



On the Political Economy of Foreign Aid and Human Rights in Autocracies

Rabab Batool¹; Ghashia Kiyani²; Saba Obaid³; Mian F. Raza⁴; Purushottam Subedi²

¹Department of Instructional Design and Technology, Northern Illinois University, DeKalb, IL, USA

²Department of Political Science, Western Illinois University, Macomb, IL, USA

³Department of Instructional Design and Technology, Western Illinois University, Macomb, IL, USA

⁴Department of Economics, Harper College, Palatine, IL, USA

Author Note

All authors contributed equally, and the names are listed in alphabetical order.
Correspondence concerning this article should be addressed to Mian F. Raza, Harper College.

Email: rm08251@harpercollege.edu

Abstract

This paper presents a game-theoretic analysis of repression and resistance to show that foreign aid to autocratic governments may increase the incidence of conflict and human rights abuses. We empirically test this simple theory using a two-stage predictor substitution (2SPS) approach in 91 autocracies from 1981 to 2010. With various robustness checks, we find that aid significantly reduces government respect for human rights in autocracies. A further breakdown of autocratic regimes demonstrates that aid increases repression and human rights violations in personalist and single-party regimes more than their military counterparts. These empirical findings demonstrate strong evidence in support of the theoretical prediction that aid is generally ineffective in reducing human rights abuses in autocracies.

Keywords: foreign aid; human rights abuses; autocratic regimes; repression; resistance

JEL Classification: D74, P48, Q34

1. Introduction

Can foreign aid provide economic incentives for autocracies to respect human rights (i.e., physical integrity rights)? How would the resulting impacts on human rights vary across different types of authoritarian regimes (e.g., single-party, personalist, or military)? In this paper, we provide answers to these questions.

Donors may use foreign aid allocation as an incentive device and expect the improvement of human rights in recipient countries. Many aid donors thus include human rights promotion as one of the goals of their aid programs. For example, in the 1990s, Organization of Economic Cooperation and Development (OECD) members started stressing government respect for human rights in their policy statements. The OECD came up with a criterion essential to achieve development goals including capacity development for effective, democratic, and accountable governance, the protection of human rights and respect for the rule of law (Development Assistance Committee, 1996). In recent years, human rights records in Latin America have played an essential role in U.S. aid allocation, although many studies conclude that respect for human rights is of marginal importance.¹

Foreign aid donors aim at improving respect for human rights, particularly in autocracies, for the following main reasons: First, autocratic leaders cannot rely on the popular vote to legitimize their rule and hence face a continuous threat of regime change. To tackle this threat, autocratic rulers rely on repression (Tullock 1987; Gandhi and Przeworski 2006). Second, the absence of electoral accountability in autocracies help rulers go unpunished when they repress their populations. This, combined with the benefits of repression, makes them more likely to abuse human rights to maintain political power.² Escriba-Folch (2013) presents evidence that an autocratic leader increases reliance on repression to reduce his or her chances of being overthrown by the masses and the elites.

Given these incentives on the part of autocratic leaders, donor states may try to alter them by using conditional aid as an instrument to improve human rights in autocracies. However, the donor may disregard the differences among autocracies, which is crucial to the effectiveness of conditional aid. For instance, Davenport (2007) contends that it is important to compare military, personalist, and single-party regimes because institutional differences and varying coercive capacities exist among different autocracies, which make them behave differently. Most work on repression suggests that autocratic regimes violate human rights more than their democratic counterparts. Among autocracies, single-party

¹ See, e.g., Poe (1992), Poe et al. (1994), and Poe and Sirirangsi (1994). Fleck and Kilby (2009) empirically analyze the changing nature of US aid to its recipients. The authors find that with the war on terror the pattern of US aid has dramatically shifted. For instance, poor countries received large amount of US aid with war on terror compared to previous years (before 9/11). It also suggests that war on terror negatively affects the need element of recipients in aid allocation.

² See, e.g., Poe and Tate (1994), Mitchell and McCormick (1988), Harff (2003), Davenport and Armstrong (2004), and Frantz and Kendall-Taylor (2014).

regimes are the least repressive.³ Furthermore, empirical work on aid and repression illustrates how human rights practices affect aid allocation to the recipient countries, especially since the 1990s, when the US and OECD members incorporated respect for human rights as one of the conditions for aid allocation. Nevertheless, the effectiveness of aid in preventing human rights violations is debated. Kono and Montinola (2008), in their study of the impact of foreign aid on autocratic leader survival, assert that continued aid to autocrats increases the autocratic regime duration.⁴ Similarly, the selectorate theory indicates that aid increases leader survival (Bueno De Mesquita et al. 2003).

It appears that relatively little research has attempted to directly examine, from both a theoretical and empirical point of view, how foreign aid affects the incidence of conflict and the resulting human rights abuses in different types of autocracies. The present study thus aims to fill the gap by analyzing the impact of aid on government respect for physical integrity rights in autocracies. Moreover, we pay particular attention to different types of autocracies in our empirical study. As in Geddes et al. (2014), we classify autocracies into three groups: military, personalist, and single party.⁵ Military regime is defined as an entity where officers as a group jointly decide who the ruler or policymaker is, whereas in a personalist regime political power is concentrated in the hands of an individual leader. Finally, for a single-party regime, political power is controlled by one dominant party, though other parties may or may not compete in elections (Geddes et al. 2014).

From the perspectives of economic theory and empirical evidence, the objective of the present paper is twofold. We first present a simple conflict-theoretic model to analyze the behavior of an authoritarian ruler in repressing its citizens, and the citizen group responds by fighting back in a sequential-move game with the provision of foreign aid. The theoretical findings are as follows: First, aid increases the expected financial capability of the regime which escalates the ruling party's optimal level of repression to its citizens and helps to retain political power. In conflict equilibrium, other things being equal, the ruler's probability of retaining political dominance through harsher repression is shown to exceed 50%. Second, Increasing the amount of foreign aid to an autocratic state increases the incident of conflict and the intensity of fighting between its ruling party and citizens. As a result, the human costs of conflict and human rights abuses increase. This phenomenon lessens in degree without the provision of foreign aid.

To confront the theoretical results that aid is generally not effective in reducing human rights abuses, we conduct an empirical analysis using a two-stage predictor substitution (2SPS) method in 91 autocracies from 1981 to 2010. Our empirical results show

³ For literature on US aid and Human rights see, e.g., Cingranelli and Pasquarello (1985), McCormick and Mitchell (1988), Carleton and Stohl (1987) Poe (1990, 1992) and Neumayer (2003). Further, for OECD aid and Human rights see, e.g., Palmer et al. (2002), Lebovic (2005), Neumayer (2003), Carey (2007), Alesina and Dollar (2000), and Besides that, scholarly work on repression among various autocracies includes Davenport (2007), and Vreeland (2008).

⁴ In an interesting study that examines aid benefits to elites, Bjørnskov (2010) suggests that aid distribution and its benefits to elites in autocratic regimes are essentially insubstantial.

⁵ Monarchies are used as the baseline category for the regime type.

that (i) aid significantly reduces government respect for human rights in all types of autocracies, and (ii) human rights abuses are more severe in personalist and single-party regimes than in their military counterparts. We further confirm the findings through various robustness tests using Political Terror Scale data of human rights abuses, and Physical Integrity Right Indicators (i.e., occurrences of disappearances, killings, political imprisonments, and torture), both in all autocracies and different types of autocratic regimes. These empirical findings demonstrate strong evidence in support of the theoretical predictions – a foreign aid makes human rights abuses more abusive. This result is consistent with the study of Dutta, Leeson, and Williamson (2013) that aid makes "dictatorial countries *more* dictatorial" – an amplification effect of aid on political institutions. We show theoretically and empirically that there is an amplification effect of foreign aid on human rights violations in autocratic states. Furthermore, we present empirical evidence that this amplification effect of aid on human rights abuses varies across different regime types in autocracies.

