nor a promotion. In the tests below, I use each of these categories as outcome variables in a set models. The baseline case is then either membership of the no change category, or membership of the opposite variable. For example, tests for clear promotion include members of that category, excluding no change, demotion, and other promotions. In the time series designs, I put the data in a month-region format. The outcome variable is 0 for each month except those where the promotion/demotion takes place.

3.1.2 Economic outcomes

To test for evidence of economic outcomes mattering, I use gross regional product, unemployment, and wage data from the national statistics agency. The main concern with these data is bias. First, local officials—including governors and their juniors—might misreport data because they perceive that they are less likely to be dismissed following positive results (Garbiras-Díaz and Slough 2022). Statistical data in the regions is collected by regional committees of the national statistics bureau, but they may still rely on governors for certain information (for evidence of this in Kazakhstan, see Onalbaiuly 2019, 140–42; Sharipova 2018, 51-52). I try to minimise this issue by using a range of data. A key measure, gross regional product (GRP), is calculated by the central statistics office with data from national ministries and national-level surveys (Maldybaeva 2017).¹⁰ This indicator should not be influenced by lower-level units. Second, central officials may be behind misreporting and prefer not to report poor performance (Martínez 2022). Again, official statistics would then not reflect regime perception of competency. The economic data do tend to be positive. GRP rarely falls and unemployment rarely rises. Nevertheless, there are sustained differences between regions. Using data from between 2004 and 2009, Propastin and Kappas (2012) compare Kazakhstan's GRP figures to nightlight strength—proxying regional economic activity—and find a reassuringly strong correlation.

From all three measures, I use both the raw measure as well as calculating annual changes. he GRP and growth variables (annual change in GRP) may reflect governors' observable abilities to maximize output and support national development. The second variable measures the level of and annual change in regional unemployment rates. The third is a wage index and a measure of annual change in the index. These measures may reflect an governor's ability to

 $^{^{10}}$ This evidence comes from the statistics agency's official journal.

Table 1: Summary of election data.

Year	Regions	Avg regime vote	Avg turnout	Type
2007	16	-	0.643	Parliamentary/regional assembly
2011	16	0.955	0.902	Presidential
2012	16	0.816	0.754	Parliamentary/regional assembly
2015	16	0.978	0.958	Presidential
2016	16	0.820	0.780	Parliamentary/regional assembly
2019	17	0.700	0.769	Presidential
2021	17	0.695	0.638	Parliamentary/regional assembly

Note: In years where there are both parliamentary and regional assembly elections, I use the parliamentary vote for the vote share since it is available in more years. Therefore, all results are for national-tier elections. Regime vote is for Nur Otan/AMANAT in parliamentary elections and Nazarbayev and Tokayev in presidential vote.

bolster regime legitimacy claims by supporting citizen welfare through wage changes. Each variable reflects a plausible goal for an economic performance-seeking regime. Second, since they are calculated in different ways with different data, using multiple variables helps guard somewhat against the risk of bias. Though the data are annual, I link them with the governor panel at the monthly level, so each row in the panel contains the economic measure as it was last reported.

3.1.3 Political outcomes

Vote share and turnout

For the first measure of political outcomes, I compile regional-level data on election results since 2007 (Table 1). These data largely come from national and regional election commission sources, but have not previously been compiled into one dataset. Data falsification poses some clear challenges here. On the one hand, governors may be responsible for vote rigging as they seek to signal popularity to the centre. On the other, the central government may just be reporting incorrect information while knowing the bureaucrat 'true' level of support. Bar independent and representative surveys that might capture popularity—these have never been consistently carried out in Kazakhstan—this issue is difficult to overcome.

Protest

As a second method of measuring political outcomes, I collect information on protests in each region since 2018. I use ACLED's event data in the category of 'protest' and 'riots', which I aggregate to create a region-month panel that I link to the governor panel. In particular, I create two variables. The first is a raw count of protests per month. The second is the number

Table 2: Acled: Monthly protest counts from the start of 2018 to the end of 2021

Year	Events	Avg monthly events per region	Avg monthly national events
2018	101	0.809	13.8
2019	151	2.53	43.1
2020	175	4.08	69.4
2021	179	4.89	83.1

of protests per region as a proportion of all nationwide events. This second variable then explicitly captures which regions are experience more protests than others. One problem with this data is that—like many event data—it does not capture all protest events. In particular, as Table 2 shows, the rising number of events per year may simply reflect that coverage has improved over time. In early years, especially, recorded events may be concentrated in the larger cities, where they are more visible to ACLED researchers. I somewhat account for this by including separate time and region fixed effects in the analyses that follow.

4 Meritocracy in Kazakhstan

In this section, I first discuss the political context of my case and reasons to believe that governors might or might not be judged on economic and political performance. Second, I present the main analysis.

4.1 Case context

4.1.1 Economic meritocracy

Existing research claims that, generally, autocrats tend to prioritise economic competence only in regions and periods in which they have a secure hold over power (e.g Reuter and Turovsky 2022; Landry, Lü, and Duan 2018; Aaskoven and Nyrup 2021). In Kazakhstan, the regime's firm grip on power suggests it might employ meritocracy. Since the mid-2000s, the regime has been hegemonic and increasingly highlighted its ability to promote growth and deliver services (Baturo and Tolstrup 2024, Figure 2). Kazakhstan's governors do have an ability to influence economic outcomes in their regions that they might be judged on. They control significant budgets and have responsibility over areas that can impact growth, including regional development and housing plans, service delivery, and infrastructure. Even if the regime does not believe governors have the ability to affect outcomes, dismissing governors in poor performing regions may be an attempt to appear responsive.

Qualitative evidence also suggests that the regime may punish the governors of poorly performing regions. Sometimes, the government has publicly blamed poor performance for an governor's removal. A recent example is the dismissal of Shymkent's head in 2019. The head of the presidential administration, sent to introduce his replacement, said "the credit of political trust given to [the akim] has been exhausted" and mentioned Shymkent's debt to the national budget. In late 2022, media linked the dismissal of the governor of Pavlodar region after two years to service failures, including the breakdown of communal heating in the city of Ekibastuz. Most dismissals are lower profile, with no reason given. One claim is that regime less overtly shuffles or dismisses poor-performers based on 'ranking' with economic and social indicators. The regime itself has claimed to follow such a system. Daniyar Ashimbaev argues that there is a 'monitoring system [...] akims who perform badly are fired'. Ashimbaev

An example of how regional heads might undermine growth comes from the capital, Astana. Built largely from scratch in the late 1990s, Astana grew quickly and suffers from tremendous traffic issues. Buses—the responsibility of the governor—spend rush hour moving just as slowly as private cars. Since the 2000s, the akimat has planned to build an elevated light rail system.¹⁵ Initial tenders were issued in 2011, but construction only began in 2017. The company constructing the line, however, collapsed in 2019 amidst a corruption scandal. Current plans aim for completion in the late 2020s. For now, huge concrete columns erected in the early stages of construction are scattered about the city centre in a visible—and often parodied—symbol of the project's mismanagement. Many are overlooked by the presidential palace, the parliament, and ministerial buildings. If the regime is focused on maintaining a competent set of governors, then cases like these might lead it to remove failing governors quicker. On the one hand, while one responsible head lasted six years in office—between 2008 and 2014—since then, four heads have lasted about two years on average. On the other, these governors have not been 'punished' for incompetence. Although an ex-deputy head of Astana was arrested over the issue, Astana's recent heads have moved directly onto roles as the Min-

¹¹"Politicheskiye oshibki" Gabidully Abdrakhimova i obraz akimov [The 'Political Mistakes' of Gabidulla Abdrakhimov and the image of akims], Radio Azattyk, 31 July 2019, https://rus.azattyq.org/a/kazakhstan-shymkent-ex-mayor-abdrakhimov/30085334.html.

¹² "Abylkair Ckakov was dismissed from the post of akim... Ekibastuz was left without heat and hot water after several boilers at the thermo-electric plant were turned off... President Kassym-Jomart Tokaev reacted to the situation [otreagiroval na situatsiyu]." See Vladimir Nikitin, "Kasym-Zhomart Tokaev provel perestanovki sredi akimov [Kassym-Zhomart Tokaev reshuffled akims]," Komsomol'skaya Pravda, 1 December 2022, https://www.kp.kz/online/news/5036209/.

¹³E.g., "V pravitel'stve obsuzhdena sistema reytingovoy otsenki akimov [The government discussed the system of rating akims]," Karavan, 23 February 2005, https://www.caravan.kz/news/v-pravitelstve-obsuzhdena-sistema-rejjtingovojj-ocenki-akimov-205302; Gaukhar Aymukhamedova, "Proverka na effektivnost'. Opredeleny kriterii otsenki raboty akimov [Testing for effectiveness. Criteria for ranking the work of akims were determined]," Zakon, 9 April 2010, https://web.archive.org/web/20181228150156/http://www.zakon.kz:80/168813-proverka-na-jeffektivnost.-opredeleny.html.

¹⁴Evgeniya Kim, "Daniyar Ashimbaev: naznachenie akimov v Kazakhstane – eto lotereya [Daniyar Ashimbaev: the appointment of akims in Kazakhstan is a lottery]," IA-CENTR, 14 April 2022, https://ia-centr.ru/experts/evgeniya-kim/daniyar-ashimbaev-naznachenie-akimov-v-kazakhstane-eto-lotereya/.

