

# Why Do Authoritarian Regimes Provide Welfare?

Sanghoon Park  
University of South Carolina  
[sp23@email.sc.edu](mailto:sp23@email.sc.edu)

April 9, 2024

## Abstract

Why do authoritarian regimes provide welfare for their citizens? This paper answers this question by examining the information problems faced by autocrats: how well they can identify public preference and the key groups they must co-opt to stay in power. Despite democracies provide welfare by public demand, authoritarian leaders use it strategically to maintain their ruling coalitions. I argue that the extent of welfare provision depends on which groups an autocrat relies on for support and their ability to gather information about the population because better information allows them to target benefits more effectively. I examine data on authoritarian regimes and their welfare provisions from 1966-2011. I find that mass-based coalitions and strong mass party organizations lead to more universal welfare. Also, the effect of mass-based coalition diminishes when autocrats effectively manage information problems with a well-institutionalized mass party, reducing the need for universal welfare provisions. However, particular country cases drive the significant interplay between mass-based coalition and mass party organization, suggesting a need for qualitative research to understand how unique country-specific contexts influence these dynamics.

*Keywords:* Welfare provision, Information problem, Ruling coalition, Mass Party Organization, Preference falsification


Why do authoritarian regimes provide welfare? While most existing scholarship has focused on welfare provision in democracies (Pierson 1996, 2000; Miller 2015), it is not uncommon to find authoritarian regimes redistributing resources to their citizens in the real world.<sup>1</sup> For example, China, a typical authoritarian regime, has a social assistance program providing unconditional cash transfers to protect minimum-income earners (Pan 2020). Some authoritarian regimes design and provide welfare to its citizens broadly: the members of the Soviet Union or post-communist countries (Pascall and Manning 2000; Orenstein 2008). However, the workings of welfare provision in modern autocracies remain poorly understood.


This reliance extends to both elite factions, who can pose a direct threat to their rule (Geddes 1999; Cheibub, Gandhi and Vreeland 2010), and the broader populace, whose potential for mobilization necessitates careful management to avoid the all-or-nothing game (Acemoglu and Robinson 2006). As a result, autocrats face two different fundamental problems with elites and masses in general (Svolik 2012). Since autocrats lose the regime if they fail to solve either or both problems, both elites and masses may exert pressure on autocrats to secure their support and loyalty through welfare provision (Bueno de Mesquita et al. 2005).


In addition to managing elite power-sharing and mass control, autocrats face significant information deficits. In the absence of democratic processes, autocratic leaders struggle to discern citizens' preferences and identify whom to co-opt to maintain their hold on power. Effectively addressing information problems is crucial for designing welfare programs in authoritarian regimes, particularly for identifying potential opponents capable of organizing anti-regime collective action. When autocrats are more likely to spend less on costly public goods while increasing their chances of political survival through welfare provisions (Bueno de Mesquita et al. 2005; Olson 1993), these information problems affect whether autocrats target broader or selective population for welfare

---

<sup>1</sup>Previous literature offers some case studies showing that authoritarian regimes do provide welfare (Tang 2000; Kwon 2005; Bader 2015; Ong 2015; Morgenbesser 2017).

provisions. The autocrats who effectively identify whom to buy off in order to avoid potential challenges do not need to design universal welfare provisions. 

These challenges with elites, masses, and information about them affect welfare provision in authoritarian regimes, primarily through the way they interact with their support group. I argue that information problems shape welfare provision in authoritarian regimes in two ways. First, when autocrats rely on a broader segment of population, autocratic leaders are more likely to provide universal welfare since dictators cannot identify who are the potential opponents. Second, however, the incentive of universal welfare provisions will diminish as autocratic leaders improve their ability to solve information problems and clarify friends or foes. 

This paper tests theoretical arguments with data on authoritarian regimes and welfare provisions from 1966 to 2011, showing that authoritarian welfare provision is dependent on the ruling coalition in place, but the underlying rationale is based on mechanisms for resolving information problems. Using time-series cross-sectional (TSCS) data from 87 to 98 autocratic states, this study investigates the relationship between the nature of the ruling coalition, the level of mass party organization, and the scope of welfare provision over time, ensuring rigorous analysis by including fixed effects for countries and years. The findings show that while mass-based coalitions increase universal welfare, the effect diminishes when autocrats can effectively manage information problems, reducing the need for broad welfare provisions.  It adds to our understanding of authoritarian regimes by emphasizing the role of institutionalization and coalition management in welfare distribution, providing insights into how autocratic leaders use institutions to consolidate power.

## Literature Review

Welfare provision refers to the states ability to intervene *ex post* to correct inequalities in the marketplace, and is typically viewed as mechanisms for distributing or redistributing benefits to insure individuals against risks such as job loss or illness (Moene and Wallerstein 2001; Genschel 2004). Given finite resources, how to provide welfare can be a political issue since it should be about the topic *who gets what and who gets more*. In authoritarian regimes, however, welfare provision is more than just a socioeconomic mechanism. It is a strategic tool for co-optation, allowing autocrats to maintain support while mitigating threats (Wintrobe 1998; Gerschewski 2013). This is markedly different from the welfare narratives common in democratic settings, where welfare is frequently driven by public demand. When applied to authoritarian regimes, this divergence reveals the limitations of existing literature's three grand lines of inquiry: modernization theory, power resource theory, and redistributive theory, all of which focus mainly on welfare provision in democracies.

Modernization theory, with its focus on socioeconomic developments leading to an expanded middle class that demands more welfare, does not account for welfare provision in authoritarian regimes that maintain high levels of economic development without transitioning to democracy (Lipset 1959; Wucherpfennig and Deutsch 2009; Rosenfeld 2021). This theory's reliance on democratic transitions and middle-class demands fails to capture the dynamics in autocracies where welfare can be deployed absent these conditions.

Another line of inquiry explains welfare provision through the concept of *power resources*. The power resource theory suggests that the role of bargaining power among social groups, particularly the working class, in redistributing resources matters (Korpi 2006; Bradley et al. 2003; Huber, Ragin and Stephens 1993). The working class projects its interests into government policy via two interacting mechanisms via two interacting mechanisms: trade unions in the market and leftist parties in the political arena (Bradley



et al. 2003; Rueda 2008). This theory presupposes rights and mechanisms for collective mobilization that are often suppressed or controlled in authoritarian contexts, making the direct application of this theory to autocracies problematic.

Finally, the last group of students of welfare provision argues that income distribution matters because different levels of income inequality can shape individuals' preferences for various social policies (Meltzer and Richard 1981; Iversen and Soskice 2006). The redistributive theory defines the middle class as the social group with the median income earner (Iversen and Soskice 2006; Boix 2003; Acemoglu and Robinson 2006). Because democracy provides a universal franchise, the median income earner is the same as the median voter, and in an unequal society, the middle class may be the social group that favors higher taxes and more welfare provisions due to a lower-than-average income (Meltzer and Richard 1981; Iversen and Soskice 2006). In contrast, in an authoritarian regime, the median income earner who can influence policy-making would belong to a much smaller selectorate, and the middle class is more likely to be a social group with the rich or the upper class (Yi and Woo 2014). Thus, authoritarian regimes are less likely to redistribute because they only serve the interests of the wealthy elite in order to stay in power (Wigley and Akkoyunlu-Wigley 2011).

The strategic approach to welfare provision in autocracies has added value for shoring up existing explanations (Bueno de Mesquita et al. 2005; Magaloni 2008; Magaloni and Kricheli 2010). Autocrats, facing the limitations of repression, resort to welfare as a means of securing loyalty and managing elites and masses (Kim and Gandhi 2010; Wintrobe 1998; Cassani and Tomini 2019; Meng, Paine and Powell 2023). During Mexico's authoritarian regime from 1929 to 2000, the ruling party's recruitment and co-optation of essential supporters through material benefits were critical strategies for maintaining power (Magaloni 2006). Similarly, the provision of welfare in authoritarian states, such as social assistance programs including pensions and unemployment benefits, has been observed, albeit with less extensive coverage compared to democratic counterparts (Logvi-

nenko 2020; Pan 2020) .

## Theory

Although studies on welfare provision predominantly focuses on democracies (Huber, Ragin and Stephens 1993; Rothstein 2001), authoritarian regimes also design various social policies to provide welfare (Haggard and Kaufman 2012). In authoritarian regimes, welfare provision is about more than just meeting social needs; it forms a crucial components of the authoritarian bargain, where citizens exchanged their support for material benefits (Knutsen and Rasmussen 2018; Pan 2020). How a leader distributes resources and welfare depends heavily on who they rely on for support.

Autocrats prioritize minimizing provision of public goods while enhancing their chances of political survival (Bueno de Mesquita et al. 2005; Olson 1993). Authoritarian leaders face fewer constraints, allowing them to focus narrowly on those essential for maintaining power. This selective attention to a smaller group of pivotal supporters makes the distribution of private goods a more cost-effective strategy for securing loyalty than the broader provision of public goods, a stark contrast to the expectations in democracies (Bueno de Mesquita et al. 2005; Meng and Haina 2020; Duckett and Wang 2017).




The formation of an authoritarian leader's coalition is a dynamic process, shaped by how they respond to threats against their rule. The leaders navigate these threats through a mix of repression and co-optation. I do not consider the option for autocrats to repress emerging powers despite repression to be one of the fundamental tools of authoritarian regimes to prevent dominant challenges against the regime (Escribà-Folch 2012, 2013; Gerschewski 2013). Repression can be too costly to manage a newly challenging power because it usually involves permanent resource losses and failure uncertainties. As a result, autocrats are more likely to repress, even when confronted with threats, if

they lack sufficient resources and confidence in their ability to win. Massive repression may be effective in the short run to eliminate immediate threats, but in the long run it can lead to preference falsification among citizens, lowering society's overall productivity ([Rivera 2017](#), 2186). Instead of repression, I argue that autocrats must form a coalition in order to effectively manage threats.