The remainder of the paper proceeds as follows. Section 2 sets up a game-theoretic model to analyse the provision of aid to a repressive state where a ruler uses repression to retain his/her political dominance. We derive comparative-static results on whether aid affects repression and human rights. In Section 3, we describe the data and present our empirical results. Section 4 concludes with the implications of the study.

2. A Simple Model of Repression and Resistance in an Autocratic State

In this section, we present a simple model of repression and resistance in autocracy to show the resulting human cost of conflict. Based on the analytical framework, we examine how foreign aid affects the interaction between an authoritarian ruling party and the citizen group. We adopt a conflict approach to characterize the behavior of a ruler in retaining his/her political dominance by repressing citizens (Grossman 1991, 1999; Gershenson and Grossman 2000)⁶. The use of a conflict model to analyze civil war is now a widely accepted approach in the literature. Our analysis of repression in an autocratic state follows the studies by Besley and Persson (2009, 2011) that systematically investigate the logic of political violence⁷.

To analyze how foreign aid affects open conflict between a ruling party and the ordinary citizens, we consider the scenario that an amount of aid (A) is provided by a third-party donor to the repressive state⁸. We assume that the citizens are not in agreement with

⁶ For economic analyses of dictatorship see, e.g., Palda (1993), and Acemoglu, Ticchi, Vindigni (2010).

⁷ Particularly, Besley and Persson (2009) indicate that "For the period 1976 to 2006, around 32 percent of all country-years are classified as being in repression. Not surprisingly, many of these coincide with civil war" (p. 294). In terms of research methodology or modeling setup, Besley and Persson further remark that "it is useful to think about repression and civil conflict in a unified way" (p. 296). For studies on civil conflict and political violence see, e.g., Collier and Hoeffler (1998, 2004) and Besley and Persson (2011).

⁸ Collier and Hoeffler (1998, 2004) present systematic analyses on the causes of civil wars and show that *economic factors*, such as the value of state natural resources, have a strong effect on group decisions regarding civil conflict. We focus on non-military aid as a humanitarian response to the human suffering in

the way aid is utilized and hence decide to challenge the ruling party's legitimacy. Denote E_R as the level of effort exerted by the ruler and his/her loyal party in repressing the citizens to retain its political power. Let us define E_C as the level of effort put forth by the citizen group to confront the authoritarian ruler. To measure the likelihood of the ruler for keeping his/her office in the event of armed confrontation, we use a canonical “contest success function” (CSF) to reflect the technology of conflict (see, e.g., Tullock 1980; Hirshleifer 1989; Skaperdas 1996). The CSFs for the ruling party and the citizen group are given, respectively, as follows:

$$P_R = \frac{\theta E_R}{\theta E_R + E_C} \text{ and } P_C = \frac{E_C}{\theta E_R + E_C} \quad (1)$$

Where the parameter $\theta (\geq 1)$ measures the effectiveness of the ruling party's effort in repressing the citizen group. Other things being equal, an increase in θ can be considered as the case where a ruler becomes relatively more effective in repressing citizens. That is, θ represents the harshness of repression. Alternatively, one can use θ to reflect different types of regimes in autocracies.

Denote V as the value of political dominance. Let $\alpha (> 0)$ represent the scalar that converts the foreign aid A into a value. From the perspective of rent-seeking in conflict, the total amount of the contestable object is given as $V + \alpha A$. In the event of fighting, both the ruling party and the citizen group incur not only effort costs of fighting, $\{E_R, E_C\}$, but also the resulting causality or human cost of conflict. We assume that human cost of conflict to the entire state is an increasing function of fighting intensity which, as in the conflict literature, is measured by the sum of E_R and E_C .⁹ That is, the state suffers injuries and casualties in the event of armed confrontation. For analytical simplicity and tractability, the total human cost of conflict (THC) is taken to be linear:

$$THC = d(E_R + E_C), \quad (2.1)$$

where d represents average casualty for each unit of fighting effort. It follows from Equation 2.1 that the human cost of conflict or casualty to the ruling party is:

$$HC_R = d(E_R). \quad (2.2)$$

The human cost of conflict to the citizen group reflects human rights abuses ($ABUSES$), which is measured by:¹⁰

conflict. For analyses on military aid by an outside party see, e.g., Regan (1998, 2002), Chang, Potter, and Shane (2007, 2009), and Sanders and Walia (2014).

⁹ We consider human costs of conflict as an endogenous function of fighting efforts by the ruling party and the citizen group. This consideration is consistent with recent studies on endogenous destruction in conflict. See, e.g., Chang, Sanders, and Walia (2015), and Chang and Luo (2017).

¹⁰ It should be noted that the value of HC could be higher if we further consider the situations where there are “innocent bystanders” being killed.

$$ABUSES = d(E_C) \quad (2.3)$$

We proceed to examine the decisions of the autocratic ruler and the citizen group. In maintaining political dominance, the ruling party determines an optimal level of repression effort E_R that maximizes the payoff function as follows:

$$\Pi_R = \frac{\theta E_R}{\theta E_R + E_C} (V + \alpha A) - E_R - d(E_R + E_C) \quad (3)$$

As for the citizen group in fighting back, it determines an optimal level of effort that maximizes its payoff function:

$$\Pi_C = \frac{E_C}{\theta E_R + E_C} (V + \alpha A) - E_C - d(E_R + E_C) \quad (4)$$

To characterize the conflict equilibrium, we consider a two-stage Stackelberg or sequential-move game. At the first stage, the ruling party (as a leader) determines an optimal repressing effort to maintain its political dominance. At the second stage, the citizen group (as a follower) chooses an optimal fighting effort against the ruling party. We use backward induction to solve for the sub-game perfect equilibrium.

Beginning with the second stage of the game, the citizen group chooses an optimal level of fighting effort. It follows from the payoff function in Equation 4 that the first-order condition (FOC) is:

$$\frac{\partial \Pi_C}{\partial E_C} = \frac{\theta E_R}{(\theta E_R + E_C)^2} (V + \alpha A) - 1 - d = 0 \quad (5.1)$$

Which implies that the citizen group's best-response function of fighting effort is:

$$E_C = \left[\frac{\theta E_R (V + \alpha A)}{1 + d} \right]^{\frac{1}{2}} - \theta E_R \quad (5.2)$$

Substituting E_C from Equation 5 back into the payoff function of the ruling party in Equation 3 yields

$$\Pi_R = \frac{\theta E_R}{\left[\frac{\theta E_R (V + \alpha A)}{1 + d} \right]^{\frac{1}{2}}} (V + \alpha A) - E_R - d E_R \quad (6)$$

At the first stage of the game, the ruling party determines an optimal repressing effort to maximize the payoff function Π_R in Equation 6. The FOC for the party implies that:

$$E_R^* = \frac{\theta(V + \alpha A)}{4(1 + d)} > 0 \quad (7)$$

Substituting E_R^* from Equation 7 back into the best-response function of fighting effort by the citizen group in Equation 5, we have

$$E_C^* \begin{cases} = \frac{\theta(2 - \theta)(V + \alpha A)}{4(1 + d)} > 0 \text{ if } 1 < \theta < 2 \\ = 0 \text{ if } \theta > 2. \end{cases} \quad (8)$$

To consider injuries and casualties in the conflict, we rule out the corner solution in Equation 8. That is, we focus our analysis on the case where $E_C^* > 0$, which arises for $1 < \theta < 2$.

