Can't coalesce, can't constrain: redefining elite influence in non-democracies

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Abstract

What allows autocratic political elites to coordinate with each other and check dictators? Earlier work assumes that elite coordination becomes easier as dictators share more power. I argue that, even when power-sharing is pervasive, a lack of cohesiveness can rob regime members of their influence over dictators. Conflicting interests can leave seemingly powerful elites unable to agree on when or how to challenge the dictator. I develop a measure of elite collective action based on this framework. It documents not only how much power elites have, but also the obstacles they would need to resolve to work together. In doing so, it better describes the relationship between autocrats and their ruling coalition, and its added nuance allows it to recover findings that current measures miss. By paying closer attention to the cohesion of autocratic elites, this paper explains why some dictators can rule tyrannically without retribution, and why weaker elites can still constrain powerful autocrats.

The influence of autocratic regime elites explains much of what we see in non-democracies. In some cases, dictators dominate the political system and rule without worrying about other regime insiders. This personalization of power has dire consequences, as it leads to more violent and intransigent dictatorships (Weeks, 2012; Frantz *et al.*, 2020). In contrast, other rulers contend with powerful regime elites. In such cases, elite rebellion can swiftly put an end to a dictator's tenure. This threat ties the hands of autocrats and forces them to rule in less arbitrary ways to avoid deposition (Gandhi, 2008; Magaloni and Kricheli, 2010). Strong elites can then make autocracies less repressive and less likely to go to war, while also influencing their durability and even their economic performance (Gandhi and Przeworski, 2007; Gehlbach and Keefer, 2012; Svolik, 2013). The strength of regime insiders is at the center of autocratic politics.

This paper focuses on how to theorize—and measure—this key quantity. We know that the influence of regime insiders hinges on their capacity to coordinate challenges against the ruler (Myerson, 2008; Boix and Svolik, 2013). Yet, the conditions that promote elite collective action remain undertheorized. Current work rightly points to power-sharing (Gandhi, 2008; Svolik, 2012; Meng, 2020). Elites with access to institutionalized spaces gain the organizational and economic opportunities they need to confront dictators. But institutions like legislatures and parties are only part of the story. Power-sharing, I argue, is necessary but not sufficient to ensure elite coordination.

Individual elites are weaker than the autocrat in almost all cases. Hence, regime members must pool their resources to successfully confront the autocrat. Such coordination is hard for ruling coalitions riddled with internal conflict. Fragmented interests make it hard for elites to decide

when and how to challenge the dictator (Collins, 2006; Geddes *et al.*, 2018). Divergent preferences can make regime members slow to trust each other and keep them from coordinating around a shared interest (Policzer, 2009; Bove and Rivera, 2015; De Bruin, 2018). So, while power-sharing gives the elites the resources they need to act against the autocrat, it is their cohesion that allows them to put that power into action.

This paper seeks to make two contributions. First, it builds on previous work to further specify the conditions that enable elite influence. It does this by paying closer attention to their cohesion. I document how narrowly or widely dictators share power in three key areas: the administration of coercion, gaining and controlling the state, and policymaking. In doing so, this paper advances a conceptualization of elite influence that answers not only the question of how much power dictators share but also how they share it. These dual concerns—while distinct—are interconnected. The consequences of the dictator's decision to share power can be muted or exacerbated by the degree of elite cohesion. Unlike what existing theories suggest (Bueno de Mesquita *et al.*, 2003), I argue that the power of dictators is only counterbalanced when they share power with only a few actors. A dictator who shares power with numerous actors is better insulated because larger groups have difficulty coordinating around conflicting interests (Olson, 1965). Elite cohesion and power-sharing interact to define how much influence regime insiders have over the ruler.

The second contribution of this paper is to provide a more nuanced measure of the potential for elite coordination. I use a novel measurement model with one key advantage. Current item response theory (IRT) measures of elite influence assume that the indicators they use have a constant effect across regimes (Geddes *et al.*, 2018; Gandhi and Sumner, 2020). For example, they treat single parties as having the same effect regardless of the presence or absence of a legislature or a dominant military. They assume structural equivalence. In contrast, the IRT model below uses items with random effects to recognize that the same political institution can matter differently across regimes. The incorporation of this heterogeneity is particularly important because informal norms in autocracies often shape formal institutions in unexpected ways. Two replications show that this advantage translates into a more nuanced measure that can uncover patterns that current ones miss. Future research can then use the suggested measure, and the theoretical framework it is based on, to gain a more complete understanding of authoritarian politics.

1. Concepts of autocratic elite influence

What allows elites to rein in dictators? Regime members must make autocrats believe that power grabs will be costly (Boix and Svolik, 2013). But in dictatorships, few, if any, are in position to punish the leader. Instead, regime members must rely on their collective strength. Elites that work together bolster their power and can more credibly threaten to rebel against dictators that overstep. In contrast, weaker elites that cannot threaten ouster have little recourse to stop ambitious dictators (Geddes *et al.*, 2018). Consequently, must work sees the influence of autocratic elites as hinging on their potential for collective action (Gandhi, 2008; Gehlbach and Keefer, 2012; Sudduth, 2017). I build on this view by further specifying the conditions that facilitate elite coordination.

Figure 1 shows the conceptualization of elite influence of this paper. Like previous work, it notes that regime members can only maintain their influence when they have a high capacity for collective action. But instead of treating collective action as a natural consequence of power-sharing, it highlights two distinct requirements. Indeed, regime members must benefit from power-sharing, as suggested in the literature (Svolik, 2012). By this I mean that elites must have access to institutionalized positions within the state. Spaces like legislatures and parties give elites their own bases of support and resources, which they can use to challenge the autocrat (Magaloni, 2008). Power-sharing then gives the elite the material means they need to oppose the autocrat. But while it has received most of the attention in the literature, power-sharing is only one of the elements needed for collective action.
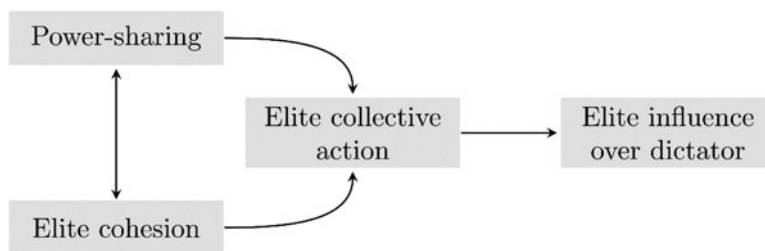
Figure 1. Elements of autocratic elite influence.

