Uncertainty, Cleavages and Ethnic Coalitions[*]

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Abstract

Why do ethnically diverse elites share power in government coalitions? I argue that uncertainty about their societal support makes ethnic leaders frequently form oversized coalitions when their group does not represent an overwhelming majority. This uncertainty stems from cross-cutting cleavage configurations, which enable coethnics to hold membership in multiple groups, and opens up the possibility of future defection to the opposition along shared identity markers. In response, elites prefer coalitions that internalize cross-cutting cleavages as they restrict defections to coalition partners and survive longer. To test these hypotheses, I collected new data on linguistic, religious, and racial intra-group divisions. Using conditional choice models on formation opportunities in 134 ethnically divided societies between 1946 and 2009 I find that, independent of institutional rules, ethnic elites frequently opt for oversized multi-ethnic coalitions that share as many ethnic markers as possible. These coalitions survive longer than more heterogeneous pacts.

KEYWORDS: coalition formation, coalition duration, cross-cutting cleavages, ethnic identity, power-sharing

Why do ethnically diverse elites share power in coalitions?[1] This is a central question for scholars who study the prevention and resolution of civil wars (Lijphart, 1977; Walter, 2002; Hartzell and Hoddie, 2007) and policy-makers concerned with violent conflicts in ethnically divided societies such as South Sudan and Iraq.[2] The composition of the ruling coalition also influences important outcomes such as economic growth (Bueno de Mesquita et al., 2003), authoritarian regime stability (Pepinsky, 2009), and patronage politics (Chandra, 2004). Studying the origins of ethnic power-sharing is of particular interest because conventional wisdom holds that it should be very difficult to accomplish. Students of ethnically divided societies conceptualize political elites and their coethnic supporters as rational actors who want to maximize their own share of power (e.g., Posner, 2005), or even subordinate members of other groups (Horowitz, 2000). In the absence of institutional rules such as guaranteed government inclusion, minimum-winning coalitions or even minority rule should predominate in ethnically divided societies due to ethnic outbidding (Horowitz, 1993; Rabushka and Shepsle, 2008). The resulting large-scale ethnic exclusion is a fertile breeding ground for violent conflicts (see Cederman, Gleditsch and Buhaug, 2013).

Yet despite an extensive literature that links so-called power-sharing institutions such as proportional representation (PR) or authoritarian parties to desirable outcomes including stability and economic growth (e.g., Norris, 2008; Gandhi, 2008), relatively little evidence exists that the same institutions affect the formation of multiethnic coalitions. In fact, Figure 1 shows no link between institutions and multiethnic coalitions.[3] The frequency of multiethnic coalitions in 2009 (grey bars) exceeds the frequency of single-group rule (black) in states without power-sharing institutions (left) while the pattern reverses in states with power-sharing institutions (right). The absence of multiethnic coalitions in many countries with power-sharing institutions calls into question the

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[1]I use the terms *coalition* and *power-sharing* to denote any national government, such as communist central committees, military juntas, or presidential cabinets, that consists of leaders of more than one ethnic group. In contrast, I refer to executive bodies dominated by representatives of one ethnic group as *monoethnic* or *single-group rule*.

[2]These are multiethnic states where politicians make ethnic claims in national politics.

[3]My operationalization of power-sharing institutions follows the literatures on conflict resolution (Horowitz, 2002; Lijphart, 2002) and authoritarian politics (Boix and Svolik, 2013, 307), and encompasses any of the following formal rules: PR, the alternative vote, or parliamentary government in democracies, and parliaments or parties in autocracies.

hypothesized effectiveness of these institutions. That elites form multiethnic coalitions where no power-sharing institutions exist demands a new explanation.

Figure 1: Power-sharing institutions in 2008 and ethnic regime type in 2009. Data on power-sharing institutions comes from Cheibub, Gandhi and Vreeland (2010) and Bormann and Golder (2013). Data on ethnic coalitions comes from the Ethnic Power Relations dataset by Cederman, Wimmer and Min (2010).
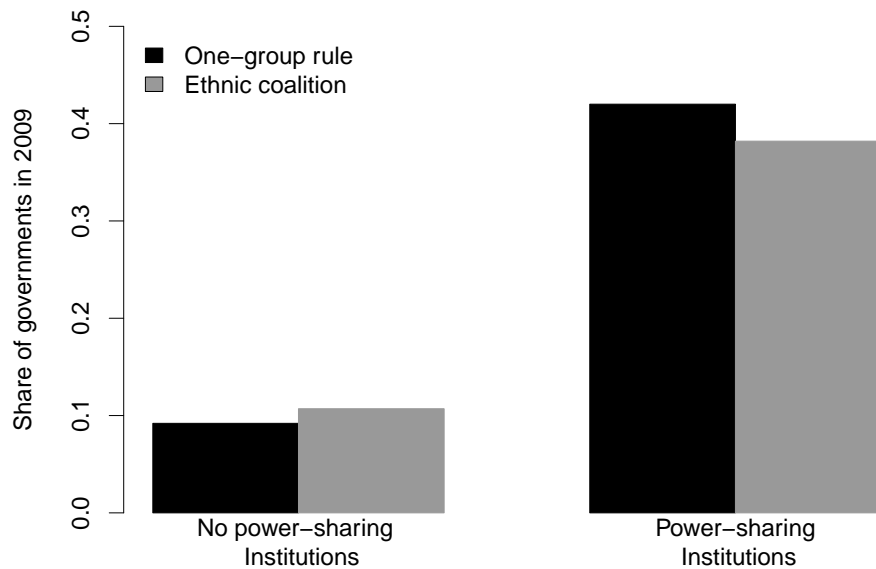
In this study, I argue that political elites frequently form *oversized* multiethnic coalitions due to incomplete information about their true support and the anticipation of impending challenges to their rule. Uncertainty over their own strength compels elites to ensure themselves against the risk of coups and rebellions, party splits and uncertain elections. This unertainty arises from intra-group conflict and defections (Kalyvas, 2008; McLauchlin and Pearlman, 2012). It is particularly severe when cross-cutting cleavages endow individuals with membership in multiple groups, for example when speakers of one language subscribe to the same religious attributes as members of another linguistic group (Posner, 2005; Chandra, 2012). Although individuals cannot just claim membership in any identity group, shifts in salient group boundaries can transform bare majorities into minorities. These realignments occur, for example, when a subset of ruling elites offers previously excluded group leaders a new pact along cross-cutting cleavages that gives the defectors greater influence in the new government coalition. In response, ruling elites generally seek *secure* majorities that survive defections by their supporters and prefer coalitions among groups with shared identity attributes.[4] Governments formed around cross-cutting cleavages feature a smaller number of internal divisions, and correspondingly fewer opportunities for defection to the opposi-

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[4]I define secure majorities as (1) oversized coalitions that exceed minimum-winning size, and

tion. Therefore, more homogeneous government coalitions survive longer than those with greater internal diversity at equal size.

The primary contribution of this study is to develop and test a novel mechanism of ethnic coalition formation that emphasizes the interplay between ethnic elites and their supporters in the presence of uncertainty-increasing cross-cutting cleavages. My argument draws on recent insights into how the threat of violence creates self-enforcing power-sharing (Svolik, 2009, Roessler, 2016, Ch.10), and adds that the position of elites can weaken when supporters defect. My study also speaks to the debate between scholars who highlight how African leaders share power to deter rebellion (Rothchild and Foley, 1988; Francois, Rainer and Trebbi, 2015) and coups (Arriola, 2009), and researchers who argue that leaders in divided societies exclude other ethnically distinct elites in minority or minimum-winning coalitions (Horowitz, 2000; Rabushka and Shepsle, 2008; Roessler, 2011). Taking an intermediate position, I predict that, on average, leaders balance the costs of sharing power too widely with the risk of losing power in minority and minimum-winning governments by choosing oversized but not grand coalitions. Finally, building on existing work on ruling coalitions in Africa (Arriola, 2009; Francois, Rainer and Trebbi, 2015), I test the implications of my argument for ethnic government formation and duration on a global sample.