Lemma 1: *In an autocratic state we consider, the ruling party represses its citizens, and the citizen group decides to fight back when the effectiveness of repression harshness (denoted by θ) exceeds one but is less than two. That is, $1 < \theta < 2$.*

Based on the equilibrium levels of E_R^* and E_C^* in Equation 7 and Equation 8, we calculate the ruler's probability of retaining political power and the citizen group's probability of victory in open conflict. This yield

$$p_R^* = \frac{\theta E_R^*}{\theta E_R^* + E_C^*} = \frac{\theta}{2} > \frac{1}{2} \text{ for } \theta > 1; p_C^* = \frac{E_C^*}{\theta E_R^* + E_C^*} = 1 - \frac{\theta}{2} < \frac{1}{2} \quad (9)$$

Using (7) and (8), we have the following comparative-static derivatives:

$$\frac{\partial E_R^*}{\partial \theta} = \frac{\theta(V + \alpha A)}{1 + d} > 0, \frac{\partial E_C^*}{\partial \theta} = -\frac{(\theta - 1)(V + \alpha A)}{2(1 + d)} < 0 \quad (10.1)$$

$$\frac{\partial E_R^*}{\partial A} = \frac{\theta \alpha}{1 + d} > 0, \frac{\partial E_C^*}{\partial A} = \frac{\alpha \theta (2 - \theta)}{4(1 + d)} > 0 \quad (10.2)$$

The results in (9) and (10) permit us to establish the first proposition:

Proposition 1. *In conflict equilibrium with repression and resistance in a sequential-move game, the probability that the ruling party retains its political dominance exceeds 50%. Other things being equal, an increase in the amount of aid increases the fighting efforts of both the ruling party and the citizen group. However, when the effectiveness of repression (θ) is greater, the ruling party increases its repressing effort, and the citizen group responds by reducing its fighting effort.*

Proposition 1 has implications for the use of repression in autocracies. These results are consistent with the empirical findings of Escribà-Folch (2013), examining whether repression is an effective instrument for retaining power across different types of authoritarian regimes. The findings indicate that repression is effective in neutralizing challenges and hence lowering the likelihood of losing power. Moreover, dictators raise their levels of effort in repression when they perceive a higher risk of losing office. In analyzing possible effects that foreign aid has on political institutions of recipient countries, Dutta, Leeson, and Williamson (2013) show empirically that aid has an *amplification effect* in that it makes dictatorial countries *more* dictatorial.¹¹ From Proposition 1, we draw our

¹¹Dutta and Williamson (2016) document that foreign aid may end up reducing economic freedom in autocracies. In our study, we pay attention to the effect of aid on human rights abuses in autocracies.

first testable hypothesis: More aid makes autocracies more effective at repressing, therefore, they are more likely to repress.

Next, we plug the equilibrium levels of fighting efforts from Equations 7 to 8 back into Equations 3 and 4 to calculate the payoffs of the ruling party and the citizen group:

$$\Pi_R^* = \frac{\theta(1-d+d\theta)(V+\alpha A)}{4(1+d)} > 0; \Pi_C^* = \frac{(4d-4\theta-5d\theta+\theta^2+d\theta^2+4)(V+\alpha A)}{4(1+d)} > 0$$

The above two expressions are all positive. We further compute the resulting human costs of conflict and human rights abuses:

$$\begin{aligned} THC^* &= \frac{\theta(3-\theta)(V+\alpha A)d}{4(1+d)} > 0, \quad HC_R^* = \frac{\theta(V+\alpha A)d}{4(1+d)} > 0, \\ ABUSES &= \frac{\theta(2-\theta)(V+\alpha A)d}{4(1+d)} > 0 \end{aligned} \quad (11.1)$$

It is easy to verify from Equation 11.1 the following comparative-static results:

$$\frac{\partial THC^*}{\partial \theta} > 0, \quad \frac{\partial HC_R^*}{\partial \theta} > 0, \quad \frac{\partial (ABUSES)}{\partial \theta} < 0 \quad (11.2)$$

$$\frac{\partial THC^*}{\partial A} > 0, \quad \frac{\partial HC_R^*}{\partial A} > 0, \quad \frac{\partial (ABUSES)}{\partial A} > 0 \quad (11.3)$$

We present the economic implications of the results in Equation 11.2 as follows. For the case in which the effectiveness or harshness of repression is greater, the ruling party increases its fighting effort, which causes the party's causality to increase. In the case when the harshness of repression is severe, the citizen group responds by decreasing its effort, which causes the group's causality to decline. As for the economic implications of the results in Equation 11.3, we find that human costs of conflict and human right abuses are all positively related to foreign aid.

Moreover, we have from the derivatives in Equation 11.1 that

$$THC^* \Big|_{A>0} > THC^* \Big|_{A=0}$$

and

$$ABUSES|A > 0 > ABUSES|A = 0 \quad (12)$$

Based on the results of the analyses, we have the following proposition:

Proposition 2. *In the event of open confrontation between the ruling party and the citizen group, human costs of conflict are higher: the higher the marginal casualty of effort (d), the higher the value of political dominance (V), the greater the relative effectiveness of the ruling party in repression (θ), and the greater amount of foreign aid (A). Moreover, compared to the situation without foreign aid, human costs of conflict increase with the provision of aid.*

This proposition reflects the implications about the differences in incentives to repress in different types of autocracies. Scholarly work on institutional differences within autocracies indicate that institutional differences allow leaders to opt different strategies such as coercion and co-optation. The studies further indicate that different authoritarian regimes are limited in their ability to use repression as a key strategy to address domestic threats (Wilson and Martinez Machain, 2016; Wilson and Piazza 2013; Geddes 2003; Wright 2008; Gandhi 2008).

From Proposition 2, we draw our second testable hypothesis: Personalist regimes have higher values for political dominance (V). Personalist leaders care more about staying in power because losing power is costlier for personalist leaders than other autocrats (Geddes 2014; Wilson and Piazza 2014; Weeks 2012; Goemans 2012). For single-party regimes having a bigger effect than military because military regimes are already peaked out in terms of effectiveness at repression (Wilson and Martinez Machain, 2016). Therefore, marginal casualties from effort, as well as the effectiveness of the ruling party at repression will see bigger increases as a result of aid in single-party regimes than they do in military regimes (e.g., the effect of a fat person running vs a skinny person, the fatter person will lose more weight than the skinny person).

3. Empirical Testing and Research Design

In this section, we empirically test whether foreign aid affects human rights in autocracies. Based on the simple analysis of aid and repression, as discussed in Section 2, we focus our empirical studies on two propositions. One is to test whether the provision of aid to autocracies increases human rights abuses. The other is to test whether human rights abuses vary among authoritarian regimes. Testing these two propositions allows us to evaluate whether aid has a statistically significant impact on human rights and whether the resulting impacts differ across the regime types of autocracies.

To assess the impact of foreign aid on human rights in autocracies, we use time-series cross-sectional (TSCS) data of 91 autocracies from Geddes et al. (2014). The unit of analysis is a country-year. Further, we choose the period 1981 to 2010 to ensure data availability of all the three datasets.

3.1 *Dependent Variable*

The dependent variable is Physical Integrity Rights (PIR), which are the most basic rights. It is measured using the Physical Integrity Rights Index from the Cingranelli-Richards-Clay Human Rights dataset.¹² The PIR measures government respect for individuals' rights to not be extra-judicially killed, tortured, politically imprisoned, or disappeared. The index codes each of these rights separately on a 0-2 scale (0 = frequent violations [50 or more cases], 1 = few violations [1-49 incidences], and 2 = no violations), and then sums them to create an index ranging from 0-8, where 0 indicates no respect for PIR (high level of repression) and 8 indicates full government respect for PIR (low level of repression).