¹⁵E.g., Paolo Sorbello, "Kazakhstan's Light Rail Corruption Case Drags on", The Diplomat, 16 October 2021, https://thediplomat.com/2021/10/kazakhstans-light-rail-corruption-case-drags-on/

ister of Defense, Vice Prime Minister, Minister of Trade, and, twice, Head of the Presidential Administration. This more detailed examination of the regime's promotion strategy suggests that economic meritocracy may not always be particularly important.

4.1.2 Political performance

Alternatively, the regime may be interested in political criteria. On the one hand, as above, Kazakhstan is lead by a hegemonic regime. The country was headed by one man—Nursultan Nazarbayev—between 1989, when he became First Secretary of the Communist Party of the Kazakh Soviet Socialist Republic, and 2019, on handing over presidential office to his arranged successor, Kassym-Jomart Tokayev. Nazarbayev established a hegemonic regime in the 1990s, overcoming resistance from the parliament and regional elites (see, e.g., Jones Luong 2002; Cummings 2005; McGlinchey 2011; Webb Williams and Hanson 2022). Nazarbayev's regime pushed through reforms to increase his power, secured high vote shares in increasingly unfair elections, and selectively repressed opposition figures. It established a firm 'pyramid of power', supported by the targeted distribution of rents (Junisbai 2010; Peyrouse 2012; Hale 2015). Key here was regime control over profits from foreign and domestic exploitation of Kazakhstan's significant oil and gas reserves (Jones Luong and Weinthal 2010, 259–298; McGlinchey 2011). Tokayev—a long-time insider—runs a similar regime to Nazarbayev, who retained substantial influence until 2022's 'Bloody January' (in Kazakh, Qandy Qantar).

The last major bout of elite resistance was the Democratic Choice of Kazakhstan party (DVK), established in late 2001. DVK mixed oligarchs tired of the growing economic power of Nazarbaev's inner circle, regional elites, and young technocrats committed to a more open political system (Junisbai and Junisbai 2005; LaPorte 2017). The regime had dealt with DVK by 2007, through targeted repression, exile of opposition elites, and consolidating pro-regime elite support into ruling party Nur Otan, which—renamed to AMANAT in 2022—remains dominant (Isaacs 2011). Elite opposition is now rare. With a stable elite coalition, the regime may have been able to focus more on mass control. The regime held multi-party elections for president and the *Mazhilis* (parliament), but their outcomes were never in doubt. This reflects a level of popular support, but also high levels of vote rigging. In 2007, for instance, Nur Otan won every seat in the parliament. In 2015, Nazarbayev won over 97% of the vote. On the other hand, Tokayev won a much lower 71% of the vote in 2019, for example (Table 1). There has been some variation in electoral returns over time. There has been variation across regions in some years too, which might have allowed the regime to reward certain governors.

Despite general social stability, there have also been sporadic outbreaks of mass contention in the past 15 years (Isaacs 2022). For example, 2011 saw wage protests in the west that were violently suppressed, 2016 saw relatively large-scale anti-land reform protests, and there were growing political protests in 2018–2020. The reforms in 2022 were the result of the nationwide *Qandy Qantar* events. These mass protests saw hundreds of civilians killed by security forces and prompted Tokayev to start a large-scale sweep of 'old regime' influence (Kudaibergenova and Laruelle 2022). Given this, protest management may additionally be rewarded. This

emphasis, as well as the potential focus on vote share, may have been especially high in particularly restive regions. Economic protests have focused on oil-producing Atyrau and Mangystau regions. Almaty has been home a number of political movements.

4.1.3 Non-meritocracy

That all said, there are also reasons to believe that a focus on elite loyalty has been more important than economic or political performance for Kazakhstan's regime. First, the regime may already recognize governors' merits. Governor is a high-level role and—as I show elsewhere—holders of it have usually worked for the state for decades (Hazell 2025). The regime has already had a sufficient chance to monitor their economic and political merit. Incompetent officials may have been removed at lower levels. In line with this, governors typically have a high level of education. Every governor in my data has a university-level degree. Over half of governors have a PhD-level degree recorded. As Abalkina and Libman (2020) argue is the case in Russia, this prevalence indicates that doctorates function as a sort of 'symbol of status' for bureaucrats in Kazakhstan. All this may mean that the regime trusts its governors to do a good job and does not promote or demote based on results, at least outside of cases of severe incompetence.

Second, the regime's long-term stability and access to resource rents may allow it to largely ignore efficiency in economic or political tasks. While there have been moments of opposition, since the mid-2000s the regime has largely appeared consolidated. Additionally, its access to natural resources means it has been able to maintain high levels of state spending, employ a large proportion of its population, and achieve consistent growth. These factors may mean that it is comfortable with its position among the population. Instead, it may be happy to focus on ensuring elite loyalty through appointment practices.¹⁷

4.2 Time series design

To test for evidence of meritocracy and performance-based promotions in Kazakhstan, I employ the standard time series set-up used by most work in this literature. Each row in the panel data represents a single region for a single month, with an indicator promotion_{r,t} = 1 where an governor has their tenure as governor of region r formally ended and they are promoted (and vice-versa for demotion).¹⁸ I estimate

$$\text{promotion}_{r,t} = \alpha + \beta \text{predictor}_{r,t} + \mathbf{X}_{r,t} + \text{tenure}_{r,t} + \text{tenure}_{r,t}^2 + \text{tenure}_{r,t}^3 + \lambda_r + \delta_t + \epsilon_{r,t}. \quad (1)$$

 $^{^{16}}$ These include bachelors' degrees (bakalavr), technological qualifications from an institut, and master's and legal qualifications

¹⁷For more detailed theory on how regimes can use appointments to co-opt officials, see Hazell (2025).

¹⁸This follows recent work on governor tenure (Landry, Lü, and Duan 2018; Aaskoven and Nyrup 2021), as well as broader shifts away from harder-to-interpret logistic regression (Hellevik 2009; Mood 2010). I find substantively similar results, not reported here, with logistic regression.

 $\mathbf{X}_{r,t}$ is a matrix of controls for population and quadratic of age. tenure_{r,t} is a moving time-in-office term for the region's incumbent governor. Modeling time dependence with the cubed tenure term means my analysis approximates the standard Cox proportional hazards model (Carter and Signorino 2010).¹⁹ λ_r is the region fixed effect, so that results reflect associations in the same region over time (absent time-invariant region-specific influences on dismissal). For instance, the regime might put more emphasis on growth in richer, oil-producing region. δ_t is a year fixed effect, to capture changes in appointment practices over time. So, conditional on these, the coefficient of interest β estimates the effect of a percentage point increase in an annual performance measure on the probability of being promoted/demoted in each month.²⁰ Descriptive statistics for the data used in these models are in Table 3.

Table 3: Descriptive statistics for time series models

Variable	N	Mean	SD	Min	Max	Q1	Median	Q3
Start year	4267			1995	2021		2008	
End year	4267			2000	2024		2013	
Month	4267			2000	2021		2011	
Turnover	4267	0.02	0.15	0.00	1.00	0.00	0.00	0.00
Months in office	4267	26.45	20.06	0.00	93.07	10.03	22.03	39.02
Promotion	4267	0.01	0.12	0.00	1.00	0.00	0.00	0.00
Clear promotion	4267	0.01	0.09	0.00	1.00	0.00	0.00	0.00
Demotion	4264	0.00	0.07	0.00	1.00	0.00	0.00	0.00
Clear demotion	4265	0.00	0.03	0.00	1.00	0.00	0.00	0.00
GRP growth	4056	18.51	13.27	-17.04	77.67	10.83	17.22	26.54
Unemployment growth	3864	-3.70	4.72	-20.74	8.16	-6.25	-2.17	0.00
Wage growth	4056	0.40	7.00	-20.68	23.69	-3.20	0.29	4.99
Pro-regime vote (term average)	1561	83.32	10.04	55.52	98.94	77.38	83.63	90.33
Turnout (term average)	1952	77.61	14.44	22.51	98.48	71.85	79.80	88.27
Age	4267	52.07	7.06	35.01	68.86	46.73	51.93	57.14
Population	4267	1016117	519475	315203	2878636	645280	794335	1361877
Protest count	811	3.09	3.82	0.00	26.00	0.00	2.00	4.00
Share of national protests	811	5.86	6.35	0.00	33.33	0.00	4.35	8.45
Protest count (term average)	811	2.65	2.95	0.00	17.00	0.54	1.71	3.38
Share of national protests (term average)	811	6.14	5.20	0.00	26.67	2.24	4.81	8.44

¹⁹This follows applications in the literature, such as Buckley and Reuter (2019) and Reuter and Turovsky Reuter and Turovsky (2022).

²⁰In the plots below, I multiply coefficients by 12 to scale this to represent annual promotion/demotion probability.

4.2.1 Equivalence testing

There are a number of reasons to expect that Kazakhstan's regime does *not* focus on governors' performance. Yet one of the problems faced by existing work is that they do not show a lack of meritocracy by deliberately arguing for a null effect (Rainey 2014; Hartman and Hidalgo 2018; Kane 2025).