I evaluate my hypotheses with the help of conditional choice models and semi-parametric duration models on data of ethnic coalitions in 134 ethnically divided states from the Ethnic Power Sharing (EPR) dataset (Cederman, Wimmer and Min, 2010). To explore the central cleavages mechanism I introduce new data on ethnic groups' linguistic, religious, and racial segments that can cut across group boundaries. The statistical tests confirm my three main theoretical expectations. First, the results indicate that ethnic elites prefer oversized coalitions to minority, minimum-winning, and grand coalitions regardless of the institutional rules in operation. Monoethnic regimes are typical when the ruling group constitutes an overwhelming majority, and leaders mostly fear internal challenges predicted by the commitment logic rather than rebellion or supporter defections. Yet my sample includes as many oversized coalitions as monoethnic regimes, and secure majorities are thus by far the most likely type of government in ethnically divided so-

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(2) monoethnic rule by a group that includes an overwhelming majority ($> 60\%$) of the population. A minimum-winning government requires links to at least 50% of the population and includes the minimum number of groups to pass this threshold.

cieties while minority rule is rare. Second, ethnic elites prefer homogeneous coalitions around cross-cutting cleavages as they anticipate shifts in salient identity markers and erect reinforcing cleavages to excluded groups. Third, coalition governments are generally unstable but those which internalize cross-cutting cleavages survive longer than those that do not. I conclude by illustrating the logic of my theory in a case study of Indonesia.

Theory

Why do ethnic elites share power in coalition governments? Almost every theory of coalition formation draws on Riker's (1967) formative work that captures the importance of the distribution of power in the "size principle," which predicts that utility-maximizing actors aim to form minimum-winning coalitions. Later studies explore other aspects of coalitions in democracies such as ideological congruence or proposal sequencing, but the relative power of actors remains central (e.g., Axelrod, 1970; Baron and Ferejohn, 1989). Although empirical work on coalition formation shows that minimum-winning governments are not ubiquitous, they constitute the modal outcome in post-war European democracies (Golder, Golder and Siegel, 2012, 436).

In the context of ethnically divided societies, three expectations prevail. First, leaders of majority groups generally rule alone (Horowitz, 2002, 20, Rabushka and Shepsle, 2008, 91). Second, minority rule prevails in the absence of majority groups and formal institutions that require or incentivize multiethnic coalitions (Horowitz, 2000, 433–434). Third, leaders only form coalitions where institutional rules impose winning thresholds that no group manages to surpass on its own (ibid., 369).[5] This view underwrites analyses that attribute political violence and other suboptimal social outcomes to the lack of cooperation between ethnically distinct groups (see, e.g., Alesina, Baqir and Easterly, 1999; Roessler, 2011; Esteban, Mayoral and Ray, 2012).

In reaching these conclusions, existing work on ethnic power-sharing usually builds on three central assumptions: (1) ethnic elites and their followers are utility-maximizing actors; (2) authoritarian regimes and some democracies lack commitment technologies, that is mechanisms that incentivize cooperation across ethnic boundaries; and (3) ethnic groups are homogeneous and unified actors.[6] While I share the first assumption of utility-maximizing actors (also see Posner, 2005;

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[5]Table A1 in the online appendix summarizes numerous studies making these predictions.

[6]I follow Weber (1978) in defining ethnicity as a "putative belief in common ancestry" that builds on shared identity markers such as language, religion, caste, and race.

Chandra, 2012; Francois, Rainer and Trebbi, 2015), I relax the remaining two statements.

With respect to commitment technologies, I assume that violent revolutions and coups in dictatorships serve as substitutes for elections and partisan defections in democracies (also see Bueno de Mesquita et al., 2003; Svolik, 2009; Francois, Rainer and Trebbi, 2015).[7] Most scholars agree that democratic elections incentivize coalitions when elites lack a clear majority (Horowitz, 2002; Lijphart, 2002). However, in autocracies minority rule is the standard expectation (Horowitz, 1993, 21; Bueno de Mesquita et al., 2003, 70; Rabushka and Shepsle, 2008, 90-1).

Yet upon closer inspection, ethnic minority regimes such as Assad's Syria and Apartheid South Africa constitute the exception rather than the rule. Opposition majorities successfully overthrew minority regimes in Afghanistan, Ethiopia, Liberia, Uganda, South Africa, and Zimbabwe, and seceded from Pakistan and Sudan. On average, larger excluded groups are more likely to violently challenge the government directly than smaller groups (Buhaug, 2006) and "stronger rebels" are more likely to win civil wars (Cederman, Gleditsch and Buhaug, 2013, 196–198). Only if ethnic minority governments, such as Ladinos in Guatemala, balance their demographic inferiority with vast superiority in coercive capacity should they be able to defend their position in the long run. To stay in power, incumbents in authoritarian "hegemonial exchange regimes" in Sub-Saharan Africa share power in coalition governments "to reduce alienation and opposition" (Rothchild and Foley, 1988, 250). Even in dictatorships ethnic elites usually require the support from a majority of the population due to the threat of violence from excluded groups.[8]

Nevertheless rational elites benefit less from holding office the more spoils they need to share with their coalition partners. In contrast to theories focusing primarily on external and internal threats to incumbent elites' hold on power (Arriola, 2009; Roessler, 2011; Francois, Rainer and Trebbi, 2015), my theory does not predict that leaders simply include all potential rivals and form ever larger or grand coalitions. However, elites will not enjoy any spoils if they do not hold

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[7]Conceptually, I distinguish autocracies and democracies by the method of leader selection and the degree to which elites in most democratic regimes are accountable to their supporters.

[8]Since violence as a commitment device entails higher personal risks than losing elections, it should deter potential defectors, and thus permit smaller coalitions than in democracies. Yet due to weaker accountability mechanisms, authoritarian elites capture relatively larger rewards from holding office than democratic politicians (Bueno de Mesquita et al., 2003, 22). With increasing rewards, rebellion risk rises, and so does the need for larger coalitions.

sufficient coercive capacity to obtain and defend their position. On average then, elites opt to first secure their position in majority governments and then exclude as many groups as possible.

Uncertainty and coalitions

So far I have argued that ethnic elites are most likely to form majority-sized coalitions no matter the institutional rules under which they operate. Yet even if ethnic leaders form majority governments, existing theoretical models of coalition formation predict that these coalitions should be minimum-winning (Riker, 1967). Therefore, a large number of ethnic groups should still be excluded from power-sharing pacts. Research on civil war alliances (Christia, 2012) and government formation in ethnically divided societies (Rabushka and Shepsle, 2008) supports the minimum-winning predic-tion. However, the conditions under which Riker's logic holds have received less attention in these analyses. As discussed above, one central assumption that undergirds the minimum-winning logic is that ethnic leaders obtain the full support from their coethnics and know how large this support is (Riker, 1967, 47). With this fixed and indivisible conceptualization of ethnic groups, existing research presupposes that ethnic elites have complete information over the distribution of power.

In contrast, I argue that ethnic groups are neither fixed nor indivisible units that support their political elites unconditionally. Although ethnicity is probably the most common political cleavage globally, the boundaries between ethnic groups are neither impenetrable nor unchangeable (Barth, 1969). Ethnic boundaries are least telling of political allegiance where identity markers allow membership in multiple sub-groups. In these contexts, individuals stress the one identity marker that guarantees their inclusion in the smallest possible winning coalition (Posner, 2005; van der Veen and Laitin, 2012). This implies that political elites who draw on the support of their coethnics to gain and stay in power operate in an environment of incomplete information: they only know the approximate distribution of power gauged from the headcount of different ethnic groups.

There is ample evidence that group loyalties in multiethnic states do not always prove stable. Recent research shows that ethnic voting becomes less likely when material benefits are neither distributed along ethnics lines nor excludable (Dunning and Nilekani, 2013; Ichino and Nathan, 2013). Brass (1968) describes the fluidity of coalitions in Indian state parliaments, and Ferree (2012) shows that governments in Sub-Saharan Africa that include ethnic groups with majority sub-segments frequently experience volatility. Once the ethnic distribution of power becomes uncertain, the minimum-winning logic no longer applies:

The uncertainty of the real world and the bargaining situation forces coalition mem-

bers to aim at a subjectively estimated minimum-winning coalition rather than at an

actual minimum. In decision-systems large enough so that participants do not know

each other or what each is doing, the actual size and weight of a coalition may be

in doubt, if only because of . . . participants' inability to estimate each other's weights

(Riker, 1967, 77–78).

