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Insurgency and credible commitment in autocracies and democracies

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Abstract: This paper suggests a new factor that makes civil war more likely: the inability of political actors to make credible promises to broad segments of society. Lacking this ability, both elected and unelected governments pursue public policies that leave citizens less well-off and more prone to revolt. At the same time, these actors have a reduced ability to build an anti-insurgency capacity in the first place, since they are less able to prevent anti-insurgents from themselves mounting coups. However, while reducing the risk of conflict overall, increasing credibility can, over some range, *worsen* the effects of natural resources and ethnic fragmentation on civil war. Empirical tests using various measures of political credibility support these conclusions.

Insurgency and credible commitment in autocracies and democracies

The literature on the determinants of civil war asks, "Under what conditions do normal politics give way to armed conflict?" Three answers to this question have been explored: resource endowments that raise the stakes of political conflict; the incapacity of government to organize a response to rebellion, including the presence of country characteristics (e.g., mountains) favorable to rebel activity; and social conditions, particularly ethnic fragmentation, that make the population more likely to acquiesce to rebel activity. The focus in this paper is on a more overtly political characteristic of countries, the ability of politicians to make credible promises to large segments of the citizenry. Evidence below suggests that different proxies for credibility distinguish conflict from non-conflict countries at least as definitively as other conflict predictors, ranging from oil to ethnic fractionalization.

Lack of credibility promotes insurgency in two ways. First, weakly credible leaders have incentives only to make policies in the interests of those few specific groups that believe their promises. Public goods are underprovided and private good provision and corruption swell in this setting. As a result, most citizens are at best indifferent between the regime in power and any challenger, facilitating the emergence of insurgency. Second, non-credible leaders are less able to build an anti-insurgency capacity, both because they cannot ensure that state forces capable of defeating insurgents will, themselves, refrain from overthrowing the government; and because they are less able to promise future rewards to anti-insurgents in return for current anti-insurgency effort. Broad political credibility simultaneously mitigates the risk of disloyalty and improves the credibility of ruler promises to anti-insurgents.

Although much of this argument flows directly from recent analyses of political market imperfections in democracies, it applies as strongly to non-democracies.[1] This is important, because the vast majority of insurgencies occur in non-democracies. The discussion below identifies features of non-democratic regimes that both lend themselves to credible commitment by unelected leaders and reduce the likelihood of conflict.

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[1] Keefer and Khemani (2005) use this term in showing how obstacles to electoral accountability explain variations in performance across two Indian states.

Political credibility and popular support for insurgency

The existing literature already points to a significant role for credibility in how civil wars start and end. Garfinkel and Skaperdas (2000) argue that political competitors resist peaceful redistribution because they cannot credibly refrain from using the benefits of redistribution to arm themselves in the future. In fact, as Walter (1997) reports, only 20 percent of civil wars have ended by agreement, nearly all which relied on third party enforcement. This paper focuses on a different aspect of credibility, common in discussions of political competition more generally, but less so in the literature on conflict: whether leaders can make credible promises to large numbers of citizens. This ability affects the probability of insurgency in three ways.

First, where rulers can make credible promises to improve the welfare of citizens broadly, popular support for the ruler deters rebellion. Second, the extent to which rulers can build an anti-insurgency capacity sufficient to suppress rebels depends on whether they can make credible promises of future rewards to anti-insurgents. Third, their willingness to recruit anti-insurgents depends on the ability of anti-insurgents to promise credibly not to undertake coups against the regime. The first point, whether rulers can make credible promises to citizens at large, is at the core of the analysis here, affecting both the threat of insurgency and the ability of rulers to contract with anti-insurgents.

The literature on democratic decision making asks how electoral accountability changes when challengers cannot make credible promises to voters. In the limit, if incumbent challengers cannot make credible promises, citizens have no reason to believe that they will enact different policies or perform better than poorly-performing incumbents. Incumbents, knowing this, ignore citizen welfare and throw themselves into rent-seeking. Ferejohn (1986) notes, however, that in real world democracies, even where credibility appears to be absent, citizens are nevertheless able to exert some electoral accountability on politicians. He attributes this ability to the possibility of voter coordination on a performance threshold: if incumbents meet this threshold, they are re-elected; if they do not, they are expelled. This type of post-electoral accountability mechanism exerts a relatively weak influence on government performance.