The nature of the ruling coalition in an authoritarian regime can vary widely, encompassing diverse social groups with the potential for mobilization or strategic influence ([Albertus 2015](#), 72; [Svolik 2012](#); [Geddes, Wright and Frantz 2014](#); [Geddes, Wright and Frantz 2018](#)). Among various social groups, what we have to investigate are the groups with a potential for effective threats to autocrats through intentional mobilization against regimes and access to resources that provide strategic leverage over the regime ([Dahlum, Knutsen and Wig 2019](#), 1495). Co-optation strategies in authoritarian regimes, particularly welfare provisions, will differ depending on which coalition autocrats rely on and whether autocrats can identify their potential enemies. In other words, the extent of welfare provision in authoritarian regimes hinges more critically on the resolution of the information problems that refer to the autocrats' ability to identifying key groups for co-optation to maintain power.

The sources of threats that autocrats commonly face come from two major constituencies: elites and masses. Elites can pose an effective threat to autocrats ([O'Donnell and Schmitter 1986](#); [Geddes 1999](#); [Cheibub, Gandhi and Vreeland 2010](#)) and tend to be smaller and more powerful because they have a comparative advantage in investing in power ([Acemoglu and Robinson 2008](#)). Autocrats are more likely to provide private goods than public goods to co-opt the elites because they are easy to be identified and less expensive.

 Autocrats can mitigate elite threats by sharing power with them and establishing credible commitments that include granting elites opportunities to participate in formal institutions ([Svolik 2012](#)). When the ruling coalition with elites becomes institutionalized,

it is more likely to have exclusive memberships, making their source of power immobile (Geddes, Wright and Frantz 2018). Such an institution-based coalition with elites encourages elite members to have a more convergent preference for specific social policies or selective welfare provisions, in the sense that they lose influence as soon as they leave the institution. Political parties, for example, may offer goods to their members, who are distinguished from other institution-based elite groups such as military elites (Magaloni and Kricheli 2010; Levitsky and Way 2012; Bernhard, B. Edgell and Lindberg 2020; Reuter 2022). Military elites are also likely to prefer preserving military unity and corporate interests (Geddes, Frantz and Wright 2014; Kim and Kroeger 2018), whereas party elites seek to strengthen their party platform and increase their privileged position through party membership (Teo 2019; Magaloni and Kricheli 2010).

Authoritarian regimes also face a critical information problem in discerning the genuine preferences of the general public, as opposed to democratic leaders who can rely on open elections and free media to gauge public opinions (Jiang and Yang 2016; Guriev and Treisman 2020). In the absence of these channels, autocrats have difficulty navigating the uncertainty of preference falsification. As a result, autocrats resort to providing universal welfare as a means of co-optation. This strategy allows them to gain support from the general public despite a lack of information about their preferences. Autocratic universal welfare provisions are thus a strategic move to build and maintain mass support, rather than an act of generosity. When unable to directly ascertain the public's preferences, authoritarian leaders choose universal welfare initiatives that are likely to meet a wide range of needs. In this context, autocrats with mass-based coalitions are more likely to provide universal welfare, indicating a strategic decision to secure their base of support (Kuran 1991; Wintrobe 1998; Truex and Tavana 2019).

Authoritarian leaders can also institutionalize support through the development of political parties. Parties are not just tools for elite co-optation and power-sharing (Reuter and Szakonyi 2019; Río 2022; Kavasoglu 2022) but also serve as vehicles for mass sup-



port, especially when they are well-organized and deeply rooted in public (Smith 2005; Magaloni and Kricheli 2010). Parties can be a better option for autocrats to manage information problems by eliciting information about the preference of the masses when they have mass-based organizations such as regional and local branches. Parties can be trusted sources of information and give early warning of potential discontent or sources of opposition. Thus, parties can provide a direct link between autocrats and broad masses that goes beyond clientelist exchanges (Bizzarro et al. 2018). As on-the-ground organizations mass parties strengthen the ties between leaders and the masses and act as mechanisms for mobilizing mass supporters (Handlin 2016) and collecting information on their preferences (Reuter 2022). Consequently, mass parties, in particular, are effective in bridging the gap between leaders and the general public, enabling the regime to gather valuable information about public preferences through grassroots engagement.

**Hypothesis 1:** *When an autocrat has a mass-based ruling coalition, the autocrat is more likely to provide universal welfare than when the coalition is based on elites.*

**Hypothesis 2:** *When an autocrat has stronger mass party organization, the autocrat is more likely to provide universal welfare.*

Although autocrats have a mass-based coalition, party institutions that function as mass-based organizations, connecting autocrats to the masses, can address the autocrat's information problem, potentially reducing the need to provide universal welfare. Autocrats face exacerbated information problems when the masses are perceived as a threat, as they struggle to discern actual public preferences and identify potential opponents within the larger population. Due to a lack of precise information about public preferences, autocrats provide universal welfare to appease the masses and reduce perceived threats.

Incorporating well-institutionalized mass party organizations, however, provides a more nuanced approach to information problems. Mass party organizations serve as vital links between autocrats and masses gathering detailed information about public

preferences (Reuter 2022) and enables autocrats to better understand constituents' needs, identify adversaries, and recognize key supporters. In other words, autocrats can improve their surveillance capabilities, allowing them to take a more strategic approach, reducing reliance on the masses and universal welfare (Xu 2020).

This brings us to a critical intersection: mass-based coalition building and strategic use of mass party organizations. While mass-based coalitions necessitate some level of universal welfare to ensure widespread appeasement, mass party organizations offer a way to refine the regime's welfare provisions. The improved information flow allows for a more targeted welfare strategy, potentially reducing universal welfare benefits. As a result, it suggests that welfare provisions should be strategically calibrated not just for broad appeasement, but also to maintain support for potentially less universal welfare provisions.



**Hypothesis 3:** *The amount of universal welfare an autocrat provides to mass-based coalition diminishes with greater mass party institutionalization.*

## Research Design

I test my hypotheses with unbalanced time-series cross-sectional (TSCS) data from authoritarian regimes from 87 and 98 autocracies between 1966 and 2011. TSCS data has the advantage of permitting tracking the correlation of multiple variables at the same time, as well as the differences between units and the longitudinal changes of individual units. I use Regimes of the World (RoW) from the Varieties of Democracy (V-Dem) dataset to create a binary variable that identifies authoritarian regimes. The RoW dataset divides regimes into four types based on Robert Dahl's polyarchy theory, which defines democracy as the presence of elected officials, free and fair elections, freedom of expression, alternative sources of information, associational autonomy, and inclusive citizenship (Lührmann, Tannenberg and Lindberg 2018, 62). I consider a country to be an autocracy if



it lacks *de facto* multi-party elections, free and fair elections, or even a minimal fulfillment of Dahl's institutional prerequisites for democracy. Alternatively, an electoral autocracy subjecting the chief executive to at least *de jure* multiparty competition qualifies.

I estimate ordinary least squares models to test my hypotheses. My models include fixed effects for countries and years addresses country- and year-specific features that are systematically related to variables in models but difficult to observe and quantify. However, this approach can raise the bar for most models, resulting in more conservative estimates. It is critical to recognize that indiscriminately including many dummies may absorb variation in legitimate and theoretically important covariates, potentially rendering significant variables insignificant (Type II error), as noted by [Blaydes and Kayser \(2011, 899\)](#). Additionally, I do not include the lagged dependent variable because this study attempts to trace how the levels of welfare provisions in terms of universalism vary while I lag all explanatory variables by a year to account for potential exogenous effects on welfare provisions. The main models in this article are structured as follows:

$$\begin{aligned} \text{Welfare Universalism}_{i,t} = & \beta_0 + \beta_1 (\text{Mass-based Coalition}_{i,t}) \\ & + \beta_2 (\text{Mass Party Organization}_{i,t}) \\ & + \mathbf{X}_{i,t}\beta + \gamma_i + \delta_t + \varepsilon_{i,t} \end{aligned} \tag{1}$$

$$\begin{aligned} \text{Welfare Universalism}_{i,t} = & \beta_0 + \beta_1 (\text{Mass-based Coalition}_{i,t}) \\ & + \beta_2 (\text{Mass Party Organization}_{i,t}) \\ & + \beta_3 (\text{Mass-based Coalition}_{i,t} \times \text{Mass Party Organization}_{i,t}) \\ & + \mathbf{X}_{i,t}\beta + \gamma_i + \delta_t + \varepsilon_{i,t} \end{aligned} \tag{2}$$

In the models,  $i$  represents countries and  $t$  denotes years. The vector  $\mathbf{X}_{i,t}$  encompasses control variables in the analysis. The quantities of interest,  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$ , capture key relationship between dependent variable and main explanatory variables. Additionally,  $\gamma_i$  denotes country-specific fixed effects, and  $\delta_t$  represents year-specific fixed effects, accounting for unobserved heterogeneity across countries and years.