¹² See Cingranelli, Richards, and Clay (2014).

3.2 Independent Variable

The key independent variable is foreign aid allocation. Following other studies (see e.g., Knack 2004; Lai 2003), data are from the OECD. The OECD operationalizes aid as total net official development assistance, which includes bilateral aid disbursement from all donor members (OECD, 1985). It includes grants and concessionary loans having a grant element of more than 25% and excludes military assistance.¹³ Aid is measured in terms of millions of dollars, and given the large skewness, we utilize the natural logarithm in the analysis.

3.3 Control Variables

Finally, we include a set of controls that previous studies in the literature found to be positively correlated with physical integrity rights (such as civil war, The Cold War, Gross Domestic Product, and dissent). Previous literature suggests that civil war increases human rights violations (e.g., Davenport 1995; Mitchell and McCormick 1988; Gleditsch et al. 2002). Civil war is a dummy variable and is from a UCDP/PRIO armed conflict dataset (Gleditsch et al., 2002). It identifies all the intra-state wars that have more than twenty-five battle deaths. In our data, the variable takes the value of “1” if there is an ongoing civil war in a country and “0” if it is not experiencing a civil war. In addition to that, the literature suggests that during The Cold War all governments used repression to maintain power. As such, the variable takes the value of “1” if it is the Cold War Era, otherwise it gets “0” (Cingranelli and Richards 1999; Davenport, 2007).

As developed countries are less likely to violate physical integrity rights (Gleditsch 2002; Poe and Tate 1994; Keith, 2002), we control for the Gross Domestic Product per capita (GDP). We obtain the data for GDP per capita from the World Bank (2018), and because of skewness, we use the natural logarithm of GDP per capita. Given that dissent is likely to increase repression in autocracies (Wintrobe 1998), we follow Kisangani and Pickering (2010) in measuring dissent as mass instability and elite instability. Mass instability variable is constructed by combining riots, strikes and demonstration, and elite instability is the sum of purges and government crises. Data are from Arthur Banks cross-sectional time-series (Banks 2011).

3.4 Model specification

Given the possibility that the foreign aid allocation might depend on the recipient respect for human rights (Nunn and Qian 2014; Cingranelli and Pasquarello 1985; Neumayer 2003; McCormick and Mitchell 1988; Knack 2004), we utilize an instrument variable estimator. Following Knack (2004), we have instrument log of aid with two variables (i) infant mortality (initial year), which is a measure of recipient need, and (ii) country size measured as log population (initial year) of recipient nation, which is a measure of donor interest from World Bank (2017). We support the use of these instruments after various post-estimation tests. First, we run Durbin-Wu Hausman tests, and based on the

¹³ Even though military assistance affects human rights violations, but OECD aid data (particularly official development assistance) does not provide information on military aid. Thus, data does include military assistance.

results, we reject the null hypothesis that our independent variable (log aid) is exogenous, which asserts the need for accounting endogeneity. Second, our first stage model includes two instruments, infant mortality (initial year), and log population (initial year). Both have a high F statistic (271) and a highly significant minimum eigenvalue statistic, suggesting that instruments are strongly correlated with the log aid. Third, the Sargan and Bassman statistic is not significant, suggesting that the instruments are not correlated with the error term and that none of our exogenous variables should be treated as endogenous. Overall, it shows that our instruments, as previously used by Knack (2004), are valid. To further deal with the issue of endogeneity bias, we use one-year lag of all independent variables. Moreover, each testing model includes one-year lag of the dependent variable, Physical Integrity Rights, as it helps to control for autocorrelation (Beck and Katz 1995). In theoretical terms, lagging rights abuses helps to control for the assumption that the previous year's rights practices are a significant predictor of current year's practices (Poe and Tate 1994; Poe, Tate, and Keith, 1999).

As for the estimation model, we use a two-stage predictor substitution (2SPS). Two-stage predictor substitution is an instrument variable approach mainly used for correcting endogeneity bias in non-linear models and is an extension of two-stage least square (Newey, 1987; Lu and McGuire, 2002). In the first stage of 2SPS, we obtain the predicted values of an endogenous variable by estimating a reduce form linear regression. In the second stage, we estimate the ordinal logistic regression of an outcome equation by replacing the endogenous variable with the predicted values obtained in the first equation.

3.5 Empirical results

This section explains the results based on research design. Briefly, the result suggests that aid reduces government respect for physical integrity rights in autocracies. Further, differences among autocracies suggest that personalist and single party are more likely to violate physical integrity rights. In what follows, we report our results in several tables.

Table 1 presents our estimation results for the first set of models that examines the effect of aid on respect for physical integrity rights. As a reminder, the aid variable is the predicted values obtained from the instrument variables (infant mortality and log population) from the first stage of the two-stage predictor substitution model. Model 1 presents the results of a model that test the relationship between foreign aid and respect for rights by excluding controls, while Model 2 includes all the control variables along with the primary independent variable.

As shown in Table 1, the coefficients of both models are negative and statistically significant, suggesting that aid reduces the government respect for Physical Integrity Rights in autocracies. This finding is consistent with Proposition 1 in our theoretical model, which suggests that aid makes an autocratic state more effective at repressing by increasing its optimal level of repression. The autocratic leader is more likely to retain political dominance. With respect to controls, it comes as no surprise that civil war affects the respect of human rights negatively. Nevertheless, the presence of Cold War increases the respect for rights and is shown to be statistically significant. This finding is consistent with the

assertion that Cold War subdued the "coercive expertise" and pluralism which restraint autocratic leaders to repress masses (Agnew and Corbridge 1995, p. 72). However, some studies suggest that leaders were repressive during the Cold War and that they started liberalizing and respecting human rights in the post-Cold War era to align with the United States (Cingranelli and Richards 1999).

Table 1*Foreign Aid and PIR in Autocracies*

	PIR (excludes controls) Model 1	PIR (includes controls) Model 2
<i>Aidt-1</i>	-0.602*** (0.115)	-0.546*** (0.120)
Mass Instability		-0.193 (0.123)
Elite Instability		0.201 (0.409)
GDP Per Capita (ln)		0.0335 (0.0778)
Cold War		0.574*** (0.148)
Civil War		-0.832*** (0.186)
PIR _{t-1}	0.890*** (0.0667)	0.809*** (0.0649)
σ	0.468** (0.212)	0.415** (0.188)
log-pseudo likelihood	-2929.2	-2632.2
Wald χ^2	360.1	410.0
N	1843	1669

Standard errors in parentheses. Significance level at ** $p < 0.05$, *** $p < 0.01$.