Coordination also requires cohesiveness. I use the term elite cohesion to refer to the number of distinct interests that have representation within the regime.[1] Some dictators only share power with a narrow group, such as members of their own party or family. Others opt to share power more broadly, including genuine opposition groups (Francois et al., 2015). This results in autocratic regimes that are far from monolithic and include a variety of interests within them. The decision of how to distribute access to the state has deep implications for elite cohesion. Dictators that increase the number of distinct interests within the regime also increase the potential for conflicts within it. Frictions among regime members give rulers political opportunities, as elites that are fighting each other are unlikely to band together to check the dictator. For example, ethnic conflicts within the Uzbek ruling coalition meant that regime members distrusted each other too much to unite against the leader's moves to erode power-sharing arrangements (Collins, 2004). Similarly, Mexican president de la Madrid recalls how "once the regime opened the door to the new political forces, my power kept increasing […] the old guard understood that they were not indispensable and that I had many options available" (2004, 93). A lack of elite cohesion makes it hard for regime members to work together and gives dictators the necessary room to outmaneuver their more powerful rivals.

Admittedly, power-sharing and elite cohesion are interrelated concepts. Power-sharing can create cohesion by giving regime members in the same institution a shared interest in protecting it from the dictator's advances (Myerson, 2008). At the same time, elite cohesion can create and sustain power-sharing. Existing work suggests that dictators proactively share more power when they face a cohesive elite (Meng, 2019a). Elite power also tends to collapse when the elite is divided and cannot check the dictator's power grabs (Geddes et al., 2018).

While power-sharing and cohesion often move in tandem, one does not reduce to the other. Strategic behavior on the part of dictators makes the link between the two quantities ambiguous. Autocrats can weaken their own elites to prevent a potential coup but doing so makes them susceptible to mass rebellion or foreign threats (Greitens, 2016). Hence, dictators that worry about the future of the regime often refrain from taking power away from fragmented elites (Svolik, 2013). Dictators can also selectively use power-sharing to diminish elite cohesion. Indeed, the coup-proofing literature shows that extending power-sharing in the form of creating new coercive institutions can leave elites too divided to resist the autocrat (Böhmelt and Pilster, 2015). It is then useful to distinguish between power-sharing and elite cohesion when judging the influence of regime members. Indeed, I show below (Figure 3) that these two dimensions of elite collective action remain empirically distinct.

2. The two dimensions of elite collective action

Table 1 shows how power-sharing and elite cohesion interact. In the scenario that is most conducive to collective action, the elite enjoys ample power-sharing and high cohesion. Regime members in this condition have the necessary resources to challenge the autocrat, as well as

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[1]I also use the term fragmentation to refer to the lack of elite cohesion.

Table 1. Elements of Elite Collective Action (ECA)

		Elite cohesion	
		High	Low
Power-sharing	High	High ECA	Intermediate ECA
	Low	Low ECA	No ECA

the knowledge that they will not have to confront rival factions siding with the dictator. Hegemonic party regimes approach this ideal type the most. In these countries, dictators share large amounts of power by giving party members access to the highest decision-making bodies. Hegemonic parties also foster elite cohesion by imposing a common political hierarchy and institutional incentives on all regime's members. Party leaders can then mobilize vast resources against the autocrat without elevated coordination costs.

The potential for collective action diminishes as the elite loses cohesion. Fragmented elites have difficulty coordinating because they operate under more uncertainty. This manifests itself in two distinct problems. First, under elite fragmentation, elites have difficulty learning about each other preferences. The high costs of dissent under autocracy incentivize individuals to falsify their preferences to diminish risk. Elites can typically circumvent this problem through frequent informal interactions in shared spaces away from the eyes and ears of the dictator (Myerson, 2008). However, when dictators share power across institutions and social groups, elites may not have the necessary overlap in their networks to alleviate this problem. Members of the military may not then realize that party officials share a common desire to rebel, for example.

Even when fragmented elites can communicate their shared inclination to challenge the autocrat, a more fundamental problem remains. Regime insiders that belong to different social groups or political institutions have distinct interests and incentives. This presents an additional obstacle for fragmented elites. They must not only agree on when to challenge the autocrat, but they must also compromise on what the future of the regime will be. Such compromises are hard in dictatorships because, similar to other contexts where violence is manifest, there are no formal processes to credibly commit to them (Walter, 1997). The weaker factions of the regime have no reason to believe that the stronger ones will respect previous arrangements and refrain from monopolizing power. It is safer for them to side with the dictator and avoid the very likely scenario of being betrayed by their fellow elites (Padro-i-Miquel, 2007). At the same time, stronger factions recognize weaker ones as unreliable allies. Powerful elites can anticipate that dictators can buy off marginal regime members easily because the payoff of cooptation represents a significant improvement over their status quo (Bove and Rivera, 2015). Regime insiders are then left looking for trustworthy allies. This uncertainty discourages coordination even if a challenge that manages to get off the ground would be likely to succeed.

As important as cohesion is for regime insiders, a loss of power-sharing is even more detrimental to their coordination capacity. Cohesive elites may agree that they would be better off under a different leadership, but they will be unable to act on that preference if they do not have the means to rebel. As the literature suggests, the elite gain the necessary powerbase to depose dictators from controlling positions within the state (Svolik, 2012; Meng, 2020). Hence, I treat regime insiders that are cohesive but lack the benefits of power-sharing as having only a low potential for collective action. An even more dire scenario for the elite is when they lack access to state positions and do not have shared institutions or political networks tying them together. In those circumstances of low power-sharing and low cohesion, checking the autocrat is often impossible. This opens the door to personalists' regimes where dictators have monopolized power at the expense of other regime members.

