Loyalty and Acquiescence: Authoritarian Regimes and Inequality Outcomes

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Abstract

This article seeks to explain inequality outcomes in authoritarian regimes as a function of the different combinations of loyalty-building and repressive measures (carrots and sticks) that authoritarian rulers use to maintain power. Like democratically-elected rulers, authoritarian rulers supply public and private goods in response to competitive pressures, and they can also employ repression to raise the costs of political dissent. The optimal combination of carrots and sticks varies across authoritarian regimes according to the nature of the political institutions by which authoritarian rule is organized. The results are economic policy outcomes that, over time, affect the level of economic inequality. Using a cross-national dataset covering over 80 authoritarian regimes observed during the 1965-2005 time period, this article develops and tests hypotheses that link inequality outcomes to authoritarian regime types. When it comes to explaining variation in the level of economic inequality across countries, it has become clear that the degree of democracy is not the most important political factor. The predictions of Meltzer and Richards' median-voter model notwithstanding, democracies do not have dramatically lower inequality than dictatorships on average, and the scope of variation in inequality is equally wide among longstanding democracies and dictatorships.¹ Given this empirical reality, it is helpful to start with fresh assumptions.

First, rulers of all types face rivals and thus are subject to competitive pressures. The nature of these pressures, and the tools that rulers have to respond to them, vary across different types of political regimes. Like democratically-elected rulers, authoritarian rulers implement policies to reward constituencies that keep them in power. Second, although greater contestation can induce rulers of all kinds to expend greater resources, the effects of this expenditure on inequality depend upon which constituencies are the target groups.

That democracies differ institutionally in ways that matter for redistributive policies is already well-understood, but much less is known about the implications of different forms of organizing authoritarian rule. A side-effect of the Meltzer-Richards model, perhaps, has been disproportionate attention to democracies and democratic institutional forms, treating authoritarian regimes as a residual category or black box. The burgeoning scholarship on authoritarian regimes in recent years, however, provides a much deeper understanding of authoritarian heterogeneity. I draw upon this literature to examine the proposition that institutional differences in authoritarian regimes can help explain variation in economic inequality outcomes.

Specifically, different levels of inequality arise because the degree and form of goods distribution is a product of the combination of carrots and sticks that dictators employ in their efforts to remain in power. Dictators face potential threats from rivals within the political elite (i.e. horizontal pressures) as well as from popular uprisings (i.e. vertical pressures). Carrots are inducements that rulers offer in order to buy loyalty or acquiescence. Sticks are repressive measures that impede collective action against the dictator. From the dictator's point of view, the relative costs of these measures affect their optimal composition,

¹Meltzer and Richard 1981.

and these costs depend on how authoritarian rule is organized. Authoritarian legislatures, parties, militaries, and royal families provide different kinds of tools for managing horizontal and vertical pressures, and the nature of these tools affects the extent of redistribution and thus the level of inequality.

Section 1 of this paper seeks to establish that inequality in authoritarian regimes merits further study. The next section examines literature on authoritarian regimes with an eye toward connecting authoritarian regime types to patterns in economic policy outcomes and thus inequality. From this discussion emerges a general theoretical framework that is used to generate hypotheses in section 3. The next section describes the data that will be used to test these propositions. Section 5 presents the results of the statistical analysis, and section 6 concludes.

1 Authoritarianism, Democracy, and Inequality

Two findings support the claim that we can deepen our understanding of the relationship between political institutions and economic inequality by exploring the effects of authoritarian political institutions on inequality outcomes. First, the democracy-dictatorship dimension is not a powerful factor for explaining variation in economic inequality. Second, inequality is not a significant driver of regime transition. These facts facilitate empirical analysis by reducing concern about endogeneity between regime type and level of inequality, and they thus provide justification for focusing on the basic relationship between authoritarian political forms and policy outputs.

The evidence that we need to look beyond the democracy-dictatorship distinction to explain variation in inequality is compelling. A recent study by Timmons finds, for example, that there is no systematic relationship between inequality and democracy.² This outcome is consistent with that of an earlier review of several studies by Sirowy and Inkeles.³ Even the long-run effects of democracy do not seem to matter much. For example, the correlation

 $^{^{2}}$ Timmons 2010.

³Sirowy and Inkeles 1990.



Figure 1: Gini Coefficient by Mean Polity Index Level

between each country's mean Polity2 score for the period 1960-2005 and its Gini coefficient (post-taxes and transfers) at the end of this period is quite weak (r=-.22), and the correlation drops close to zero if we exclude countries with GDP per worker of greater than \$20,000.⁴ Figure 1 presents this relationship graphically.

Regime	Mean	St. dev.	Range	n
Democracies (all)	33.7	7.9	23.2 - 51.4	47
Dictatorships (all)	40.6	7.8	18.6-66.6	61
Democracies (lower income)	37.7	8.4	24.3 - 51.4	20
Dictatorships (lower income)	39.3	7.8	18.6 - 63.5	39

Table 1: Mean and Dispersion of Gini Coefficients by Regime Type

Table 1 compares the 2005 level of inequality between countries that were coded as either a democracy or a dictatorship in 80% of the years during the period 1960-2005 in the

⁴The same is true for the mean Gastil political rights index for the period 1972-2005 (r=.24). The Polity2 index comes from Marshall and Jaggers 2009. and the political rights index is from Freedom House 2008. Inequality data come from Solt 2009. Data on GDP per worker (constant 1990 PPP-adjusted dollars) come from the World Bank 2009.

dichotomous coding of Cheibub and Gandhi, as updated in 2008.⁵ Although countries that have been predominantly democratic during this period have lower inequality on average, the dispersion of the Gini coefficients is very similar within the two categories. Furthermore, if we focus the comparison on only lower-income countries – those with GDP per worker of less than \$15,000 in 1990 PPP-adjusted dollars – the difference between the two categories becomes negligible.⁶

Other research examines the relationship between inequality and regime change. Two theoretical perspectives have been predominant. In one, Boix argues that ruling elites will oppose democracy more strongly when inequality is high and are more willing to accede to it when inequality is low.⁷ In the other, Acemoglu and Robinson predict an inverted U-shaped relationship between inequality and democratization in which middle levels of inequality produce the greatest likelihood of democratization.⁸ Ansell and Samuels note that both of these perspectives are *redistributivist* in that they build upon the Meltzer-Richards model by assuming that regime change is driven by a battle over redistribution in which autocratic elites fear that democracy threatens their wealth.⁹

Given that inequality varies widely even among countries where the regime type generally has been stable, however, it would be surprising if evidence revealed a robust relationship between overall inequality and regime transition. Indeed, Houle finds that inequality has no net effect on democratization, though it does serve to undermine the consolidation of democracy.¹⁰ Teorell concludes that inequality has no effect on movements either toward or away from democracy.¹¹ Finally, using a qualitative dataset of regime transitions, Haggard and Kaufman find that just over half of transitions to democracy roughly fit the theoretical expectation of redistributivist perspectives even when using the most expansive definition of

⁵Cheibub and Gandhi 2004.