Riker's quote captures the political competition in ethnically divided states where elites only have an approximate sense of the strength of their support from group members. This uncertainty stems from the lack of fixed group membership, which does not automatically translate into political allegiance. Even in states where ethnic tensions run high, group members hardly ever throw their support consistently behind just one ethnic organization (e.g., McLauchlin and Pearlman, 2012). As a consequence, political elites anticipate defections from their coethnic supporters and allies, and rely on *secure* majorities. In nation-states, where one ethnic group constitutes a vast majority and regime-threatening rebellions are unlikely, leaders form monoethnic governments that minimize the potential for splits and internal challenges. Where ethnic demography precludes such arrangements, uncertainty is higher and leaders seek oversized coalitions that can deter rebellions and survive defections.[9]

Ethnic cleavages' effect on coalition formation and duration

Cleavage reconfiguration constitutes one of the major sources of uncertainty for ethnic leaders regarding the strength of their support, and therefore proves crucial in forming governments and maintaining coalitions. Whereas earlier work on ethnicity and cleavages emphasized rigidity and lock-in of cleavages (Lijphart, 1977; Lipset and Rokkan, 1990 (1967)), more recent studies emphasize how individuals alternate between highlighting one identity attribute such as their language and another such as their religion (Chandra, 2004; Posner, 2005; van der Veen and Laitin, 2012). If enough individuals activate an alternative identity attribute, they reconfigure state-wide cleavage constellations (Chandra, 2012, 58–9). Then, a government majority on one ethnic dimension can turn into a minority along another cleavage (Chandra, 2005, 243). Unlike creating new identities or

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[9]A different type of uncertainty lies at the heart of the commitment problem logic, which highlights that ethnically distinct coalition partners do not know each others' intentions and cannot trust each other to continue cooperation (Svolik, 2009; Roessler, 2011).

assimilating into another ethnic group, changing the salience of available ethnic attributes constitutes a 'legitimate' defection because it aligns with preexisting identity markers.[10] Where support realignment threatens the survival of the ruling coalition, elites will act on it.

Aware of alternative majorities, excluded elites stress those cleavages that cross-cut the border between the government coalition and the opposition in order to delegitimize their own exclusion. In Zambia, politicians who are likely to lose elections during multiparty competition between language groups, aim to activate latent tribal identities, which would upend linguistic majorities (Posner, 2005, 192-4). Similarly, excluded elites in India attempt to activate new caste cleavages to gain power Chandra (2004). This mechanism differs from ethnic outbidding, which pits moderates against hardliners from the same group and aims at the exclusion of coalition partners. In fact, outbidding frequently occurs locally in Zambia, where competition centers on one ethnic dimension, but not on the national level (Posner, 2005, 110). In contrast to competition over one cleavage, multi-dimensional contests induce moderation (Chandra, 2005, 241).

Anticipating the threat of cleavage realignment, ruling elites attempt to undercut the emergence of new salient ethnic dimensions through a variety of strategies including using state power to distribute patronage, discredit opposition politicians, and outright intimidate them. Yet even under authoritarian rule, excluded elites can counter government power by mobilizing supporters on university campuses and through religious networks (see Slater, 2009), or by relying on private-sector funding (Arriola, 2012). This is why ruling elites try to preclude supporter defection by forming coalitions around cross-cutting cleavages. For example, leaders of linguistic groups seek coalition partners with whom they share religious and racial markers, thus minimizing intra-coalition diversity.[11] Simultaneously, ruling elites exclude groups that differ on a large number of ethnic

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[10]It is conceivable that non-ethnic allegiances trump ethnic ones (e.g., Dunning and Nilekani, 2013), but most scholars assume that ethnic cleavages dominate non-ethnic divisions in their ability to overcome collective action dilemmas (Horowitz, 2000). Yet Chandra (2005, 243) suggests that the distinction between ethnic and non-ethnic cleavages blurs in environments with numerous cross-cutting ethnic cleavages while Lupu and Riedl (2012, 1357) question the ability of ethnicity to structure political space when uncertainty is high.

[11]Expelling coalition partners decreases coalition diversity but also increases civil war risk. The mechanism of reducing internal diversity operates independent of coalition size by choosing coalition partners with cross-cutting rather than reinforcing cleavages.

dimensions, and thus reinforce the ethnic differences between the ruling coalition and the opposition. Where ethnic leaders succeed in forming coalitions that internalize cross-cutting cleavages, support realignment may shift the balance of power within the government but not to the opposition. However, when leaders fail to internalize cross-cutting cleavages, opposition elites emphasize dormant ethnic dimensions to shift away support from the ruling party or ambitious junior partners inside the coalition seek outside support to improve their relative power.

Uncertainty about the loyalty of their supporters also affects government duration. High uncertainty, often resulting from the expectation of instability, compels elites to form oversized coalitions to stabilize their own rule (Riker, 1967, 77-79; Slater and Simmons, 2012). Since elites form larger coalitions in anticipation of instability, these coalitions are characterized by shorter survival times than demographically dominant monoethnic regimes with few opportunities for defection. My argument adds that coalitions with fewer ethnic dimensions survive longer because supporters cannot defect as easily to the opposition.

I summarize my three central expectations in the following hypotheses:

H_1 : Ethnic elites are more likely to form secure majorities than minimum-winning coalitions, minority governments, and grand coalitions.

H_2 : Ethnic elites are more likely to form coalitions around cross-cutting cleavages with few ethnic dimensions than more heterogenous pacts.

H_3 : The more cleavages divide a government the shorter its duration.

Alternative explanations

The commitment problem logic constitutes an important rival explanation for ethnic coalition formation while also stressing the threat of violence as the main incentive for elites to overcome mutual suspicion (e.g., Svolik, 2009; Dal Bó and Powell, 2009; Boix and Svolik, 2013). However, these accounts primarily focus on the difficulties of elites to commit to future cooperation amongst each other and disregard the relations between elites and their supporters. Emphasizing coup risk in multiethnic coalitions, Roessler (2011) argues that the very tactics elites from one group employ to prevent coups, appear to be threatening to coalition partners from another group. To preempt their own exclusion, elites then expel their rivals from power, and should increasingly form monoethnic and minority governments but not oversized coalitions (cf. Rabushka and Shepsle, 2008).

While I do not negate the risk coups pose, I argue that elites usually form another oversized coalition after deposing an opponent rather than moving towards monoethnic rule. Similarly, Arriola (2009) and Roessler (2011, 325) describe diffusing power among many coalition partners as a coup-proofing strategy in Sub-Saharan Africa. Roessler (2016, Ch.10) also demonstrates that the commitment logic predicts stable power-sharing when the two largest groups in a country are equally powerful. Roessler's work then implies that oversized coalitions should be less likely in democracies, where coups are less of a risk, and should mostly involve equally sized partners. If, however, fear of cleavage reconfiguration drives elites, oversized coalitions should occur at similar rates in democracies and autocracies, and be more unstable than predicted by Roessler.

The common solution to the commitment problem are institutions that allow elites to credibly commit to power-sharing (e.g. Boix and Svolik, 2013). The capacity of state and non-state institutions, rather than their type, likely affects coalition formation and duration but the direction of this effect is not clear. Strong non-state organizations such as highly institutionalized party systems and communist organizations could enable opposition politicians to activate dormant cleavage dimensions, or harden active ethnic and non-ethnic identities, and thus reduce the likelihood of defections. Similarly, strong states have less of a need for oversized coalitions, yet also have the power to integrate many elites in large coalitions as argued by Slater (2010). More clearly, strong states should have more resources to withstand attempts of cleavage reconfiguration.