3. Measuring elite collective action capacity

Based on the previous discussion, I operationalize elite collective action as the sum of power-sharing and elite cohesion, where cohesion is itself weighted by the power the elite holds. This is equivalent to the formulation in Table 1:

$$\text{Elite collective action} = \text{Power sharing} + \text{Elite Cohesion} \times \text{Power sharing}$$

This operationalization recognizes power-sharing as a necessary, non-substitutable, condition for collective action. Elites that have a variety of institutional resources at their disposal can present autocrats with more credible challenges. But power-sharing is not sufficient to guarantee coordination. Autocratic elites face a common agency problem (Bernheim and Whinston, 1986). A variety of principals—the elite—with distinct interests try to influence the behavior of one agent or autocrat. In the absence of a shared interest among the principals, the agent gains independence and opportunities to deviate. Factionalism can then leave seemingly powerful autocratic elites without influence. Therefore, I also include elite cohesion as a constituent part of collective action.

Importantly, elite cohesion cannot guarantee coordination either. I assume that the degree to which cohesiveness facilitates coordination depends on the degree of power-sharing. As power-sharing approaches zero, so does collective action, regardless of cohesion. For example, North Korea has ideal conditions for elite cohesion with the Worker's Party holding most of the power that is not on the hands of leader. However, the potential for elite challenges remains low because the autocrat shares very little power. Elite cohesion cannot facilitate collective action in the absence of power-sharing.

3.1 Data

The dimensions of elite collective action cannot be directly observed. This makes it necessary to rely on a measurement model that translates partial observable indicators into more comprehensive measures. I now turn to the indicators that will inform the measurement model below. I use data from 204 autocracies from 1946 to 2017. This covers most autocracies since the end of World War II. I use regime-year as the unit of analysis as identified by Svolik (2012).

Dictators share three key powers with other state actors: the administration of coercion and conflict, gaining or maintaining control of the state, and policymaking. I include indicators that touch on these three dimensions. Tables 2 and 3 summarize all the indicators. I carried out original data collection to update all indicators and avoid missing data.

Some of these indicators will be more relevant for some autocracies than others. But this should not reduce the overall validity of the measure. The measurement model presented below recognizes this variation and weighs each indicator appropriately depending on the context. This results in less overfitting to cases while allowing us to recognize the diversity of factors that can be important across the variety of autocratic regimes.

3.1.1 Indicators of power-sharing

A first indicator of power-sharing is military involvement in politics. Powerful militaries can threaten to oust leaders. This gives them considerable policy influence in addition to their role in coercion. Parties have a similar role. Strong parties develop policy and channel political conflict even in the absence of elections. Many dominant parties are the only vehicle for accessing the state, which means that dictators often owe their position to party. Admittedly, some dictators create these parties and continue to control them. These type of single party empower the elite to a much lesser degree (Meng, 2019b). I distinguish between these single parties and hegemonic parties precede and survive specific autocrats.

Legislatures also empower regime members (Jensen et al., 2013). They give elites formal procedures to try to check dictators in a manner that reduces the chance of retaliation, as well as

Table 2. Indicators of power-sharing

Indicator	Source	Coded as 1 if there is
Military involvement	Svolik (2012)	Direct military influence over government
Executive is selected	Svolik (2012)	Dictator selected by a collective body
Single party	Svolik (2012)	Only one political party in the regime
Hegemonic party	Templeman (2014)	Party has held executive power for 20 years
Presence of a legislature	Beck et al. (2001)	Legislature with formal authority
Autonomous legislature	Lindberg et al. (2014)	Legislature with *de facto* independence
Stable legislature	Svolik (2012)	Leader has not dissolved a legislature
Stable cabinet	Banks and Wilson (2017)	No major cabinet changes in the last year
Local government	Beck et al. (2001)	Local government with autonomy over taxing, spending, or legislative activity

All variables are coded as either 0 or 1. A value of 1 indicates higher expected levels of power-sharing.

resources they can use to build their own networks of supporters. Not all legislatures empower the elite. Some of them are best described as rubber-stamping institutions (Wilson and Woldense, 2019). I differentiate between legislatures that serve as genuine, even if restricted, spaces for contestation and those that do not. Similarly, I consider whether the dictator has a history of dissolving the legislature when it is convenient as opposed to those who tolerate legislative opposition. This kind of behavioral indicator is important since dictators can often undermine formal institutions through political maneuvering. For this reason, I also consider the shuffling of cabinets, which is a common strategy for limiting elite influence (Woldense, 2018).

The last indicator for power-sharing is whether local governments exist. Local governments put bureaucratic machineries at the disposal of local leaders. Therefore, autocrats often find strong opposition in local leaders. Notorious *caciques* or *coronéis*, can control a large portion of the public revenue, decide who gets to climb through the ranks, and have policy-making authority in the region.

3.1.2 Indicators of elite cohesion

The first indicators for elite cohesion consider intra-institution fragmentation for legislatures and the military. Dictators divide military command to counterbalance powerful generals. This allows the leader to create competition and distrust among rival parts of the military. Research by Sudduth (2017) also suggests that counterbalancing occurs when elite cohesion is already low. Dictators have similarly adopted bicameralism to bring into the regime local elites to counteract national ones (Perry, 1996). This divides the legislative and gives a more dominant role to the executive. Additionally, even a unicameral legislative may have trouble coordinating if there are factions within it. I take a history of unified and independent legislative voting as evidence of a lack of factionalism. I also consider inter-institution fragmentation. Particularly, whether power is divided among the military and a party or if only one of those holds influence. Both institutions can empower elites by creating homogenous interests for its members. However, when both exist, coordination becomes difficult as the incentives for military and civilian leaders are distinct and often at odds (Brooks and White, 2022).

Table 3. Indicators of elite cohesion

Indicator	Source	Coded as 1 if there is
Unified military	Böhmelt et al. (2018)	Military with low levels of fragmentation
Unicameralism	Lindberg et al. (2014)	Only one legislative chamber
Unified legislative voting	Lindberg et al. (2014)	Main party members vote mostly together
Institutional homogeneity	Svolik (2012)	Only military or party elites hold influence
No interest groups	Lindberg et al. (2014)	Civil society has no role in policymaking
No independent judiciary	Lindberg et al. (2014)	Judiciary subordinated to regime insiders
No internal conflict	Banks and Wilson (2017)	No civil conflict between domestic forces

All variables are coded as either 0 or 1. A value of 1 indicates higher expected levels of elite cohesion.