Table 2*Foreign Aid and PIR in Different Autocratic Regimes*

	Military Regime	Military Regime	Personalist Regime	Personalist Regime	Single- Party Regime	Single- Party Regime
	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
<i>Aid_{t-1}</i>	-0.124 (0.0878)	-0.105 (0.169)	-0.407** (0.197)	-0.567** (0.242)	-0.827*** (0.207)	-0.67*** (0.208)
Mass Instability		-0.387 (0.362)		-0.0429 (0.260)		-0.344** (0.169)
Elite Instability		0.521 (0.951)		0.211 (0.567)		0.105 (0.597)
GDP Per Capita (ln)		0.0816 (0.212)		-0.344** (0.158)		-0.0174 (0.121)
Cold War		0.520 (0.610)		0.507 (0.314)		0.425** (0.210)
Civil War		-1.498 (0.787)		-0.528 (0.285)		-0.77*** (0.301)
PIR _{t-1}	0.816*** (0.0989)	0.561** (0.222)	0.859*** (0.127)	0.823*** (0.121)	0.842*** (0.0869)	0.795*** (0.0888)
σ	1.16e-32 (2.59e- 32)	0.132 (0.513)	0.574 (0.391)	0.465 (0.319)	0.721** (0.356)	0.402 (0.244)
log- pseudo likelihood	-356.8	-335.5	-899.3	-813.2	-1339.9	-1172.2
Wald χ^2	74.63	137.8	58.64	126.2	194.7	273.7
N	211	204	569	523	850	741

Standard errors in parentheses. Significance level at ** $p < 0.05$, *** $p < 0.01$.

Given that institutional differences make autocracies behave differently, now we move to analyze different autocratic regimes in Table 2. As shown here, Model 3 (without controls) and 4 (added controls) reflect that foreign aid has no significant effect on physical integrity rights in military regimes. However, Model 5 (without controls) and 6 (added controls) demonstrate the relationship between foreign aid and violation of human rights in

personalist regimes and show that the aid coefficients in both models are negative and statistically significant. This negative relationship indicates that personalist regimes are more likely to violate rights when receiving aid. This finding gets support from Proposition 2 of our theoretical model. Proposition 2 indicates that leaders are more likely to repress when they have a higher value for political dominance. The value of political dominance is probably higher in the personalist regime because losing power is costlier for personalist leaders than other autocrats.¹⁴ Regarding controls, the result of GDP per capita is consistent with existing studies indicating that higher a state's per capita GDP, the government is less likely to be repressive.

In Model 7 (without control) and 8 (added controls), we attempt to determine the impact of aid on human rights violations in single-party regimes. The results indicate that the aid coefficients are negative and statistically significant, implying that aid reduces the respect for rights in single-party regimes. The Proposition 2 of our theoretical model supports this empirical finding by suggesting that a leader is more likely to repress when it is relatively effective at repression, with the consequence that there is a higher casualty from fighting. This is particularly true in the case of single parties than military regimes since military regimes are already peaked out in terms of effectiveness at repression and are less likely to be affected by aid. This argument is further supported by studies indicating that military regimes are less likely to be involved in an international conflict when they are already involved in a domestic conflict compared to non-military autocratic regimes (Wilson and Martinez Machain, 2018). The same logic applies to military engagement in repression by suggesting that casualties from fighting, as well as the effectiveness of the ruling party at repression, will see more significant increases as a result of aid in single-party regimes than they do in military regimes (since they are already engaged in repression). Besides the critical relationship, the controls are consistent with the base model of all autocracies, and further suggests that mass instability reduces the respect for human rights. Previous literature on repression does suggest that dissent in the form of mass instability increases repression (Davenport 2007).

3.6 Robustness Analysis

To further confirm the findings, we conduct robustness checks using Political Terror Scale data (PTS) as an alternative dependent variable, another used measure of physical integrity rights (Gibney et al., 2016; Poe and Tate 1994; Davenport and Armstrong 2004). The PTS provides information regarding disappearances, torture, killing, and political imprisonment, and the index ranges from 1 to 5, where 1 indicates a low level of rights abuse and 5 indicates high levels of physical integrity rights abuse. It should be noted that the scale of PTS is opposite to CIRI index of physical integrity rights.

In Table 3, we see models 9 and 10 about for physical integrity rights and political terror scale, respectively. The findings of political terror scale are consistent with the study. Specifically, Model 9 presents the results of respect for physical integrity rights of all

¹⁴Empirical studies indicate that personalist leaders losing power are more likely to face severe consequences than their non-personalist counterparts (Debs and Goemans 2010; Weeks 2012).

autocracies using CIRI, and Model 10 indicates the abuse of integrity rights using the Political Terror Scale in all autocracies. The estimates show that aid coefficient of PTS is positive and highly significant suggesting aid increases the abuse of rights in autocracies, which is consistent with the findings of government respect of physical integrity rights results (Model 9). Further, the control variables in PTS are consistent with the CIRI.

Table 3

Robustness Check I with Political Terror Scale (PTS) in Autocracies

	Physical Integrity Rights (CIRI)	Abuse of Integrity Rights (PTS)
	Model 9	Model 10
<i>Aidt-1</i>	-0.546*** (0.120)	0.539*** (0.106)
Mass Instability	-0.193 (0.123)	-0.0374 (0.132)
Elite Instability	0.201 (0.409)	0.151 (0.312)
GDP Per Capita (ln)	0.0335 (0.0778)	-0.00812 (0.0702)
Cold War	0.574*** (0.148)	-0.441*** (0.143)
Civil War	-0.832*** (0.186)	1.090*** (0.194)
PIRt-1	0.809*** (0.0649)	
PTSt-1		2.707*** (0.180)
σ	0.415** (0.188)	0.223** (0.106)
log-pseudo likelihood	-2632.2	-2027.4
Wald χ^2	410.0	496.8
N	1669	1533

Standard errors in parentheses. Significance level at ** $p < 0.05$, *** $p < 0.01$.

Table 4*Robustness Check I with Political Terror Scale (PTS) in Different Autocratic Regimes*

	Military Regime	Personalist Regime	Single-Party Regime
	Model 11	Model 12	Model 13
<i>Aidt-1</i>	0.250 (0.174)	0.799*** (0.262)	0.452*** (0.163)
Mass Instability	0.0595 (0.302)	-0.241 (0.206)	0.150 (0.220)
Elite Instability	-0.584 (0.727)	-0.216 (0.570)	0.362 (0.371)
GDP Per Capita (ln)	0.159 (0.189)	0.121 (0.164)	0.0325 (0.101)
Cold War	-0.642** (0.289)	-1.196*** (0.416)	-0.128 (0.170)
Civil War	2.163*** (0.624)	1.228*** (0.383)	0.810*** (0.226)
PTSt-1	2.062*** (0.484)	1.822*** (0.275)	3.083*** (0.217)
σ	9.84e-31 (3.91e-30)	0.873** (0.392)	0.0678 (0.0866)
log-pseudo likelihood	-246.1	-701.8	-855.0
Wald χ^2	188.1	106.8	324.3
N	184	514	665

Standard errors in parentheses. Significance level at ** $p < 0.05$, *** $p < 0.01$.

Moreover, Table 4 shows the results of rights abuses in different types of autocracies. To elaborate, Model 11 indicates the impact of aid on rights abuse in military regimes, and the findings suggest that aid increase the abuse of rights, but the relationship is not statistically significant. Model 12 and 13 reflects upon the impact of aid on rights abuse on personalist and single-party regimes respectively, and both the coefficients in both models are positive and statistically significant asserting that aid increase rights abuse in personalist and single-party regimes. These findings are consistent with the previous models of different regimes using CIRI data in Table 2.

We conduct another further robustness check using individual CIRI indicators of physical integrity rights (i.e., instances of disappearances, killings, political imprisonments, and tortures) across all autocracies. These indicators, according to CIRI (2014), range from 0-2 (0 for frequent occurrences, 1 for occasional occurrence, and 2 for no occurrence). Table 5 presents the findings of these indicators and compares to the primary model of physical integrity rights.