In the analysis below, when I argue that appointments in Kazakhstan are not meritocratic, I therefore follow apply the equivalence testing approach (Rainey 2014; Hartman and Hidalgo 2018; for the application in this literature which I follow, see Trinh 2025). First, I use Equation 1 to estimate the relationship between my performance measures and appointments. Second, following Trinh (2025), I then present marginal effects of what he calls 'major hypothetical achievements'. These are especially impressive changes in the performance indicators—which may not actually be seen in the data—that provide a sort of most likely case for promotion. For the economic variables, I provide comparisons for a 2 percentage point (2 pp) increase in the variable as well as a—typically substantial—move from the median to the third-quartile. (Note that the median, first-, and third-quartile of these variables are provided in Tables 3 and 4.) Such an increase would reflect a governors ability to move an average performing region to being one of the best. For these variables, I also present results both for the current value and the value lagged by a year. For regime vote share and turnout, I test 2 pp and 5 pp increases in the cumulative average results over the governor's term. For protests, I provide the median to third quartile move and an absolute decrease of one protest per month. The evidence that performance does not matter is stronger to the extent that the effect of these impressive achievements on promotion probability is still statistically distinguishable from the substantively important probability m I discuss below. For tests with demotion as the outcome variable, these are reverse to represent exceptionally poor performance. For instance, I present results for a move from the mean to the first quartile and an increase of one protest per month.

Finally, I define a substantively important annual promotion/demotion rate m and test whether it is statistically distinguishable at the 5% level from the estimates. What is a substantively meaningful promotion or demotion rate in my context, bearing in mind that I study the effects of very good achievements? I again follow Trinh (2025) and suggest that a 5 point increase/decrease in probability is a good level of substantive significance. First, the average annual turnover rate of governors—whether or not they are promoted—is about 24%. About 16% of governors are promoted annually (on the looser definition of promotion)²¹ and 8% are demoted.²² This promotion rate, for example, is somewhat higher than the 6% promotion rate observed in Nazi Germany (Aaskoven and Nyrup 2021) and the 8% observed in China (Li and Zhou 2005).²³ A 5 point increase for an achievement such as increasing growth by

 $^{^{21}9\%}$ on the stricter definition

 $^{^{22}2\%}$ on the stricter definition

²³The demotion rate also appears to be lower than Russia, where about 23% of governors (and 24% of regional economic officials) are removed from office and do not receive a promotion in each year (although they may receive another job at the same level) (Buckley and Reuter 2019).

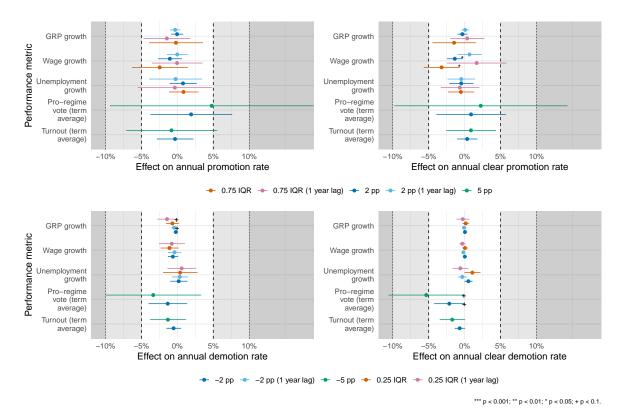


Figure 2: Estimates of the effect of large hypothetical increases in different performance measures on a governor's probability of promotion and demotion, with 90% confidence intervals

from 18% to 26% (the mean to third quarterly) would therefore be meaningful but low in this context. Second, this change in probability is substantially lower than some effects identified in the literature. For example, the point estimates reported in Wiebe (2024, Table 3) from the literature on China range from 0.28 to 0.43 for a baseline 1 point increase in growth (the effects are much smaller but non-significant with his stricter promotion measure). Finally, I also show a slightly weaker test where a 10 point increase in promotion probability is the meaningful effect.

4.3 Tests

I present results from the economic and electoral variables in Figure 2. The figure shows point predictions for the full models. The dashed lines at the 5% and 10% effects represent the substantively meaningful effects m discussed above. The error bars show 90% confidence intervals. If these intervals do not cross the m lines, then I can reject the null of a meaningful

effect at the 5% level (Rainey 2014, 2023).²⁴ The point estimates and intervals are colored by the hypothetical major achievement they estimate. The plot shows where an estimate is significant at a conventional level. However, note that an estimate may be statistically significant but substantively equivalent to zero.

For the economic variables, along with the 2 pp increases, the major hypothetical achievements in quartile terms are substantial: a move from 17.2% to 26.5% growth and from wages growing at 0.3% to 5%. If governors are judged on a meritocratic basis, these achievements should be associated with a higher promotion rate. Unemployment growth should have the opposite sign and be associated with a lower probability of promotion; here, it represents the annual change in unemployment rising from a little less than -2% to 0%.

However, even these exceptional increases in economic performance are generally not associated with promotion. Point estimates on the economic performance measures are centered around zero. Estimates only cross the 5% boundary in a couple of cases—all the larger median to third-quartile moves—where promotion is the outcome. In about half these cases, the estimate direction goes against theoretical expectations. These results give no reason to believe that the regime in Kazakhstan uses economic meritocratic criteria when deciding whether to promote governors. By contrast, they offer strong evidence that the 2pp improvements in economic performance do not lead to promotion. There is slightly weaker, but consistent, evidence that exceptional improvements in economic performance do not drive promotion probability. The evidence is strongest for the demotion variables. For both the strict and less strict variables, dramatic decreases in performance are robustly statistically distinct from a meaningful effect

For the electoral variable cumulative averages, the I present hypothetical achievements representing either a 2 point or a 5 point increase in turnout (median 78%) and proregime vote share (median 83%). First, changes in turnout are associated with neither promotion or demotion. However, with the less strict promotion variable I cannot exclude effects just below -5% or above 5% for the larger change in turnout, though none of the effect sizes within the confidence intervals are much bigger than that. Some of the width of the confidence intervals here—as with the vote share data—are explained by the fact that there are about 2,000 missing monthly observations compared to the economic tests due to the cumulative variable only starting following the first election of a governor's term. Still, I cannot rule out that a major turnout increase is associated with somewhat better chances of promotion.

Second, I cannot rule out substantial increases in regime vote share having effects on promotion and demotion. There is no evidence they do have an effect, with none of the point estimates particularly near conventional levels of significance; there is a slight reduction at the 10% level in the probability of clear demotion following a rise in pro-regime vote. However, the confidence intervals are very wide and so a range of substantive effects—including in a theoretically

²⁴Specifically, this is equivalent to two onesided tests (TOST) rejecting the null hypotheses of meaningful positive and negative effects of $\pm 5\%/\pm 10\%$ with p < 0.05.

²⁵For instance, one estimate suggests that growing wages are plausibly associated with a slightly lower promotion rate.

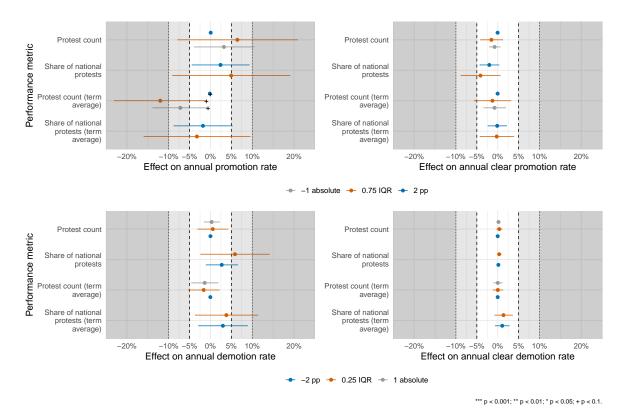


Figure 3: Estimates of the effect of hypothetical increases in regional protest levels on a governor's probability of promotion and demotion, with 90% confidence intervals

sensible direction—are within the plausible range. On the one hand, this may be due to the regime prioritizing political factors when making promotion and demotion decisions. On the other hand, it also reflects limitations in the data here, especially relatively wide variation in proregime vote depending on what type of elections the governors were in office for and what years they took place in (Table 1).

Protest

Next, in Figure 3, I present results from an as yet unstudied measure of political performance, protest count within a governor's region. These data need some caution. The ACLED data I use only starts in 2018 and I continue to use 2022 as the end point, so there are only four years of coverage (Table 2). In later analyses, I sill extend the governor promotion data to improve the length of this panel. Also, as set out above, it is not clear that the data are comprehensive until 2020. For the protest count variable, a move from the median to the third quartile means a shift from 2 to 4 events (as a share of national protests, from 4.3% to 8.5%). The shift is the same for the moving protest count average, and from 5% to 8.4% for the moving share variable.

If the regime is judging its governors on their ability to control protests, these variables should be associated with a negative effect on promotion rates and a positive effect on demotion.

The figure shows mixed evidence. Again, there is no clear evidence that protest counts do matter as a driver of promotion and demotion. For the clear demotion and clear promotion, there is good evidence that it has no substantive effect. However, on the left panel, the effect on the less strict promotion and demotion variables is much less clear. I cannot rule out that the protest variables have an effect on promotions or demotions. It remains to be seen whether the potential negative effect on promotion, suggested by the weakly significant moving average variable, holds up to increasing the time series. On the other hand, I cannot rule out positive effects, in the opposite direction to that theorized, with this initial analysis.

4.3.1 Whole tenure design

An alternative design used by some research is to test the effect of whole tenure performance on reappointment upon term completion (e.g., on China, Landry, Lü, and Duan 2018). This alternative design lacks the inferential advantages of a two-way fixed effects panel set-up. It is potentially more vulnerable to concerns about selection bias and may also not tap the effects of officials who improve over their time in office. It cannot test whether meritocratic regimes promote successful officials quicker than their peers soon after good performance. However, it may better reflect a process where regimes judge officials on their full terms and when officials cannot strategically optimize their performance because they do not know the amount of time they will be given ex-ante (see p. 1085). In this set-up, it allows me to test the potential impact of consistently very good performance, as opposed to what may be just a year or too of exceptional results.