Persson and Tabellini (2000) extend this logic to government decisions regarding the provision of private and public goods and rent-seeking. However, the extension does not predict the particular configuration of policies that one observes in many poor – and pre-

conflict – countries: low public good provision, high private (or targeted or "clientelist") good provision, and high rent-seeking. Keefer and Vlaicu (2005) relax the assumption that credibility is an exogenous characteristic of countries and allow politicians either to make promises with the assistance of patrons (who appeal in turn to their clients), or instead, at some cost, make promises directly to some fraction of society. When costs of the latter are sufficiently high, or when patrons demand a low enough fraction of rents in exchange for their services, credible promises can be made to only a few. Policy making therefore benefits only a few, in the form of targeted policies and spending. Public goods suffer and politicians have substantial room to collect rents.

Manifestations of credible democracies include the presence of programmatic political parties and the years of continuing competitive elections. Programmatic parties are, by definition, able to attract voter support simply because of their policy stance. If they renege on the policy promises embedded in their program, they lose that ability, making the promises credible. Similarly, the greater the years of continuous competitive elections, the greater the opportunity political competitors have had to develop policy reputations with voters. The cost of losing these reputations makes more credible the commitments these competitors make to citizens at large. Keefer (2005, 2005b) finds substantial evidence that in environments where politicians are less able to make credible pre-electoral promises to most voters (where programmatic parties are absent or the years of continuous competitive elections fewer), public good provision (such as high secondary school enrollment, bureaucratic quality and unencumbered public information flows) is lower, private good provision (government jobs and public investment) are higher, and corruption is higher.[2]

In both cases, there is a continuum of political credibility from pure clientelism, where only personalized promises to a select group of citizens are credible, to democracies in which multiple political competitors can make broad promises to all citizens about all areas of policy. In intermediate cases, politicians may be able to make credible promises to large groups of citizens, but fall short of reaching most citizens. So, for example, political parties may be able to make credible promises to particular ethnic groups about redistributive transfers, but not to all citizens about improvements to the quality of education.

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[2] These analyses use the number of years of continuous competitive elections and whether or not political parties are programmatic to capture credibility; these are used here, as well.

The effects of credibility on the probability of insurgency follow immediately from this analysis. Where political credibility is limited, overall social welfare falls and the benefits of public policy flow narrowly to the small group of citizens to whom rulers can make credible commitments. To the extent that the threat of insurgency rises as welfare falls or inequity in the provision of public services increases, the threat of insurgency correspondingly rises.

The foregoing points to the serious consequences, in democracies, of the effects of political non-credibility. However, most civil wars occur in non-democracies (56 out of 71 since 1975, the period analyzed here). Credibility also has a significant role in determining regime support in the non-democracies. For example, clientelist strategies – the targeting of benefits to particular supporters at the expense of citizens at large – are a well-known staple of decision making in poorly performing non-democracies (see, e.g., Lewis 1998), just as they are in poorly performing democracies.

Like democracies, autocracies vary in their ability to make credible promises to large numbers of citizens. In many circumstances, as Haber, et al (2003) argue was the case with the Mexican autocrat Porfirio Díaz, autocrats rely on personal relationships or family ties to make credible commitments. Their ability to make credible commitments only to a narrow slice of society correspondingly reduces the quality of public policies towards the vast majority, increasing incentives to mount insurgencies. On the other hand, Gehlbach and Keefer (2006) model the incentives of unelected leaders to expand the base of supporters to whom they can make credible commitments using many of the institutional arrangements familiar from democracies. Unelected leaders can choose to share power, using some form of political checks and balances; they can make costly investments in the institutionalization of a ruling party, including transparent promotion and reward schemes for party members; they can share decision making power over the repressive power of the state; or they can allow elections (albeit with substantial limits on entry).

All of these reduce autocrat discretion over policy and facilitate their removal from office should they renege on promises. This is obvious in the case in which the ruler deliberately shares control over the repressive apparatus of the state. It is also true even for apparently technocratic decisions like investing in transparent promotion schemes for party members. The more transparent and meritocratic the scheme, however, the more difficult it is for the leader to remove party members for political reasons.