The next set of indicators refer to the degree to which regime members have independence from their society. While typically associated with democracy, interest groups also function in autocracies, even if their action space is limited. Most autocracies have strong regime outsiders that manage to gain influence over regime insiders. These may include a rising business class, landed elites, multinationals, independent media corporations, etc. These groups coopt elite members and impose on them agendas that may not resonate with the rest of the regime. Some dictators also allow for independent judiciaries. These courts open the gates of the state to political opponents and create diversity within the regime (Ginsburg and Moustafa, 2008). Overall, regime insiders find themselves under the pressure of more diverse interests as the number of powerful actors outside of the state increase. This leads to a loss of cohesiveness as different interest groups coopt different sets of regime members.

Finally, it is not unusual for autocracies to face internal turmoil, but large-scale conflict perdures when elite divisions are the source of the conflict or when they lack the necessary cohesion to carry unified action against the challengers. Additionally, when regime outsiders can sustain violent conflict, divisions within the regime tend to emerge between hard and soft-liners. A lack of internal conflict shows an elite cohesive enough to prevent opposition from emerging and perduring.

3.2 Measurement model

Current work uses IRT models to measure elite influence (Geddes et al., 2018; Wright, 2019; Gandhi and Sumner, 2020). The main advantage of this approach is that it recognizes that individual indicators relate differently to the quantities of interest. So, if one of the indicators discussed previously did not capture the proposed dimension, the model would discount it while prioritizing others. This allows for a valid measure even with noisy or incomplete indicators. A disadvantage of current IRT measures, however, is that they treat indicators as having the same meaning across regimes. For example, they assume that a legislature has the same implications regardless of context. If the effect of legislatures depends on the nature of political parties or the role of the military, then current measures would be misleading. To account for this issue of structural heterogeneity, I implement a random item (RI) IRT model as delineated by Fox (2010)[2]:

$$y_{jkt} \sim \mathrm{logit}(\eta_{jkt})$$
$$\eta_{jkt} = \alpha_{jk}\theta_{jt} - \beta_{jk}$$
$$\alpha_{jk} = \alpha_k + a_{jk}$$
$$\beta_{jk} = \beta_k + b_{jk}$$

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[2]A key identifiability concern for this model is that comparisons across regimes require a shared scale, and the introduction of regime-specific offsets shifts the scale for each regime in different ways. This results in under-identification unless

where j indexes regimes, k indexes items, and t indexes time. An observation y_{jkt} denotes the probability that, for regime j, the indicator k is present at time t. This probability is a Bernoulli process where the success rate is η_{jkt}. The specification of η_{jkt} has three elements. The parameter θ_{jt} denotes the latent quantity for regime j at time t. β_{jk} denotes the difficulty parameter and α_{jk} represents the discrimination parameter for each item for a specific regime. Hence, the difference in RI IRT models is that the discrimination and difficulty parameters vary across regimes. For instance, α_{jk} is a combination of the overall discriminatory power of item k, α_k, and a regime-specific deviation denoted a_{jk}. The model then deals with structural heterogeneity by allowing the same indicator to matter differently across cases.[3]

The model estimates the regime-level deviations a_{jk} and b_{jk} as random effects. This means that the indicators are not additively separable. That is, if a given indicator is very rare in the sample, it will be estimated to be less relevant to the latent quantities. I assess below whether this affects the validity of the estimates. I fit the model using the Stan. I assess convergence using the Gelman and Rubin statistic, the effective sample size of iterations, and a lack of divergent transitions. All parameters use weakly informative priors to aid with identification.

A simulation study highlights the value added of the RI model. The simulated data consist of 20 items (indicators), 65 groups (regimes), and 70 units (years). I limit the number of groups to avoid excessive computational costs. I simulate the data so that the discrimination and difficulty parameters vary by regime. The variance across countries for α_{jk} and β_{jk} ranges from 0.05 to 1 and 0.25 to 1.2, respectively. Some items are simulated with no variance to confirm that the RI model works as intended under item invariance as well.

The posterior predictive checks in panel A of Figure 2 show how well the RI model recovers the latent dimension θ_{jt}. The distance between the simulated θ_{jt} and the estimated θ_{jt} is small across its range. For almost all observations, the estimated credible intervals recover the true θ_{jt}. Overall, the correlation between the estimated and simulated θ_{jt} is 0.92. Panel A then shows that the RI model recovers the main quantity of interest.

Under item variance, the RI model performs much better than the 2PL IRT model used in current measures (Geddes *et al.*, 2018; Gandhi and Sumner, 2020). Panel B of Figure 1 compares the performance of both models using the root mean square error (RMSE). It takes the RMSE of the RI model as the baseline (fixed to 100), and shows that the 2PL model produces more error in all cases. The 2PL model produces 20 percent more error for θ_{jt}. Ignoring item variance results in strong bias in our inferences about the latent dimension of interest. The same is true for the mean discrimination (α_k) and difficulty (β_k) parameters across countries. The 2PL model produces 21 percent more error for α_k and a 41 percent more error for β_k.

Panel C further supports the use of the RI model. It plots the true η_{jkt} against the estimated probability that $y_{jkt} = 1$. Since η_{jkt} considers all parameters, it serves as a check for the overall performance of the model. It shows the RI model closely follows the true probability of a positive response. In contrast, the 2PL predictions are farther apart from the true probability. Leave-one-out cross-validation also strongly supports the RI model with an information criterion that is 1294 (±56) smaller than that of the 2PL model. In short, the simulation results show that current measures of elite influence carry substantial error whenever structural equivalence does not hold.

I use the RI model to build separate measures of power-sharing and cohesion, which I then standardize to range from 0 to 1 and combine into a single measure of collective action. The

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additional constrains are adopted. Random item models require parameter constraints to resolve this. In particular, the scale of the latent quantity θ_{jt} is fixed to have a mean of 0 and a standard deviation of 1. Regime-specific difficulties are also fixed so that $\Sigma_k b_{jk} = 0$. The cross-national discrimination parameters also need to be fixed so that $\prod_k \alpha_k = 1$, and the product of regime-specific discriminations are similarly set to 1. These constraints fix the scale and location to allow for valid cross-national comparisons (Fox, 2010, 206–8).