⁶Cross-sectional regression confirms that long-term regime type has no effect on inequality after controlling for log GDP per worker. This finding is consistent with the logic in Przeworski 2005. that there is more leeway for redistributive policies in wealthier countries.

 $^{^{7}}$ Boix 2003.

⁸Acemoglu and Robinson 2006.

⁹Ansell and Samuels 2010.

 $^{^{10}\}mathrm{Houle}$ 2009.

 $^{^{11}\}mathrm{Teorell}$ 2010.

distributive conflict.¹²

Together, these findings suggest there is value in turning our focus away from the relationship between democracy and inequality and instead explore the effects of institutional variation *within* the regime types. Previous work has already demonstrated that variation in democratic institutional forms is both substantial and relevant for inequality outcomes. Electoral systems, governmental forms, and different geographical distributions of the poor all affect the extent of redistributive spending.¹³ Proportional representation systems deliver higher levels of social spending compared with majoritarian systems. Likewise, parliamentary systems are linked to greater social spending than presidential systems. Even among the twenty wealthiest democracies in 2005, the percentage of gross domestic product devoted to social expenditures ranges from 16.0% to 30.1%, and the Gini coefficient, post-transfers, ranges from 23.6 to 37.6.¹⁴

Authoritarianism is similarly heterogeneous, and given that inequality varies widely across authoritarian regimes, the sources of this variation merit investigation. The extensive literature examining the relationship between various democratic forms and redistributive policy serves both as a model of how this investigation might proceed and as a reminder that equal attention has not been given to the authoritarian context. In recent years, the study of authoritarian variants has expanded significantly, providing a rich body of work on which to construct possible connections between these variants and patterns in inequality.

2 Authoritarian Politics

Typically, authoritarian politics is described as a competitive struggle in which rulers employ some mixture of carrots and sticks to stave off rivals and reduce the threat of mass revolt against the regime. The particular combination of redistribution and repression, as Wintrobe contends, defines the essential characteristics of an authoritarian regime, providing a basic

¹²Haggard and Kaufman 2012.

¹³Shugart 1999; Milesi-Ferretti et al. 2002; Iversen and Soskice 2006; Jusko 2008.

¹⁴Calculations by the author using data from the OECD Social Expenditure Statistics database and Solt 2009.

summary of its policy outputs.¹⁵ Both types of tools are employed to affect the decisionmaking calculus of potential opponents to the regime, whether they are members of the elite or the mass population, with the goal of making acceptance of the status quo more attractive than challenging the ruler. Carrots can either buy loyalty or gain acquiescence, while sticks work only through the latter.

In this section, I draw upon the insights from recent literature to develop the argument that the degree of economic inequality in authoritarian regimes is a function of the mechanisms through which authoritarian rulers build loyalty and acquiescence: political parties, legislatures, royal families, and the military. These mechanisms provide the means to deliver carrots and sticks and thus affect the optimal composition of these tools. Since most scholarship in this area is oriented toward understanding the durability of authoritarian regimes or the effects of authoritarian institutional differences on economic performance, the focus on economic inequality represents comparatively unexplored terrain.

2.1 Building Loyalty and Acquiescence

As argued by Gandhi and Przeworski and Svolik, dictators face two types of threats. First, they face political competition and demands for resource distribution from within the elite.¹⁶ Second, they face pressures from mass society that can threaten their hold on power if not mollified or contained. In a manner similar to that in Abrami et al., one can think of these pressures as an extension of the concepts of horizontal and vertical accountability from O'Donnell to the non-democratic context.¹⁷

Horizontal accountability deals with the responsiveness of the dictator to other members of the elite. What constitutes the elite varies across country contexts: military officers, large landholders, industrialists, members of the royal family, religious leaders, and so forth. These actors represent centers of power that are situated in a predominantly lateral, rather than hierarchical, relationship with the dictator. In Tullock, threats from within the elite are the

¹⁵Wintrobe 1998.

¹⁶Gandhi and Przeworski 2007; Svolik 2012.

¹⁷Abrami et al. 2011. O'Donnell 1990.

principal concern of the dictator, serving as a significant constraint on policy decisions.¹⁸ Or, as Svolik puts it, dictators must solve the problem of authoritarian power sharing.¹⁹

Vertical accountability is the responsiveness of the ruling elite to the broader mass of the population. Even without a formal say in the selection of the ruler, the general population can determine the prospects of his survival by threatening the regime itself. Repression alone is likely insufficient to sustain rule in most cases. Instead, through some mixture of carrots and sticks, rulers seek to ensure that for a critical mass of the population the costs of opposing the regime outweigh the potential gains from successful overthrow of the ruler.

A central claim here is that redistributive policies that respond to pressures created by horizontal accountability typically are associated with greater inequality, while policies that grapple with vertical pressures are linked with lower inequality. Members of the elite tend to have particularistic interests. Dictators may gain their loyalty by granting rents, providing access to state resources, appointing them to key positions, defending their wealth from redistributive claims, and the like. By contrast, winning the acquiescence of the masses requires policies that spread resources much more widely. They might include broad use of patronage, subsidies for basic necessities like food or water, wage agreements for organized labor, redistribution of land or income, public services such as education and health care, or economic development measures that bring general prosperity.

Additionally, vertical and horizontal pressures can be addressed through repressive measures, such as political imprisonment, control of media, restrictions on political activity, torture, killings, and so forth. In some cases, dictators may expropriate the wealth of rival elites to prevent them from becoming a threat to the regime.²⁰ In general, whether applied in response to horizontal or vertical pressures, repression by itself is associated with greater inequality.²¹

To grapple with these pressures, rulers need a means to organize their rule. As Haber argues, dictators depend on a "launching organization," some kind of organized group, more

¹⁸Tullock 1987.

 $^{^{19}\}mathrm{Svolik}$ 2012.

²⁰Albertus and Menaldo 2012.

 $^{^{21}}$ Repression can be used in conjunction with redistributive measures, however, such as expropriation of landed elites for purposes of land reform. This is a combination of sticks and carrots.

or less institutionalized, to solve the collective action problems involved with keeping them in power.²² These organizations may provide a means to construct consensus among stakeholders, serve as a vehicle for distributing resources to build support for the regime, apply repression, extend the reach of the state into society by creating linkages to social organizations, and so forth. To the extent that different mechanisms for organizing authoritarian rule are linked with different types of carrots and sticks, we should expect them to be associated with different levels of economic inequality as well.