Non-democratic rulers also have the opportunity to build a programmatic reputation for the ruling party. With a programmatic reputation for a particular stance on public policies, the party further sets itself apart from potential regime opponents, who may have no credible policy stance except of opposition to the regime. The reputation might be redistributive (communism) or nationalistic (the opposition of the Mexican Partido Revolucionario Institucional, PRI, to oil privatization). As long as the policy stance is valued by some citizens who believe it, a policy reputation increases barriers to entry for regime opponents, including insurgents.

Two examples illustrate the potential efficacy of institutionalization in essentially non-democratic settings. Following the Glorious Revolution, as North and Weingast (1989) famously describe, the (non-democratic) British Crown acceded to institutional arrangements (a strengthened parliament) that tied its hands; the parliament represented a tiny fraction of all British citizens, but a considerably larger fraction of its moneyed citizens. As a consequence, investment opportunities for the members of parliament and employment opportunities for the rest of society opened up.

China moved from an era in which the top leadership's capacity for arbitrary decision making (under Mao) was nearly unfettered, to one in which the top leadership was constrained by a number of intra-party institutional arrangements. These included rules governing intra-leadership decision making (checks and balances at the top of the party) and expensive and elaborate personnel evaluation schemes that restricted arbitrary treatment of cadres by individual leaders. Such institutional arrangements increased the credibility of leadership promises to millions of Communist Party cadres, who responded to economic liberalization with massive investments, apparently convinced under the new intra-party institutional arrangements that Beijing would not expropriate the proceeds of those investments (Keefer 2006).

In China, as in Britain, the new institutions did not directly protect most of the population from arbitrary treatment by unelected leaders. However, they did extend this protection to a group of supporters far larger than a tiny coterie of family members. Investment by this larger fraction of individuals created employment opportunities for supporters and non-supporters alike that would not have existed in the absence of these institutions. This, in turn, mitigated revolutionary threats.

Despite their usefulness, institutionalized ruling parties are uncommon in non-democracies. Institutionalization require leaders to surrender authority and, therefore, rents. For example, the autocratic leader who decides to share power with a junta of nine other autocrats could see his rent share drop 90 percent. In countries with large natural resource deposits, the rents from faster growth, reduced insurgency threats and enhanced anti-insurgency capacity may be lower than the rents lost from sharing.

In autocracies as in democracies, therefore, the ability of rulers to make credible commitments to citizens broadly affects their incentives to improve social welfare generally, and correspondingly affects the probability of insurgency. The empirical analysis below examines whether, indeed, there is an association between the "institutionalization" of ruling parties in autocracies and insurgency.

Political credibility and the construction of anti-insurgency capacity

The ability of rulers to make credible promises to citizens at large has a significant effect on their ability to build anti-insurgency capacity. In particular, it allows them to make more credible promises regarding the future compensation of anti-insurgents; and it increases their confidence that anti-insurgents will not overthrow them. The first problem arises because it is difficult to use spot contracts with anti-insurgents. Leaders cannot easily observe anti-insurgency effort, nor can the timing of payoffs to anti-insurgents easily be made to coincide with the effort. Success-based compensation, necessarily *ex post*, is therefore a better way to elicit effort, but requires that ruler promises be credible.

In addition, the effort needed to defeat an insurgency may simply exceed the ruler's borrowing constraint. Assume that governments cannot borrow and that with a total effort by supporters given by E (expressed in units of rents), an anti-insurgency can be defeated, extending the expected duration of the government to T years. Anti-insurgents exert effort E provided that this effort is compensated by the government. The expected value of rents that the government receives from each additional T years of tenure is given by r; total rents are given by $R=rT$. If its assurances to supporters are credible, anti-insurgents accept future rewards for current effort and the government can expend up to R to defeat the insurgency,

prevailing if $R>E$. If these assurances are not credible, though, the government can only defeat the insurgency if $r>E$.[3]

There are two solutions to this problem. The first emerges if rulers have put in place institutional arrangements that allow them to make credible promises to large segments of the citizenry. These same arrangements allow them to make credible promises to anti-insurgents. For example, in autocracies, if the promotion criteria for party loyalists are credible (because of checks and balances inside the ruling party and heavy investments in human resource management that would be lost if the criteria were violated), so also is the reward structure for anti-insurgents, since they come from the pool of party loyalists. In democracies, if political competitors can make broadly credible promises to citizens to provide public goods, one key public good is law and order. Anti-insurgency capacity is a by-product of the provision of law and order more generally; governments that renege on their contracts with anti-insurgents undermine the provision of law and order and renege on their promises to citizens, incurring a reputation loss.