Another rival explanation highlights mutual cultural or policy preferences and trust as the main impetus for elites, or their supporters, to prefer certain coalition partners over others. One version of this argument points to greater cultural distance between racially distinct groups (Caselli and Coleman, 2013) or religious traditions (Huntington, 1996); another emphasizes that common identity markers imply shared policy preferences (Lieberman and McClendon, 2013). The cultural distance logic implies that multiethnic coalitions are less likely across specific dimensions – a claim I test below. Coalitions around shared identity markers may reduce policy differences and mistrust relative to coalitions separated by multiple ethnic dimensions. However, the policy and trust arguments still predict relatively small coalitions as each new member adds at least one more ethnic marker. In contrast, my theory predicts oversized coalitions around cross-cutting cleavages in anticipation of future defections and can thus account for supporter realignment detailed in studies from Africa (Posner, 2005; Ferree, 2010) and Asia (Chandra, 2004; Horowitz, 2013).[12]

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[12]It is possible that supporters do not defect because cross-cutting cleavages in the ruling coali-

Research Design and Data

The analysis in this paper proceeds in three steps. The first two consist of quantitative analyses of the government formation hypotheses ($H_{1\&2}$) and the duration hypothesis (H_3) along with competing explanations for each outcome. The last step illustrates my argument and scope conditions with ethnic coalition dynamics in Indonesia. In what follows, I focus on the complex formation stage, which forms the basis of the duration analysis.

While there are different ways to model ethnic power-sharing I build on Martin and Stevenson (2001) and the literature on parliamentary government formation in using *conditional choice models*. This family of statistical estimators models the choice situation of elites in one country at a given point in time by comparing *all* potential government coalitions rather than only the observed outcome. Conditional logit models thus combine the rigour of fixed effects estimators with the ability to capture the exact bargaining situation of each state. Rather than estimating the binary decision of coalition government versus monoethnic rule (Reilly, 2005) or the share of the included population (Wimmer, 2013, Ch.5), the estimator enables me to capture the different choice environments in ethnic majority countries such as Turkey and fragmented polities such as Chad.

My unit of analysis is the formation opportunity that includes between three and over a million government choices depending on the number of groups in a state.[13] Conditional choice models estimate the likelihood of each alternative available to leaders at each formation opportunity. Although the number of choices varies, these models weigh each formation opportunity equally. A large number of choices in one state does not disproportionally influence the estimated coefficients relative to a formation opportunity in a different state with fewer choices since each formation opportunity only counts as one unit. Similarly, the estimator accounts for a changing number of relevant groups within states over time.

I draw my sample of formation opportunities from the Ethnic Power Relations (EPR) dataset (Cederman, Wimmer and Min, 2010; Cederman, Gleditsch and Buhaug, 2013), which codes po-

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tion imply higher trust/policy agreement relative to more diverse coalitions.

[13]See Table A2 for an example. The number of coalition choices at a formation opportunity is $2^n - 1$, where n is the number of groups, as the empty coalition is excluded. Since the number of choices rises exponentially, a state like India with 20 relevant groups presents more than a million coalition opportunities compared with 3 in Trinidad and Tobago.

litically relevant ethnic groups in all states where leaders make claims on behalf of their groups, or where the state discriminates politically against any group.[14] Government coalitions are usually formed between political organizations that represent ethnic groups and EPR implicitly includes organizations. The EPR codebook notes that "[an] ethnic group is considered politically relevant if at least one political organization claims to represent it in national politics..." (Min, Cederman and Wimmer, 2008). While it would be preferable to have data on political organizations, existing datasets usually only include a much smaller number of groups or states. Moreover, some regimes included in this study legally ban all political organizations. For most military dictatorships, it would be impossible to collect organizational actor information.

I construct my dependent variable, the actual government choice, from information on the political access of group representatives to executive power. When EPR considers group representatives as included in the executive, I code the group as a participant in the actual government.[15] Token membership by ethnic elites that do not effectively represent a group does not qualify for an "inclusion" coding. Only if elites from at least two groups effectively represent their respective coethnics, does my data record power-sharing.

Drawing on its constructivist understanding of ethnicity, EPR traces the reconfiguration of ethnic group boundaries. In a number of states, ethnic groups split into smaller segments – Blacks in South Africa after the end of Apartheid – or merge into larger ones, for example, along territorial lines.[16] Ethnic groups gain or lose political relevance in national politics when elites start or cease to make claims on behalf of these groups. Similarly, the data capture changes in relative group sizes over time, for example, due to differential birth rates in Lebanon.

New formation opportunities arise under two sets of circumstances. First, the actual bargaining environment must change. This occurs whenever the EPR dataset records changes in group size, in the set of politically relevant ethnic groups, or in the power position of any group that does not affect coalition composition.[17] These events are comparable to new elections in the literature on

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[14]Discrimination is usually negative as in Apartheid-South Africa.

[15]Monoethnic regimes consist of "dominant" or "monopoly" groups. Coalition governments feature "senior" and "junior partners" (Cederman, Wimmer and Min, 2010, 93 & 100-1).

[16]Horowitz (2002, 20) describes the ethnic polarization of political allegiances between northern and southern groups in many African states.

[17]This might include a relative change within the government coalition, one group moves from

parliamentary government formation. Second, novel formation opportunities also arise when the government composition changes without any apparent alteration to the overall bargaining environment. Such reconfigurations result either from government breakdown, in which case at least one group leaves the government, or from government expansion, when at least one group enters the coalition. This situation is comparable to government collapse after a vote of no confidence in the study of parliamentary government formation. I use these changes in the ethnic composition of the executive to measure the time in years until government failure in the duration analysis.

The data then include a new formation opportunity that comprises all possible combinations of ethnic groups, and identify the realized government.[18] Although governments constantly face the possibility of failure, and thus reconfiguration, the distribution of realized governments at the formation opportunities identified above does not differ much from the distribution of formation opportunities recorded each year (see Figure A3). However, my approach is computationally more feasible. Due to such limitations, my analysis already excludes Russia/the Soviet Union and China.[19] Yet my sample still features 4,795,033 potential coalitions across 473 formation opportunities in 134 ethnically divided states between 1946 and 2009.

My explanatory variables proxy power relations through the number of groups in a potential coalition, and four dummy variables that note whether the largest group in a state is included, whether elites form single-group majority governments, oversized or minimum-winning coalitions.[20] I follow common practise and use the population share of ethnic groups to code their relative power in the coalition (e.g., Francois, Rainer and Trebbi, 2015, 467). Theories of coalition formation generally attribute a formateur advantage to the largest ethnic group in a state, which is thus an important control variable (ibid.). Moreover, Riker's (1967) "size principle" suggests that elites prefer ruling with as few other groups as possible to maximize their own share of power

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junior to senior partner status, or among excluded groups, when a previously discriminated group moves to powerless status.

[18]The online appendix provides an alternative strategy to identify formation opportunities based on changes in the institutional setup and leadership alternations that likely indicate a change in the bargaining environment. Analyses based on this sample do not alter the fundamental conclusions.

[19]The exponential growth in the number of combinations in countries with more than 40 groups translates into more than a trillion potential coalitions at each formation opportunity.

[20]Minority coalitions constitute the residual category.

and spoils. Finally, I control for path dependencies by adding a variable that measures the share of the population represented in the previous government, which drops initial formation opportunities and reduces the sample to 333 cases.

In order to measure cleavages for each potential government constellation, I collected new data on the linguistic, religious, and racial segments of each ethnic group in the EPR data.[21] As suggested by constructivist theories of ethnicity, individuals usually possess multiple identity attributes but not all of them are politically salient at the same time (Chandra, 2012). The politically relevant groups included in the EPR data usually differ from other groups on at least one but not necessarily on all ethnic dimensions. Using two ethnic groups from Nigeria as examples, Figure 2 shows that the data provide information on up to three segments per ethnic dimension. The Yoruba and Hausa-Fulani are primarily divided by language but members of both groups adhere to the Sunni Muslim faith, and they do not differ on the racial dimension.