## **Dependent variable: Welfare universalism**

The two testable hypotheses necessitate that I capture the extent of welfare provision. Derived from the V-Dem dataset, this index of welfare universalism is informed by expert coding and reflects the degree to which welfare programs within a given state are means-tested or universally accessible over a specified time period. Welfare universalism is coded by country experts using five-point ordinal scales ([Rasmussen and Pontusson 2018](#)). A value of 0 on the index signifies that there are no or extremely limited welfare state policies including education, health, retirement, unemployment, and poverty programs. A score of 1 indicates that almost all welfare state policies are means-tested, whereas a value of 2 suggests that while the majority are means-tested, a significant portion is designed to be universalistic. A midpoint score of 3 represents an even distribution between means-tested and universalistic policies. Moving towards the higher end, a score of 4 implies that the majority of welfare state policies are universalistic, albeit with a significant portion still being means-tested. The highest value, 5, is assigned when nearly all welfare state policies are characterized by their universal nature, with a negligible proportion subjected to means-testing ([Coppedge et al. 2020](#)).

Subsequently, the V-Dem measurement model, which is a Bayesian item response theory model, converts these ordinal categories into interval-level scores. These scores represent positions on an underlying latent dimension that the ordinal categories correspond to ([Rasmussen and Pontusson 2018](#)). The index accounts for means-tested programs that target individuals who are poor, needy, or underprivileged, with cash-transfer

programs typically falling into this category. In contrast, it also considers universal programs that are potentially available to all constituents, encompassing services like free education, national health care schemes, and retirement programs. It acknowledges that there may be differential benefits from these universal programs, as higher earners might receive greater advantages, such as higher unemployment benefits. Nonetheless, the crucial aspect is the potential for all to be beneficiaries.



## Explanatory variables

### Ruling coalition

This paper argues that the composition of ruling coalitions has a significant impact on the extent of welfare provision. This is because autocrats face information problems that varying levels of difficulty in identifying whom to include in their welfare programs (H 1). I identify the different ruling coalitions that affect the levels of the authoritarian welfare state into two: *Mass-based ruling coalition* and *elite-based ruling coalition*. When autocrats rely on elite-based coalitions, there exists a communication channel that enables them to resolve information problems, making it more likely for autocrats to provide welfare to their identified supporters. Conversely, in cases where autocrats have mass-based ruling coalitions, autocrats confront information problem, resulting in less precise welfare provision.

To measure social groups that make ruling coalitions, I utilize the variable measuring the regimes' most important support group from the V-Dem data set (Dahlum, Knutsen and Wig 2019). Since the measurement on the most important support group in the regime provides various types of social groups, I can aggregate the groups into elite-based social groups and mass-based social groups according to my theoretical expectations.

The raw variable of ruling coalition identifies the most important social groups.<sup>2</sup>

---

<sup>2</sup>Party elites, the military, the ethnic/racial groups, the religious groups, agrarian elites, local elites, business


Among the fourteen groups, I conceptualize *party elites* of the party and *the military* that control the executive as elite-based social groups, which is formally institutionalized, while treat urban and rural *middle* and *working classes* as mass-based social groups. Figure 1 depicts how the numbers of mass-based and elite-based class coalitions in authoritarian regimes have changed between 1960 and 2020. On average, in authoritarian regimes, ruling coalitions formed by elite-based social groups are more popular than ruling coalitions formed by mass-based social groups. In particular, mass-based coalitions mainly consist of working classes and includes several states; Bolivia, Vietnam, Argentina, Nicaragua, and Ukraine. Those autocracies with mass-based coalitions account for 2.4 percent of all coalition observations in the sample. 

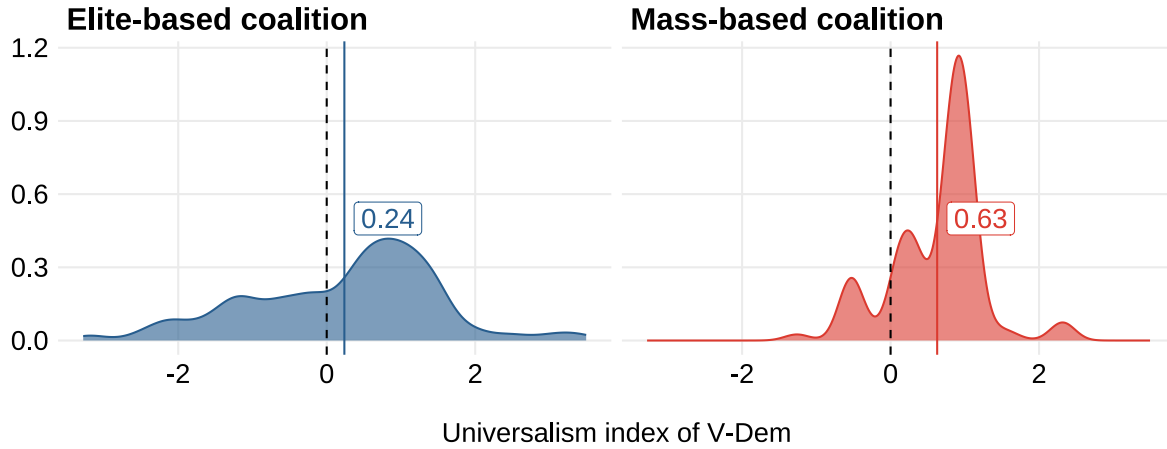
Figure 1 shows the distribution of welfare universalism index of the well-known V-Dem project between mass-based and elite-based coalitions. The average universalism index for mass-based coalitions is greater than the mean value of institutionalized elite coalitions in authoritarian regimes between 1960 and 2020. It suggests that the welfare provision of authoritarian regimes building coalitions with mass-based social groups tends to provide universal welfare programs covering broader groups of societies than other authoritarian regimes with elite-based coalitions. This density plot suggests that there can be a possible association between class coalitions and universal welfare provision as I expect.

### Mass-based party organizations

Another key explanatory variable is the level of institutionalization for masses. One way that autocrats can institutionalize threats from masses is to establish party organization based masses. Mass-based party organization works as a channel for autocrats to mobilize mass support and gather information of masses. Following Reuter (2022), I use

---

elites, civil servants, urban working, rural working, urban middle, rural middle, the aristocracy, a foreign government or colony.



Note: The dashed line shows that the welfare policies are roughly evenly divided between means-tested and universalistic.

Figure 1: The distribution of the universalism index of V-Dem by mass-based coalition and elite-based coalition, 1960-2020

a variable of mass party organization, which sums up three measures from the Varieties of Party Identity and Organization (V-Party) dataset: local organizational activity and local branch extensiveness, local organizational extensiveness, and ties to social organizations. I expect that highly institutionalized mass party can solve information problems by allowing autocrats to identify potential dissenters and supporters among masses and absorb the influence of mass-based coalition on welfare provisions, resulting in less universal provisions than without mass-based party organizations.

### Control variables

Authoritarian regimes employ a variety of strategies to maintain power. Although this study focuses on co-optation and welfare provision, information problems can also influence a dictator's decision to use another strategy, repression. Investigating the relationship between authoritarian welfare provision and information problems should be accompanied by a consideration of repression. If autocrats can afford repression, they should not have to make concessions ([Acemoglu and Robinson 2006](#)). I control the ability of a regime to use repression possible influence of repression strategies using the stan-

dardized and reversed human rights protection score of (Schnakenberg and Fariss 2014; Fariss 2014), which shows that higher values indicate more state-led repression (Chin, Song and Wright 2023).



I also include civil war experience since welfare provision is closely related to the concern of domestic social security (Titmuss 1974; Kuhnele and Sander 2021). Although the relationship between welfare provision and civil war experience can be endogenous (Taydas and Peksen 2012), a state that experienced civil war is more likely to provide universal welfare to its people than those who do not experience such turmoils (Shalev and Gal 2018). I generate a binary variable to indicate past civil war experience using the variable of number of internal armed conflicts per country in a given year. Civil war means internal armed conflicts occurred between the government of a state and one or more internal opposition group(s) without intervention from other states. I measure it using the data from the Uppsala Conflict Data Program (Harbom, Melander and Wallensteen 2008; Pettersson 2023; Davies, Pettersson and Öberg 2023).



The inclusion of civil war experience is essential, as welfare provision is intricately linked to domestic social security concerns ((Titmuss 1974; Kuhnele and Sander 2021). While the relationship between welfare provision and civil war experience might be endogenous (Taydas and Peksen 2012), states with civil war histories are more inclined to implement universal welfare for their citizens compared to those without such experiences (Shalev and Gal 2018). I create a binary variable to capture past civil war experiences, derived from the count of internal armed conflicts per country in a given year, where civil war refers to conflicts within a state between the government and one or more internal opposition groups, with no foreign intervention. This measurement is based on data from the Uppsala Conflict Data Program (Harbom, Melander and Wallensteen 2008; Pettersson 2023; Davies, Pettersson and Öberg 2023).

Additionally, it is important to control the financial capacity of autocrats because their capacity to provide welfare hinges on their available resources. In this study, I in-



clude resource management capability, which can demonstrate the change in resources available to an autocrat, such as the extent of natural resources or the change in economic level or growth. Moreover, evaluating the financial capability of autocrats is essential, as their capacity to offer welfare hinges on their available funds. In this research, I consider their ability to manage resources, which reflects fluctuations in an autocrat's resources, like the availability of natural resources or shifts in economic status and growth.