The second solution relates to the second credibility gap, the inability of anti-insurgents to credibly promise not to overthrow leaders. By offering a high enough share of rents to anti-insurgents, rulers can make the contract with them self-enforcing. Anti-insurgents have no incentive to overthrow the ruler, since the additional rents they could obtain are low relative to the costs of overthrow; the ruler has no incentive to renege on the agreement with anti-insurgents, since they can overthrow him if he does. This is an expensive solution: the rent share necessary to make it succeed may far exceed the effort anti-insurgents must invest to put down any rebellion. The cost of the solution is therefore a substantial disincentive to the formation of a large and capable anti-insurgency force (similar to the argument in Gehlbach and Keefer, 2006, that autocrats are more reluctant to institutionalize a large ruling party when the rents they sacrifice are too high).

Leaders can lower the costs of this second solution by making it more difficult for anti-insurgents to overthrow them. For example, they could increase coordination costs of anti-insurgents by creating separate and competing anti-insurgency units, by rotating unit leaders frequently, or by putting family members in command of the units. Haber (forthcoming) makes a similar argument in the context of dictators who would like to

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[3] Rulers also compensate anti-insurgents extra-contractually, by providing them opportunities for looting or drug-dealing, for example. These strategies effectively reduce R.

prevent their supporters from overthrowing them, but would still like to make credible promises to them. This strategy has two defects. It weakens anti-insurgency capacity, since uncles and brothers may be incompetent. And it potentially unravels the self-enforcing nature of the agreement, if the costs of overthrow are so great that the only credible compensation that rulers can offer anti-insurgents are less than E, the effort they will expend to put down rebellion.

Rulers who can make broadly credible promises solve the dilemma at lower cost. As ruler credibility with the whole population rises, anti-insurgents are more likely to confront citizen opposition should they mount a coup. In addition, the same institutional arrangements that allow rulers to make credible commitments to the population at large also allow them to make credible commitments to anti-insurgents not to renege on agreements with them. Credible rulers therefore have more degrees of freedom in creating multiple or competing anti-insurgent groups to mitigate the threat of overthrow.

The ability of political leaders to make credible promises to large numbers of citizens is part and parcel of their ability to deter insurgency. In democracies the key credibility question is whether voters generally believe the pre-electoral promises of political competitors. In non-democracies, the question is whether (and how many) supporters of unelected leaders believe the promises of the leadership. The prediction in either case is that the more credible leaders are to a broad segment of the population, the less likely are insurgencies.

Credibility and alternative explanations for civil war

Testing whether the lack of political credibility breeds insurgency is complicated by other prominent explanations of conflict, income and poverty, natural resource rents, and social polarization. Scholars differ regarding the precise causal chains leading from these factors to a greater risk of insurgency. In all cases, though, it is straightforward to identify an important role for the credibility of political commitments to the public, making it more difficult to disentangle the underlying influence of political credibility on civil war.

The literature offers several explanations for the significance of income per capita as a determinant of civil war. Fearon and Laitin (2003) argue that income captures government capacity to build administrative, military and police capability. This encourages insurgencies because, whether in poor or rich countries, insurgents are usually obliged to make the same

technological choices for war-fighting. They rarely control airports, for example, rendering air power useless. Richer states, on the other hand, can adopt better anti-insurgency technologies than poorer states.

This argument is plausible, but it is not clear empirically how constrained even poor countries are in their access to better technology. For example, military spending as a fraction of GDP does not fall with income per capita; if anything, it rises. Sri Lanka, India and Pakistan, despite roughly similar incomes per capita, exhibit vast differences in military spending: Pakistan spends twice as much as India and Sri Lanka 50 percent more, differences that seem more correlated with the fraction of their territory that the countries view as vulnerable to armed dispute than with differences in their incomes per capita.[4] Finally, even to the extent that income is a binding constraint on capacity, it is not clear how much of an advantage high technology buys in deterring insurgency.

Hegre, et al (2001) argue, instead, that as incomes rise, class conflicts moderate and opposing segments of society are more amenable to peaceful resolutions of their disagreements. One indicator of class-based mobilization is the existence of political parties advocating the interests of different classes. The argument here predicts that it is precisely the *absence* of such parties that makes conflict more likely. The tests below examine this thesis directly, showing that direct measures of programmatic – possibly class-based – parties *reduce* the probability of insurgency.