In one sense, this logic is similar to that in selectorate theory,²³ which argues that rulers supply some combination of public and private goods to maintain the support of their "winning coalition." The larger the size of this winning coalition, the more that rulers are expected to provide public, rather than private, goods. The theoretical perspective here differs in one crucial respect, however: unlike in selectorate theory, rulers are sensitive to the threat of rebellion from unenfranchised members of the polity. This difference is important because it provides a rationale for a ruler to engage in redistribution and supply public goods even when the group of elites that comprises his winning coalition is small.²⁴

2.2 Authoritarian Institutional Forms

Recent scholarship in this area has produced several authoritarian typologies using classification schemes based on organizational forms. Geddes, for example, classifies authoritarian regimes as personalist, single-party, military, or hybrids of these types.²⁵ Others, such as Brownlee, Ulfelder, and Hadenius and Teorell, use this typology as a starting point, adding additional forms such as monarchy.²⁶ Cheibub and Gandhi categorize authoritarian regimes as civilian, military, or monarchy, while Magaloni delineates regimes by type of launching organization – political parties, the military, and the royal family – and uses the number of political parties for further classification.²⁷

 $^{^{22}}$ Haber 2006.

 $^{^{23}\}mathrm{Bueno}$ de Mesquita et al. 2003.

²⁴For a fuller discussion of this perspective, see Gallagher and Hanson 2013.

 $^{^{25}\}mathrm{Geddes}$ 1999.

²⁶Brownlee 2005. Ulfelder 2005. Hadenius and Teorell 2007.

²⁷Cheibub and Gandhi 2004. Magaloni 2008.

Arguing that typologies of this kind create categories that are neither mutually exclusive nor exhaustive, Svolik describes conceptually distinct dimensions on which authoritarian regimes can vary independently: the nature of executive selection, the nature of legislative selection, the form of restriction on political parties, and the degree of military involvement in politics.²⁸ This measurement strategy facilitates empirical analysis that more flexibly captures the reality that regimes come in many different organizational variants.

Measurement difficulties aside, this body of research helps generate expectations for how authoritarian organizational forms may affect policy outcomes that matter for inequality. Different organizational characteristics are linked with differences in the kinds of policies that dictators find optimal for survival. First, these characteristics define the size and nature of the interests that must be satisfied, determining the scope and type of resources the dictator must expend to maintain power. Second, they affect the relative costs of carrots and sticks. The ability of rulers to deliver particular kinds of resources, or apply repression, is a function of the tools provided by the launching organization. In other words, these institutional mechanisms determine how the ruler grapples with horizontal and vertical threats. This section explores the effects of parties, legislatures, royal families, and military involvement in politics on the policy outputs of authoritarian regimes.

Consider a scenario in which rulers have consolidated power rather than share it formally through a legislature, a ruling party, the military, or a royal family. Svolik refers to such regimes as established autocracies.²⁹ Like personalist dictatorships in Geddes, regimes of this type are characterized by a narrow network of elites whose fortunes are closely tied to the survival of the individual dictator.³⁰ Exclusion from this network means no access to the distribution of spoils and rents. In other words, the level of horizontal accountability is low, and rulers need devote few resources to maintain this coalition. The absence of strong organizational linkages to society, however, makes strategic deployment of carrots difficult. The use of sticks thus becomes relatively more attractive.

²⁸Svolik 2012.

²⁹Svolik 2012.

 $^{^{30}}$ Geddes 2003.

In practice, few dictators manage without institutions to organize their rule.³¹ More typically, dictatorships have legislatures or political parties, and about 70% have both. Of the small percentage of cases that have neither a legislature nor any political parties, nearly all regimes are either monarchies or have some level of military involvement in politics.³² Many combinations of these institutional forms appear.

2.2.1 Parties and Legislatures

The extent to which parties and legislatures are tools for managing pressures that are horizontal or vertical is subject to some debate. Regime parties can provide tools to address both kinds of pressures because they have multiple potential roles: co-opting rivals, organizing the distribution of spoils, serving as agents of control, and building mass support.³³ For Magaloni, parties serve as a means for the dictator to commit credibly to a power sharing arrangement with members of the ruling coalition.³⁴ In contrast, Gandhi and Przeworski and Gandhi emphasize the role of parties in providing tools for the co-optation of potential rivals from beyond the ranks of the elite.³⁵ Party organizations penetrate society, facilitate the broader distribution of spoils and patronage, and mobilize public support for the regime.

These roles involve styles of resource distribution that differ in the scope and type of resources allocated, both of which may affect the level of inequality. To the extent that parties are instruments of elite cohesion, we would expect them to focus on allocation of spoils to a relatively narrow group. If parties serve as tools for the regime to extend its reach into society, however, they would allocate resources far more broadly and, possibly, shift toward greater use of transfers instead of spoils.³⁶ As indicators of the roles that regime parties perform in particular contexts, we can consider whether they hold intra-party

³¹Some examples of rulers who came close are António Agostino Neto of Angola, Isa ib Salman Al Khalifa of Bahrain, and Hissène Habré of Chad. The Philippines under Ferdinand Marcos and Libya under Muammar Gaddafi also serve as prominent examples.

³²Calculated at the county-year level using data from Svolik 2012.

³³Geddes 2003; Magaloni and Kricheli 2010; Svolik 2012.

 $^{^{34}}$ Magaloni 2008.

 $^{^{35}\}mathrm{Gandhi}$ and Przeworski 2007. Gandhi 2008.

 $^{^{36}}$ Svolik (2012), however, argues that delivering transfers does not require a party mechanism. The benefits of a party, then, are for providing the ruler a tool for co-optation through particularistic benefits.

elections,³⁷ whether opposition parties are permitted, and whether there is meaningful interparty competition for legislative seats.³⁸ These factors provide information about the degree to which the regime party has power independent of the ruler and the extent to which the the regime either tolerates opposition parties out of necessity or finds them useful for maintaining power.

Another indicator of the extent to which regime parties would be associated with broad distribution of resources is party ideology. Although recent literature gives organizational characteristics far greater attention, which is logical given its general focus on regime survival rather than policy outcomes, the relevance of ideology for explaining inequality outcomes is clear in this study. Rightist and leftist parties most likely differ far less in terms of their use of spoils and patronage than they do in terms of broader distributive transfers. We should expect policies oriented toward creating greater equality where regime parties have a leftist ideology.

More often than not, authoritarian regimes permit multiple parties, a fact that can be interpreted in two competing ways. First, dictatorial regimes permit opposition parties as part of a strategy of co-optation when they face strong social opposition. It serves the interests of the regime to bargain with opponents in an institutionalized setting,³⁹ and the ability to play opposition parties off against each other can fragment the opposition and thus strengthen the hold of the regime.⁴⁰ In this scenario, we would expect policy compromises that broaden the distribution of resources beyond the ruling party. Legislatures are an important venue for hammering out these compromises. Gandhi and Przeworski argue that legislatures are "ideally suited" for working out policy concessions because they create a controlled environment in which demands can be presented and negotiated in a context that

³⁷Abrami et al. (2011) demonstrate that differences in spending patterns between China and Vietnam, which are more redistributive across regions in the case of the latter, are explained in because of the greater competitiveness of party elections in Vietnam, making rulers more accountable to broader, more diverse constituencies, including provincial leaders.

 $^{^{38}}$ When regimes have at least one party, they almost always have a legislature as well – regimes have legislatures in 88% of country-years in Svolik (2012) in which there are one or more parties – making it relevant to consider how both factors work together.