[3]Previous work has allowed item parameters to vary with time (Fariss, 2014). The proposed approach is similar but generalizes it to all item parameters.
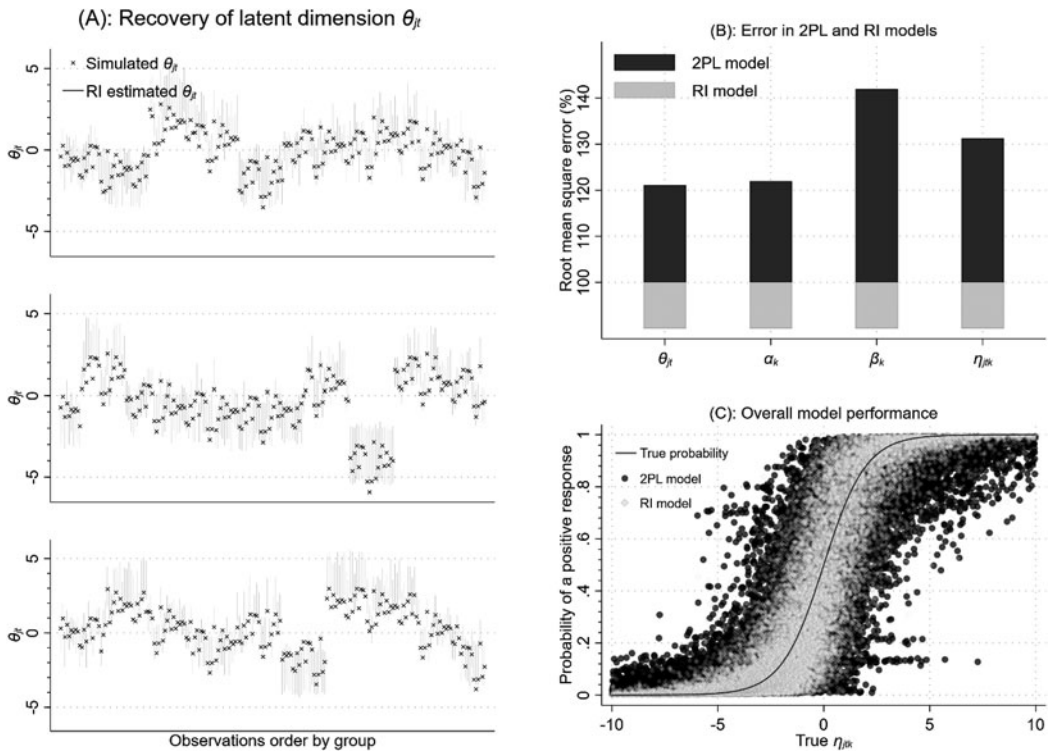
Figure 2. Performance of RI and 2PL IRT models under item variance.

resulting quantities remain distinct. Figure 3 shows the correlation between the component parts of elite coordination. Panel A shows a weak correlation ($r = 0.23$), with many cases with high elite power but low cohesion and vice versa. Panel B shows the correlation within regimes. For most, the correlation between the two elements is quite small, with about 30 percent of regimes having a negative correlation. This confirms the importance of distinguishing between the power and the cohesion of elites, and not treating one as indicative of the other.

4. Measure validation

As a first step in assessing the validity of the resulting measure, Figure 4 shows the average estimated elite collective action for six regimes. It shows a considerable level of face validity. Qualitative accounts suggest that among the selected countries, Mexico should score the highest in elite collective action. For most of its tenure, the Institutional Revolutionary Party (PRI) was a highly institutionalized party capable of constraining dictators (Greene, 2010). Similarly, the UMNO had many instances of successfully resisting economic policies pushed by leaders that compromised the interests of the ruling coalition (Bowie and Unger, 1997; Prasse, 2006). In contrast, scholars have documented how the concentration of power in monarchies like Oman and Nepal have disarmed political elites, leaving little room for opposition to their rulers (Valeri, 2009). The proposed measure echoes the qualitative evidence of each of these cases.