To provide further tests of performance-based autocracy in Kazakhstan, I therefore estimate linear probability models

$$\mathbf{promotion}_{r,i,k} = \alpha + \beta \mathbf{performance}_{r,i,k} + \mathbf{X}_{r,i,k} + \mathbf{tenure}_{r,i,k} + \mathbf{tenure}_{r,i,k}^2 + \Omega_k + \lambda_r + \epsilon_{r,i,k}, \quad (2)$$

where i is a governor appointed in year (cohort) k and r is the region that they lead. Average performance is each governor's whole-term average of the economic and electoral variables used throughout the paper. I do not test the importance of protest control here because so few terms have been completed since the ACLED data become available. $\mathbf{X}_{r,i,k}$ includes the quadratic of governor age at the start of their term and the log average of regional population. The squared tenure_{r,i} terms are the length of the governor's tenure. Following Trinh (2025), Ω_k are cohort fixed effects and λ_r are region effects. The cohort fixed effects aim to parse out differences in regime promotion strategies over time. Therefore, the coefficient on performance estimates the effect on promotion and demotion probability given a major hypothetical improvement in outcomes under an official compared to a counterfactual median performing official appointed to the same region in the same year. Descriptive statistics for this design are in Table 4.

Table 4: Descriptive statistics for whole tenure models

Variable		Mean	SD	Min	Max	Q1	Median	Q3
Start date				1995	2021		2010	
End date	111			2002	2023		2013	
Tenure length (months)	111	41	23	6	103	23	40	54
Promotion	111	0.60	0.49	0.00	1.00	0.00	1.00	1.00
Clear promotion	111	0.31	0.46	0.00	1.00	0.00	0.00	1.00
Demotion	108	0.24	0.43	0.00	1.00	0.00	0.00	0.00
Clear demotion	109	0.07	0.26	0.00	1.00	0.00	0.00	0.00
Average GRP growth	111	18.02	10.85	-16.58	51.80	10.43	17.76	24.41
Average unemployment growth	106	-3.19	3.63	-20.00	2.27	-5.17	-2.07	0.00
Average wage growth	111	0.39	4.38	-19.51	12.86	-2.00	0.38	2.53
Average pro-regime vote	54	82.47	10.74	69.48	97.83	69.81	85.04	89.91
Average turnout	64	76.50	10.37	63.79	95.77	64.35	76.91	86.88
Age at appointment	111	49.85	6.67	34.39	66.98	44.88	49.50	55.06
Average population		1036461	549343	317197	2878636	659698	797082	1363295

The whole-term probability of promotion is clearly higher than the average rate, so the substantively meaningful effect m I consider here is higher too. In this sample, 55% of tenures end in promotion (29% under the stricter definition) and 26% in demotion (8.3% under the stricter definition). For example, the province level effects for small relative changes (which should have weaker effects than the major improvements I study here) in Landry, Lü, and Duan (2018) are in the order of 10–20%. No work has yet applied the equivalence testing approach to whole tenure tests of reappointment. Nor have they applied the major achievements set-up. I therefore set a conservative major substantive effect of 10% as well as considering a weaker boundary of 25%.

Figure 4 presents results. For all the economic variables, I can more or less rule out a meaningful effect of over 10% for the 2pp increases The median to third-quartile hypothetical major economic achievements are again substantial. They include a shift from 17.8% to 24.4% GRP growth, 0.3% to 2.5% wage growth, and -2.1% to 0% growth. Especially for the median to third quartile variables, I cannot completely rule out a substantively significant effect on promotion or demotion, with a number of the confidence intervals overlapping the non-equivalence zone. That said, the largest plausible effect sizes are only a little over a 10 point change in promotion/demotion even with these large hypothetical changes. Any plausible effect of the economic variables, that is, is therefore much smaller than that found in the existing literature.

For the electoral variables, I again present results with 2 pp and 5 pp changes from the whole sample average. Here, I do find some substantive and statistically significant effects on promotion. In particular, the average proregime vote is associated with a greater probability of promotion at the end of a term at the 5% level for both the strict and less strict promotion

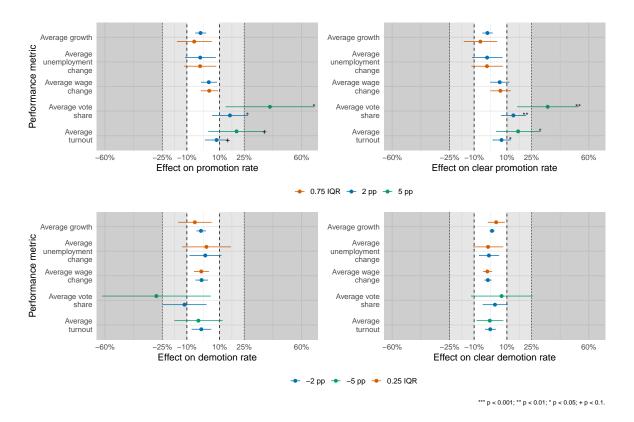


Figure 4: Estimates of the effect of large hypothetical increases in different performance measures on a governor's probability of promotion and demotion at the end of their term, with 90% confidence intervals

variables. For a 5 pp change, further, I can exclude all non-substantially significant effects. The turnout effects are weaker, reaching the 5% level only for strict promotion and the 10% level otherwise; I certainly cannot reject substantive effects. Any effect of the electoral variables is less clear considering demotion. I can only confidently rule out an effect of turnout on clear demotion. Some of the plausible effect of vote count is in the predicted direction, where a drop in votes associated with a higher chance of dismissal, but negative effects are also within the confidence interval. For the basic demotion rate variable, a 2 pp decrease in turnout is entirely within the equivalency region, but not the 5 pp decrease. The confidence intervals are especially wide for the vote share variables. However, the plausible substantive effect is in the opposite direction than performance-based demotion would predict—I cannot rule out that a fall in vote share within a region decreases the probability of its governor being demoted.

4.4 Discussion

This section discussed evidence for meritocracy and performance-based appointment practices in an unstudied case—Kazakhstan. These tests use a new dataset of governor tenures and post-office career trajectories. I show that the effect of economic performance on governors promotion or demotion is equivalent to, or almost equivalent to, zero across specifications even when considering very large hypothetical achievements. As I discuss in Section 4.1.1, some media sources and analysts claim that the regime in Kazakhstan uses objective economic performance measures to guide the selection and promotion of officials. Here, I am able to rule out that this is the case when considering a set of plausible state-published measures of performance. Nevertheless, there are always concerns with economic data in autocracies. It may be that economic performance does matter, but that the state only publishes universally positive data so that such an effect does not show up in this analysis. For this to be the case, such falsification would have to be systematic, cover all the economic measures I use, and large enough that even the major hypothetical improvements in performance I test have an effect equivalent to zero. One option to test this in further research is to use remote sensing data—such as night time lighting—to provide an object measure of growth (Landry, Lü, and Duan 2018; Martínez 2022; Trinh 2025).

The evidence on the importance of political performance is more mixed. Through the analysis, turnout is more or less robustly distinct from meaningful effects on demotion. Only its whole-term average may have a slight positive effect on promotion. In the time series designs, relatively modest changes (± 2 pp) in pro-regime vote share are statistically distinct from an effect on promotion and demotion. I cannot rule out larger changes of ± 5 pp mattering, however. In the whole tenure design, proregime vote share has the only significant association with promotion across the paper. This is initial evidence that governors in Kazakhstan can improve their prospects of promotion through improved management of their region's political situation. However, as Landry, Lü, and Duan (2018, 1095), this design has a selection bias problem that the use of region-cohort fixed effects cannot fully deal with: it may be that officials who are likely to be promoted anyway are given more regime friendly regions. Further evidence is required to more robustly demonstrate that political results do matter.

Finally, I also provide the first test of the importance of protest control for regional officials' promotions and demotions in an autocracy. The data presented in this initial working paper are limited, as I only draw on about 4 years of event data; future versions will double this time period and should therefore increase the precision of the estimates. First, substantive effects of increased protests on demotion can largely be ruled out and, where confidence intervals are outside the equivalency zone, are at most small. Second, however, I cannot rule out effects on promotion. However, the direction—and so perhaps prima facie plausibility—of any effect is unclear; effects in either direction are within the confidence intervals of these estimates. In future versions of this paper, further evidence from Kazakhstan and reanalysis of existing data from Russia will further probe the use of protest count as a measure of officials' political performance in autocracies.

5 Conclusion

This paper examines the literature on performance-based appointments under autocracy. Existing work highlights, on the one hand, the potential for authoritarian regimes to prioritise the economic or political merits of its officials by observing the outcomes they produce. Good performers are promoted, bad performers demoted. On the other hand, some work highlights the autocrat's search for loyalty and a resulting inability to prioritise competence in appointment decisions. I discuss important findings from this literature, while highlighting that further work is needed to provide more rigorous tests of null and heterogeneous effects.