Table 5*Robustness Check II with PIR Indicators in Autocracies*

	Instance of Disappearances Model 14	Instance of Killings Model 15	Instance of Pol. Imprisonment Model 16	Instance of Torture Model 17
<i>Aidt-1</i>	-0.467** (0.213)	-0.936*** (0.204)	-0.696** (0.286)	-0.872*** (0.205)
Mass Instability	-0.464*** (0.144)	-0.505*** (0.151)	-0.272 (0.149)	-0.0831 (0.194)
Elite Instability	0.0958 (0.304)	0.275 (0.417)	0.196 (0.484)	0.471 (0.496)
GDP Per Capita (ln)	0.0963 (0.162)	0.140 (0.155)	-0.119 (0.163)	-0.0222 (0.163)
Cold War	0.543** (0.247)	1.336*** (0.283)	0.0206 (0.261)	1.618*** (0.236)
Civil War	-1.723*** (0.269)	-1.587*** (0.238)	-0.925*** (0.295)	-0.903*** (0.215)
Disappearances t-1	0.00264 (0.00229)			
Killings t-1		0.0103*** (0.00303)		
Imprisonments t-1			0.00126 (0.00225)	
Torture t-1				0.0171*** (0.00308)
σ	1.636*** (0.385)	1.917*** (0.393)	2.643*** (0.642)	1.947*** (0.361)
log-pseudo likelihood	-1237.1	-1448.3	-1434.6	-1203.6
Wald χ^2	75.69	94.97	23.19	116.6
N	1710	1710	1710	1710

Standard errors in parentheses. Significance level at ** $p < 0.05$, *** $p < 0.01$.

Model 14 is a base model where PIR a combine indicator (results from Table 1) is compared to instances of disappearances, killings, political imprisonments, and tortures across all autocracies. The results in Models 14, 15, 16, and 17 suggest that aid increases the occurrences of disappearances, killings, and political imprisonment across all autocracies, and results are highly significant. Further, the controls in all models are consistent with previous models (Table 1) with a minor change of mass instability variable in two of the models suggesting mass instability increases the occurrences of disappearances or killings.

In addition to analyzing all autocracies, we conduct robustness checks through Physical Integrity Rights indicators for military, personalist, and single-party regimes and present our results in Tables 5.1, 5.2, and 5.3, respectively. Table 5.1 shows that instances of disappearances, killings, imprisonment, and torture increase in military regimes but none of the indicators are statistically significant. However, Table 5.2 indicates that incidents of torture and killings increases in personalist regimes and the coefficients are highly significant. Finally, Table 5.3 suggests that the occurrences of disappearances, killings, political imprisonment, and torture in single-party regimes and the coefficients are highly significant. To sum up, these findings confirm the finding that aid increases the occurrences of disappearances, killings, political imprisonment, and torture in all regimes. Across different regime types of autocracies, personalist, and single-party regimes are shown to be more repressive than their military counterparts.

Table 5.1

Robustness Check II with Physical Rights Indicator Indicators in Military Regimes

	Instance of Disappearances Model 18	Instance of Killings Model 19	Instance of Pol. Imprisonment Model 20	Instance of Torture Model 21
<i>Aidt-1</i>	0.106 (0.281)	-0.527 (0.406)	-0.123 (0.207)	-0.178 (0.283)
Mass Instability	0.429 (0.225)	-0.201 (0.467)	-0.733 (0.520)	-1.140*** (0.378)
Elite Instability	-0.210 (0.985)	-0.691 (1.829)	2.431*** (0.899)	0.267 (0.682)
GDP Per Capita (ln)	-0.167 (0.275)	-0.0763 (0.324)	0.545*** (0.166)	0.107 (0.286)
Cold War	0.506 (0.348)	1.702** (0.844)	0.440 (0.476)	1.284*** (0.396)
Civil War	-1.916*** (0.614)	-2.974*** (0.683)	-0.544 (0.380)	-1.249*** (0.425)
Disappearances t-1	1.206** (0.490)			

Table 5.1-Contd...

Killings t-1		-0.00638*** (0.00169)		
Imprisonments t-1			1.858*** (0.309)	
Torture t-1				0.479 (0.319)
σ	0.443 (0.410)	1.466** (0.623)	1.82e-32 (2.49e-32)	0.460 (0.494)
log-pseudo likelihood	-158.1	-171.4	-150.8	-149.4
Wald χ^2	53.00	261.3	113.7	68.21
N	207	207	207	207

Standard errors in parentheses. Significance level at ** $p < 0.05$, *** $p < 0.01$.

Table 5.2

	Instance of Disappearances	Instance of Killings	Instance of Pol. Imprisonment	Instance of Torture
	Model 22	Model 23	Model 24	Model 25
<i>Aidt-1</i>	-0.585 (0.487)	-1.242*** (0.474)	0.0185 (0.478)	-0.853 (0.494)
Mass Instability	-0.441 (0.295)	-0.583 (0.302)	-0.201 (0.270)	0.284 (0.396)
Elite Instability	0.370 (0.764)	0.360 (0.806)	-0.400 (1.246)	-0.693 (0.941)
GDP Per Capita (ln)	-0.344 (0.282)	-0.00311 (0.359)	-0.690** (0.304)	-0.712*** (0.257)
Cold War	0.844 (0.538)	1.716*** (0.584)	-0.978** (0.483)	1.796*** (0.415)
Civil War	-1.042 (0.599)	-1.328*** (0.416)	-0.851** (0.413)	-0.217 (0.414)
Disappearances t-1	0.0841*** (0.0122)			
Killings t-1		-0.00346*** (0.000416)		
Imprisonments t-1			0.0888*** (0.0122)	
				0.0900***

Table 5.2-Contd...

Torture t-1				
				(0.0110)
σ	1.622** (0.661)	2.675*** (0.672)	1.956*** (0.615)	1.633*** (0.613)
log-pseudo likelihood	-412.8	-473.1	-418.9	-317.9
Wald χ^2	84.74	205.1	64.23	155.8
N	538	538	538	538

Robustness Check II with Physical Integrity Rights Indicators in Personalist Regimes

Standard errors in parentheses. Significance level at ** p < 0.05, *** p < 0.01.

Table 5.3**Robustness Check II with Physical Integrity Rights Indicators in Single-Party Regimes**

	Instance of Disappearances Model 26	Instance of Killings Model 27	Instance of Pol. Imprisonment Model 28	Instance of Torture Model 29
<i>Aidt-1</i>	-0.644** (0.297)	-0.962*** (0.303)	-1.037*** (0.363)	-1.072*** (0.274)
Mass Instability	-0.694*** (0.219)	-0.593*** (0.183)	-0.201 (0.172)	0.140 (0.258)
Elite Instability	0.0453 (0.344)	0.411 (0.551)	0.0744 (0.544)	0.911 (0.635)
GDP Per Capita (ln)	0.144 (0.275)	0.0106 (0.245)	-0.0406 (0.238)	-0.143 (0.287)
Cold War	0.112 (0.379)	0.857** (0.373)	-0.183 (0.400)	1.498*** (0.348)
Civil War	-1.379*** (0.376)	-1.101*** (0.310)	-0.753 (0.472)	-0.630** (0.315)
Disappearances t-1	0.00188 (0.00174)			
Killings t-1		0.0112*** (0.00269)		
Imprisonments t-1			-0.000287 (0.000479)	
Torture t-1				0.0140*** (0.00123)
σ	1.550*** (0.478)	2.220*** (0.699)	2.528*** (0.963)	2.173*** (0.510)

Table 5.3-Contd...

log-pseudo likelihood	-529.5	-628.1	-616.6	-529.4
Wald χ^2	37.69	30.74	29.15	181.5
N	763	763	763	763

Standard errors in parentheses. Significance level at ** $p < 0.05$, *** $p < 0.01$.