Figure 4 also serves to start to assess the criterion validity of the elite collective action measure I propose (ECA hereafter). Admittedly, previous measures of elite influence are based on differing theoretical perspectives, making the comparison across measures less precise. However, past literature has largely used autocratic type as a proxy for how constrained dictators are by their
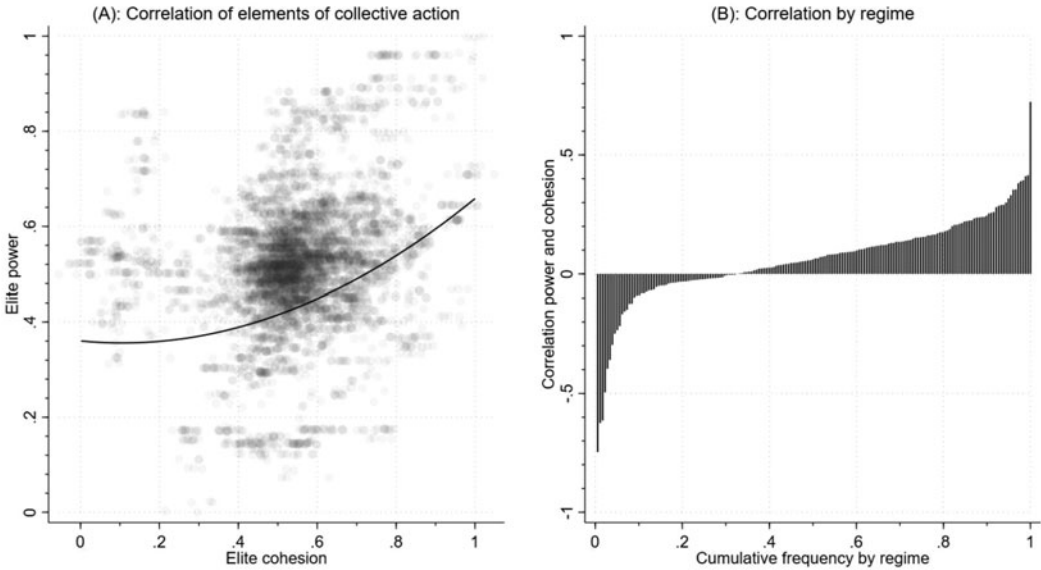
Figure 3. Correlation of power-sharing and cohesion. Black line in panel (A) shows quadratic fit. Elite cohesion corrected for skewness to improve readability. Correlations in panel (B) weighted by variation in the indicators.
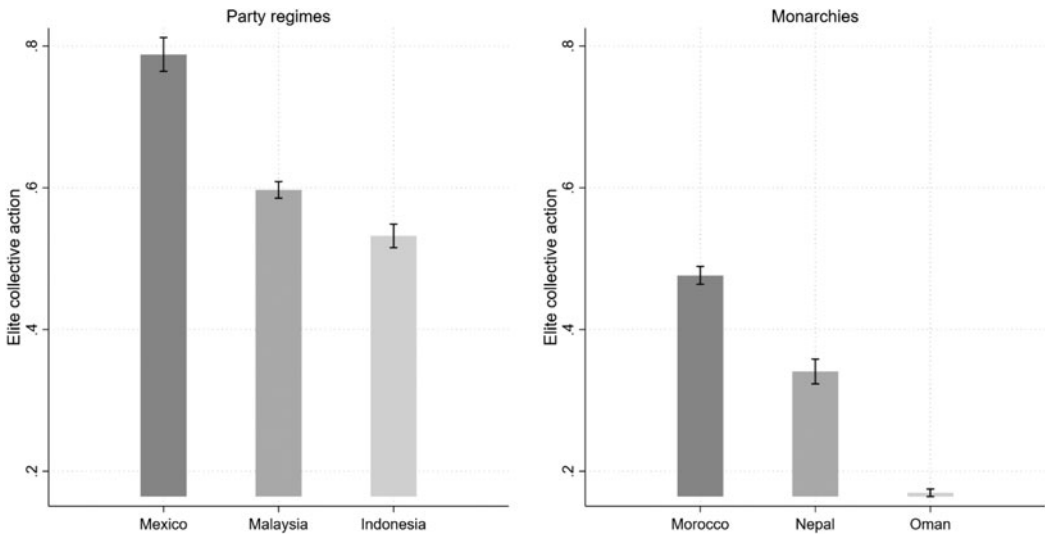

Figure 4. Elite collective action within regime types.

ruling coalitions (Svolik, 2012; Geddes *et al.*, 2014). Past work shows that, on average, one-party systems have more influential elites than personalist regimes. ECA also reflects this insight, suggesting that it is touching on the same latent dimension previous work has focused on. However, it also has the key advantage of capturing variation within autocratic type. It correctly shows how, in Indonesia, the Golkar party was not able overcome the dominant role that Suharto and his family had in the political system. Similarly, it mirrors Gandhi's (2008) description of how the Istiqlal party in Morocco had a long history of challenging rulers despite the monarchical structure of the regime. The ECA measure recovers the expected variation within types of autocratic regimes.
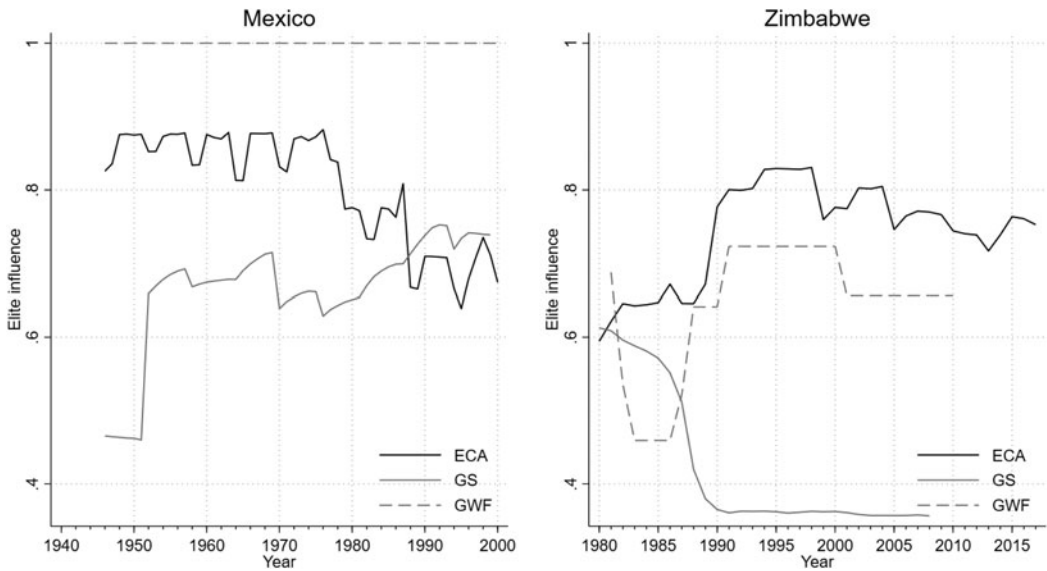
Figure 5. Mexican and Zimbabwean elites according to three measures. All measures standardized to range from 0 to 1, with 1 meaning more influential elites. ECA refers to the proposed elite collective action measure. GS and GWF refer to the Gandhi and Sumner and Geddes, Wright, and Frantz power-sharing measures, respectively.

I now turn to a comparison of ECA with the more recent measures of elite influence. This serves as an additional check on the criterion validity of my measure but also highlights the value added of its theoretical framework. I focus on the evolution of elite influence in Mexico and Zimbabwe. They are both cases with powerful elites but changing levels of cohesion. As a result, the proposed measure offers qualitatively different insights from existing accounts. Gandhi and Sumner (GS, 2020), as well as Geddes *et al.* (GWF, 2018), develop IRT measures of personalism, which I invert to reflect power-sharing. These measures signified an improvement over previous work in a number of ways, and so remain immensely useful for researchers. However, they put their focus squarely on power-sharing. Therefore, they serve as a good benchmark to compare the benefit of incorporating elite cohesion into our conceptualization of elite influence. Figure 5 shows the evolution of elite influence for Mexico and Zimbabwe according to these three measures.