On the one hand, states with substantial revenue from natural resources like oil, minerals, or gas often possess the fiscal means to implement national strategies without levying heavy taxes on their citizens (Ross 2001; Haber and Menaldo 2011; Fails 2020). I use a variable of fiscal reliance on resources that Haber and Menaldo (2011) use showing the percentage of government revenue from oil, gas, and minerals. On the other hand, the wealth of resources enables autocracies to provide universal welfare benefits, which improves social stability and strengthens the legitimacy of those in power. Economic development determines the amount of money autocrats can use to maintain peace and provide public goods (Olson 1965) and higher economic growth allows a state to invest in more universal welfare for its citizens (Han 2021). I calculate the natural logarithm of the per capita GDP. Both economic variables are obtained from the Maddison Project (Bolt and van Zanden 2014).

Expanding civil society is associated with more extensive universal welfare provision (Wucherpfennig and Deutsch 2009). I control two measures to show whether civil societies are associated with the welfare universality is controlled. One measures if civil society organizations (CSOs) routinely consults with policymakers, while another shows the extent of CSOs' participatory environment. Finally, I introduce four measures to represent different dimensions of the power base of the chief executive, such as hereditary, military, ruling party (Coppedge et al. 2020), and personalism (Chin, Song and Wright 2023).



## Empirical Analysis

Table 1 presents the coefficient estimates for the effect of ruling coalition (H 1) and mass party organization (H 2) on welfare universalism. All the models in Table 1 include country and year fixed effects. I include fixed effects in the models to capture possible country- and year-specific influences, but this does not preclude the possibility that some observations exert inordinate leverage on the quantity of interests (Blaydes and Kayser 2011). Since my sample includes relatively few observations for mass-based coalition than elite-based coalition, it is likely that a specific country's observations could greatly influence the results. Almost all individual-level controls exhibit the expected effects. Table A.3 in Appendix include the full models.

Model 1 test first two hypotheses (H 1 and H 2) expecting the relationship between that authoritarian regimes with mass-based coalitions and strong mass party organization, and universal welfare provision. The coefficient estimate of *Mass-Based Coalition* and *Mass Party Organization Index* are significant and positive, which mean that authoritarian regimes with key explanatory variables are more likely to provide universal welfare than autocracies with elite-based ones or weak mass party. These findings are consistent with my theoretical expectations. Also, the findings of mass party organization index align with previous research indicating that party institutions are linked to increased welfare provisions (Rasmussen and Knutsen 2021).

To test the third conditional hypothesis (H 3), Model 2 includes interaction terms between *Mass-Based Coalition* and *Mass Party Organization Index*. The coefficient estimate of the interaction term is negative and significant, demonstrating that the impact of autocracies with a mass-based ruling coalition on universal welfare provision is diminishing as the level of mass party organization index increases, which is consistent with my theoretical argument.

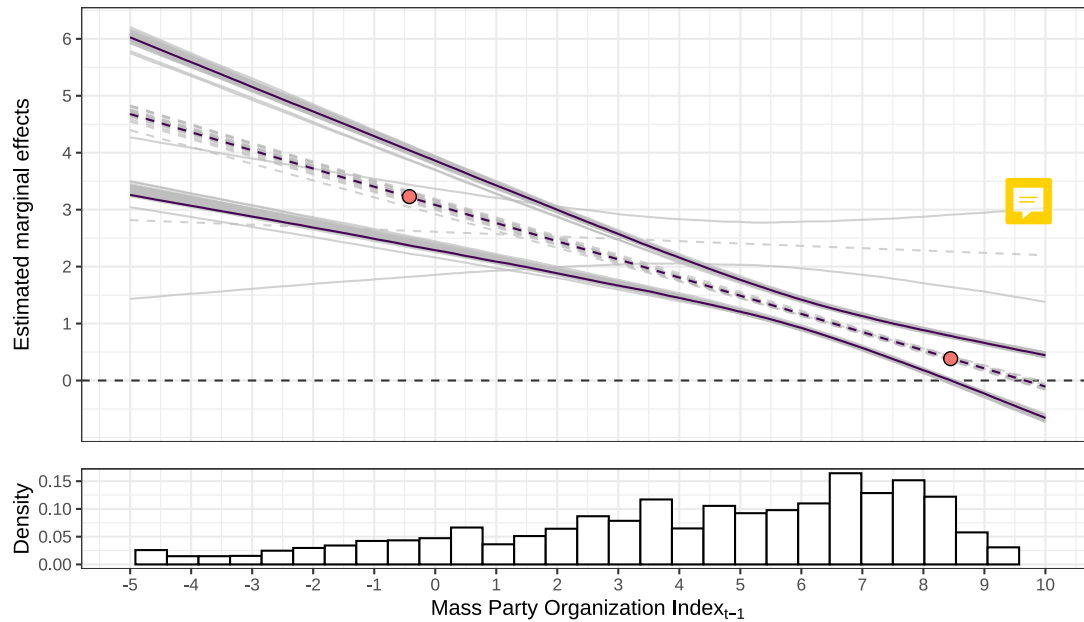
Based on Model 2 of Table 1, I visualized the relationship between key explanatory

Table 1: Ruling Coalitions, Mass Party Organizations, and Universal Welfare Provisions in Autocracies

	(1)	(2)	(3)	(4)
Mass-Based Coalition (vs. Elite-Based)	0.442*** (0.084)		1.189*** (0.132)	3.093*** (0.390)
Mass Party Organization Index		0.058*** (0.005)	0.046*** (0.006)	0.368*** (0.062)
Mass-Based Coalition $\times$ Mass Party Organization Index				-0.321*** (0.062)
Ln(GDPpc + 1)	-0.037 (0.049)	-0.009 (0.053)	0.027 (0.056)	0.020 (0.055)
Annual GDP Growth	0.605** (0.227)	0.227 (0.210)	0.015 (0.224)	-0.016 (0.223)
Resource Dependence (Per GDPpc)	0.014 (0.012)	0.024+ (0.013)	0.047** (0.014)	0.045** (0.014)
Civil War Experience	0.087* (0.035)	0.023 (0.032)	0.013 (0.034)	0.020 (0.034)
Repression: Human Rights	0.073** (0.026)	0.119*** (0.027)	0.144*** (0.028)	0.144*** (0.028)
CSO Consultation	0.103*** (0.018)	-0.035+ (0.019)	-0.026 (0.021)	-0.033 (0.021)
CSO Participatory Environment	-0.032+ (0.017)	0.141*** (0.019)	0.136*** (0.020)	0.134*** (0.020)
Hereditary Dimension	-0.318 (0.299)	0.478 (0.346)	0.338 (0.344)	0.336 (0.342)
Military Dimension	0.054 (0.057)	0.149* (0.062)	0.149* (0.064)	0.106+ (0.064)
Ruling Party Dimension	0.415*** (0.086)	0.385*** (0.081)	0.337*** (0.087)	0.301*** (0.087)
Personalist Dimension	0.086+ (0.048)	-0.195*** (0.052)	-0.146** (0.055)	-0.158** (0.055)
Country-fixed	YES	YES	YES	YES
Year-fixed	YES	YES	YES	YES
No. of countries	94	98	88	88
Year coverage	1966-2011	1947-2011	1966-2011	1966-2011
AIC	3962.0	1996.9	1687.8	1661.0
BIC	4040.1	2071.2	1766.2	1745.0
RMSE	0.46	0.38	0.37	0.36
Num.Obs.	3,018	2,245	1,991	1,991

Note: Standard errors are shown in parentheses, +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

variables and welfare universalism in Figure 2, assuming that autocrats with mass-based coalitions have fewer incentives to provide universal welfare due to information problems resolved through mass party organization. Figure 2 illustrates that the impact of mass-based coalitions on universal welfare provision decreases with increasing level of mass party organization.



Note: The figure depicts the impact of mass-based coalitions on welfare universalism, with the main result from the full model highlighted in color. Each line plot is shown with 95% confidence intervals. The colored points represent the estimated marginal effects at the bottom and top ten percentiles of the mass party organization index. Grey lines represent the marginal effects of models using the jackknife method, with each model excluding one country from the analysis. Excluding Vietnam represents the marginal effect of mass-based coalitions and mass party organization statistically insignificant

Figure 2: Marginal Effect of Mass Coalition by Mass Party Organization Level

I run cross-sectional jackknife analyses, which systematically remove each cross-sectional unit (that is, country) and re-estimates the models to check the robustness of results for the coefficient estimates for interaction between *Mass-Based Coalition* and *Mass Party Organization Index* on *Welfare universalism*. It is worth noting that the interaction effect is statistically insignificant when Vietnam is excluded from the analyses. It implies that Vietnam is almost entirely responsible for the estimated interaction effect. Nevertheless, both *Mass-Based Coalition* and *Mass Party Organization Index* are positive and significant on their own when I exclude Vietnam from the analysis. In other words, it suggests that we investigate contextual interplay between two key variables to find robust supporting evidence for the third hypothesis (H 3). In short, Table 1 and Figure 2 both show that autocrats with mass-based coalitions are more likely to provide universal welfare, but such incentives diminish when autocrats successfully institutionalize masses and resolve



the information problem.

## Conclusions

This paper investigates the dynamics of welfare provision in authoritarian regimes, emphasizing the strategy of co-opting specific societal groups to maintain power. It highlights the crucial channels that link autocratic leaders with masses, driven by the inherent information problems faced by autocrats. The study finds a significant association between the presence of mass-based coalitions or the extent of mass party organizations and the implementation of universal welfare provisions. However, as autocrats enhance their information management capabilities, particularly through the institutionalization of mass party organizations capable of detecting potential dissent, the propensity for generous welfare provision appears to diminish.