Political credibility may offer a more persuasive explanation for the significance of income as a determinant of conflict. Broad political credibility is a determinant of income per capita: where politicians can make more broadly credible promises, investment is less risky and public good provision higher. These policy effects are well-known to increase country incomes. Hence, omitted credibility measures create a positive association between poverty and insurgency. Credibility also explains why state capacity is greater in higher income countries: state capacity is a public good that broadly credible politicians have a greater incentive to provide. For example, law and order and strong administrative capacity, from which anti-insurgency capacity springs, benefit all citizens. The earlier discussion predicts that such public goods will be under-provided in low credibility states. In fact,

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[4] India, with purchasing power parity-adjusted income per capita of $2,312 in 1999, is richer than Pakistan, with income of $1,818, but poorer than Sri Lanka ($3,229).

Keefer (2005) presents evidence that the rule of law and bureaucratic quality are both lower in low-credibility democracies.

The political advantages of making broadly credible commitments are also fewer in poorer countries. Poorer voters are more susceptible to targeted transfers than richer voters (Dixit and Londregan 1996). The political advantages of relying on clientelist strategies that target the few voters who believe politician promises are therefore greater in poorer countries, reducing political incentives to invest in credibility, but also increasing insurgency incentives and giving rise to an association between insurgency and income that runs through political credibility. [5]

Natural resource rents are another prominent determinant of insurgency. Collier and Hoeffler (1998) and Elbadawi and Sambanis (2002) argue that access to these rents is both a goal of rebel movements and a way for rebel movements to finance themselves. Political credibility affects the influence of rents on insurgency in several ways, however. Rents increase insurgency risk by reducing ruler incentives to build the institutions that allow them to make credible commitments. In fact, there is a strong negative correlation between those countries coded by Fearon and Laitin (2003) as oil exporters and the variables used below to capture the extent to which politicians can make broadly credible promises to voters.

The introduction of rents also encourages rulers to dismantle pre-existing institutions that allow them to make credible commitments, increasing the risk of civil war. When natural resource rents rise, the benefits to rulers of credible institutions (their share of rents from higher investment) fall relative to the costs of these institutions (the natural resource rents they must share). Their preference is therefore to reduce the share of the population benefiting from these institutions when rents increase. Moore (2004) provides an illustration of the discovery of oil leading to new and more circumscribed institutional arrangements. Prior to the discovery of oil, Kuwaiti merchants shared control with the sheiks of the dominant al-Sabah family: "Manpower and financial power gave Kuwaiti merchants an early sense of equality with the ruling al-Sabahs. . . Commerce was not viewed as subordinate to politics. Indeed, politics needed commerce (p. 31)." However, with the discovery of oil in 1938, "The elected municipality board, which had served as an *asil* [elite] merchant enclave

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[5] The fact that the lack of political credibility might be both a cause and consequence of low incomes suggests the possibility of a credibility-based poverty trap. Keefer and Vlaicu (2005) anticipate such a possibility, proving that where the costs to politicians of clientelist electoral strategies are sufficiently low, they will delay the investments needed to make their promises broadly credible.

since 1932, was replaced with an appointed board of shaikhs. As royal family members took control of government ministries, merchant committees within those bodies, designed to provide policy input, were disbanded (p. 42)."

However, those who are protected under the umbrella of credible institutions (say, members of the ruling party) are better able to organize themselves to oppose the ruler than citizens at large. We might therefore observe, at least over some range of these institutions, a *greater* incidence of civil war among countries with more credible institutions and greater natural resource rents. Specifically, when the share of the population benefiting from these institutions is initially low, leader efforts to reduce this population affects few citizens: violence associated with such changes is unlikely to be so extensive as to be recorded as a civil war. Over some medium range, though, the violence associated with ruler efforts to reduce this population are more likely to be manifested as civil war. However, when the share of this population is high, rulers simply do not propose large changes in the institutional arrangements: the high risk of successful insurgency exceeds their potential gains in rent share. This is consistent with notable natural resource success stories, such as Norway, that exhibit both high natural resource rents and political credibility. Norwegian institutions of political credibility included multiple political parties able to make credible promises to all Norwegians.