Mexico's autocratic regime under the PRI was known for its well-defined structure. Presidents shared power with the party, and consistently abided by term limits. They were unlikely to go against the party consensus, partly because the PRI protected them once they left office. However, the balance of power between presidents and the party elite changed with time. The political reforms of 1977 and 1983 were watershed moments in this process. They opened the regime to genuine opposition parties and decentralized power for the benefit of local authorities and at the expense of the national PRI elite (Rodriguez Araujo, 1979). As a result, the ruling coalition soon became an amalgamation of disparate actors with contrasting interests (Loeaza, 2010; Ortega, 2010). The resulting loss of elite cohesion allowed subsequent leaders to monopolize power without having to worry about the threat of the elite coming together in opposition. Indeed, later presidents successfully sidelined powerful elites from organized labor and the oil industry that once had been indispensable allies. Ultimately, the reforms led to a weaker ruling coalition that was unable to resist the public's demands for democratization in 2000.

The ECA measure correctly captures the slow decline in elite influence as the ruling coalition lost cohesion. In contrast, the GWF measure does not have the variation we would need to

capture the changing balance of power between Mexican leaders and the regime elites. This case is also puzzling through the lenses of GS. This measure suggests that the dominant presidencies of De la Madrid and Salinas came at a moment where the elite had accumulated unprecedented influence. In contrast, ECA reveals that these powerful leaders gained a hold over the regime only after years of a constant loss of elite coordination capacity. ECA accurately shows this decline starting with the political reform of 1977 and continues until the country's democratization. While ECA and GS converge for the later years, the interpretation of the historical events is less puzzling through the former.

Zimbabwe's Robert Mugabe won the elections of 1980 under the Zimbabwe African National Union (ZANU). Mugabe took power as dominant force within the party, but his power was not monolithic. He faced the opposition of the ZAPU, a rival movement within government. Dissatisfied with this power-sharing arrangement, Mugabe used his party to purge ZAPU members. In doing so, he gave ZANU officials a stronger position in government in return for their collaboration (Meredith, 2007, 63, 82). The military received similar benefits as Mugabe grew more dependent on his coercive agents to combat ZAPU supporters (Cheeseman and Tendi, 2010). The process repeated itself in the 1990s when the Zimbabwe Unity Movement (ZUM) emerged, establishing a self-reinforcing cycle (Howard-Hassmann, 2010). As opposition to Mugabe and repression increased, so did the power of regime insiders (Meredith, 2007, 123). Eventually, regime members became powerful enough to oust Mugabe as his health deteriorated (Reuter and Gandhi, 2011, 106–9; Tendi, 2013, 969). Mugabe stayed in office for almost 40 years, but he did not do it by monopolizing power. Instead, he managed to prolong his rule by making increasing concessions to regime insiders.

GS shows Mugabe's regime as one where elites like the military and ZANU officials were weak. GWF and ECA instead show the elite at higher levels of strength. They capture Mugabe's slow loss of power and his eventual dismissal from the party. Additionally, the variation in ECA offers more details about the changes in Zimbabwean politics, such as the rise of factionalism after first electoral defeat of ZANU and Mugabe in 2000. Unlike the other measures, it also shows considerable elite influence during the early 1980s, when Mugabe had strengthened the ZANU and the military to combat the opposition.

In short, the proposed measure seems to capture more closely the changes in the relationship between autocrats and their elites. It does so by explicitly incorporating elite cohesion into the measurement model, which we know should be a strong factor shaping the capacity for elite collective action.

5. Replications

Next, I assess the value added of ECA to applied research. I replicate two previous studies and show that ECA can be used to avoid false negatives in future work. Its added nuance can get researchers more precise inferences even under more demanding conditions.

5.1 Frantz et al. (2020)

A robust result in the literature is that power concentration leads to repression (Davenport, 2007; Frantz and Kendall-Taylor, 2014; but see Kaire, 2019). In this section, I examine how the three measures of elite influence predict repression. An illuminating study by Frantz et al. (2020) has already used the GWF measure to explain repression, so it serves as a useful benchmark.

Following Frantz et al., I use Fariss' (2014) human rights scores to measure repression. The unit of analysis is regime-years, which I treat as clustered around regimes in a multilevel structure. Adjusting for autocratic type is necessary to avoid bias since it is associated with human rights and elite influence. Adding additional controls like population size, and GDP only increases the predictive advantage of ECA. In other words, the specification that I present is the hardest
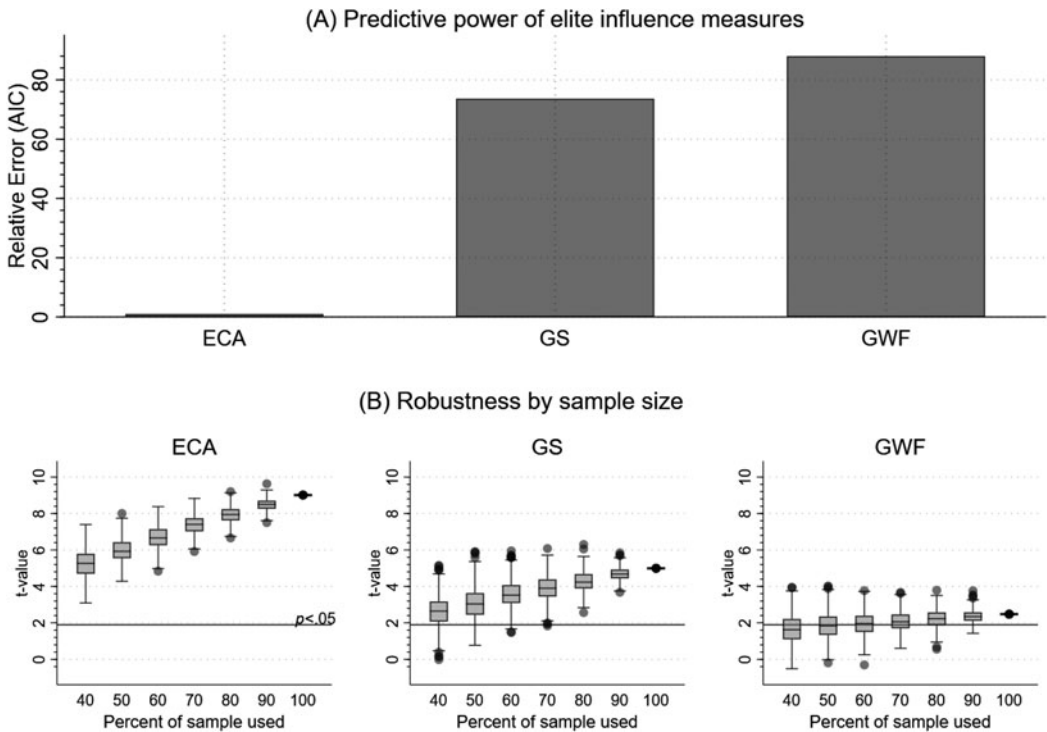
Figure 6. Predicting human rights with three measures of elite influence. Dependent variable for all models is Fariss (2014) human right scores. Models control for autocratic type. They also adjust for violent conflict since it is part of the ECA measure but also closely related to human rights. This prevents artificially inflating ECA *t*-values. AIC scores normalized so that the best performing model has an AIC of zero.