The empirical findings show that both mass-based coalitions and well-organized mass parties significantly influence the expansion of universal welfare provision. It suggests that some autocrats, despite the challenges of relying on mass supports, establish institutions that connect them to masses, aiding in threat detection and management. Nonetheless, the establishment of such institutions does not guarantee universal welfare provision. Instead, an improvement in the autocrats' ability to gather and process information can drive decrease in universal welfare provision.

This study contributes to the existing literature by investigating how coalitions and information problems influence autocratic welfare strategies. While previous research has emphasized the importance of coalition size in shaping autocratic co-optation strategies, this study focuses on the role of information problems that autocrats inherently face. I anticipate that this insight will contribute to theoretical frameworks on autocratic welfare by emphasizing the importance of information management over coalition size.

I also emphasize the need for a nuanced approach that combines broad theoretical

approaches with detailed case studies. To fully comprehend institutional dynamics in authoritarian settings, one must look beyond general theories and consider each case's specific context and historical background. I believe that this comprehensive approach will provide a more accurate depiction of how autocratic welfare strategies are developed and implemented.

Future research can look at how different factors, both internal and external to the regime, influence welfare strategies. Furthermore, more targeted data collection is required to better understand the mechanisms that improve autocrats' information management capabilities. Such studies could shed more light on the circumstances that lead autocrats to adopt various ruling strategies, enriching our understanding of political tactics in authoritarian settings.

## References

- Acemoglu, Daron and James A. Robinson. 2006. *Economic origins of dictatorship and democracy*. New York: Cambridge University Press.
- Acemoglu, Daron and James A. Robinson. 2008. "Persistence of Power, Elites, and Institutions." *The American Economic Review* 98(1):267–293.
- Albertus, Michael. 2015. *Autocracy and Redistribution: The Politics of Land Reform*. Cambridge Studies in Comparative Politics Cambridge: Cambridge University Press.
- Bader, Julia. 2015. "Propping up dictators?: Economic cooperation from china and its impact on authoritarian persistence in party and non-party regimes." *European Journal of Political Research* 54(4):655–672.
- Bernhard, Michael, Amanda B. Edgell and Staffan I. Lindberg. 2020. "Institutionalising electoral uncertainty and authoritarian regime survival." *European Journal of Political Research* 59(2):465–487.
- Bizzarro, Fernando, John Gerring, Carl Henrik Knutsen, Allen Hicken, Michael Bernhard, Svend Erik Skaaning, Michael Coppedge and Staffan I. Lindberg. 2018. "Party strength and economic growth." *World Politics* 70(2):275–320.
- Blaydes, Lisa and Mark Andreas Kayser. 2011. "Counting calories: Democracy and distribution in the developing world." *International Studies Quarterly* 55(4):887–908.
- Boix, Carles. 2003. *Democracy and redistribution*. Cambridge: Cambridge University Press.
- Bolt, Jutta and Jan Luiten van Zanden. 2014. "The Maddison Project: Collaborative research on historical national accounts." *Economic History Review* 67(3):627–651.
- Bradley, By David, Evelyne Huber, Stephanie Moller, François Nielsen and John D Stephens. 2003. "Distribution and redistribution in postindustrial democracies." *World Politics* 55(2):193–228.

- Bueno de Mesquita, Bruce, Alastair Smith, Randolph M Siverson and James D Morrow. 2005. *The logic of political survival*. MIT press.
- Cassani, Andrea and Luca Tomini. 2019. "Authoritarian resurgence: towards a unified analytical framework." *Italian Political Science Review / Rivista Italiana di Scienza Politica* 49(2):115–120.
- Cheibub, José Antonio, Jennifer Gandhi and James Raymond Vreeland. 2010. "Democracy and dictatorship revisited." *Public Choice* 143(1-2):67–101.
- Chin, John, Wonjun Song and Joseph Wright. 2023. "Personalization of Power and Mass Uprisings in Dictatorships." *British Journal of Political Science* 53(1):2544.
- Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, David Altman, Michael Bernhard, M. Steven Fish, Adam Glynn, Allen Hicken, Anna L uhrmann, Kyle L. Marquardt, Pamela Paxton, Kelly McMann, Daniel Pemstein, Brigitte Seim, Rachel Sigman, Svend-Erik Skaaning, Jeffrey Staton, Steven Wilson, Agnes Cornell, Nazifa Alizada, Lisa Gastaldi, Haakon Gjerløw, Garry Hindle, Nina Ilchenko, Laura Maxwell, Valeriya Mechkova, Juraj Medzihorsky, Johannes von Romer, Aksel Sundstr om, Eitan Tzelgov, Yi-ting Wang, Tore Wig and Daniel Zilblatt. 2020. "V-Dem CountryYear/CountryDate Dataset v10. Varieties of Democracy (V-Dem) Project."
- Dahlum, Sirianne, Carl Henrik Knutsen and Tore Wig. 2019. "Who revolts? Empirically revisiting the social origins of democracy." *Journal of Politics* 81(4):1494–1499.
- Davies, Shawn, Therese Pettersson and Magnus Öberg. 2023. "Organized violence 1989-2022 and the return of conflicts between states?" *Journal of Peace Research* 60(4).
- Duckett, Jane and Guohui Wang. 2017. "Why do Authoritarian Regimes Provide Public Goods? Policy Communities, External Shocks and Ideas in Chinas Rural Social Policy Making." *Europe-Asia Studies* 69(1):92–109.



- Escribà-Folch, Abel. 2012. "Authoritarian responses to foreign pressure: Spending, repression, and sanctions." *Comparative Political Studies* 45(6):683–713.
- Escribà-Folch, Abel. 2013. "Repression, political threats, and survival under autocracy." *International Political Science Review* 34(5):543–560.
- Fails, Matthew D. 2020. "Oil Income and the Personalization of Autocratic Politics." *Political Science Research and Methods* 8(4):772–779.
- Fariss, Christopher J. 2014. "Respect for Human Rights Has Improved Over Time: Modeling the Changing Standard of Accountability." *American Political Science Review* 108(2):297–318.
- Geddes, Barbara. 1999. "What do we know about democratization after twenty years?" *Annual Review of Political Science* 2:115–144.
- Geddes, Barbara, Erica Frantz and Joseph G. Wright. 2014. "Military rule." *Annual Review of Political Science* 17(1).
- Geddes, Barbara, Joseph Wright and Erica Frantz. 2014. "Autocratic breakdown and regime transitions: A new data set." *Perspectives on politics* 12(2):313–331.
- Geddes, Barbara, Joseph Wright and Erica Frantz. 2018. *How dictatorships work: Power, personalization, and collapse*. Cambridge, MA: Cambridge University Press.
- Genschel, Philipp. 2004. "Globalization and the welfare state: a retrospective." *Journal of European Public Policy* 11(4):613–636.
- Gerschewski, Johannes. 2013. "The three pillars of stability: Legitimation, repression, and co-optation in autocratic regimes." *Democratization* 20(1):13–38.
- Guriev, Sergei and Daniel Treisman. 2020. "The Popularity of Authoritarian Leaders: A Cross-National Investigation." *World Politics* 72(4):601–638.

- Haber, Stephen and Victor Menaldo. 2011. "Do natural resources fuel authoritarianism? A reappraisal of the resource curse." *American Political Science Review* 105(1):1–26.
- Haggard, Stephan and Robert R. Kaufman. 2012. "Inequality and regime change: Democratic transitions and the stability of democratic rule." *American Political Science Review* 106(3):495–516.
- Han, Kangwook. 2021. "Autocratic welfare programs, economic perceptions, and support for the dictator: Evidence from African autocracies." *International Political Science Review* 42(3):416–429.
- Handlin, Samuel. 2016. "Mass Organization and the Durability of Competitive Authoritarian Regimes: Evidence From Venezuela." *Comparative Political Studies* 49(9):1238–1269.
- Harbom, Lotta, Erik Melander and Peter Wallensteen. 2008. "Dyadic Dimensions of Armed Conflict." *Journal of Peace Research* 45(5):697–710.
- Huber, Evelyne, Charles Ragin and John D. Stephens. 1993. "Social democracy, christian democracy, constitutional structure, and the welfare state." *The American Journal of Sociology* 99(3):711–749.
- Iversen, Torben and David Soskice. 2006. "Electoral institutions and the politics of coalitions: Why some democracies redistribute more than others." *American Political Science Review* 100(2):165–181.
- Jiang, Junyan and Dali L. Yang. 2016. "Lying or Believing? Measuring Preference Falsification From a Political Purge in China." *Comparative Political Studies* 49(5):600–634.
- Kavasoglu, Berker. 2022. "Opposition party organizational features, ideological orientations, and elite co-optation in electoral autocracies." *Democratization* 29(4):634–654.

- Kim, Nam Kyu and Alex M. Kroeger. 2018. "Regime and Leader Instability Under Two Forms of Military Rule." *Comparative Political Studies* 51(1):3–37.
- Kim, Wonik and Jennifer Gandhi. 2010. "Coopting Workers under Dictatorship." *The Journal of Politics* 72(3):646–658.
- Knutsen, Carl Henrik and Magnus Rasmussen. 2018. "The autocratic welfare state: Old-age pensions, credible commitments, and regime survival." *Comparative Political Studies* 51(5):659–695.
- Korpi, Walter. 2006. "Power resources and employer centered approaches in explanations of welfare states and varieties of capitalism." *World Politics* 58:167–206.
- Kuhnele, Stein and Anne Sander. 2021. The Emergence of the Western Welfare State. In *The Oxford Handbook of the Welfare State*, ed. Daniel Béland, Kimberly J. Morgan, Herbert Obinger and Christopher Pierson. Oxford University Press pp. 73–92.
- Kuran, Timur. 1991. "Now out of Never: The Element of Surprise in the East European Revolution of 1989." *World Politics* 44(1):7–48.
- Kwon, Huck Ju. 2005. "Transforming the developmental welfare state in East Asia." *Development and Change* 36(3):477–497.
- Levitsky, Steven R. and Lucan A. Way. 2012. "Beyond Patronage: Violent Struggle, Ruling Party Cohesion, and Authoritarian Durability." *Perspectives on Politics* 10(4):869–889.
- Lipset, Seymour Martin. 1959. "Some Social Requisites of Democracy: Economic Development and Political Legitimacy." *American Political Science Review* 53(1):69–105.
- Logvinenko, Igor. 2020. "Authoritarian Welfare State, Regime Stability, and the 2018 Pension Reform in Russia." *Communist and Post-Communist Studies* 53(1):100–116.