Figure 2: Example of linguistic, religious, and racial subgroup segments for the Hausa-Fulani and Yoruba in Nigeria.
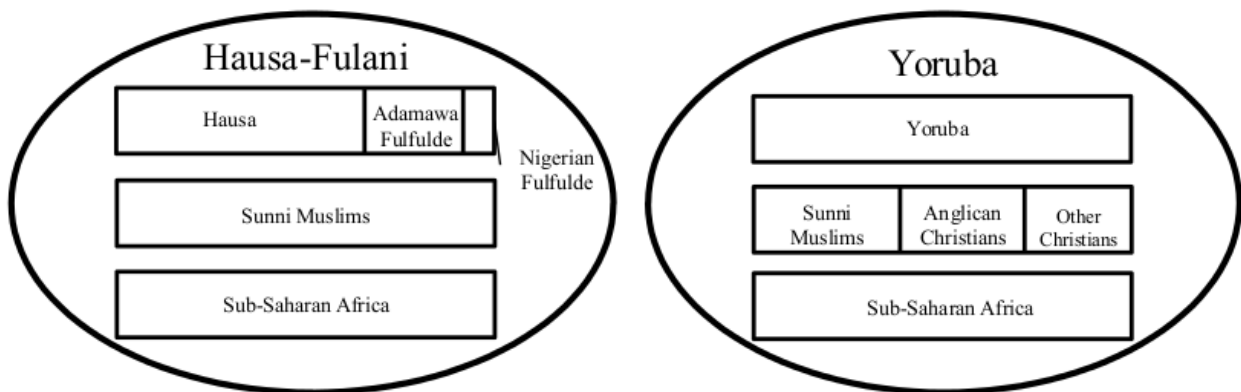
To assess the potential for members of one group to defect to elites who stress alternative identity attributes, I count the ethnic dimensions with at least one division between groups. In a potential coalition between the Haussa and Yoruba in Nigeria, the variable would take the value '2', reflecting racial homogeneity but differences on the language and religious dimensions. The coalition is thus vulnerable to splits on the two latter ethnic dimensions, for example, if Christian Yoruba would align with other southern Christians or other Yoruba-speakers and exclude Hausa-Fulani and Yoruba Muslims. I also use another operationalization that counts the sum of all cleav-

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[21]I derived most of the information from the Ethnologue catalog of languages by Lewis (2009) and the *Joshua Project: Unreached Peoples of the World* (2011) online database that codes the religious affiliation of Ethnologue groups. See the online appendix for more details.

ages by coalition. In the Hausa-Fulani and Yoruba case, the total cleavage count takes a value of '5', reflecting three linguistic cleavages and two religious divisions. The shared Sunni segment reduces the number of cleavages on the religious dimension relative to a similar coalition partner with a non-Sunni religious segment. Whereas the cleavage dimension variable provides the more conservative measure as it disregards shared sub-segments, the total cleavage count more accurately traces potential splits within groups.[22]

The duration sample only includes realized governments for each year in which the government holds office for a total of 6,390 government-years and 179 instances of changes in its ethnic composition. The analysis uses all explanatory variables from the formation stage except for lagged government membership. In addition, I control for rebellions targeted at overthrowing the government (Gleditsch et al., 2002), coups and leader age (Goemans, Gleditsch and Chiozza, 2009), as well as GDP and population variables (Gleditsch, 2002) that correlate strongly with instability (Hegre and Sambanis, 2006).[23] I employ Cox-proportional hazard models to estimate the impact of explanatory factors on the baseline hazard of coalition failure (Box-Steffensmeier and Jones, 2004).[24]

Analysis

Before turning to multivariate choice models of coalition formation and duration, I explore the global patterns of ethnic coalitions descriptively. Between 1946 and 2009, ethnic leaders formed coalitions in more than half of all formation opportunities (246). Among coalition governments, elites opted for Lijphart's grand coalition that contains representatives of all relevant ethnic groups 76 times. The Central African Republic features the smallest ethnic coalition between the Yakoma and Mbaka with just 9% of the country's population.

Figure 3 shows the distribution of realized government types in ethnically divided societies and the population shares represented in them (bottom). The pattern revealed by the bar graph is definite: the vast majority of ethnic governments are majority governments, and the combination of grand and oversized coalitions constitute the modal government type. Focusing on non-western states (grey area) further strengthens the conclusion that leaders prefer oversized coalitions over

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[22]Figure A6 plots the distribution of the two variables.

[23]Table A8 in the appendix provides summary statistics.

[24]Cox models estimate the form of the hazard rate from the data.

Figure 3: Realized governments and size of included population in 134 states, 1946–2009.
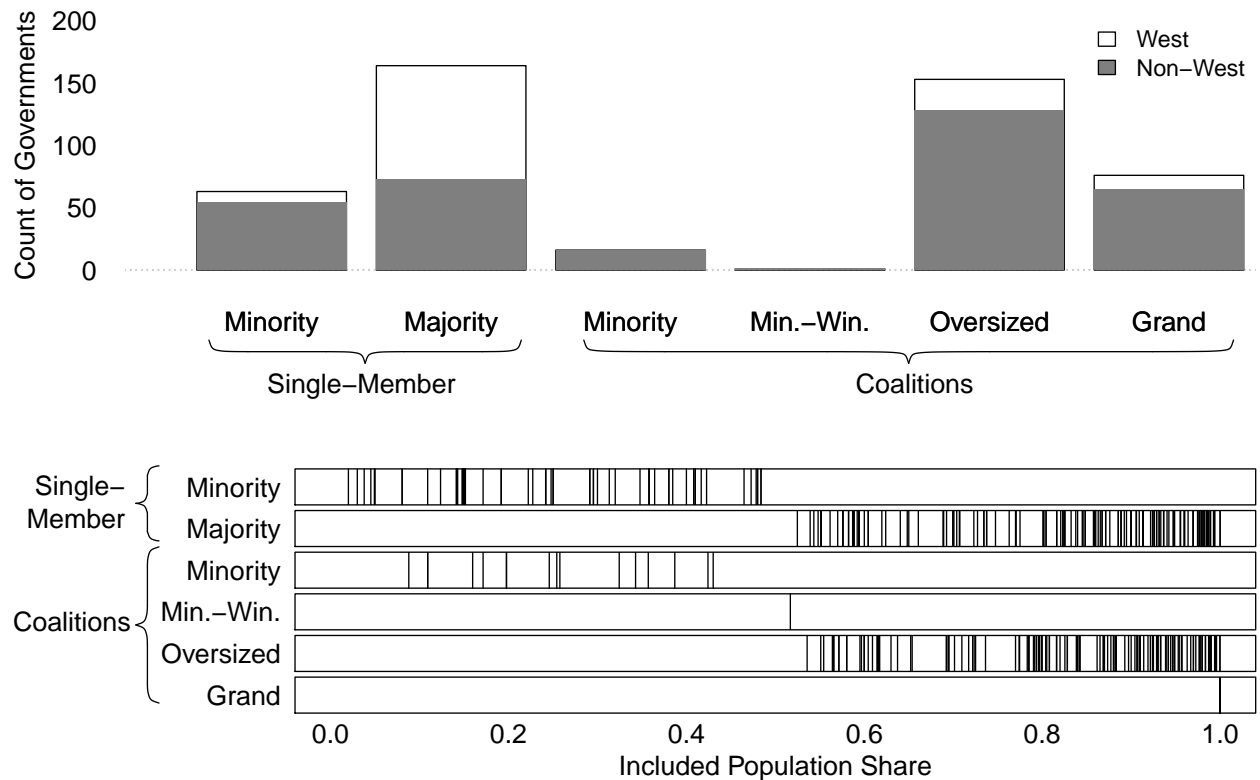
other government types and half of these coalitions even include a majority group. As the size distribution of single-member majority regimes below shows, elites generally choose monoethnic rule when they command an overwhelming demographic majority (the average is about 84% while the median is even higher). Only 14% of all monoethnic majority governments represent less than 60% of the population.

In states with a secure monoethnic majority, neither violent challenges by exluded minorities nor internal defections by coethnics present a credible threat to the dominant group. Single-group majorities prove more stable with an average duration of more than 30 years compared to oversized coalitions with an average duration of about 15 years. Oversized coalitions account for 104 out of 161 changes in government composition (64%), and for 93% of all events in which the leaders of at least one group have to leave the government. This empirical pattern is consistent with both my uncertainty logic that sees oversized coalitions as insurance against defections, and theories that link commitment problems to instability (e.g., Roessler, 2011). Whereas the commitment problem explains the frequency and stability of monoethnic majorities, it cannot explain why unstable oversized coalitions are replaced by other oversized pacts rather than single-group rule.