³⁹Gandhi 2008.

 $^{^{40}}$ Lust-Okar 2005.

is not threatening to the regime.⁴¹

Second, the presence of opposition parties gives members of the ruling party more bargaining leverage against the dictator because they have the alternative of joining with the opposition.⁴² In other words, opposition parties are a tool for members of the ruling elite to prevent the dictator from abandoning his power-sharing commitments. This scenario implies that opposition parties serve to strengthen horizontal accountability. As Magaloni argues, legislatures are not particularly meaningful since legislative seats can be taken away at any time and since dictators can just ignore the demands of opposition parties. What matters is the degree to which the dictator cedes power to the ruling party. Elections for legislative seats serve as an indicator of greater horizontal accountability.

Empirical testing can help determine which perspective fits the evidence. Is the presence of opposition parties, especially in legislatures, associated with higher levels of transfer spending? If so, then we have more reason to believe that opposition parties are a mechanism to grapple with vertical pressures against the regime. In general, the more that these parties serve to expand the distribution of resources beyond the political elite and employ broader transfers, the lower the level of expected inequality. As Gandhi notes, however, greater inequality may generate class conflict and social polarization, increasing the need for dictators to permit opposition parties in the first place.⁴³ In this case, we might observe both greater inequality and higher transfers in regimes that permit opposition parties.

2.2.2 Royal Families

In monarchies, the royal family serves as a built-in network to help organize the rule of the regime and manage succession. Like a dominant-party organization, the royal family has a vested interest in the survival of the regime beyond the survival of the current ruler. These networks can be very extensive, facilitating control over the key positions throughout the cabinet, civil service, and military.⁴⁴ As Gandhi argues, these benefits to the ruler come

⁴¹Gandhi and Przeworski 2007, 1282.

 $^{^{42}}$ Magaloni 2008.

 $^{^{43}}$ Gandhi 2008.

 $^{^{44}}$ Herb 1999.

with a price: monarchs must confer resources upon the extended family through rents and ministerial positions, and the family serves as a source of constraints on decision-making.⁴⁵ The royal family thus represents a source of horizontal accountability on the monarch.

Wright states that monarchies in recent decades tend to be dependent upon natural resources and foreign aid, an indication that regimes tend not to survive as monarchies if they require extensive cooperation from society for revenues.⁴⁶ These unearned revenue streams can be used to reduce vertical pressure against the regime by funding repression, broad distributive spending, or some combination thereof.⁴⁷ Brooker notes, however, that not all monarchies are resource-rich (e.g. Jordan and Morocco).⁴⁸ It may be the case, as Herb argues, that the survival of monarchies in the Arabian peninsula has more to do with the extensiveness of royal family networks than with oil-driven spending.⁴⁹ Overall, unlike party organizations that may develop strong linkages into society, monarchies will tend to keep resources concentrated at the top as much as possible.

2.2.3 Militaries

Lastly, regimes vary in the extent to which the military is integrated into political rule. Svolik frames the problem as one of moral hazard.⁵⁰ The more that dictators rely upon repression to fend off threats from society, the greater the dangers they face from the repressive apparatus itself. In exchange for providing support, the military will demand greater institutional autonomy and policy concessions. At the extreme, the military throws out the regime and takes full control of the state. Intervention in politics can be costly to the military, however, and return to the barracks is an attractive option when factional splits or other political difficulties beset the regime.⁵¹

The implications of military government for inequality, however, are not clear. Military regimes neither have been associated with a particular ideology nor are they, as sometimes

- 48 Brooker 2009.
- ⁴⁹Herb 1999. ⁵⁰Svolik 2012.

 $^{^{45}}$ Gandhi 2008.

⁴⁶Wright 2008.

 $^{^{47}}$ Ross 2001.

 $^{^{51}}$ Geddes 2003.

^{&#}x27;Geddes 2003.

assumed, consistently linked to landed elites. As Geddes notes, members of the military come from a variety of backgrounds, and the chief shared preference among military officers is the corporate interest of the military itself.⁵² Finer, likewise, disputes the idea that militaries represent particular class interests and, in an examination of 35 military regimes, finds that they take no distinctive approach to managing their economies.⁵³

One the one hand, military dictators should find the costs of repression cheaper than do non-military dictators. If they wish to employ coercive force, they directly control the tools for delivering that force. On the other hand, the ability to employ repression does not make military dictatorships immune from societal pressures, and continued use of repression undermines the reputation of the military as being the keeper of the national interest. Involvement in day-to-day politics exposes the military to ideological conflicts within its ranks, goes against military norms of professionalism and civilian control, and may threaten the fighting capacity of the military.⁵⁴ Overall, while there are prominent examples of brutal military regimes, it may not be the case that military regimes are any more repressive than authoritarian regimes in general.

Overall, work in recent years has added considerably to our knowledge of the complexities of authoritarian politics. It is clear from this work that authoritarian regimes should not be lumped together in a catch-all category. Additionally, we can draw upon this scholarship as a foundation to make predictions about the kinds of policies and inequality outcomes that are associated with different forms of organizing authoritarian rule.

3 Hypotheses

Dictators with the narrowest ruling coalitions – those that rule without use of parties, legislatures, and royal families and the military – need to expend fewer resources to maintain power. In general, we would expect these regimes to have high levels of inequality and low levels of transfer spending. Dissent is more likely to be dealt with through use of repression.

 $^{^{52}\}mathrm{Geddes}$ 2003.

 $^{^{53}\}mathrm{Finer}$ 1988. See also Brooker 2009, 165.

 $^{{}^{54}}$ Finer 1988.

As described in the previous section, ruling parties can serve to address both horizontal and vertical accountability challenges in authoritarian politics. Compared with military regimes and monarchies, single-party regimes are more likely to reach into society and create a political base. In these regimes, the interests of the party organization often supersede those of the individual dictators. The party itself controls the distribution of benefits, and its links to other organizations in society, such as business and labor groups, commit the party to extend resources still further. In single-party regimes, we should expect that rents are less likely to be concentrated narrowly in the ruling class. This expectation leads us to the first hypothesis.

Hypothesis 1 All else equal, authoritarian regimes with a single, ruling party will have lower levels of economic inequality than those without a ruling party.

The kinds of carrots for which party organizations are needed and effective, as Svolik argues, are selective benefits like patronage and spoils rather than programmatic transfers.⁵⁵ Parties are not necessary to implement the latter. Through the power to give and withhold these selective benefits, the party creates incentives to cooperate and work within the system rather than rebel, providing a means to contain dissent and forestall direct repression. Thus, while we should expect that regime parties are a means of significant resource delivery, their effects in reducing inequality would tend to come from vehicles such as public employment rather than transfers.

If opposition parties are a mechanism of co-optation, as Gandhi argues, their presence signals that rulers face greater vertical accountability.⁵⁶ In this scenario, the argument develop above predicts lower levels of inequality in multi-party regimes on average. We should also observe that levels of transfer spending are higher where multiple parties are present, particularly if these parties are situated in a competitive legislature where deals for policy concessions of this kind can be struck.