First, work should go further in testing measures of political performance beyond vote share—I propose control of protest as one candidate. Autocrats have diverse priorities and the particular merits that officials need to meet these may be radically different. Being willing and able to crack down on protests may require a different sort of person than engaging in vote rigging, for example. Claims that merit does not matter in autocratic bureaucracies are weakened without more comprehensive tests of the effect of plausible measures of performance. A related issue is that current work focuses on two quite particular cases, Russia and China. It is difficult to generalize about the importance of meritocracy in autocracies more generally—claims which may be important for the development of countries in which very many people live—without evidence from more typical cases.

Second, work should go beyond presenting statistical tests that only show the null effect of a particular type of merit cannot be rejected (perhaps under certain contexts) (Rainey 2014; Trinh 2025). This is particularly important in environments characterized by poor quality, misreported, or variable data. These data may increase the chance of spurious positive findings. However, they may also make statistical significance less likely even when there is a true effect. Under the current approach, research may incorrectly rule out promotion-based appointments. Work can then provide stronger evidence of non-meritocracy by providing evidence that substantially meaningful effects—those big enough to care about—are statistically distinct from null estimates.

I build on these arguments by providing new tests of the role of merit in the career trajectories of Kazakhstan's regional governors. Kazakhstan is a good example of a resource rich, middle-power electoral autocracy. Yet little comparative research—especially quantitative research—pays attention to it. I build a new, comprehensive set of regional governors' biographies up to reforms in 2022, and manually code whether their tenures end in promotion, demotion, or a lateral posting. I address concerns of subjectivity by using both strict and weak notions of promotion and demotion (Wiebe 2024). I combine these data with economic data from 2000, a new collection of region-level election results from 2007, and ACLED protest event data from 2018. Following the literature on promotions, I subject both time series and whole tenure designs to an equivalence testing design.

In Kazakhstan, I find robust evidence that governors' economic performance—even a very large hypothetical achievement like increasing growth by almost 10%—does not affect their prospects for promotion or demotion. In this case, at least, the regime does not aim appointments at improving the economic situation out of a so-called 'developmentalist' approach or concern for public legitimacy. There is some evidence that political performance matters, especially in the effect of regime vote share in promotion. Data limitations make it hard to draw conclusions about the importance of controlling promotion—I can rule out neither a null effect nor something substantive meaningful. Future additions to this paper extending the governor and protest datasets should help with this issue. Altogether, however, any plausible effects of political success here are small. These tests do not undermine arguments that the regime in Kazakhstan managers top-level officials on the basis of improving their loyalty more than with an eye on improving economic and political stability (Hazell 2025).

This paper, first, contributes to the literature on performance and promotions in autocracy. It shows how research can develop to provide the most plausible claims of (non-)meritocracy when comparing the importance of different types of merit for officials' career trajectories. It proposes protest control as a new way of tapping political performance. Event data on protest may be more relevant for regimes' judgment of officials than election outcomes in regimes where elections are not held or entirely noncompetitive. It moves the literature beyond a focus on China and Russia to a case that is understudied in comparative politics as a whole. Second, the paper contributes to the literature on bureaucracy under authoritarianism by showing the relative weakness of performance incentives for top-level officials in one regime. I use detailed biographic data on autocratic bureaucrats to provide new insights into their career trajectories.

5.1 Further work

Further work on this paper, first, will improve the analysis of Kazakhstan by extending the protest data and using objective, nightlight-derived measures of economic performance. I will also provide tests for region- and time-specific effects to analysis any heterogeneity in the regime's strategy. Second, I will apply my proposals for the literature on meritocracy by reanalyzing existing data from Russia. I will apply the equivalence testing approach to claims that economic performance does not matter in this context. I will test whether protest control is a merit focused on by the Russian regime, given its emphasis on social stability and the rich availability of protest data in this case.

Bibliography

- Aaskoven, Lasse, and Jacob Nyrup. 2021. "Performance and Promotions in an Autocracy: Evidence from Nazi Germany." *Comparative Politics* 54, no. 1 (October 1, 2021): 51–85. ISSN: 0010-4159. https://doi.org/10.5129/001041521X16132218140269.
- Abalkina, Anna, and Alexander Libman. 2020. "The Real Costs of Plagiarism: Russian Governors, Plagiarized PhD Theses, and Infrastructure in Russian Regions." Scientometrics 125, no. 3 (December): 2793–2820. ISSN: 0138-9130, 1588-2861. https://doi.org/10.1007/s11192-020-03716-x.
- Abbott, Kenneth W., Philipp Genschel, Duncan Snidal, and Bernhard Zangl. 2020. "Competence–Control Theory: The Challenge of Governing through Intermediaries." In *The Governor's Dilemma*, edited by Kenneth W. Abbott, Philipp Genschel, Duncan Snidal, and Bernhard Zangl, 3–36. Oxford: Oxford University Press, February 27, 2020. ISBN: 978-0-19-885505-7 978-0-19-188902-8. https://doi.org/10.1093/oso/9780198855057.003.0001.
- Ang, Yuen Yuen. 2016. "Co-Optation & Clientelism: Nested Distributive Politics in China's Single-Party Dictatorship." Studies in Comparative International Development 51, no. 3 (September): 235–256. ISSN: 0039-3606, 1936-6167. https://doi.org/10.1007/s12116-015-9208-0.
- Bader, Max, and Carolien van Ham. 2015. "What Explains Regional Variation in Election Fraud? Evidence from Russia: A Research Note." *Post-Soviet Affairs* 31, no. 6 (November 2, 2015): 514–528. ISSN: 1060-586X, 1938-2855. https://doi.org/10.1080/1060586X. 2014.969023.
- Bai, Ying, and Titi Zhou. 2019. "'Mao's Last Revolution": A Dictator's Loyalty–Competence Tradeoff." *Public Choice* 180, nos. 3–4 (September): 469–500. ISSN: 0048-5829, 1573-7101. https://doi.org/10.1007/s11127-019-00649-9.
- Barteska, Philipp, and Jay Euijung Lee. 2024. Bureaucrats and the Korean Export Miracle. Working paper 2024–11. Nottingham: Nottingham Interdisciplinary Centre for Economic and Political Research, June 20, 2024.
- Baturo, Alexander, Nikita Khokhlov, and Jakob Tolstrup. 2024. "Playing the Sycophant Card: The Logic and Consequences of Professing Loyalty to the Autocrat." *American Journal of Political Science* (August 31, 2024): ajps.12909. ISSN: 0092-5853, 1540-5907. https://doi.org/10.1111/ajps.12909.
- Baturo, Alexander, and Jakob Tolstrup. 2024. "Strategic Communication in Dictatorships: Performance, Patriotism, and Intimidation." *The Journal of Politics* 86, no. 2 (January 26, 2024). ISSN: 0022-3816, 1468-2508. https://doi.org/10.1086/726945.

- Besley, Timothy J, Robin Burgess, Adnan Khan, and Guo Xu. 2022. "Bureaucracy and Development." *Annual Review of Economics* 14:397–424. https://doi.org/10.1146/annureveconomics080521-011950.
- Best, Michael Carlos, Jonas Hjort, and David Szakonyi. 2023. "Individuals and Organizations as Sources of State Effectiveness." *American Economic Review* 113, no. 8 (August 1, 2023): 2121–2167. ISSN: 0002-8282. https://doi.org/10.1257/aer.20191598.
- Bhavnani, Rikhil R., and Alexander Lee. 2018. "Local Embeddedness and Bureaucratic Performance: Evidence from India." *The Journal of Politics* 80, no. 1 (January): 71–87. ISSN: 0022-3816, 1468-2508. https://doi.org/10.1086/694101.
- Blaydes, Lisa. 2010. Elections and Distributive Politics in Mubarak's Egypt. Cambridge: Cambridge University Press. ISBN: 978-1-107-00055-1, accessed April 11, 2023. https://www.cambridge.org/core/books/elections-and-distributive-politics-in-mubaraks-egypt/A7B40E87B0D3D464C1459AC8D549BBED.
- ——. 2018. State of Repression: Iraq under Saddam Hussein. Princeton, NJ: Princeton University Press. ISBN: 978-0-691-18027-4.
- Boix, Carles, and Milan W. Svolik. 2013. "The Foundations of Limited Authoritarian Government: Institutions, Commitment, and Power-Sharing in Dictatorships." *The Journal of Politics* 75, no. 2 (April): 300–316. ISSN: 0022-3816, 1468-2508. https://doi.org/10.1017/S0022381613000029.
- Brancati, Dawn. 2014. "Democratic Authoritarianism: Origins and Effects." Annual Review of Political Science 17, no. 1 (May 11, 2014): 313–326. ISSN: 1094-2939, 1545-1577. https://doi.org/10.1146/annurev-polisci-052013-115248.
- Buckley, Noah, Guzel Garifullina, Ora John Reuter, and Alexandra Shubenkova. 2014. "Elections, Appointments, and Human Capital: The Case of Russian Mayors." *Demokratizatsiya* 22 (1): 87–116.
- Buckley, Noah, and Ora John Reuter. 2019. "Performance Incentives under Autocracy: Evidence from Russia's Regions." *Comparative Politics* 51, no. 2 (January 1, 2019): 239–266. https://doi.org/10.5129/001041519X15647434969894.
- Bulman, David J., and Kyle A. Jaros. 2020. "Loyalists, Localists, and Legibility: The Calibrated Control of Provincial Leadership Teams in China." *Politics & Society* 48, no. 2 (June): 199–234. ISSN: 0032-3292, 1552-7514. https://doi.org/10.1177/0032329220908691.
- Carter, Brett L., and Mai Hassan. 2021. "Regional Governance in Divided Societies: Evidence from the Republic of Congo and Kenya." *The Journal of Politics* 83, no. 1 (January 1, 2021): 40–57. ISSN: 0022-3816, 1468-2508. https://doi.org/10.1086/708915.
- Carter, David B., and Curtis S. Signorino. 2010. "Back to the Future: Modeling Time Dependence in Binary Data." *Political Analysis* 18 (3): 271–292. ISSN: 1047-1987, 1476-4989. https://doi.org/10.1093/pan/mpq013.