Coalition formation

Table 1 presents five conditional logit models that test H_1 and H_2. As indicated by the positive effects for single-group majorities and oversized coalitions across all models, governments that include groups representing more than 50% of the ethnically relevant population in a state are more likely to emerge than minority governments (the baseline category). Political elites that represent majority ethnic groups often opt to govern alone as argued by Horowitz (2002, 22). Yet many of these governments rule in European and American states, which represent successful nationalist projects (Figure 3).

Contrary to predictions of many models of coalition formation, ethnic leaders rarely choose minimum-winning coalitions. The estimated effect is statistically insignificant in all and even negative in the first three models in Table 1, implying that in some circumstances even minority rule seems more likely. Where ethnic group elites do cooperate, they overwhelmingly form oversized coalitions. Wald tests indicate that both oversized and single-majority governments differ significantly from minimum-winning coalitions ($\chi^2(1) = \{5.11^\star, 4.88^\star\}$). Overall, these models provide strong evidence in support of H_1 that expects ethnic elites to form secure majorities.

Turning to the control variables, the estimate for the largest group dummy is positive but statistically insignificant in all models, which provides weak support for a formateur advantage. In Model 1, the negative estimate for the number of groups in a coalition implies that ethnic elites try to maximize their own relative share of power with respect to other ethnic groups, even while they are building secure majorities. This negative effect also sheds doubt on Lijphart's prediction of grand coalitions.[25]

Model 2 adds a cleavage count variable to the base specification. As opposed to the estimated effect of the number of included groups, which becomes indistinguishable from zero, the cleavage effect is negative and statistically significant. Clearly, political elites prefer more homogeneous governments to more diverse alternatives. The fewer cleavages included in the government relative to alternative coalition options, the more difficult it becomes for exluded politicians to activate other ethnic dimensions that cross-cut government-opposition lines. In line with H_2, supporter defections through cleavage reconfiguration become less likely.

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[25]Figure A7 in the appendix also plots the predictions of grand coalitions from Model 1, which clearly demonstrates that they are less likely than oversized coalitions.

Table 1: Conditional logit models of coalition formation in 134 states, 1946–2009.

	(1)	(2)	(3)	(4)	(5)
Single-Group Majority	2.724***	2.193***	2.181***	1.985***	2.976***
	(0.427)	(0.420)	(0.429)	(0.511)	(0.735)
Minimum-Winning Coalition	-1.203	-0.582	-0.184		1.625
	(1.059)	(1.053)	(1.071)		(1.190)
Oversized Coalition	1.545***	1.977***	2.036***	2.116***	2.566***
	(0.407)	(0.407)	(0.411)	(0.443)	(0.630)
Largest Group	0.273	0.348	0.147	-0.065	0.607
	(0.336)	(0.337)	(0.295)	(0.353)	(0.434)
Member Count	-0.528*	-0.348	-0.295	-0.515*	0.142
	(0.218)	(0.217)	(0.224)	(0.238)	(0.262)
Cleavage Dimensions		-0.973***	-0.915***	-0.688*	-1.465***
		(0.206)	(0.255)	(0.271)	(0.429)
Past Government Share			2.710***	2.422***	3.880***
			(0.458)	(0.484)	(1.064)
Formation Opportunities	473	473	333	208	125
Potential Coalitions	4795033	4795033	4489587	279316	4210271
ℓ	-1327.874	-1276.863	-940.774	-635.622	-288.601
χ^2	95.953	118.332	107.631	67.568	79.583

Country-clustered standard errors in parentheses.

$^*\ p < 0.05$, $^{**}\ p < 0.01$, $^{***}\ p < 0.001$

Model 3 adds a variable that measures the population share included in both the previous and newly formed government. Its positive estimate indicates that incumbency exerts a strong influence on the subsequent ethnic composition of governments. Including an incumbency proxy weakens some of the other regressors – especially the largest group dummy – but does not change the substantive insights regarding H_1 and H_2.

## Alternative explanations of coalition formation

Formal rules that encourage or prescribe elite cooperation offer the most important alternative explanation to my theory. To test this proposition I rerun Model 3 on a subset of different institutional configurations. In Table 1, Models 4 and 5 display the estimated coefficients for autocracies and democracies respectively.[26] Lijphart and others expect that democracies and PR electoral rules should make minority rule unlikely while increasing the probability of ethnic coalition formation relative to single-group rule (Lijphart, 2002; Norris, 2008). Although Model 4 and 5 display some differences such as the larger estimate for single-majority governments in democracies, none of these changes differ significantly between the two subsets. The increased size of the estimated coefficient likely derives from including established nation-states in Europe and the Americas.

Figure 4 reinforces this conclusion by displaying the predicted probabilities across all formation opportunities for various government types. For each type, the plot displays the probability in democracies and dictatorships on the left (data from Cheibub, Gandhi and Vreeland, 2010), and in electoral systems within democracies on the right (data from Bormann and Golder, 2013). The bars inside the boxes indicate the median predicted probability while the whiskers represent the 90% confidence intervals.

The left panel of Figure 4 shows hardly any differences between democracies (white boxes) and dictatorships (black) in the overall patterns of government formation. Only minority rule by one ethnic group is significantly more likely in dictatorships than in democracies. The graph also confirms that ethnic elites are far more likely to form either single-group majorities or oversized coalitions than any other type of government. Again, no notable differences between democratic and autocratic rule exist within these categories. Although it seems as if oversized coalitions are even more likely in dictatorships than in democracies, the relationship is not statistically signifi-

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[26]Minimum-winning coalitions are dropped from Model 4 because none formed in authoritarian regimes. Table A12 displays the underlying regression models for the electoral distinctions.

Figure 4:   Estimated government type probabilities in democracies and dictatorships (left) and under PR and majoritarian electoral rules within democracies (right).
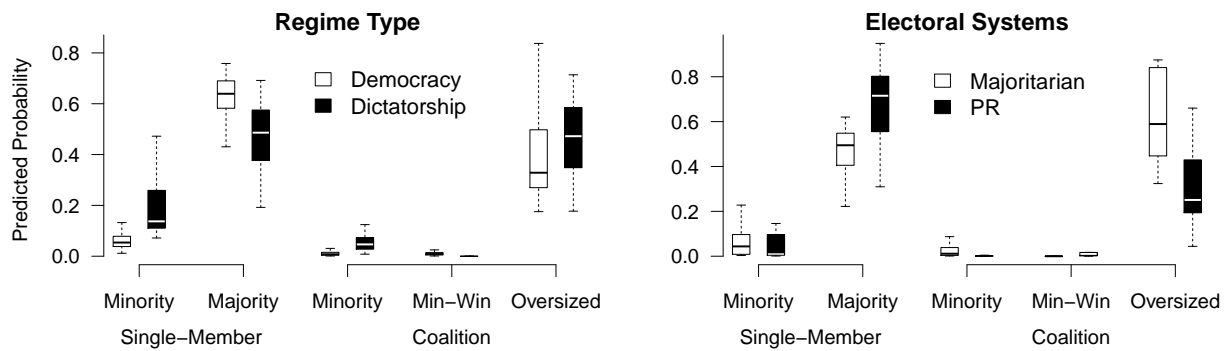
cant. Whether or not governments are elected has little effect on their ethnic inclusiveness.[27]

Several scholars agree that first-past-the-post electoral rules reduce the chances of multiethnic coalitions because even minority groups can gain a majority of parliamentary seats (Lijphart, 1977; Horowitz, 2000). The more proportional the electoral result, the greater the incentives for ethnic power-sharing. The right panel of Figure 4 compares majoritarian and PR electoral systems. It lends little support to the assertion that PR (black boxes) promotes ethnic power-sharing. Rather, majoritarian electoral systems (white) are more often associated with oversized coalitions. Even more surprisingly, ethnic leaders opt for single-member majorities significantly more often than for oversized coalitions under PR. Uncertainty about coethnic support again explains this finding. In contrast to PR systems, small changes in the vote distribution can lead to large shifts in the seat distribution under majoritarian rule and result in loss of power. Elites hedge against this possibility by forming oversized coalitions that allow them to remain in office after losing some support.[28]

Rather than differences in type, variation in institutional capacity could affect both the choice of government type and its diversity. I proxy the capacity of non-state organizations by the degree of party institutionalization and present or past communist insurgencies. In both cases, oversized coalitions become more likely as the government anticipates a greater threat from excluded groups (cf. Slater, 2010). In contrast, governments challenged by strong non-state institutions are less

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[27]Using the Polity IV by Marshall, Jaggers and Gurr (2011) instead of the DD measure and adding anocracies as a third category does not change this insight (Figure A8).