The essential endogeneity of institutional arrangements drives the counter-intuitive result that higher quality institutions (those that make political commitments credible) might be associated with a heightened risk of civil war when higher natural resource rents are observed. This conclusion contrasts with others in the literature that point to the mitigating effect of high quality institutions on the resource curse. Mehlum, et al. (2006) argue that the effect of natural resource rents on growth may actually be positive when institutions are friendly to producers. By institutions, however, they mean secure property and contractual rights. These are also endogenous choices of rulers, however.

Robinson et al. (2006) conclude as well that high quality institutions mitigate the natural resource curse. In their work, high quality institutions are those that restrict ruler ability to distribute natural resource rents as patronage. Key to patronage in their model is the (exogenously given) ability of rulers to make credible promises to some groups in society and not others. If rulers can offer no credible promises of patronage to anyone, the

distortionary effects of natural resource rents diminish. As in the analysis here, more credibility implicitly worsens the resource curse in their model.

Scholars have found, using various measures, that polarization is also a determinant of civil war (Reynal-Querol 2002 and Soysa 2002). Sharp differences in policy preferences across social groupings create social cleavages that increase insurgent pressures. Social polarization is endogenous to political decision making, however. The credibility arguments here explain one way in which politics and polarization interact. Non-credible politicians seek to expand the set of citizens to whom they can make credible commitments. In socially fragmented countries, the low cost way for them to do this may be by making ethnic or religious appeals. Politicians build a reputation for policy stances favoring particular ethnic groups, but in broadening the reach of their credible commitments, they exacerbate political polarization. Van de Walle (2003) documents this in the case of emerging African democracies, where he finds the overwhelming organizational principle of new political parties is ethnic or linguistic.

The effect is, as with natural resources, non-linear. In purely clientelist political systems, even if politicians make personalized promises exclusively to members of one social group, most members of that group will not benefit from them. Political competition therefore does not exacerbate social polarization. In political systems where politicians can make credible promises to all citizens, they compete on the base of broad issues such as growth or education quality, or on multi-dimensional issues that cross social cleavages. Again, political competition does not exacerbate social polarization. In intermediate cases, however, where politicians can make credible commitments only to specific ethnic or religious groups, competition for office worsens polarization.[6]

The two kinds of fragmentation considered here, religious and ethnic, differ in an important respect. The organization needed to generate social polarization out of social fragmentation *already exists* in the case of religious fragmentation, since religious groups are, in most cases, already organized. Religious polarization requires only that the leaders of religious organizations adopt a political agenda. Institutions of political credibility are not a

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[6] The analysis in Robinson et al. (2006) is analagous: if politicians can offer no credible promises of patronage to anyone, they point out, the distortionary effects of natural resource rents diminish. On the other hand, as is well-established in the literature reviewed earlier, when politicians can make credible promises to the whole population, competition for citizen support forces political competitors to pursue policies that improve social welfare more broadly.

necessary condition for religious polarization. This is not the case with respect to ethnic fragmentation: ethnic groups are politically organized only if politicians organize them.

Measuring credibility

The estimations below use political measures that are new to the conflict literature: the continuous years of competitive elections; years in office of the executive and the age of the largest government party; and a dichotomous variable tracking whether the main government party is programmatic or not. Each of these indirectly measures the degree to which politicians can make credible promises to citizens. The years of continuing competitive elections is from the Database of Political Institutions (Beck, et al. 2001) and covers the period 1975-2004. This variable takes a zero in countries where leaders have not been elected by competitive elections (elections in which multiple candidates compete in legislative and executive elections and none gets more than 75% of the vote, as judged by the Legislative and Executive Index of Electoral Competitiveness from the DPI).

The continuing years of competitive elections have a striking effect on a broad array of policy outcomes, ranging from corruption and bureaucratic quality to government control of the print media and public investment (Keefer 2005). The only theoretical explanation that fits this pattern of results (younger democracies provide fewer public goods, more targeted goods and are more corrupt) is that politicians in younger democracies are less able to make credible promises to a large fraction of the electorate (Keefer 2005).