test for ECA. I run three identical models, where the only difference is the measure of elite influence. I utilize a sample of all autocracies from 1949 to 2008, which is the period for which all three measures are available.

Panel A in Figure 6 shows the predictive performance of the three measures. The y-axis shows the Akaike information criteria (AIC) of using each of the measures to predict human rights. AIC measures out-of-sample prediction error, where lower values indicate better performance. The difference between ECA and the second best performing measure (GS) is of about 70, which constitutes very strong support for ECA (Burnham and Anderson, 2003, 70–71). Leave-one-out cross-validation supports this conclusion. This process uses all but one datapoint to fit the model, and then tests the model by predicting the point that was left out. The procedure is repeated for all datapoints. Under cross-validation, the ECA expected log predictive density—which measures predictive error—is 37 (±9.6) units smaller than that of the GS model and 48.2 (±9.7) smaller than the GWF model. A difference of more than four indicates a significant improvement (Vehtari *et al.*, 2017), hence, the ECA measure has significant added predictive power.

The predictive power of ECA allows for more robust inferences when data are scarce. Consider panel B of Figure 6. It shows the results of running the same regression as above 500 times but with different sample sizes and observations. The x-axes show the percentage of the sample for each group of regressions. The boxes show the average *t*-score (coefficient/standard error) for each group of 500 regressions. The results indicate that—when using the complete database— all measures of elite influence show a positive effect that is statistically significant at conventional

Table 4. Replication of Gehlbach and Keefer analysis of FDI and elite collective action

	Model 1	Model 2	Model 3
Party strength	0.60 (1.26)	−0.86 (1.57)	
Elite collective action			4.8* (2.4)
Regime duration	0.03 (0.07)	−0.00 (0.08)	0.02 (0.08)
Intra-elite turnover	−0.70 (2.04)	−1.75 (2.78)	−0.79 (2.61)
Fuel exports/GDP	0.05 (0.04)	0.07 (0.04)	0.07 (0.04)
Ore exports/GDP	0.05 (0.03)	0.05 (0.03)	0.06 (0.03)
Young population	−0.13** (0.05)	−0.17** (0.06)	−0.18** (0.06)
Total population	−0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Adjusted income	−1.25 (0.74)	−1.37 (0.81)	−1.23 (0.80)
N	115	93	93
R^2	0.15	0.17	0.19

*$p < 0.05$. The coefficients of party strength are rescaled to make them comparable to the elite collective action measure. Differences in sample size are due to Gehlbach and Keefer considering additional countries as autocracies.

levels (t-value $\gtrsim 2.2$). However, with the smaller samples researchers often need to work with, estimated coefficients shrink and standard errors expand, leading to false negatives. Despite this loss of power, ECA still recovers the effect of elite influence on human rights with only 40 percent of the sample. A similar sample with the other measures would force researchers to wrongly conclude that elite influence has no effect on human rights.

5.2 Gehlbach and Keefer (2012)

Gehlbach and Keefer argue that elite collective action incentivizes private investment in autocracies by constraining dictators. The authors find support for their argument when analyzing private and domestic investment, but find no similar relationship when it comes to foreign direct investment. They argue that this is because the institutions that favor collective action do not provide guarantees that protect foreign investors. However, recent research finds the opposite (Moon, 2015). Strong autocratic elites push for property rights to protect their own interest, but also to signal to foreign investors that expropriation is unlikely. As elites secure foreign investment, they can use these resources to protect the regime that empowers them from economic downturns and social discontent (Bak and Moon, 2016). Therefore, strong elites should be associated with increased foreign investment. This makes the null result Gehlbach and Keefer report puzzling. I reexamine it using the proposed ECA measure.

Table 4 shows that the null finding of Gehlbach and Keefer is likely the result of measurement error. The original study proxied elite collective action with party and legislative strength, not considering other elements of elite influence. Model 1 in Table 4 shows the results obtained by Gehlbach and Keefer. The second model replicates the first with a sample for which ECA is available. Model 3 shows the results of replicating the study with ECA. Consistent with recent research, elite collective action attracts foreign investment. Again, the ECA measure identifies patterns in the data and avoids false negatives. Indeed, the ECA measure produces a significant improvement in model fit. This is reflected in the R^2 differences, and lower AIC values. Moreover, neither the GS nor GWF measures recover this positive effect, and both result in lower predictive power than ECA.

6. Conclusion

Elite collective action is best understood as the combination of power-sharing and elite cohesiveness. For elites to be able to rebel, they need a big enough power-share that the dictator cannot easily quell elite dissent. But elites also need to be able to overcome their individual interests to leverage that power. This becomes harder for heterogeneous ruling coalitions that need to reconcile

competing interests before mobilizing. While the literature has focused on power-sharing, the cohesion of elites is just as important.

This paper presents a measure of elite collective action potential. It uses a hierarchical IRT model to recover both constituent parts of elite collective action. The proposed measure represents a significant improvement over previous operationalizations of elite influence that reduce it to power-sharing. In addition, the measure deals with the important issue of cross-national structural heterogeneity. The combination of the theoretical framework with this statistical approach produces a particularly powerful measure. The validation exercises show that the proposed measure provides more nuanced and accurate descriptions of historical evidence, and that its added precision can help future studies reach more accurate inferences, and recover more of the evidence in their data.

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