4. Concluding Remarks

Foreign aid is a policy tool that third-party donors may use to influence repression and human rights in autocracies. Scholarly work examining issues on human rights violations and aid allocation is inconclusive. Some studies argue that human rights abuses in the recipient nations do not necessarily affect aid allocations. However, other studies suggest that donors do take into account the rights abuses of the recipient nation and find that rights violators do not qualify for aid allocation (Cingranelli and Pasquarello 1985; McCormick and Mitchell 1988; Carleton and Stohl 1987; Poe 1990, 1992; Neumayer, 2003). This paper contributes to the existing literature by examining the impact of aid on repression and Physical Integrity Rights abuses in autocracies through both the theoretical model and empirical analysis. Notably, our empirical study considers the political diversity among autocracies under the premise that one type of an autocratic regime tends to be more repressive upon receiving aid than its counterparts.

Our findings from the simple model of repression and resistance suggest aid may have the effect of increasing autocratic abuses on human rights, and such effect varies across regimes (in terms of the severity of repression). We present empirical testing about the effect of aid on human rights abuses in 91 autocracies from 1981 to 2010. Our empirical findings support the theoretical propositions that aid decreases government respect for human rights in all autocracies.¹⁵ Moreover, among autocracies personalist and single-party regimes are more likely to violate human rights than the military regimes. The result that characterizes the behavior of a personalist regime is not surprising since among autocracies personalist regimes usually have a smaller winning coalition. As such, it is much easier for a personalist leader in utilizing aid as incentives to its smaller group and continue to garner their support for repression.

The empirical finding characterizing the behavior of a single-party regime stands in contrast with the previous studies, that single-party regimes are least repressive than their counterparts. One possible explanation, based on our theoretical analysis, is that the relative effectiveness of a regime at fighting and the severity of casualty affect the regime's repression. In this case, these two factors lead to a significant increase in human rights violations because of aid in single-party regimes than they do in military regimes (since they

¹⁵ Our empirical results are in consistent with the findings of Bueno de Mesquita et al. (2005). The authors stress logic of political survival that authoritarian rulers use foreign aid to provide incentives such as a mix of public and private goods to its winning coalition which, in turn, favors policies of the rulers in maintaining political power through repression and human rights abuses.

are already engaged in repression). Another possible explanation is that a single-party regime builds more loyalty by having more institutions that people have a stake in and are thus willing to defend the regime (Wilson and Piazza, 2013). Moreover, single-party regimes are associated with a high degree of cohesiveness that comes from their shared ideology among comrades and their preferences over the monopolized power. The cohesion helps to create bureaucratic institutions in a way that supports to gain the full control of state apparatus and society. Such a bureaucratic structure makes it less likely for a single-party regime to follow the donor's expectation or condition in terms of improving respect for rights, which minimizes the threat of aid sanctions as well. We confirm the findings with multiple robustness checks.

This study is the first attempt to test the impact of aid on autocracies; however, previous literature analyzed the relationship in the opposite direction (i.e., human rights impact on aid allocation). Furthermore, it seems that none of the studies in the past analyzed the relationship by using a game-theoretic analysis coupled with empirical testing. Also, this study contradicts the previous literature about single-party repression and hence opens for further investigation. Above all, it challenges the policy tool of using aid as an effective strategy to reduce repression in autocracies. Based on the findings of the present paper, we cast doubt on using aid as an efficient way of improving human rights violations in autocracies. Aid may not end up reducing government respect for human rights. This suggests that resources donors may allocate to autocratic countries could better be used elsewhere.

Before closing, it is instructive to note that future work can expand on this study by examining the impact of foreign aid in a broader sample, including democracies and anocracies. It may also consider differences between military regimes such as the military regime run by a group of high-ranking officers versus that ruled by a military strongman.

References

- Acemoglu, D., Ticchi, D., & Vindigni, A. (2010). A theory of military dictatorships. *American Economic Journal: Macroeconomics*, 2(1), 1-42.
- Agnew, J., & Corbridge, S. (1995). *Mastering Space: Hegemony, Territory, and International Political Economy*. London: Routledge.
- Alesina, A., & Dollar, D. (2000). Who gives foreign aid to whom and why? *Journal of Economic Growth*, 5(1), 33-63.
- Banks, A. S. (2011). *Cross-National Time-Series Data Archive, 1815-2011*.
- Beck, N., & Katz, J. N. (1995). What to do (and not to do) with time-series cross-section data. *American Political Science Review*, 89(3), 634-647.
- Besley, T., & Persson, T. (2011). The logic of political violence. *Quarterly Journal of Economics*, 126(3), 1411-1445.
- Besley, T., & Persson, T. (2009). Repression or civil war? *American Economic Review*, 99(2), 292-297.

-
- Bjørnskov, C. (2010). Do elites benefit from democracy and foreign aid in developing countries? *Journal of Development Economics*, 92(1), 115-124.
- Bräutigam, D., & Knack, S. (2004). Foreign aid, institutions, and governance in sub-Saharan Africa. *Economic Development and Cultural Change*, 52(2), 255-285.
- Bueno De Mesquita, B., Smith, A., Siverson, R., & Morrow, J. (2003). *The Logic of Political Survival*. Cambridge: MIT Press.
- Carey, S. C. (2007). European aid: Human rights versus bureaucratic inertia? *Journal of Peace Research*, 44(4), 447-464.
- Carleton, D., & Stohl, M. (1987). The role of human rights in US foreign assistance policy: A critique and reappraisal. *American Journal of Political Science*, 31(4), 1002-1018.
- Chang, Y.-M., & Luo, Z. (2017). Endogenous destruction in conflict: Theory and extensions. *Economic Inquiry*, 55(1), 479-500.
- Chang, Y.-M., Potter, J., & Sanders, S. (2007). War and Peace: Third-party intervention in conflict. *European Journal of Political Economy*, 23(4), 954-974.
- Chang, Y.-M., Potter, J., & Sanders, S. (2009). Raising the cost of rebellion: The role of third-party intervention in intrastate conflict. *Defence and Peace Economics*, 20(2), 149-169.
- Chang, Y.-M., Sanders, S., & Walia, B. (2015). The costs of conflict: A choice-theoretic, equilibrium analysis. *Economics Letters*, 131, 62-65.
- Cingranelli, D. L., & Pasquarello, T. E. (1985). Human rights practices and the distribution of US foreign aid to Latin American countries. *American Journal of Political Science*, 29(3), 539-563.
- Cingranelli, D. L., & Richards, D. L. (1999). Respect for human rights after the end of The Cold War. *Journal of Peace Research*, 36(5), 511-534.
- Cingranelli, D. L., Richards, D. L., & Clay, K. C. (2014). *The CIRI Human Rights Dataset*. Version 2014.04.14.
- Collier, P., & Hoeffler, A. (1998). On economic causes of intrastate war. *Oxford Economic Papers*, 50(4), 563-573.
- Collier, P., & Hoeffler, A. (2004). Greed and grievance in intrastate war. *Oxford Economic Papers*, 56(4), 563-595.
- DAC, Development Assistance Committee. (1996). *Shaping the 21st Century: The Contribution of Development Co-operation*. Paris: OECD.
- Davenport, C. (1995). Multi-dimensional threat perception and state repression: An inquiry into why states apply negative sanctions. *American Journal of Political Science*, 39(3), 683-713.
- Davenport, C. (2007). State repression and political order. *Annual Review of Political Science*, 10, 1-27.