[28]In Figures A9-A11 in the appendix, I also explore variation within autocracies, specifically between civilian and military regimes, dictatorships with and without ruling parties or legislatures. The main results remain robust.

likely to form coalitions around cross-cutting cleavages, potentially because strong organizations harden identities and prevent defections (Table A19). I proxy state capacity by two historical measures: low settler mortality and a long history of statehood. Governments with greater degrees of statehood are more likely to form oversized coalitions but the relationship reverses for governments of states with low settler mortality, possibly because the data is only available for a restricted sample. Governments in weaker states pay more attention to internalizing cross-cutting cleavages regardless of the measure as they have less power to guard themselves against supporter defection (Table A20). Overall, I find some evidence that institutional capacity affects the two main theoretical mechanisms but the differences are not statistically significant.

Trust between groups that share ethnic attributes rather than the anticipation of defections offers an alternative explanation for H_2, which states that coalitions including cross-cutting cleavages should be more likely. In the absence of survey data that allows me to test this mechanism directly by comparing levels of trust between all ethnic groups within countries, I rely on existing research and my qualitative narratives. Both indicate that it is unlikely that trust accounts for coalitions in multiethnic societies. Wucherpfennig, Hunziker and Cederman (2016), for example, employ an instrumental variable strategy to demonstrate that government leaders from one ethnic group tend to include groups that pose a threat to their rule to appease them (also see Roessler, 2016, Ch.10). Trust between the biggest rivals seems an unlikely explanation for the choice of such coalition partners although more tests are needed to fully rule out this possibility.

To test the robustness of my results to modeling and sampling assumptions, I rerun the main specifications with the more complex but unbiased mixed logit (Table A9) and on an alternative specification of formation opportunities defined by institutional change (Table A10). In both cases, my results remain robust. Selection poses another threat to the robustness of my results, although, I argue, an unlikely one. If the two different sets of formation opportunities oversampled uncertain periods and countries relative to stable situations, the results would be biased towards more oversized and more homogeneous coalitions. Yet the sample of formation opportunities used above balances actual changes in government composition (54%) with changes in the bargaining environment without governmental alternation (46%; see Table A5). Moreover, formation opportunities are not more likely after coups or governmental civil wars (Table A6).

To ensure that the results are not driven by cases in which ethnicity has arguably less political

salience, I rerun Model 3 on various subsets of countries. Neither the removal of specific world regions (Table A11), nor the exclusion of states where the largest ethnic group accounts for at most 60% of the population challenges my findings. Adopting a broader definition of minimum-winning coalitions has no effects on the main insights of the formation analysis either (Table A12). I continue to find support for H_2 when replacing the cleavage dimension variable with the total count of cleavages. Other tests show no systematic relationship between any specific ethnic dimension and coalition formation predicted by cultural distance theories (Table A13).

Coalition duration

My theory predicts that elites form oversized coalitions around cross-cutting cleavages to minimize the risk of supporter defection. Empirically, governments that internalize cross-cutting cleavages should survive longer than more heterogeneous pacts with more overlap with excluded groups (H_3). Moreover, oversized coalitions should be less stable than monoethnic governments because elites form them in anticipation of defections. The Cox regression models in Table 2 estimate these effects on the risk of changes in the ethnic composition of the government. Positive coefficients indicate an increased risk of government failure.[29]

Across all specifications, governments that feature more cleavage dimensions are more likely to fail than governments formed around fewer cleavage types while controlling for the number of groups in the coalition. When coalitions include cross-cutting cleavages, and thus fewer overall cleavage dimensions, the likelihood of supporter realignment that changes the ethnic composition of the government decreases as predicted by H_3. In line with the uncertainty logic, Wald tests indicate that monoethnic governments with a crushing demographic dominance and little opportunity for defection outlast oversized coalitions in all models. Relative to the baseline category of minority governments single-group majorities are associated with a lower risk of failing, although the difference is only significant at the 10% level once I add controls for regime capacity. Similarly, oversized coalitions do not seem to outlast minority governments. However, they grow more stable as leaders add additional ethnic groups to the coalition. Whether or not a coalition includes the country's largest group does not make a statistically significant difference to government stability.

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[29]The duration models estimate the likelihood of failure of realized governments. With only one minimum-winning coalition among them, which lasted for three years, I dropped the dummy from the duration analysis.

Table 2: Cox duration models of coalition failure, 1946-2009.

	(6)	(7)	(8)	(9)	(10)
Single-Group Majority	−1.320***	−1.061*	−0.960	−1.101	−1.021
	(0.387)	(0.507)	(0.538)	(0.606)	(0.589)
Oversized Coalition	−0.208	0.174	0.291	0.258	0.240
	(0.323)	(0.423)	(0.453)	(0.502)	(0.501)
Largest Group	−0.182	−0.331	−0.330	−0.327	−0.304
	(0.339)	(0.459)	(0.485)	(0.568)	(0.547)
Member Count	−0.099*	−0.116*	−0.105	−0.116	−0.117*
	(0.049)	(0.049)	(0.062)	(0.061)	(0.057)
Cleavage Dimensions	0.711**	0.765**	0.660*	0.531*	0.616*
	(0.231)	(0.246)	(0.267)	(0.245)	(0.253)
Civil War Ongoing		0.495**	0.354*	0.366*	0.365*
		(0.155)	(0.156)	(0.168)	(0.160)
Irr. Leader Change		1.977***	1.962***	2.002***	1.970***
		(0.212)	(0.211)	(0.198)	(0.202)
Log(Leader Tenure)		0.286**	0.218*	0.348**	0.233*
		(0.094)	(0.089)	(0.112)	(0.099)
Socio-Economic Controls	No	No	Yes	Yes	Yes
DD Regime Institutions	No	No	No	Yes	No
Electoral & Party Institutions	No	No	No	No	Yes
Wald test: $\Pr(\beta_1 = \beta_2)$	<0.001***	0.002**	0.002**	<0.001***	0.001**
Observations	6,360	5,724	5,724	5,724	5,724
ℓ	−859.352	−680.765	−674.130	−663.093	−669.222

*p<0.05; **p<0.01; ***p<0.001. Displayed estimates are coefficients, not hazard ratios. Country-clustered standard errors in parentheses.

Model 7 controls for important threats to incumbent governments: ongoing governmental civil wars, coups, and the age of the current head of government all increase the risk of changes to the ruling coalition. Governments are more stable in wealthier countries while GDP growth and population size are statistically insignificant (see Table A21 for full results). Model 9 includes regime type dummies from the Democracy and Dictatorship dataset. Monarchies produce more stable ethnic power relations but other regime types differ little from one another. Finally, Model 10 introduces electoral and party-system dummies that link majoritarian electoral rules with higher government instability in line with my uncertainty-based theory.[30]

Alternative explanations of coalition duration

As in the formation stage, the most important alternative explanation of coalition stability is an institutional one, specifically in dictatorships where legislatures and parties correlate strongly with regime stability. Yet controlling for an alternative set of authoritarian and democratic institutions

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[30]Tests of the proportional hazards assumption do not reveal any violations.

does not change the robustness of the estimated effects (Table A22). Adding controls for institutional strength reduces the statistical significance of the estimated cleavage effect in some specifications while also decreasing sample size due to missing values on the institutional variables (Table A23). Neither controlling for regime change periods and foreign occupation (Table A24) nor using continuous indicators of the included population and groups rather than governmental dummies alters the basic conclusions (Tables A25-A28).

Reverse causality and selection pose two challenges to my tests of H_3. Although, a reverse causal arrow running from coalition failure to more diverse and larger coalitions seems implausible, I lagged all explanatory variables by one year. Selection is at the core of my theoretical argument: leaders prefer coalition partners with cross-cutting cleavages and, if possible, select into less diverse governments because they expect them to last longer. Both the formation and duration stage support this interpretation with their estimated cleavage effects.