- Chen, Ting, and Ji Yeon Hong. 2021. "Rivals within: Political Factions, Loyalty, and Elite Competition under Authoritarianism." *Political Science Research and Methods* 9, no. 3 (July): 599–614. ISSN: 2049-8470, 2049-8489. https://doi.org/10.1017/psrm.2019.61.
- Choi, Eun Kyong. 2012. "Patronage and Performance: Factors in the Political Mobility of Provincial Leaders in Post-Deng China." *The China Quarterly* 212 (December): 965–981. ISSN: 0305-7410, 1468-2648. https://doi.org/10.1017/S030574101200118X.
- Crabtree, Charles, Holger L Kern, and David A Siegel. 2020. "Cults of Personality, Preference Falsification, and the Dictator's Dilemma." *Journal of Theoretical Politics* 32, no. 3 (July 1, 2020): 409–434. ISSN: 0951-6298. https://doi.org/10.1177/0951629820927790.
- Cummings, Sally N. 2005. *Kazakhstan: Power and the Elite*. London: I.B.Tauris. ISBN: 978-1-86064-854-0 978-0-7556-2099-9.
- Egorov, Georgy, and Konstantin Sonin. 2011. "Dictators and Their Viziers: Endogenizing the Loyalty-Competence Trade-Off." *Journal of the European Economic Association* 9, no. 5 (October): 903–930. ISSN: 15424766. https://doi.org/10.1111/j.1542-4774.2011.01033.x.
- Francois, Patrick, Francesco Trebbi, and Kairong Xiao. 2023. "Factions in Nondemocracies: Theory and Evidence From the Chinese Communist Party." *Econometrica* 91 (2): 565–603. ISSN: 0012-9682. https://doi.org/10.3982/ECTA19274.
- Gailmard, Sean, and John W. Patty. 2012. "Formal Models of Bureaucracy." *Annual Review of Political Science* 15, no. 1 (June 15, 2012): 353–377. ISSN: 1094-2939, 1545-1577. https://doi.org/10.1146/annurev-polisci-031710-103314.
- Gandhi, Jennifer. 2009. *Political Institutions under Dictatorship*. Cambridge: Cambridge University Press. ISBN: 978-0-511-51009-0.
- Gao, Jie. 2015. "Pernicious Manipulation of Performance Measures in China's Cadre Evaluation System." *The China Quarterly* 223, nos. 618–637 (September).
- Garbiras-Díaz, Natalia, and Tara Slough. 2022. The Limits of Decentralized Administrative Data Collection: Experimental Evidence from Colombia. Working paper. Florence: European University Institute, December 18, 2022. https://www.hbs.edu/ris/Publication% 20Files/decentralized_data_e7ae2990-bca5-49cc-8ede-952d2520b655.pdf.
- Gehlbach, Scott, and Alberto Simpser. 2015. "Electoral Manipulation as Bureaucratic Control." *American Journal of Political Science* 59, no. 1 (January): 212–224. ISSN: 0092-5853, 1540-5907. https://doi.org/10.1111/ajps.12122.
- Gerschewski, Johannes. 2023. The Two Logics of Autocratic Rule. Cambridge: Cambridge University Press, April 30, 2023. ISBN: 978-1-009-19940-7 978-1-009-19941-4 978-1-009-19938-4. https://doi.org/10.1017/9781009199407.

- Goldring, Edward, and Austin S. Matthews. 2023. "To Purge or Not to Purge? An Individual-Level Quantitative Analysis of Elite Purges in Dictatorships." *British Journal of Political Science* 53, no. 2 (April): 575–593. ISSN: 0007-1234, 1469-2112. https://doi.org/10.1017/S0007123421000569.
- Gorlizki, Yoram, and Oleg Khlevniuk. 2020. Substate Dictatorship: Networks, Loyalty, and Institutional Change in the Soviet Union. Yale, CT: Yale University Press, September 7, 2020. ISBN: 978-0-300-25560-7.
- Gulzar, Saad, and Benjamin J. Pasquale. 2017. "Politicians, Bureaucrats, and Development: Evidence from India." *American Political Science Review* 111, no. 1 (February): 162–183. ISSN: 0003-0554, 1537-5943. https://doi.org/10.1017/S0003055416000502.
- Hale, Henry E. 2015. Patronal Politics: Eurasian Regime Dynamics in Comparative Perspective. Cambridge: Cambridge University Press. ISBN: 978-1-107-07351-7.
- Hartman, Erin, and F. Daniel Hidalgo. 2018. "An Equivalence Approach to Balance and Placebo Tests." *American Journal of Political Science* 62, no. 4 (October): 1000–1013. ISSN: 0092-5853, 1540-5907. https://doi.org/10.1111/ajps.12387.
- Hassan, Mai. 2020. Regime Threats and State Solutions: Bureaucratic Loyalty and Embeddedness in Kenya. Cambridge: Cambridge University Press. ISBN: 978-1-108-49085-6. https://doi.org/10.1017/9781108858960.
- Hassan, Mai, Horacio Larreguy, and Stuart Russell. 2024. "Who Gets Hired? Political Patronage and Bureaucratic Favoritism." *American Political Science Review* (January 25, 2024): 1–18. ISSN: 0003-0554, 1537-5943. https://doi.org/10.1017/S0003055423001338.
- Hazell, Thomas. 2025. Shuffling to Co-Opt: Subnational Governance, Patronage, and Political Careers in Kazakhstan. Working paper. https://t-hazell.github.io/papers/latest-shuffling_to_co_opt.pdf.
- Hellevik, Ottar. 2009. "Linear versus Logistic Regression When the Dependent Variable Is a Dichotomy." Quality & Quantity 43, no. 1 (January): 59–74. ISSN: 0033-5177, 1573-7845. https://doi.org/10.1007/s11135-007-9077-3.
- Isaacs, Rico. 2011. Party System Formation in Kazakhstan: Between Formal and Informal Politics. London: Routledge, March 21, 2011.
- Isaacs, Rico. 2022. Political Opposition in Authoritarianism: Exit, Voice and Loyalty in Kaza-khstan. Basingstoke: Palgrave Macmillan, August 14, 2022. ISBN: 978-3-031-06535-4.
- Jia, Ruixue, Masayuki Kudamatsu, and David Seim. 2015. "Political Selection in China: The Complementary Roles of Connections and Performance: Political Selection in China." Journal of the European Economic Association 13, no. 4 (August): 631–668. ISSN: 15424766. https://doi.org/10.1111/jeea.12124.

- Jiang, Junyan. 2018. "Making Bureaucracy Work: Patronage Networks, Performance Incentives, and Economic Development in China." *American Journal of Political Science* 62, no. 4 (October): 982–999. ISSN: 0092-5853, 1540-5907. https://doi.org/10.1111/ajps.12394.
- Jones Luong, Pauline. 2002. Institutional Change and Political Continuity in Post-Soviet Central Asia: Power, Perceptions, and Pacts. Cambridge: Cambridge University Press.
- Jones Luong, Pauline, and Erika Weinthal. 2010. Oil Is Not a Curse: Ownership Structure and Institutions in Soviet Successor States. Cambridge: Cambridge University Press, August 23, 2010. ISBN: 978-0-521-76577-0 978-0-521-14808-5 978-0-511-77943-5.
- Junisbai, Barbara. 2010. "A Tale of Two Kazakhstans: Sources of Political Cleavage and Conflict in the Post-Soviet Period." *Europe-Asia Studies* 62, no. 2 (March): 235–269. ISSN: 0966-8136, 1465-3427. https://doi.org/10.1080/09668130903506813.
- Junisbai, Barbara, and Azamat Junisbai. 2005. "The Democratic Choice of Kazakhstan: A Case Study in Economic Liberalization, Intraelite Cleavage, and Political Opposition." Demokratizatsiya 13, no. 3 (July 1, 2005): 373–392. ISSN: 1074-6846. https://doi.org/10.3200/DEMO.13.3.373-392.
- Junussova, Madina. 2020. Cities and Local Governments in Central Asia: Administrative, Fiscal, and Political Urban Battles. Abingdon, Oxon.: Routledge. ISBN: 978-0-367-27919-6.
- Kane, John V. 2025. "More than Meets the ITT: A Guide for Anticipating and Investigating Nonsignificant Results in Survey Experiments." *Journal of Experimental Political Science* 12 (1): 110–125. ISSN: 2052-2630, 2052-2649. https://doi.org/10.1017/XPS.2024.1.
- Ketchley, Neil, and Gilad Wenig. 2023. "Purging to Transform the Post-Colonial State: Evidence From the 1952 Egyptian Revolution." *Comparative Political Studies* OnlineFirst. ISSN: 0010-4140, 1552-3829. https://doi.org/10.1177/00104140231209966.
- Khan, Adnan Q., Asim Ijaz Khwaja, and Benjamin A. Olken. 2019. "Making Moves Matter: Experimental Evidence on Incentivizing Bureaucrats through Performance-Based Postings." *American Economic Review* 109, no. 1 (January 1, 2019): 237–270. ISSN: 0002-8282. https://doi.org/10.1257/aer.20180277.
- Kudaibergenova, Diana T., and Marlene Laruelle. 2022. "Making Sense of the January 2022 Protests in Kazakhstan: Failing Legitimacy, Culture of Protests, and Elite Readjustments." *Post-Soviet Affairs* 38, no. 6 (November 2, 2022): 441–459. ISSN: 1060-586X, 1938-2855. https://doi.org/10.1080/1060586X.2022.2077060.
- Landry, Pierre F. 2008. Decentralized Authoritarianism in China: The Communist Party's Control of Local Elites in the Post-Mao Era. Cambridge: Cambridge University Press. ISBN: 978-0-521-88235-4. https://doi.org/10.1017/CBO9780511510243.