 $^{^{55}\}mathrm{Svolik}$ 2012.

 $^{^{56}}$ Gandhi 2008.

Hypothesis 2 All else equal, authoritarian regimes with multiple parties will have lower levels of economic inequality than those with more restrictions on parties.

If instead opposition parties are a tool for members of the ruling party to bind the ruler to power-sharing commitments, multi-party regimes should not have higher levels of vertical accountability There thus is no particular expectation for greater transfer spending beyond what single-party regimes produce, and economic inequality would be no different than single-party regimes.

If Hypothesis 2 holds, then logical consistency suggests that authoritarian legislatures are indeed venues for the regime to make policy concessions. Empirically, we would expect economic resources to be distributed more broadly, on average, in regimes with legislatures, leading to lower levels of inequality. This effect should be stronger where opposition parties are present and legislatures are competitive. Levels of transfer spending should be higher, and levels of inequality thus lower, where opposition parties are present in legislatures. This logic leads to two related hypotheses:

Hypothesis 3.1 All else equal, authoritarian regimes with legislatures will have lower levels of economic inequality than authoritarian regimes without legislatures.

Hypothesis 3.2 Authoritarian regimes with opposition parties in competitive legislatures will have lower levels of economic inequality than those with uncompetitive legislatures.

Contrary findings in the data could result from two factors. First, as Magaloni implies, opposition parties serve mainly to bind rulers to their own coalition and have little role in leading rulers to address vertical pressures.⁵⁷ Second, as Gandhi suspects, greater social polarization arising from inequality may lead to the need to incorporate opposition parties in the first place.⁵⁸ In this case, even if opposition parties are linked with greater transfer spending, higher inequality may still be present post-transfers.

With respect to monarchies, the analysis above states that royal families help rulers organize their control over the state and create a source of demands for horizontal distribution

⁵⁷Magaloni 2008.

 $^{^{58}}$ Gandhi 2008.

of resources. Monarchs cannot rid themselves of the other members of the royal family easily, and it is in the collective interest of the royal family to maximize its wealth over the long term. On average, accordingly, the level of rent extraction should be high in monarchies. Overall, economic inequality should be higher.

Hypothesis 4 All else equal, monarchies will have higher levels of economic inequality than other types of authoritarian regimes.

Finally, the analysis above provides no clear expectations about the effects of military influence in politics on inequality. In terms of economic preferences for societal outcomes, military regimes are not consistent. We should expect, however, that military influence in politics will be associated with larger military budgets and greater military access of military officials to rents, such as control over state enterprises.⁵⁹

4 Data

To test these hypotheses, data were compiled from a range of sources to construct a dataset covering up to 161 countries during the period 1960-2005. In all, there are 4,545 countryyears with data on economic inequality. Of these, 1,666 country-years are coded as having an authoritarian regime. For the core statistical analysis, these data are converted into fiveyear periods in which the values of key variables represent the mean of the available annual observations during the five-year period.

4.1 Dependent Variables

There are three dependent variable is this analysis. The first, *Gini*, is the net level of income inequality as measured in the *Standardized World Income Inequality Database* (SWIID) described in Solt.⁶⁰ Data on income inequality are notoriously limited in terms of coverage, and methods of measuring it vary across countries and times. The SWIID dataset contains a

 $^{^{59}}$ Gandhi 2008.

 $^{^{60}}$ Solt 2009.

standardized measure of income inequality based upon the World Income Inequality Dataset and the Luxembourg Income Study. Drawing upon these sources, Solt employs a missing data technique to standardize the measures and fill in missing cases using available data from nearby country-years. These data are relatively new, and they are designed for cross-national statistical work. The gini coefficient, which incorporate the effects of taxes and transfers, ranges from 1 to 100, with higher levels indicating greater inequality.

Second, the variable *Transfers* is the level of subsidies and other current transfers as a percentage of government spending from the World Bank.⁶¹ This measure includes social security spending, social assistance benefits, and transfers to public and private enterprises. Although broad, this variable serves as a general proxy for carrots supplied by the regime. The mean value of Transfers is 33.0 with a standard deviation of 21.5.

Third, to capture the use of sticks, I use data from the Political Terror Scale and create the variable *Terror*.⁶² This scale ranges from 1 to 5, with higher values signifying greater use of terror by the regime. The dataset contains two sets of ratings, one from Amnesty International and the other from the U.S. State Department. I use the Amnesty International ratings whenever possible and fill in missing data from the State Department ratings.

4.2 Main Independent Variables

To measure authoritarian institutional characteristics, I use the dataset constructed by Svolik.⁶³ As described above, a useful feature of the measurement strategy employed in this project is that it treats institutional characteristics as conceptually distinct factors. Since regimes come in many different variants, this kind of flexibility is beneficial for empirical analysis. Several variables were constructed from this dataset.

The variable *Authoritarian* is a dichotomous indicator of authoritarian government in which 1 represents authoritarianism. Svolik follows the operationalization strategy in Przeworski et al. with two exceptions.⁶⁴ First, he does not apply the "alternation rule," which

⁶¹World Bank 2011.

⁶²Gibney et al. 2011.

⁶³Downloaded from http://publish.illinois.edu/msvolik/the-politics-of-authoritarian-rule/.

⁶⁴Svolik 2012. Przeworski et al. 2000.

requires that there is a changeover in power between the incumbent and opposition before the regime can be considered a democracy. Second, periods of war or foreign occupation are not considered dictatorships.

Using Svolik's measure of restrictions on political parties, I code the indicators *NoParty*, *SingleParty*, and *MultiParty*. From his measure of the concentration of legislative power, I code indicators for *NoLegislature*, *Legislature*, and *CompetitiveLeg*. CompetitiveLeg designates authoritarian regimes in which the largest party controls less than 75% of the seats in the legislature. Competitive legislatures are a subset of regimes with a legislature. When both Legislature and CompetitiveLeg are included in the same regression model, the effect of CompetitiveLeg is thus interpreted relative to regimes with a legislature. All of these variables have the code 0 for non-dictatorships.

In Svolik, the degree of military involvement in politics is coded in four categories: none, indirect, personal, and corporate. The latter two categories represent the direct involvement of the military in politics, either by individuals who are soldiers (personal) or by the formal incorporation of the military into areas of the government that are usually left to civilians (corporate). I code the variable *DirectMilitary* as 1 if either of these two conditions is present (0 otherwise).

Finally, I code two other characteristics based on Svolik's dataset. The variable *Monarchy* is coded as 1 for monarchies and 0 otherwise, and the variable *Communist* is an indicator based on Svolik's coding of Communist ruling coalitions.

4.3 Other Variables

A range of other variables are used to help predict the baseline the level of inequality. First among these is the logged value of GDP per capita (y) and the square of this value (y^2) at the beginning of each five-year period. Working together, these two variables permit the estimation of a curvilinear relationship between income per capita and income inequality. Even though the well-known Kuznets hypothesis has been called into question due to findings that the curve comes from cross-national differences rather than within-country changes over time,⁶⁵ we still can expect the curvilinear relationship to appear in this cross-national analysis. The variable *Growth* is the change in the log GDP per capita from the end of previous five-year period to the end of the current period.