- Lührmann, Anna, Marcus Tannenberg and Staffan I. Lindberg. 2018. "Regimes of the World (RoW): Opening New Avenues for the Comparative Study of Political Regimes." *Politics and Governance* 6(1):60–77.
- Magaloni, Beatriz. 2006. *Voting for autocracy: Hegemonic party survival and its demise in mexico*. Cambridge: Cambridge University Press.
- Magaloni, Beatriz. 2008. *Voting for autocracy: Hegemonic party survival and its demise in mexico*. Cambridge: Cambridge University Press.
- Magaloni, Beatriz and Ruth Kricheli. 2010. "Political order and one-party rule." *Annual Review of Political Science* 13:123–143.
- Meltzer, Allan H. and Scott F. Richard. 1981. "A rational theory of the size of government." *The Journal of Political Economy* 89(5):914–927.
- Meng, Anne, Jack Paine and Robert Powell. 2023. "Authoritarian Power Sharing: Concepts, Mechanisms, and Strategies." *Annual Review of Political Science* 26(1):annurev-polisci-052121-020406.
- Meng, Sun and Lu Haina. 2020. "China and the special procedures of the UN human rights council: Is china cooperative and can they work better with each other?" *Human Rights Quarterly* 42(2):357–91.
- Miller, Michael K. 2015. "Electoral authoritarianism and human development." *Comparative Political Studies* 48(12):1526–1562.
- Moene, Karl Ove and Michael Wallerstein. 2001. "Inequality, social insurance, and redistribution." *Source: The American Political Science Review* 95(4):859–874.
- Morgenbesser, Lee. 2017. "The autocratic mandate: Elections, legitimacy and regime stability in singapore." *Pacific Review* 30(2):205–231.

- O'Donnell, Guillermo and Philippe C. Schmitter. 1986. *Transitions from authoritarian rule: Tentative conclusions about uncertain democracies*. Baltimore and London: The Johns Hopkins University Press.
- Olson, Mancur. 1965. *The Logic of Collective Action*. Cambridge: Harvard University Press.
- Olson, Mancur. 1993. "Dictatorship, Democracy, and Development." *The American Political Science Review* 87(3):567–576.
- Ong, Elvin. 2015. "Complementary institutions in authoritarian regimes: The everyday politics of constituency service in singapore." *Journal of East Asian Studies* 15(3):361–390.
- Orenstein, Mitchell A. 2008. "Postcommunist welfare states." *Journal of Democracy* 19(4):80–94.
- Pan, Jennifer. 2020. *Welfare for Autocrats: How Social Assistance in China Cares for its Rulers*. New York: Oxford University Press.
- Pascall, Gillian and Nick Manning. 2000. "Gender and social policy: comparing welfare states in Central and Eastern Europe and the former Soviet Union." *Journal of European Social Policy* 10(3):240–266.
- Pettersson, Therese. 2023. "UCDP Dyadic Dataset Codebook v 23.1."
- Pierson, Paul. 1996. "The new politics of the welfare state." *World Politics* 48(2):143–179.
- Pierson, Paul. 2000. "Three worlds of welfare state research." *Comparative Political Studies* 33(6):791–821.
- Rasmussen, Magnus B. and Carl Henrik Knutsen. 2021. "Party Institutionalization and Welfare State Development." *British Journal of Political Science* 51(3):1203–1229.

- Rasmussen, Magnus Bergli and Jonas Pontusson. 2018. "Working-class strength by institutional design? Unionization, partisan politics, and unemployment insurance systems, 1870 to 2010." *Comparative Political Studies* 51(6):793–828.
- Reuter, Ora John. 2022. "Why is party-based autocracy more durable? Examining the role of elite institutions and mass organization." *Democratization* 29(6):1014–1034.
- Reuter, Ora John and David Szakonyi. 2019. "Elite Defection under Autocracy: Evidence from Russia." *American Political Science Review* 113(2):552–568.
- Rivera, Mauricio. 2017. "Authoritarian Institutions and State Repression: The Divergent Effects of Legislatures and Opposition Parties on Personal Integrity Rights." *The Journal of Conflict Resolution* 61(10):2183–2207.
- Rosenfeld, Bryn. 2021. *The Autocratic Middle Class: How State Dependency Reduces the Demand for Democracy*. Princeton studies in political behavior Princeton: Princeton University Press.
- Ross, Michael L. 2001. "Does Oil Hinder Democracy?" *World Politics* 53(3):325–361.
- Rothstein, Bo. 2001. "The Universal Welfare State as A Social Dilemma." *Rationality and Society* 13(2):213–233.
- Rueda, David. 2008. "Left government, policy, and corporatism: Explaining the influence of partisanship on inequality." *World Politics* 60(3):349–389.
- Río, Adrián del. 2022. "Strategic Uncertainty and Elite Defections in Electoral Autocracies: A Cross-National Analysis." *Comparative Political Studies* p. 001041402210742.
- Schnakenberg, Keith E. and Christopher J. Fariss. 2014. "Dynamic Patterns of Human Rights Practices." *Political Science Research and Methods* 2(1):1–31.
- Shalev, Michael and John Gal. 2018. Bullets and Benefits in the Israeli Welfare State. In *Warfare and Welfare: Military Conflict and Welfare State Development in Western Countries*,

- ed. Herbert Obinger, Klaus Petersen and Peter Starke. Oxford University Press pp. 393–425.
- Smith, Benjamin. 2005. "Life of the party: The origins of regime breakdown and persistence under single-party rule." *World Politics* 57(3):421–451.
- Svolik, Milan W. 2012. *The politics of authoritarian rule*. New York: Cambridge University Press.
- Tang, Kwong-leung. 2000. Social welfare development in east asia. In *Palgrave*. New York: Palgrave.
- Taydas, Zeynep and Dursun Peksen. 2012. "Can States Buy Peace? Social Welfare Spending and Civil Conflicts." *Journal of Peace Research* 49(2):273–287.
- Teo, Terence K. 2019. "Inequality under authoritarian rule." *Government and Opposition* pp. 1–25.
- Titmuss, Richard M. 1974. What is social policy. In *Welfare states: Construction, deconstruction, reconstruction vol. I*, ed. Stephan Leibfried and Steffen Mau. Cheltenham, UK & Northampton, MA, USA: Elgar Research Reviews in Social and Political Science pp. 139–147.
- Truex, Rory and Daniel L. Tavana. 2019. "Implicit Attitudes toward an Authoritarian Regime." *The Journal of Politics* 81(3):1014–1027.
- Wigley, Simon and Arzu Akkoyunlu-Wigley. 2011. "The Impact of Regime Type on Health: Does Redistribution Explain Everything?" *World Politics* 63(4):647–677.
- Wintrobe, Ronald. 1998. *The political economy of dictatorship*. New York: Cambridge University Press.
- Wucherpfennig, Julian and Franziska Deutsch. 2009. "Modernization and Democracy: Theories and Evidence Revisited." *Living Reviews in Democracy* 1:1–9.

Xu, Xu. 2020. "To Repress or to Co-opt? Authoritarian Control in the Age of Digital Surveillance: Authoritarian control in the age of digital surveillance." *American Journal of Political Science* pp. 1–17.

Yi, Daejin and Joonhee Woo. 2014. "Democracy, policy, and inequality: Efforts and consequences in the developing world." *International Political Science Review* .