- Landry, Pierre F., Xiaobo Lü, and Haiyan Duan. 2018. "Does Performance Matter? Evaluating Political Selection Along the Chinese Administrative Ladder." *Comparative Political Studies* 51 (8): 1074–1105. https://doi.org/10.1177/0010414017730078.
- LaPorte, Jody. 2017. "Foreign Versus Domestic Bribery: Explaining Repression in Kleptocratic Regimes." Comparative Politics 50 (1): 83–102.
- Lee, Don S., and Paul Schuler. 2020. "Testing the "China Model" of Meritocratic Promotions: Do Democracies Reward Less Competent Ministers Than Autocracies?" Comparative Political Studies 53, nos. 3–4 (March): 531–566. ISSN: 0010-4140, 1552-3829. https://doi.org/10.1177/0010414019858962.
- Levitsky, Steven, and Lucan Way. 2010. Competitive Authoritarianism: Hybrid Regimes After the Cold War. Cambridge: Cambridge University Press. ISBN: 978-0-521-88252-1.
- Levitsky, Steven, and Lucan A. Way. 2022. Revolution and Dictatorship: The Violent Origins of Durable Authoritarianism. Princeton, NJ: Princeton University Press. ISBN: 978-0-691-22357-5 978-0-691-16952-1.
- Li, Hongbin, and Li-An Zhou. 2005. "Political Turnover and Economic Performance: The Incentive Role of Personnel Control in China." *Journal of Public Economics* 89, nos. 9–10 (September): 1743–1762. ISSN: 00472727. https://doi.org/10.1016/j.jpubeco.2004.06.009.
- Liu, Guoer. 2024. "Why Automated Data Is Biased: The Politics of Air Quality Data in China," University of Michigan.
- Liu, Hanzhang. 2023. "Meritocracy as Authoritarian Co-Optation: Political Selection and Upward Mobility in China." *American Political Science Review* (December 27, 2023): 1–17. ISSN: 0003-0554, 1537-5943. https://doi.org/10.1017/S000305542300120X.
- Lü, Xiaobo, and Pierre F. Landry. 2014. "Show Me the Money: Interjurisdiction Political Competition and Fiscal Extraction in China." *American Political Science Review* 108, no. 3 (August): 706–722. ISSN: 0003-0554, 1537-5943. https://doi.org/10.1017/S00030554140 00252.
- Lust-Okar, Ellen. 2006. "Elections under Authoritarianism: Preliminary Lessons from Jordan." Democratization~13, no. 3 (June): 456–471. ISSN: 1351-0347, 1743-890X. https://doi.org/10.1080/13510340600579359.
- Magaloni, Beatriz. 2008. "Credible Power-Sharing and the Longevity of Authoritarian Rule." Comparative Political Studies 41, nos. 4–5 (April 1, 2008): 715–741. ISSN: 0010-4140. https://doi.org/10.1177/0010414007313124.
- Magaloni, Beatriz, and Ruth Kricheli. 2010. "Political Order and One-Party Rule." *Annual Review of Political Science* 13, no. 1 (May): 123–143. ISSN: 1094-2939, 1545-1577. https://doi.org/10.1146/annurev.polisci.031908.220529.

- Magiya, Yusuf, Bogdan G. Popescu, and Güneş M. Tezcür. 2023. "All the Sultan's Men: Regime Type, Insecurity, and the Shuffling of Governors." *Comparative Political Studies* (October 31, 2023). ISSN: 0010-4140, 1552-3829. https://doi.org/10.1177/0010414023120 9963.
- Makarchev, Nikita, and Piotr Wieprzowski. 2021. "Cuckoos in the Nest: The Co-Option of State-Owned Enterprises in Putin's Russia." *Post-Soviet Affairs* 37, no. 3 (May 4, 2021): 199–221. ISSN: 1060-586X, 1938-2855. https://doi.org/10.1080/1060586X.2020.1870372.
- Makhmutova, Meruert. 2006. "Local Government Organization and Finance: Kazakhstan." In Local Governance in Developing Countries, edited by Anwar Shah, 275–302. Washington, D.C.: World Bank. ISBN: 978-0-8213-6565-6. https://doi.org/10.1596/978-0-8213-6565-6.
- Maldybaeva, G.S. 2017. "Valovoy Regional'nyy Produkt: Otsenka Pazbitiya Territoriy [Gross Regional Product: An Assessment of the Growth of Territories]." Ekonomika i statistika, no. 3, http://nblib.library.kz/elib/library.kz/Economic%20jurnal/2017%20EiS/EiS%203%202017.pdf.
- Martínez, Luis R. 2022. "How Much Should We Trust the Dictator's GDP Growth Estimates?" Journal of Political Economy 130, no. 10 (October 1, 2022): 2731–2769. ISSN: 0022-3808, 1537-534X. https://doi.org/10.1086/720458.
- Matthews, Austin S. 2024. "Elite Threats and Punitive Violence in Autocratic Regimes:" Comparative Politics 56, no. 4 (July 1, 2024): 473–493. https://doi.org/10.5129/0010415 24X17078378055516.
- McGlinchey, Eric. 2011. Chaos, Violence, Dynasty: Politics and Islam in Central Asia. Pittsburgh, PA: University of Pittsburgh Press, September 30, 2011.
- Melnikov, Kirill. 2023. "Informal Networks of Regional Elites in Russia: A Cross-Temporal Perspective." *Demokratizatsiya* 31, no. 1 (Winter): 29–55.
- Meng, Anne, Jack Paine, and Robert Powell. 2023. "Authoritarian Power Sharing: Concepts, Mechanisms, and Strategies." *Annual Review of Political Science* 26, no. 1 (June 15, 2023): annurev-polisci-052121-020406. ISSN: 1094-2939, 1545-1577. https://doi.org/10.1146/annurev-polisci-052121-020406.
- Mood, C. 2010. "Logistic Regression: Why We Cannot Do What We Think We Can Do, and What We Can Do About It." *European Sociological Review* 26, no. 1 (February 1, 2010): 67–82. ISSN: 0266-7215, 1468-2672. https://doi.org/10.1093/esr/jcp006.
- Onalbaiuly, Serik. 2019. "Democratisation of Local Government and Local Governance in Kazakhstan." PhD diss., Centre of Development Studies, Department of Politics and International Studies, University of Cambridge, April. https://core.ac.uk/download/pdf/211243314.pdf.

- Pang, Baoqing, Shu Keng, and Lingna Zhong. 2018. "Sprinting with Small Steps: China's Cadre Management and Authoritarian Resilience." *The China Journal* 80 (July): 68–93. ISSN: 1324-9347, 1835-8535. https://doi.org/10.1086/696870.
- Pepinsky, Thomas. 2014. "The Institutional Turn in Comparative Authoritarianism." British Journal of Political Science 44, no. 3 (July): 631–653. ISSN: 0007-1234, 1469-2112. https://doi.org/10.1017/S0007123413000021.
- Peyrouse, Sebastien. 2012. "The Kazakh Neopatrimonial Regime: Balancing Uncertainties among the "Family," Oligarchs and Technocrats." *Demokratizatsiya* 20, no. 4 (Autumn): 345–370.
- Propastin, Pavel, and Martin Kappas. 2012. "Assessing Satellite-Observed Nighttime Lights for Monitoring Socioeconomic Parameters in the Republic of Kazakhstan." GIScience & Remote Sensing 49, no. 4 (July): 538–557. ISSN: 1548-1603, 1943-7226. https://doi.org/10.2747/1548-1603.49.4.538.
- Qian, Jingyuan, and Steve Bai. 2024. "Loyalty Signaling, Bureaucratic Compliance, and Variation in State Repression in Authoritarian Regimes." *Comparative Politics*, ISSN: 0010-4159. https://doi.org/10.5129/001041524X17069685289697.
- Radnitz, Scott. 2010. Weapons of the Wealthy: Predatory Regimes and Elite-Led Protests in Central Asia. Ithaca, NY: Cornell University Press. ISBN: 978-0-8014-4953-6.
- Rainey, Carlisle. 2014. "Arguing for a Negligible Effect." American Journal of Political Science 58, no. 4 (October): 1083–1091. ISSN: 0092-5853, 1540-5907. https://doi.org/10.1111/ajps.12102.
- ———. 2023. "Equivalence Tests with {marginaleffects}." Carlisle Rainey, August 18, 2023. Accessed April 29, 2025. https://www.carlislerainey.com/blog/2023-08-18-equivalence-tests/.
- Reisinger, William M., and Bryon Moraski. 2013. "Deference or Governance? A Survival Analysis of Russia's Governors under Presidential Control." In *Russia's Regions and Comparative Subnational Politics*, edited by William M. Reisinger, 40–62. London: Routledge. ISBN: 978-0-415-62996-6.
- Remington, Thomas F., Andrei A. Yakovlev, Elena Ovchinnikova, and Alexander Chasovsky. 2022. "Career Trajectories of Regional Officials: Russia and China before and after 2012." Eurasian Geography and Economics 63, no. 5 (September 3, 2022): 599–624. ISSN: 1538-7216, 1938-2863. https://doi.org/10.1080/15387216.2021.1944247.
- Reuter, Ora John. 2017. The Origins of Dominant Parties: Building Authoritarian Institutions in Post-Soviet Russia. Cambridge: Cambridge University Press. ISBN: 978-1-107-17176-3. https://doi.org/10.1017/9781316761649.