-
- Davenport, C., & Armstrong, D. A. (2004). Democracy and the violation of human rights: A statistical analysis from 1976 to 1996. *American Journal of Political Science*, 48(3), 538-554.
- Dutta, N., Leeson, P. T., & Williamson, C. R. (2013). The amplification effect: Foreign aid's impact on political institutions. *Kyklos*, 66(2), 208-228.
- Dutta, N., & Williamson, C. R. (2016). Aiding economic freedom: Exploring the role of political institutions. *European Journal of Political Economy*, 45, 24-38.
- Escribà-Folch, A. (2012). Authoritarian responses to foreign pressure: Spending, repression, and sanctions. *Comparative Political Studies*, 45(6), 683-713.
- Escribà-Folch, A. (2013). Repression, political threats, and survival under autocracy. *American Political Science Review*, 34(3), 543-560.
- Fjelde, H. (2010). Generals, dictators, and kings: Authoritarian regimes and civil conflict, 1973-2004. *Conflict Management and Peace Science*, 27(3), 195-218.
- Fleck, R. K., & Kilby, C. (2010). Changing aid regimes? US foreign aid from the Cold War to the War on Terror. *Journal of Development Economics*, 91(2), 185-197.
- Frantz, E., & Kendall-Taylor, A. (2014). A dictator's toolkit: Understanding how co-optation affects repression in autocracies. *Journal of Peace Research*, 51(3), 332-346.
- Gandhi, J., & Przeworski, A. (2006). Cooperation, cooptation, and rebellion under dictatorships. *Economics and Politics*, 18(1), 1-26.
- Geddes, B., Wright, J., & Frantz, E. (2014). Autocratic breakdown and regime transitions: A new data set. *Perspectives on Politics*, 12(2), 313-331.
- Gershenson, D., & Grossman, H. I. (2000). Civil conflict. *Journal of Conflict Resolution*, 44(6), 808-822.
- Gibney, M., Cornett, L., Wood, R., Haschke, P., Arnon, D., & Pisanò, A. (2017). *The Political Terror Scale 1976-2016*. Retrieved from the Political Terror Scale website at: <http://www.politicalterror scale.org>
- Gleditsch, N. P., Wallensteen, P., Eriksson, M., Sollenberg, M., & Strand, H. (2002). Armed conflict 1946-2001: A new dataset. *Journal of Peace Research*, 39(5), 615-637.
- Grossman, H. I. (1991). A general equilibrium model of insurrections. *American Economic Review*, 81(4), 912-921.
- Grossman, H. I. (1999). Kleptocracy and revolutions. *Oxford Economic Papers*, 51(2), 267-283.
- Harff, B. (2003). No lessons learned from the Holocaust? Assessing risks of genocide and political mass murder since 1955. *American Political Science Review*, 97(1), 57-73.
- Hirshleifer, J. (1989). Conflict and rent-seeking success functions: Ratio vs. difference models of relative success. *Public Choice*, 63(2), 101-112.

-
- Keith, L. C. (2002). Constitutional provisions for individual human rights (1977-1996): Are they more than mere “window dressing”? *Political Research Quarterly*, 55(1), 111-143.
- Knack, S. (2004). Does foreign aid promote democracy? *International Studies Quarterly*, 48(1), 251-266.
- Kono, D. Y., & Motional, G. R. (2009). Does foreign aid support autocrats, democrats, or both? *Journal of Politics*, 71(3), 704-718.
- Lai, B. (2003). Examining the goals of US foreign assistance in the Post-Cold War period, 1991-96. *Journal of Peace Research*, 40(1), 103-128.
- Lebovic, J. H. (2005). Donor positioning: development assistance from the US, Japan, France, Germany, and Britain. *Political Research Quarterly*, 58(1), 119-126.
- Lu, M., & McGuire, T. G. (2002). The productivity of outpatient treatment for substance abuse. *Journal of Human Resources*, 37(2), 309-335.
- McCormick, J. M., & Mitchell, N. (1988). Is U.S. aid really linked to human rights in Latin America? *American Journal of Political Science*, 32(1), 231-239.
- Neumayer, E. (2003). Do human rights matter in bilateral aid allocation? A quantitative analysis of 21 donor countries. *Social Science Quarterly*, 84(3), 650-666.
- Newey, W. K. (1987). Efficient estimation of limited dependent variable models with endogenous explanatory variables. *Journal of Econometrics*, 36(3), 231-250.
- Mitchell, N. J., & McCormick, J. M. (1988). Economic and political explanations of human rights violations. *World Politics*, 40(4), 476-498.
- Nunn, N., & Qian, N. (2014). US food aid and civil conflict. *American Economic Review*, 104(6), 1630-1666.
- OECD (2018). *Geographical Distribution of Financial Flows to Developing Countries 2018: Disbursements, Commitments, Country Indicators*. OECD Publishing, Paris, Organization of Economic Cooperation and Development.
- Palda, F. (1993). Can repressive regimes be moderated through foreign aid? *Public Choice*, 77(4), 535-550.
- Palmer, G., Wohlander, S. B., & Morgan, T. C. (2002). Give or take: Foreign aid and foreign policy substitutability. *Journal of Peace Research*, 39(1), 5-26.
- Peksen, D. (2017). Autocracies and economic sanctions: The divergent impact of authoritarian regime type on sanctions success. *Defence and Peace Economics*, 1-16.
- Pickering, J., & Kisangani, E. F. (2010). Diversionary despots? Comparing autocracies' propensities to use and to benefit from military force. *American Journal of Political Science*, 54(3), 477-493.
- Poe, S. C. (1990). Human rights and US foreign aid: A review of quantitative studies and suggestions for future research. *Human Rights Quarterly*, 12(4), 499-512.

-
- Poe, S., Pilatovsky, S., Miller, B., & Ogundele, A. (1994). Human rights and US foreign aid revisited: The Latin American region. *Human Rights Quarterly*, 16(3), 539.
- Poe, S. C., & Tate, C. N. (1994). Repression of human rights to personal integrity in the 1980s: A global analysis. *American Political Science Review*, 88(4), 853-872.
- Poe, S. C., Tate, C. N., & Keith, L. C. (1999). Repression of the human right to personal integrity revisited: A global cross-national study covering the years 1976–1993. *International Studies Quarterly*, 43(2), 291-313.
- Regan, P. (1998). Choosing to intervene: outside intervention in internal conflicts. *Journal of Politics*, 60(3), 754-759.
- Regan, P. (2002). Third-party interventions and the duration of intrastate conflicts. *Journal of Conflict Resolution*, 46(1), 55-73.
- Sanders, S., & Walia, B. (2014). Endogenous destruction in a model of armed conflict: Implications for conflict intensity, welfare, and third-party intervention. *Journal of Public Economic Theory*, 16(4), 604-609.
- Skaperdas, S. (1996). *Contest success functions*. *Economic Theory*, 7(2), 283-290.
- Tullock, G. (1980). *Efficient rent seeking*. In: *Towards a Theory of the Rent-Seeking Society* (pp. 20-37). Palgrave Macmillan, London.
- Tullock, G. (1987). *Autocracy*. Dordrecht: Kluwer Academic.
- Vreeland, J. R. (2008). Political institutions and human rights: Why dictatorships enter into the United Nations Convention Against Torture. *International Organization*, 62(1), 65-101.
- Weeks, J. L. (2012). Strongmen and straw men: Authoritarian regimes and the initiation of international conflict. *American Political Science Review*, 106(2), 326-347.
- Weeks, J. L. (2008). Autocratic audience costs: Regime type and signaling resolve. *International Organization*, 62(1), 35-64.
- Wintrobe, R. (1998). *Some lessons on the efficiency of democracy from a study of dictatorship*. In: *The Political Dimension of Economic Growth* (pp. 20-37). Palgrave Macmillan, London.