Two other economic factors are included as control variables. First, using data from the World Bank, I measure the proportion of the population that is in the labor force (*Labor*).⁶⁶ The mean value of Labor is .42 with a standard deviation of .08. Secondly, to measure the openness of the country to the international economy, I use data from Heston et al. on total trade as a percentage of GDP.⁶⁷ This variable is called *Openness*.

Social factors that may affect the level of income inequality are the level of ethnic fractionalization (*EthnicFrac*) from Alesina et al. and population density (*PopDensity*) from the World Development Indicators.⁶⁸ Several studies show that ethnic fractionalization has negative effects on a range of development indicators, including the provision of public goods.⁶⁹ I expect economic inequality to be greater under these conditions. As for PopDensity, I expect that more sparsely populated countries will tend to be more equal. Finally, since rural residents tend to demand less redistributive spending than urban residents, I include the percentage of the population living in rural areas (*PopRural*), which is also from the World Development Indicators.

5 Presentation of Empirical Results

As a first look at the data, Table 2 shows the mean and distribution of the net Gini coefficient for all the country-years for various subcategories of authoritarian characteristics. A few items stand out. First, the subcategory of single-party regimes has the lowest mean level of Gini overall, but the dispersion is the widest. Most likely, this dispersion is due to the fact discussed earlier that ruling parties can take on different roles in grappling with horizontal

⁶⁵Deininger and Squire 1998.

⁶⁶World Bank 2011.

 $^{^{67}}$ Heston et al. 2011.

⁶⁸Alesina et al. 2003. World Bank 2011.

⁶⁹Easterly and Levine 1997; Montalvo and Reynal-Querol 2005; Alesina and La Ferrara 2005.

and vertical pressures. Additionally, differences party ideologies may also explain this wide range.

Regime	Mean	St. dev.	Range	Country-years
No Parties	43.9	8.5	28.1 - 60.4	180
Single Party	36.2	12.4	15.4 - 68.7	476
Multiple Parties	42.1	9.1	18.6-68.8	1009
No Legislature	44.0	9.4	22.8 - 65.5	222
One-Party Legislature	38.3	10.9	15.4 - 68.8	928
Competitive Legislature	43.7	9.1	18.6 - 68.8	443
Direct Military Rule	41.1	9.1	21.4-64.6	449
Civilian	40.2	10.9	15.4 - 68.8	1183
Monarchy	42.3	8.5	28.1 - 65.5	126
Non-Monarchy	40.4	10.6	15.4 - 68.8	1541

 Table 2: Distribution of Gini Coefficients by Regime Characteristics

Second, the regime categories appear to help explain a portion of the overall variation in authoritarian inequality, but there clearly is more to the story. If we move plus or minus one standard deviation around the mean of any one category, the resulting range includes the means of all the other categories. Additional variables, and multivariate statistical tools, are thus needed to help predict a country's level of inequality.

5.1 Multivariate Statistical Analysis

Table 3 presents the first set of statistical results, which use Gini as the dependent variable. For these tests, each observation is a five-year period in which most of the variables are the means of their annual values.⁷⁰ As an example, for indicators such as Authoritarian, a country would be coded as .8 if a country were authoritarian for four of the five years during the period. I use five-year periods since changes in inequality are expected to be gradual and, in any case, the constituent data for the SWIID were not annual to begin with for most countries. The estimation method is feasible Generalized Least Squares with a panel-specific AR(1) and heteroskedastic error structure.

 $^{^{70}\}mathrm{All}$ except y, y², and Growth.

			D			-	
	(1)	(2)	(3)	(4)	(5)	(9)	(2)
Authoritarian	2.03^{**} (0.47)	2.30^{**} (0.47)	1.34^{**} (0.33)	1.83^{**} (0.36)	1.00^{**} (0.33)	0.73^{**} (0.24)	4.01^{**} (0.78)
SingleParty	-2.31^{**} (0.58)	-1.38^{*} (0.61)					-1.41 (0.92)
MultiParty	-0.91^{*} (0.44)	-0.87^{\land} (0.45)					-1.59^{*} (0.72)
Communist		-7.17^{**} (1.03)					-7.88^{**} (1.09)
Legislature			-0.83^{**} (0.30)	-1.32^{**} (0.32)			-1.36^{*} (0.65)
CompetitiveLeg				2.11^{**} (0.34)			2.24^{**} (0.47)
MilitaryDirect					-0.05 (0.37)		-1.95^{**} (0.52)
Monarchy						-0.10 (0.98)	-0.87 (1.16)
у	15.56^{**} (1.46)	14.51^{**} (1.55)	14.63^{**} (1.48)	19.45^{**} (1.53)	16.06^{**} (1.44)	14.94^{**} (1.40)	17.58^{**} (1.88)
y^2	-1.07^{**} (0.09)	-1.02^{**} (0.10)	-1.01^{**} (0.09)	-1.33^{**} (0.09)	-1.10^{**} (0.09)	-1.03^{**} (0.09)	-1.22^{**} (0.11)
Growth	-2.80^{**} (0.46)	-2.70^{**} (0.48)	-2.70^{**} (0.45)	-3.12^{**} (0.47)	-2.94^{**} (0.42)	-2.61^{**} (0.43)	-3.14^{**} (0.45)
Labor	-12.24^{**} (1.92)	-9.58^{**} (2.01)	-14.09^{**} (2.13)	-7.46^{**} (1.92)	-13.28^{**} (2.28)	-13.52^{**} (2.28)	-4.14 (2.62)
Openness	0.49^{*} (0.23)	0.42^{\wedge} (0.24)	0.58^{**} (0.22)	0.53^{\wedge} (0.28)	0.45^{\wedge} (0.24)	0.48^{*} (0.22)	0.41 (0.28)
EthnicFrac	12.56^{**} (0.60)	11.64^{**} (0.63)	12.91^{**} (0.73)	9.42^{**} (0.61)	12.72^{**} (0.71)	12.98^{**} (0.73)	9.70^{**} (0.74)
PopDensity	1.37^{**} (0.26)	1.40^{**} (0.25)	1.53^{**} (0.24)	1.54^{**} (0.25)	1.52^{**} (0.25)	1.52^{**} (0.24)	1.53^{**} (0.26)
Constant	-16.03^{**} (5.99)	-11.59^{\land} (6.40)	-12.21^{*} (6.12)	-30.40^{**} (6.47)	-18.08^{**} (5.94)	-13.76^{*} (5.80)	-23.89^{**} (8.05)
N Countries	813 140	813 140	812 140	812 140	813 140	813 140	812 140
Table 3. The depe Generalized Least	ndent variable Squares with p	is the post-tran anel-specific AI	< 0.10, * p < 0.1 sfer Gini coeffici R(1) and heteroi	05, ** $p < 0.01$ ient at the end c skedastic errors	of a five-year pe	riod. Estimatec	l using