- ———. 2023. The Logic of Subnational Appointments in Russia. Working paper. University of Wisconsin, Milwaukee and Higher School of Economics. https://ojreuter.com/wp-content/uploads/2023/03/LogicAppointments_Reuter.pdf.
- Reuter, Ora John, and Graeme B. Robertson. 2012. "Subnational Appointments in Authoritarian Regimes: Evidence from Russian Gubernatorial Appointments." *The Journal of Politics* 74, no. 4 (October): 1023–1037. ISSN: 0022-3816, 1468-2508. https://doi.org/10.1017/S0022381612000631.
- Reuter, Ora John, and Rostislav Turovsky. 2022. "Vote Mobilization, Economic Performance and Gubernatorial Appointments in Russia." Russian Politics 7, no. 2 (July 11, 2022): 183–209. ISSN: 2451-8913, 2451-8921. https://doi.org/10.30965/24518921-00604017.
- Rivera, Carlos Velasco. 2020. "Loyalty or Incentives? How Party Alignment Affects Bureaucratic Performance." *The Journal of Politics* 82, no. 4 (October 1, 2020): 1287–1304. ISSN: 0022-3816, 1468-2508. https://doi.org/10.1086/708337.
- Rochlitz, Michael, Vera Kulpina, Thomas Remington, and Andrei Yakovlev. 2015. "Performance Incentives and Economic Growth: Regional Officials in Russia and China." *Eurasian Geography and Economics* 56, no. 4 (July 4, 2015): 421–445. ISSN: 1538-7216, 1938-2863. https://doi.org/10.1080/15387216.2015.1089411.
- Rodionov, Alexander. 2021. Geokz: Offers Various Kazakhstani Maps as Data Frames and 'sf' Objects. R package version 0.0.0.9051. https://github.com/arodionoff/geokz/.
- Roessler, Philip. 2011. "The Enemy Within: Personal Rule, Coups, and Civil War in Africa." World Politics 63, no. 2 (April): 300–346. ISSN: 0043-8871, 1086-3338. https://doi.org/10.1017/S0043887111000049.
- Rosenfeld, Bryn. 2021. The Autocratic Middle Class: How State Dependency Reduces the Demand for Democracy. Princeton: Princeton University Press. ISBN: 978-0-691-19219-2 978-0-691-19218-5.
- Rundlett, Ashlea, and Milan W. Svolik. 2016. "Deliver the Vote! Micromotives and Macrobehavior in Electoral Fraud." *American Political Science Review* 110, no. 1 (February): 180–197. ISSN: 0003-0554, 1537-5943. https://doi.org/10.1017/S0003055415000635.
- Sharipova, Dina. 2018. State-Building in Kazakhstan: Continuity and Transformation of Informal Institutions. Lanham, MD: Lexington Books. ISBN: 978-1-4985-4057-5.
- Sheng, Yumin. 2022. "Performance-Based Authoritarianism Revisited: GDP Growth and the Political Fortunes of China's Provincial Leaders." *Modern China* 48, no. 5 (September): 982–1018. ISSN: 0097-7004, 1552-6836. https://doi.org/10.1177/00977004221074297.
- Shih, Victor, Christopher Adolph, and Mingxing Liu. 2012. "Getting Ahead in the Communist Party: Explaining the Advancement of Central Committee Members in China." *American Political Science Review* 106, no. 1 (February): 166–187. ISSN: 0003-0554, 1537-5943. https://doi.org/10.1017/S0003055411000566.

- Shih, Victor C. 2008. ""Nauseating" Displays of Loyalty: Monitoring the Factional Bargain through Ideological Campaigns in China." *The Journal of Politics* 70, no. 4 (October): 1177–1192. ISSN: 0022-3816, 1468-2508. https://doi.org/10.1017/S0022381608081139.
- ———. 2022. Coalitions of the Weak. Cambridge University Press, June 2, 2022. ISBN: 978-1-316-51695-9. Google Books: DntrEAAAQBAJ.
- Smith, Benjamin. 2005. "Life of the Party: The Origins of Regime Breakdown and Persistence under Single-Party Rule." World Politics 57, no. 3 (April): 421–451. ISSN: 0043-8871, 1086-3338. https://doi.org/10.1353/wp.2006.0004.
- Spenkuch, Jörg L., Edoardo Teso, and Guo Xu. 2023. "Ideology and Performance in Public Organizations." *Econometrica* 91 (4): 1171–1203. ISSN: 0012-9682. https://doi.org/10.3982/ECTA20355.
- Sudduth, Jun Koga. 2017. "Strategic Logic of Elite Purges in Dictatorships." Comparative Political Studies 50, no. 13 (November): 1768–1801. ISSN: 0010-4140, 1552-3829. https://doi.org/10.1177/0010414016688004.
- Svolik, Milan W. 2012. *The Politics of Authoritarian Rule*. Cambridge: Cambridge University Press. ISBN: 978-1-107-02479-3 978-1-107-60745-3.
- Tertytchnaya, Katerina. 2023. ""This Rally Is Not Authorized": Preventive Repression and Public Opinion in Electoral Autocracies." World Politics 75, no. 3 (July): 482–522. ISSN: 1086-3338. https://doi.org/10.1353/wp.2023.a900711.
- Tolstrup, Jakob, and Emil Souleimanov. 2022. "Centre-Province Relations in Personalist Autocracies: Explaining the Emergence and Survival of Powerful Provincial Leaders." Government and Opposition 57, no. 3 (July): 446–466. ISSN: 0017-257X, 1477-7053. https://doi.org/10.1017/gov.2021.13.
- Toral, Guillermo. 2024. "How Patronage Delivers: Political Appointments, Bureaucratic Accountability, and Service Delivery in Brazil." *American Journal of Political Science* 68, no. 2 (April): 797–815. ISSN: 0092-5853, 1540-5907. https://doi.org/10.1111/ajps.12758.
- Trinh, Minh D. 2025. Statistical Misreporting: The View From (Very High) Above* (Or, Why Meritocracy Is Absent Where It Is Expected). Working paper.
- Wallace, Jeremy L. 2016. "Juking the Stats? Authoritarian Information Problems in China." British Journal of Political Science 46, no. 1 (January): 11–29. ISSN: 0007-1234, 1469-2112. https://doi.org/10.1017/S0007123414000106.
- Webb Williams, Nora, and Margaret Hanson. 2022. "Captured Courts and Legitimized Autocrats: Transforming Kazakhstan's Constitutional Court." Law & Social Inquiry 47, no. 4 (November): 1201–1233. ISSN: 0897-6546, 1747-4469. https://doi.org/10.1017/lsi.2021.85.
- Wiebe, Michael. 2024. "Replicating the Literature on Prefecture-Level Meritocratic Promotion in China." Research & Politics 11, no. 1 (January): 20531680241229875. ISSN: 2053-1680, 2053-1680. https://doi.org/10.1177/20531680241229875.

- Williams, Martin J. 2017. "The Political Economy of Unfinished Development Projects: Corruption, Clientelism, or Collective Choice?" *American Political Science Review* 111, no. 4 (November): 705–723. ISSN: 0003-0554, 1537-5943. https://doi.org/10.1017/S0003055417 000351.
- Wong, Stan Hok-Wui, and Kelvin Chun-Man Chan. 2021. "Determinants of Political Purges in Autocracies: Evidence from Ancient Chinese Dynasties." *Journal of Peace Research* 58, no. 3 (May): 583–598. ISSN: 0022-3433, 1460-3578. https://doi.org/10.1177/00223433198 99155.
- Wright, Joseph. 2008. "Do Authoritarian Institutions Constrain? How Legislatures Affect Economic Growth and Investment." *American Journal of Political Science* 52, no. 2 (April): 322–343. ISSN: 0092-5853, 1540-5907. https://doi.org/10.1111/j.1540-5907.2008.00315.x.
- Xu, Guo. 2018. "The Costs of Patronage: Evidence from the British Empire." American Economic Review 108, no. 11 (November 1, 2018): 3170–3198. ISSN: 0002-8282. https://doi.org/10.1257/aer.20171339.
- Xu, Guo, Marianne Bertrand, and Robin Burgess. 2023. "Organization of the State: Home Assignment and Bureaucrat Performance." The Journal of Law, Economics, and Organization 39, no. 2 (June 15, 2023): 371–419. ISSN: 8756-6222, 1465-7341. https://doi.org/10.1093/jleo/ewab022.
- Zakharov, Alexei V. 2016. "The Loyalty-Competence Trade-Off in Dictatorships and Outside Options for Subordinates." *The Journal of Politics* 78, no. 2 (April): 457–466. ISSN: 0022-3816, 1468-2508. https://doi.org/10.1086/684365.