# Appendix

## A. The share of mass-based and elite-based coalitions, 1960-2020

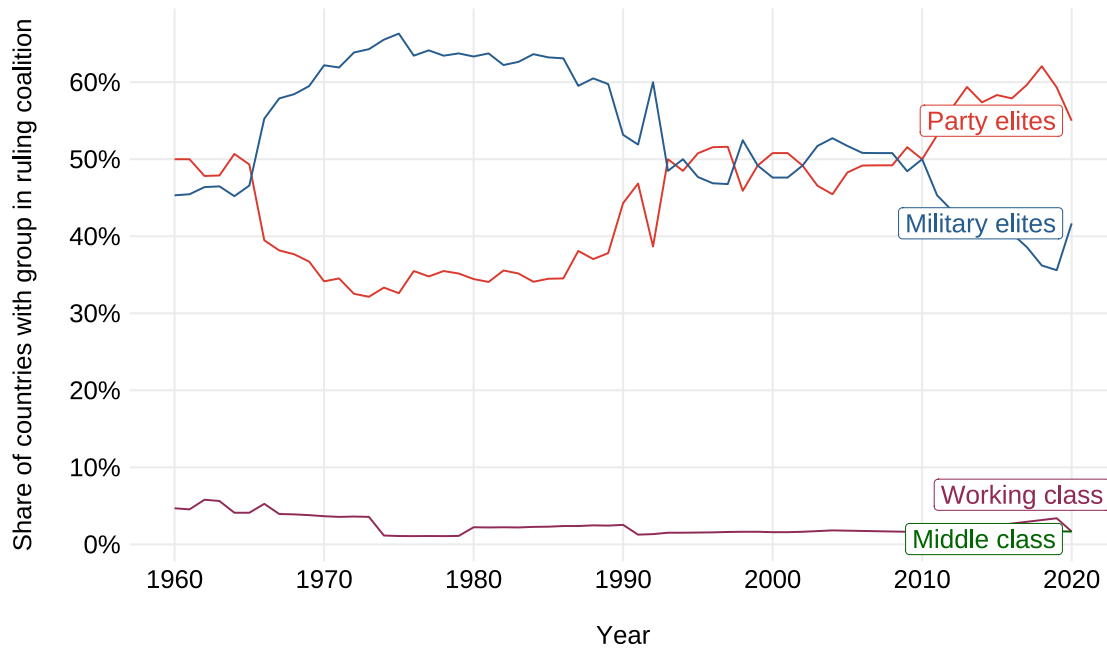


Figure A.1: The share of mass-based and elite-based coalitions, 1960-2020

Autocrats tend to maintain smaller coalitions due to the costs of gaining support ([Bueno de Mesquita et al. 2005](#)) and strive to institutionalize them in a manageable manner ([Svolik 2012](#)). Figure [A.1](#) shows that authoritarian regimes have much more elite-based coalitions, such as military or party elites, than mass-based coalitions. However, authoritarian regimes with mass-based coalitions show varying welfare universalism. Thus, I anticipate that authoritarian regimes with mass-based coalitions will have distinct contexts for such coalitions, which justifies the inclusion of fixed effects in my models.

## B. Benchmark models

Table A.2: Ruling Coalitions, Mass Party Organizations, and Universal Welfare Provisions in Autocracies

	Model 1	Model 2	Model 3	Model 4
<i>Random Effects</i>				
Mass-Based Coalition (vs. Elite-Based)	-0.036 (0.089)		0.364*** (0.096)	0.517* (0.207)
Mass Party Organization Index		0.054*** (0.004)	0.050*** (0.005)	0.050*** (0.005)
Mass-Based Coalition $\times$ Mass Party Organization Index				-0.028 (0.034)
Num.Obs.	6,241	3,612	3,073	3,073
AIC	14936.1	4745.7	3739.8	3740.4
BIC	14956.3	4764.3	3764.0	3770.6
RMSE	0.80	0.47	0.44	0.44
<i>Country-Fixed</i>				
Mass-Based Coalition (vs. Elite-Based)	-0.042 (0.090)		0.364*** (0.097)	0.510* (0.212)
Mass Party Organization Index		0.054*** (0.004)	0.050*** (0.005)	0.050*** (0.005)
Mass-Based Coalition $\times$ Mass Party Organization Index				-0.027 (0.034)
Num.Obs.	6,241	3,612	3,073	3,073
AIC	14803.2	4635.1	3642.8	3644.2
BIC	14816.6	4647.5	3660.9	3668.3
RMSE	0.79	0.46	0.44	0.44
<i>Country-Year-Fixed</i>				
Mass-Based Coalition (vs. Elite-Based)	0.228** (0.074)		0.389*** (0.097)	0.512* (0.212)
Mass Party Organization Index		0.054*** (0.004)	0.047*** (0.005)	0.048*** (0.005)
Mass-Based Coalition $\times$ Mass Party Organization Index				-0.023 (0.035)
No. of Countries	146	119	110	110
Year Coverage	1900-2023	1966-2020	1966-2020	1966-2020
Num.Obs.	6,241	3,612	3,073	3,073
AIC	12076.6	4528.2	3551.7	3553.3
BIC	12090.1	4540.5	3569.8	3577.4

Note: Standard errors are shown in parentheses, +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A.2 shows the results of benchmark models to assess the relationship between ruling coalition, mass party organization levels, and welfare universalism without control variables. I estimate four different models with random effects, country-fixed effects, and country- and year-fixed effects. Without control variables, *Mass Party Organization*

*Index* is consistent and significant positive across different specifications while the individual *Mass-Based Coalition* is only significant and positive in the model with country- and year-fixed effects. Also, the interaction term between *Mass-Based Coalition* and *Mass Party Organization Index* is negative as I expect, but not statistically significant regardless of varying specifications.

## C. Full models

Table A.3 shows the results of ordinary least squares (OLS) models to assess the relationship between ruling coalitions, mass party organization levels, and universal welfare provisions, with random effects and varying fixed effects for country and/or year, testing the research hypotheses. The first set of models with random effects, Model 1, Model 2 and Model 3, show that all key explanatory variables have coefficient estimates as I expect. *Mass-Based Coalition* and *Mass Party Organization Index* are likely to be associated with greater welfare universalism when other covariates are held constant. When I include interaction term between *Mass-Based Coalition* and *Mass Party Organization Index*, the constituent terms are still significant and positive, while the coefficient estimate of interaction term is negative and significant as I expect in the third hypothesis. Between Model 5 and 8 with only country-fixed effects and Model 9 and 12 with country- and year-fixed effects (main models), the results for quantity of interests are similar with the random effect models.

Table A.3: Ruling Coalitions, Mass Party Organizations, and Universal Welfare Provisions in Autocracies

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
Mass-Based Coalition (vs. Elite-Based)	0.442*** (0.084)		1.189*** (0.132)	3.093*** (0.390)	0.442*** (0.084)		1.189*** (0.132)	3.093*** (0.390)	0.442*** (0.084)		1.189*** (0.132)	3.093*** (0.390)
Mass Party Organization Index		0.058*** (0.005)	0.046*** (0.006)	0.368*** (0.062)		0.058*** (0.005)	0.046*** (0.006)	0.368*** (0.062)		0.058*** (0.005)	0.046*** (0.006)	0.368*** (0.062)
Mass-Based Coalition× Mass Party Organization Index				-0.321*** (0.062)				-0.321*** (0.062)				-0.321*** (0.062)
Ln(GDPpc + 1)	-0.037 (0.049)	-0.009 (0.053)	0.027 (0.056)	0.020 (0.055)	-0.037 (0.049)	-0.009 (0.053)	0.027 (0.056)	0.020 (0.055)	-0.037 (0.049)	-0.009 (0.053)	0.027 (0.056)	0.020 (0.055)
Annual GDP Growth	0.605** (0.227)	0.227 (0.210)	0.015 (0.224)	-0.016 (0.223)	0.605** (0.227)	0.227 (0.210)	0.015 (0.224)	-0.016 (0.223)	0.605** (0.227)	0.227 (0.210)	0.015 (0.224)	-0.016 (0.223)
Resource Dependence (Per GDPpc)	0.014 (0.012)	0.024+ (0.013)	0.047** (0.014)	0.045** (0.014)	0.014 (0.012)	0.024+ (0.013)	0.047** (0.014)	0.045** (0.014)	0.014 (0.012)	0.024+ (0.013)	0.047** (0.014)	0.045** (0.014)
Civil War Experience	0.087* (0.035)	0.023 (0.032)	0.013 (0.034)	0.020 (0.034)	0.087* (0.035)	0.023 (0.032)	0.013 (0.034)	0.020 (0.034)	0.087* (0.035)	0.023 (0.032)	0.013 (0.034)	0.020 (0.034)
Repression: Human Rights	0.073** (0.026)	0.119*** (0.027)	0.144*** (0.028)	0.144*** (0.028)	0.073** (0.026)	0.119*** (0.027)	0.144*** (0.028)	0.144*** (0.028)	0.073** (0.026)	0.119*** (0.027)	0.144*** (0.028)	0.144*** (0.028)
CSO Consultation	0.103*** (0.018)	-0.035+ (0.019)	-0.026 (0.021)	-0.033 (0.021)	0.103*** (0.018)	-0.035+ (0.019)	-0.026 (0.021)	-0.033 (0.021)	0.103*** (0.018)	-0.035+ (0.019)	-0.026 (0.021)	-0.033 (0.021)
CSO Participatory Environment	-0.032+ (0.017)	0.141*** (0.019)	0.136*** (0.020)	0.134*** (0.020)	-0.032+ (0.017)	0.141*** (0.019)	0.136*** (0.020)	0.134*** (0.020)	-0.032+ (0.017)	0.141*** (0.019)	0.136*** (0.020)	0.134*** (0.020)
Hereditary Dimension	-0.318 (0.299)	0.478 (0.346)	0.338 (0.344)	0.336 (0.342)	-0.318 (0.299)	0.478 (0.346)	0.338 (0.344)	0.336 (0.342)	-0.318 (0.299)	0.478 (0.346)	0.338 (0.344)	0.336 (0.342)
Military Dimension	0.054 (0.057)	0.149* (0.062)	0.149* (0.064)	0.106+ (0.064)	0.054 (0.057)	0.149* (0.062)	0.149* (0.064)	0.106+ (0.064)	0.054 (0.057)	0.149* (0.062)	0.149* (0.064)	0.106+ (0.064)
Ruling Party Dimension	0.415*** (0.086)	0.385*** (0.081)	0.337*** (0.087)	0.301*** (0.087)	0.415*** (0.086)	0.385*** (0.081)	0.337*** (0.087)	0.301*** (0.087)	0.415*** (0.086)	0.385*** (0.081)	0.337*** (0.087)	0.301*** (0.087)
Personalist Dimension	0.086+ (0.048)	-0.195*** (0.052)	-0.146** (0.055)	-0.158** (0.055)	0.086+ (0.048)	-0.195*** (0.052)	-0.146** (0.055)	-0.158** (0.055)	0.086+ (0.048)	-0.195*** (0.052)	-0.146** (0.055)	-0.158** (0.055)
Random Effects	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO
Country-Fixed	No	No	No	No	YES	YES	YES	YES	YES	YES	YES	YES
Year-Fixed	No	No	No	No	No	No	No	No	YES	YES	YES	YES
No. of countries	94	98	88	88	94	98	88	88	94	98	88	88
Year coverage	1966-2011	1947-2011	1966-2011	1966-2011	1966-2011	1947-2011	1966-2011	1966-2011	1966-2011	1947-2011	1966-2011	1966-2011
AIC	4286.0	2274.9	1953.8	1927.0	4090.0	2086.9	1777.8	1751.0	3962.0	1996.9	1687.8	1661.0
BIC	5338.1	3143.8	2776.5	2755.3	4552.9	2418.4	2108.0	2086.8	4040.1	2071.2	1766.2	1745.0
RMSE	0.46	0.38	0.37	0.36	0.46	0.38	0.37	0.36	0.46	0.38	0.37	0.36
Num.Obs.	3018	2245	1991	1991	3018	2245	1991	1991	3018	2245	1991	1991