Illustrating case narrative

Before concluding, I illustrate the logic of my argument by briefly describing the dynamics of ruling coalitions in Indonesia.[31] The case exemplifies ethnically diverse polities with multiple cleavage dimensions and showcases their effect on government formation and duration. I compare two regime periods in Indonesian history. General Suharto's authoritarian rule demonstrates scope conditions of my argument in the form of non-ethnic institutions and overwhelming coercive capacity. The transition period after Suharto's removal and the following democratic regime show that elites form oversized coalitions out of uncertainty over future threats, and that internalizing cross-cutting cleavages limits supporter defection.

After independence, attempts by Indonesia's first President Sukarno to create a stable multiethnic regime by appealing to Indonesian nationalism, Islam, and the multiethnic Communist Party of Indonesia (PKI) failed. Afraid of the PKI's plans for land redistribution and its growing influence among multiple ethnic groups, the Indonesian military led by General Suharto allied with religious elites from Indonesia's largest ethnic group, the Javanese, to overthrow Sukarno and kill hundreds of thousands of PKI members (Roosa, 2006, 20-33). Instead of cross-cutting ethnic cleavages highlighted by my argument, communist ideology buttressed by a strong non-state institution, the PKI, bridged ethnic boundaries. Although the mechanism seems similar to my argument, future re-

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[31]The appendix provides a more detailed narrative and adds Malaysia as a second case.

search should follow Slater's (2010) example and explore the interaction of ethnic and non-ethnic cleavages and institutions.

After the politicide Suharto's Javanese-dominated and "seemingly omnipotent state loomed above a weakened and mostly quiescent society" (Aspinall, 2005, 27-8). My theory suggests that single-group rule should only be possible when elites can count on overwhelming popular support. Yet military aid by the United States during the Cold War and the lack of any meaningful domestic challenger that could exploit Indonesia's cross-cutting Muslim cleavages had effectively created a secure majority, which ruled for three decades.

Feeling secure from external challenges, Suharto felt no need for sharing power. The Javanese religious elites that supported Suharto against the communists, started turning away from the regime and began to organize outside state institutions. During the Asian Financial Crisis in 1998, Suharto was forced out of office by an economically and ethnically diverse opposition (Aspinall, 2005, 23-5; Slater, 2010, 180-1; Horowitz, 2013, 37). Faced by massive uncertainty, mistrust among key players, and the threat of violence engulfing the country, a multiethnic, oversized coalition formed during the transition period and continued to operate after the country's transition to democracy (Horowitz, 2013, 45-8).

This change from monoethnic rule to oversized coalitions illustrates the importance of cross-cutting cleavages. Relying almost exclusively on Javanese-dominated military power, Suharto lost the support of crucial Islamic elites (Slater, 2010, 193-4), who mobilized cross-class opposition to his rule among the Javanese and outer-island ethnic groups. Excluding the cross-cutting Muslim cleavage from the ruling coalition facilitated its demise.

The logic of cross-cutting cleavages shaped political competition even more after Suharto's ouster. Political elites could count on a core of supporters bound to them via shared identity (Horowitz, 2013, 178), but failed to cement their hold on power due to the "very multiplicity [of cleavages], so that not all of them were politically active at any one time, and their considerable fluidity, so that alignments among various membership categories could shift" (ibid., 37). Thus:

> *Voter allegiances and party boundaries are both malleable. At both regional and national levels, candidates can and do defect from their parties to join executive tickets nominated by other parties, even parties from a different stream [or cultural community]. Candidate fluidity across streams, of course, induces voters who favor particular*

candidates to follow (ibid., 273).

To gain and keep presidential office, ruling elites formed multiethnic oversized coalitions that combined modernist, traditional, and secular members from the dominant Javanese group along with peripheral, generally Muslim, elites. In line with H_3, the post-Suharto ruling coalition was repeatedly returned to power despite high voter volatility. Although electoral support was also lost to newly founded intra-ethnic rivals, the relevant power shifts occurred within the coalition. The presidency alternated between members from different parties, but the ethnic composition of the ruling coalition remained remarkably stable (Slater and Simmons, 2012, 1383-4).

When intra-coalition conflict over policy intensified in 2011, some coalition partners suggested expelling disloyal members but President Yudhoyono preferred secure majorities that could survive future defections (Horowitz, 2013, 289). Cross-cutting cleavages within the coalition did not translate into greater trust among ruling elites. Competition over the spoils of office and the desire to keep them created the basis for oversized but not grand coalitions as predominantly Christian ethnic groups and some intra-ethnic rivals from different parties remained excluded.

Conclusion

In this paper, I argued that multiethnic executive coalitions frequently result from elite uncertainty about future support by their coethnics supporters and coalition partners. My findings indicate a preference for oversized coalitions that stems from the desire of elites to hold on to power in environments of incomplete information about coethnic support when cross-cutting cleavages enable membership in multiple sub-groups. Alhough my analysis reveals that leaders seek ethnic hegemony when they command large demographic or coercive superiority, it also demonstrates that power-sharing occurs more frequently than many existing studies predict (e.g., Horowitz, 2000). Yet leaders do not predominantly form Lijphart's grand coalitions either, as they balance the risks of losing office and the costs of sharing power.

My argument also predicts which specific coalition leaders will choose. My results support and complement insights from the literature on ethnic politics that show how rational individuals stress the identity marker that allows them to be a member of the smallest possible winning coalition (Posner, 2005; van der Veen and Laitin, 2012). Focusing on political elites, I argue that leaders anticipate potential defections by their coethnics. Therefore, they attempt to form coalitions between groups with cross-cutting cleavages that keep supporter defections inside the ruling coalition. In-

deed, I find that elites prefer coalitions that encompass a smaller number of ethnic dimensions, and thus incorporate more cross-cutting cleavages, to coalitions with more heterogeneous constituents and more overlap with excluded groups. I also find that the former survive longer than the latter.

My explanation that combines the role of elites and their supporters adds to recent studies that emphasize self-enforcing power-sharing coalitions (Svolik, 2009, Roessler, 2016, Ch.10), even when formal institutions designed to enforce commitments are absent. I do not find that specific institutions systematically increase the likelihood of ethnic coalition formation and only weak evidence that these institutions extend the survival of ethnic coalitions. These findings have two major implications for the literature on power-sharing and conflict research. First, future research that investigates institutional interventions to resolve conflict needs to take the cleavage landscape of societies and the resulting elite behavior into account. As Diermeier and Krehbiel (2003, 127) point out: "It cannot be stressed enough that (. . .) behavior within the institution – not just the institution in isolation – determines whether institutions are outcome-consequential, or, as is more often uttered, whether institutions matter."

Second, if my theory is correct that encompassing coalitions emerge when leaders face uncertainty, institutions that reduce uncertainty such as guaranteed government inclusion are less likely to induce de facto cooperation among ethnic leaders. Since existing research also argues that high uncertainty increases the risk of civil war (e.g., Mattes and Savun, 2010), we should expect that elites embrace power-sharing when conflict is most likely. Policy-makers who want to promote power-sharing for normative reasons of political equality thus face a dilemma. Future research needs to pay more attention to the conditions under which ethnic coalitions form and how the interaction of coalitions and institutions affect civil war risk.

Finally, focusing on ethnic coalitions allows political scientists interested in coalition behavior more generally to expand their empirical scope far beyond parliamentary democracies in Europe (e.g., Martin and Stevenson, 2001). Multiple theoretical models of coalition formation outside parliamentary democracies now exist (e.g., Acemoglu, Egorov and Sonin, 2008; Christia, 2012; Driscoll, 2012; Francois, Rainer and Trebbi, 2015). Yet only few of these theories have been exposed to the same systematic tests applied to parliamentary government formation. Ethnic divisions constitute of course only one type of political cleavage, and many scholars hold that they are exceptional (Lijphart, 1977, 238; Horowitz, 2000). Future research should focus on more complex

cleavage configurations that include economic, ideological, and intra-religious divisions and further cross-cut ethnic differences (also see Lupu and Riedl, 2012, fn.1). Only the comparative study of cleavages will allow political scientists to conclude whether or not the patterns described in this study are exceptional for ethnically divided societies, or generally prevalent in settings where elites face high uncertainty about their true support.

Acknowledgments

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