Table 3: Authoritarian Regime Characteristics and Inequality

The first two tests examine the effects of the party system on inequality outcomes. Hypothesis 1 states that regimes with a single ruling party should have lower inequality than those without a party, while Hypothesis 2 states that multi-party regimes should have lower inequality still. The results in both Models 1 are consistent with Hypothesis 1, but not with Hypothesis 2. First, note the positive and statistically significant coefficient on Authoritarian (2.03). This estimate indicates that authoritarian regimes overall have slightly higher inequality than non-authoritarian regimes (about 2.3 points on the Gini measure), controlling for a range of other factors that affect inequality. Compared with authoritarian regimes overall, however, single-party regimes have lower inequality, making them very similar to typical democracies.⁷¹ Multi-party systems also have lower inequality than authoritarian regimes overall, according to Model 1, but not lower than single-party regimes. Additionally, the control variables all have their expected effects.⁷²

Model 2, which includes the variable Communist, brings an important revision to these results. Communist regimes have much lower inequality than authoritarian regimes on average: about 7 points on the Gini scale. Once we control for Communist regimes, the effect of single-parties is weaker (-1.38 vs. -2.31). The interpretation is that the party structure does make a difference, but ideological factors are more important still.

Models 3 and 4 focus on the role of legislatures in the authoritarian context. The results of these tests provide general support for Hypothesis 3.1, which predicts that inequality will be lower in regimes with legislatures, but not Hypothesis 3.2, which states that competitive legislatures should produce lower inequality. In other words, at this point the evidence is mixed in support of the idea that legislatures provide a venue to make policy concessions. If policy concessions are greater when legislatures are competitive, we might expect to see lower levels of inequality in these cases, and thus a negative coefficient on CompetitiveLeg. Yet, it remains possible that the positive coefficient reflects the fact that opposition parties are

⁷¹We can think of these two variables as acting like an interaction term, since SingleParty is mathematically the same as the interaction of SingleParty and Authoritarian. Including a formal interaction term is not possible for this reason.

⁷²Inequality is curvilinear with respect to GDP per capita, it decreases in Growth and with the size of the labor force, and it increases in openness, ethnic fractionalization, and population density.

permitted when greater baseline inequality creates stronger social opposition, a proposition that we can examine more fully in Table 4. This interpretation will be more plausible if it turns out that transfer spending is greater when there are competitive legislatures. Models 5 and 6 test the effects of MilitaryDirect and Monarchy, respectively, on overall inequality. In neither case are these institutional characteristics distinguishable from the effect of authoritarianism overall.

Finally, Model 7 brings all of the institutional characteristics into the same model. The results reflect those from Models 1-6 with two exceptions. First, once we control for all the institutional characteristics, the effect of single-party rule is not different from zero with high statistical confidence. Once we control for the presence of a legislature, as well as for the degree of military control or monarchy, in other words, it is more difficult to distinguish single-party regimes from regimes without any parties when it comes to the level of inequality. The fact that the presence of a legislature remains a critical factor in determining the level of inequality, however, supports the contention of Gandhi and Przeworski that legislatures are a key venue for working out policy concessions.⁷³ They are a tool for grappling with horizontal pressures. Second, direct military control is associated with lower levels of inequality. This finding is unexpected and calls for further analysis.

As argued above, inequality outcomes are related to the combination of carrots and sticks that rulers employ to gain the loyalty or acquiescence other members of the polity. We should expect levels of inequality to be lower where rulers are induced to spend greater resources to manage vertical accountability. They may use repression either in combination with, or as an alternative to, greater spending. The next set of empirical tests explores these relationships.

Table 4 presents a set of tests using the dependent variables Transfers and Terror. These results help clear up questions that were lingering from the first set of results and add perspective on the relative use of carrots and sticks associated with different institutional configurations. Looking across all six models, as the coefficients on Authoritarian indicate, authoritarian regimes devote a smaller percentage of spending to subsides and transfers than

⁷³Gandhi and Przeworski 2007.

	(1) Transfers	(2) Terror	(3) Transfers	(4) Terror	(5) Transfers	(6) Terror
Authoritarian	-8.53^{**} (1.37)	0.24^{**} (0.06)	-6.75^{**} (0.79)	0.32^{**} (0.08)	-3.58^{**} (1.34)	0.42^{**} (0.11)
SingleParty	$2.37^{\wedge}\ (1.30)$	-0.42^{**} (0.07)			-4.65^{**} (1.09)	-0.62^{**} (0.10)
MultiParty	5.03^{**} (1.30)	0.18^{**} (0.06)			-1.61 (1.03)	$0.04 \\ (0.10)$
Communist	10.59^{**} (3.91)	1.05^{**} (0.10)			9.49^{*} (3.84)	1.08^{**} (0.10)
Legislature			3.12^{**} (0.59)	$-0.02 \\ (0.08)$	3.23^{**} (0.87)	$0.03 \\ (0.09)$
CompetitiveLeg			1.09^{*} (0.52)	0.15^{**} (0.04)	$0.73 \\ (0.57)$	$-0.05 \\ (0.05)$
MilitaryDirect					-0.24 (0.90)	-0.12^{*} (0.06)
Monarchy					-11.77^{**} (1.50)	-0.30^{**} (0.10)
У	3.71^{**} (0.44)	-0.43^{**} (0.02)	3.88^{**} (0.40)	-0.44^{**} (0.02)	4.31^{**} (0.36)	-0.40^{**} (0.02)
Growth	6.15^{**} (0.96)	-0.23^{**} (0.03)	6.92^{**} (0.80)	-0.19^{**} (0.04)	6.02^{**} (0.80)	-0.25^{**} (0.04)
Labor	68.91^{**} (4.46)	-1.54^{**} (0.30)	77.10^{**} (4.09)	-1.26^{**} (0.30)	65.98^{**} (3.53)	-1.88^{**} (0.30)
Openness	-5.13^{**} (0.54)	-0.28^{**} (0.04)	-4.55^{**} (0.44)	-0.34^{**} (0.03)	-4.91^{**} (0.46)	-0.27^{**} (0.04)
EthnicFrac	-17.16^{**} (1.47)	0.50^{**} (0.08)	-19.85^{**} (1.35)	0.42^{**} (0.05)	-17.27^{**} (1.37)	0.50^{**} (0.07)
PopDensity	-3.02^{*} (1.44)	0.15^{**} (0.05)	-1.41 (1.82)	0.20^{**} (0.04)	-3.51^{**} (1.02)	0.14^{**} (0.05)
PopRural	-0.26^{**} (0.02)	-0.01^{**} (0.00)	-0.25^{**} (0.02)	-0.01^{**} (0.00)	-0.26^{**} (0.02)	-0.01^{**} (0.00)
Constant	-2.09 (5.48)	6.62^{**} (0.22)	-6.69 (5.05)	6.74^{**} (0.19)	$-6.39 \\ (4.76)$	6.48^{**} (0.21)
N Countries	$\begin{array}{c} 646 \\ 126 \end{array}$	774 161	$\begin{array}{c} 645\\ 126\end{array}$	$773 \\ 161$	$\begin{array}{c} 645\\ 126 \end{array}$	773 161

Table 4: Authoritarian Regime Characteristics, Transfers, and Terror

^ p < 0.10, * p < 0.05, ** p < 0.01

Table 4. The dependent variables are *Transfers*, the mean level of transfer spending during each five-year period, and *Terror*, the political terror scale during each five-year period. Estimated using Generalized Least Squares with panel-specific AR(1) and heteroskedastic errors.

non-authoritarian regimes on average, and they are associated with higher scores on Political Terror Scale. This finding is unsurprising, but the story lies in the variation associated with different authoritarian institutional forms.