Note: Standard errors are shown in parentheses, + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

## D. Robustness check

To check the robustness of results, I run cross-sectional jackknife analyses. The cross-sectional jackknife systematically removes each cross-sectional unit (that is, country) and re-estimates the models. Mass-based coalition and the interaction of mass-based coalition and mass party organization index are of greatest interests. The left panels (Model 1 and Model 3) in Figure A.2 show that autocracies with mass-based coalitions are more likely to have universal welfare provisions, and a higher level of mass party organization is also associated with extensive welfare universalism. Autocracies with mass-based coalitions are associated with greater welfare universalism when other covariates are held constant. . Thus, autocracies with mass-based coalitions have a consistent and significant influence on increasing universal welfare provisions, providing enough empirical evidence to support the first hypothesis.

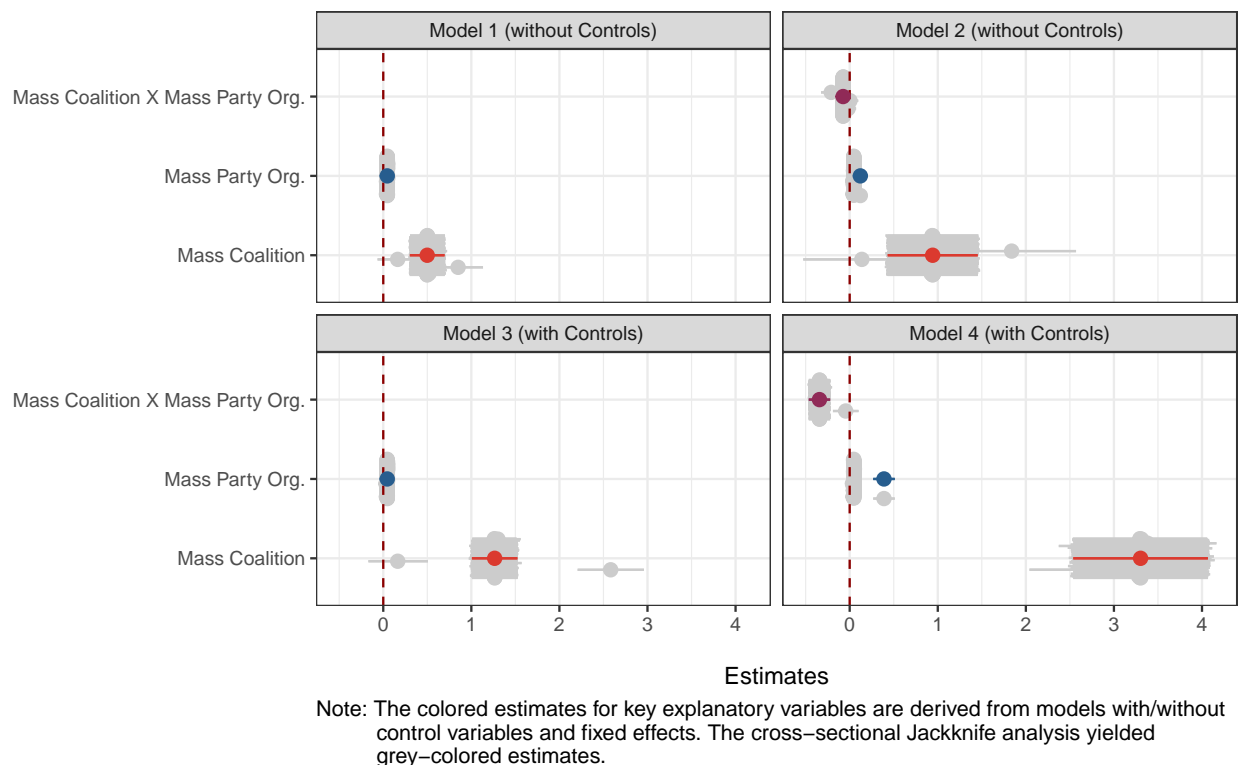


Figure A.2: Estimated coefficients for the effects of mass-based coalitions and mass party organizations, and their interactions on authoritarian welfare universalism

The results are presented in the right panels (Models 2 and 4). More than half of the estimated coefficients for the interaction term between mass-based coalitions and the mass party organization index (109/197) are not statistically significant, despite having the expected sign. When I include control variables (Model 4), I find that the conditional relationships between models with and without control variables are consistent and statistically significant, except when Vietnam is excluded.

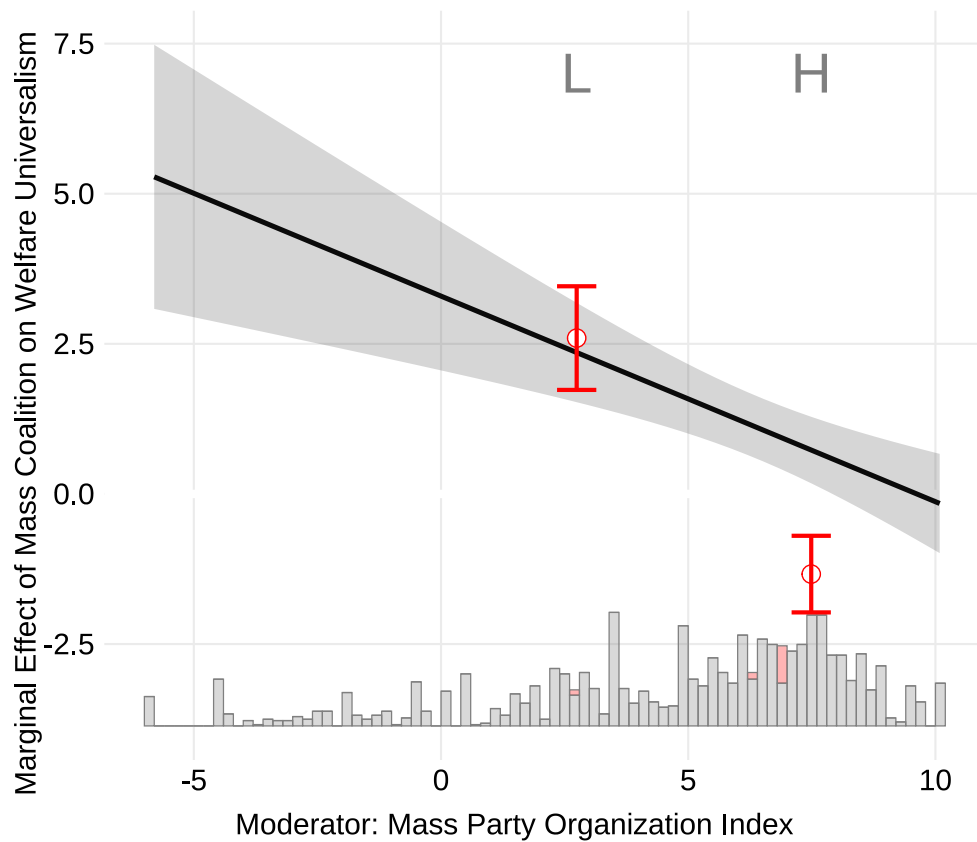


Figure A.3: Conditional marginal effects from binning estimator

Even though I manipulate the conditional marginal effect of mass-based coalitions on welfare universalism, there are some potential issues that I should consider in order to fully grasp the meaning of the multiplicative term. Instead of assuming linearity for the interaction effect, I use the binning estimator proposed by [Hainmueller, Mummolo and Xu \(2019\)](#) to determine whether the marginal effect follows a linear function. I created only two bins indicating low and high levels of mass party organization index based on

the moderator's median value because increasing the number of bins necessitates a sufficient number of observations. Then I estimate the marginal effects of a mass-based coalition based on the median value per bin. Figure A.3 does not show non-linear marginal effects that contradict the linear interaction effect assumption.

## Appendix References

- Bueno de Mesquita, Bruce, Alastair Smith, Randolph M Siverson and James D Morrow. 2005. *The logic of political survival*. MIT press.
- Hainmueller, Jens, Jonathan Mummolo and Yiqing Xu. 2019. "How Much Should We Trust Estimates from Multiplicative Interaction Models? Simple Tools to Improve Empirical Practice." *Political Analysis* 27(2):163–192.
- Svolik, Milan W. 2012. *The politics of authoritarian rule*. New York: Cambridge University Press.