Models 1 and 2, for example, examine the effects of the party system variables without controlling for the presence of a legislature, military control, or monarchy. In these tests, we see that regimes with parties allocate a greater percentage of government spending to transfers and subsidies than regimes without parties, while Communist regimes devote around 10.5% more of the budget to such spending. In the earlier set of tests (Table 3, Model 1), these same institutional configurations were associated with lower levels of inequality. The institutional forms differ, however, with respect to their predicted ratings on the Political Terror Scale. Non-communist, single-party regimes are associated with lower terror scores, while Communist and multi-party regimes are associated with higher scores.

For Communist regimes, the combination including both greater carrots and sticks is consistent with conventional expectations about these regimes given ideological factors and their repressive nature. It is more difficult to explain, however, why multi-party regimes exhibit the same pattern. One possibility is that authoritarian rulers permit multiple parties to form when they face stronger vertical threats to their rule. Under these circumstances, they both spend more on transfers and repress more as well. A second possibility is that we have yet to account for other relevant factors, such as the presence of a legislature, that are correlated with the party system.

Models 3 and 4 look at the effects of legislatures on the use of carrots and sticks. In Model 3, we see that regimes with uncompetitive legislatures devote about 3% more of the government budget to subsides and transfers compared to those without legislature. When a legislature is competitive, the share of spending on transfers is predicted to increase by an additional percentage point.⁷⁴

Model 4 indicates that legislatures, if uncompetitive, are not associated with higher scores on Terror, but that political terror is slightly greater in authoritarian regimes where

⁷⁴The effect of a competitive legislature is represented by the combined effects of the coefficient on Legislature and the coefficient on CompetitiveLeg.

there is a competitive legislature. Thus, competitive legislatures are associated with greater use of carrots and sticks both. When combined with the earlier result (Table 3, Model 7) that inequality tends to be higher in regimes with competitive legislatures, this finding suggests that competitive legislatures are not the cause of greater inequality but a means for authoritarian regimes to negotiate and provide policy concessions that respond to greater inequality.

The last two models, Models 5 and 6, include all the institutional characteristics. Several important points emerge from these tests. For example, once the other institutional characteristics have been included, non-Communist, single-party regimes are associated with lower values of Transfers on average. This result is consistent with the logic in Svolik that authoritarian parties are not needed to implement programmatic redistributive policies.⁷⁵ Their role in supporting rulers comes from their ability to provide selective incentives. Authoritarian legislatures, by contrast, remain strongly associated with a higher proportion of government spending devoted to subsidies and transfers. This finding provides additional support for the claim of Gandhi and Przeworski on the role of legislatures as vehicles for making policy concessions.⁷⁶

Direct military control, according to Model 6, leads to slightly lower scores on the Political Terror Scale all else being equal. Although the magnitude of the difference is small, the finding is statistically significant and is consistent with theories that highlight the potential reputational and organizational costs to the military from involvement with politics. At minimum, we can conclude that regimes with direct military control are no more repressive than other authoritarian regimes on average.

Finally, as expected, monarchies devote a smaller portion of their budget to subsidies and transfers than to other authoritarian regimes, all else being equal. At nearly 12 percentage points, the magnitude of the difference is considerable. This finding is consistent with the logic supporting Hypothesis 4. Even though the expectation that monarchy would be associated with greater inequality did not materialize, there is some evidence that royal families,

 $^{^{75}\}mathrm{Svolik}$ 2012.

⁷⁶Gandhi and Przeworski 2007.

as horizontal accountability organizations, prefer to concentrate resources at the top rather than disperse them widely.

6 Conclusion

Variation in economic inequality across authoritarian regime types is substantial and requires an investigation on par with the study devoted to democratic regimes. Just as we expect there to be general tendencies in the policy outcomes of presidential and parliamentary systems, or majoritarian and proportional representation systems, we should expect to observe like tendencies in authoritarian regimes of different stripes. This article represents a step forward, providing evidence that authoritarian regime types are indeed linked to differences in average levels of economic inequality.

The evidence presented here is consistent with a theoretical account in which inequality outcomes are a function of the horizontal and vertical pressures that rulers navigate in order to remain in power. The institutions that dictators use organize their rule both reflect these pressures and influence the form of distributive benefits and repression that they are able to deliver. Accordingly, we can trace these institutional characteristics to policy outcomes that affect the level of inequality.

The findings in this research with respect to regime parties are consistent with Svolik's description of these parties as tools for organizing rule through the use of selective benefits rather than programmatic transfers. A regime party's utility comes from penetrating society, incorporating political actors into the party organization, and distributing patronage and other spoils as a means to maintain loyalty. Since party organizations are not necessary to deliver subsidies and transfers, it is logical that we do not see a strong empirical connection between single-party rule and greater spending. On the other hand, the ideology of the party does play an important factor. Communist regimes consistently have lower levels of inequality and greater spending.

The institutional feature most strongly associated with policies that extend provision of benefits broadly into society and produce lower levels of inequality is the authoritarian legislature. The empirical evidence supports the theoretical position of Gandhi and Przeworski over that of Magaloni with respect to the role of legislatures. Rather than serve primarily to facilitate power sharing of the elite, legislatures appear to serve as a tools for working out policy concessions that produce wider dispersion of resources. It does not appear that legislatures must be competitive for this effect to materialize.

The effects of military control of authoritarian regimes remain ambiguous, which is not surprising given strong theoretical arguments in the literature that these regimes lack any sort of distinctive policy character. In this analysis, military regimes are linked to lower levels of inequality in some tests, but they are not found to devote a higher proportion of spending to subsidies and transfers. Neither are they associated with higher levels of political terror. The evidence with respect on monarchies, on the other hand, is a bit stronger in support the prediction that royal families tend to concentrate resources at the top.

Overall, this study supports the conclusion that research on inequality should move beyond the redistributivist framework set forth by the Meltzer-Richards' model. Rulers of all kinds face redistributive pressures, and the nature of those pressures differs according to the institutional framework of the regime. It can be challenging to connect the nature of these policies to inequality outcomes, but given the wide variation in inequality across democracies and autocracies alike, this path appears much more fruitful.

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