The difference between the age of the largest government party and the years in office of the executive are measures of party institutionalization. Parties are more institutionalized the less dependent they are on individual leaders. From the foregoing discussion, we expect that where the government party is older than the executive's tenure in office, it is more likely that party institutions can constrain the executive from reneging on agreements with party members. The larger is the age of the party relative to the executive's years in office, therefore, the lower should be the likelihood of conflict.

The final political variable that is considered below is dichotomous, indicating whether the main governing party is programmatic. The DPI indicates whether parties can be judged as right, left, or center. If they can be, this is an indication that they can make more programmatic appeals to citizens. The DPI assessment of this variable is based on sparse information. However, Keefer (2005b) compares this variable to detailed regional

studies of programmatic parties (e.g., Jones 2005 in Latin America and Kitschelt, et al. 1999 in Eastern Europe) and finds a high correlation. Moreover, in this same study, he presents evidence that the extent to which countries exhibit programmatic parties has a similar impact on government policy choices as the number of years of continuing competitive elections.

All of these regime characteristics are new to the conflict literature, which generally uses the degree of democratization to characterize polities, as measured broadly by the 20 point Polity democracy-autocracy measure (Jaggers and Gurr 1995). Although Polity has much greater year coverage than any other political dataset, it does not have data on political parties that are an essential element of the analysis here. In addition, the Polity democracy-autocracy measure are more difficult to interpret than the DPI variables. The Polity democracy measure is a composite of other Polity variables, each assigned a weight and then added together to give the final democracy score. By construction, similar democracy measures over time can be associated with significantly different configurations of the component indicators, as long as they add up to the same final number. Similarly, quite different models for constraining executives or electing leaders could drive similar values of the component variables that comprise the democracy measure.

Finally, the qualitative nature of the Polity variable also makes it more susceptible to bias. This is particularly important in civil war research. Hegre, et al. (2001) and others, for example, find that countries with intermediate values of the Polity measure are most vulnerable to civil war. Their operationalization of the Polity measure is common in the literature. However, countries can fall into the intermediate category for several reasons. One is the violent overthrow of the regime, which leads Polity evaluators to downgrade the country with respect to the institutionalization of political competition (PARREG), one of the elements of the Polity democracy index. To the extent that this is the case, the Polity measure is, by construction, endogenous to insurgency.

Data and Specification

While the political measures used in the analysis below are new to the conflict literature, the measure of insurgency, control variables and the econometric specifications used follow the literature closely. Specifically, the core specification uses the Correlates of War conflict data (Doyle and Sambanis) and the control variables employed by Fearon and Laitin (2003), where further details on these variables can be found. Among the criteria to

determine whether a country experienced civil war are these three: the conflict caused more than 1,000 deaths, it threatened the sovereignty of the state, and rebel opposition to the state was militarily organized.

The approach here follows Fearon and Laitin (2003) and others, using a logistic specification to estimate the following:

(Onset of Conflict)$_{it}$ = f(political variables, income/capita, ln(population), ln(mountainous), oil, ethnic fractionalization, religious fractionalization, and the non-contiguity of state territory)$_{i,t-1}$ + ε_{it}.

Population and geographical variables capture the ease of mounting an insurgency; oil a dummy variable constructed by Fearon and Laitin indicating whether a country is a significant oil exporter; and fractionalization variables proxy for social polarization.[7] All variables are measured the year before the onset of conflict in year t.

A key issue in specification and sample selection is the treatment of three determinants of conflict that the earlier discussion suggests are likely to be endogenous to political credibility: income per capita, ethnic and religious fractionalization, and oil. For example, the earlier discussion indicates that credibility is more difficult to build when incomes are low; and low credibility inhibits public policies that would accelerate growth and investment. Controlling for income therefore spuriously drives out the credibility effects captured by the political variables used here. Nevertheless, in all but one set of regressions, all of these variables are included in all specifications.

The exception is the specifications that use the whole sample of countries, rich and poor. In these, no political variables are significant when income per capita is included; income is therefore always omitted in the sample of all countries. The omission of income has two possible consequences. First, it prevents us from observing the effects on insurgency of those components of income that are exogenous to political credibility. That is, even across countries that lack growth-promoting political institutions, incomes vary significantly. This is because countries vary in their endowments (size, natural resources, proximity to richer countries). Income is a worse proxy for these endowments when the

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[7] Fractionalization variables also enter in other ways in the literature to better capture polarization as defined axiomatically by Esteban and Ray (1994): quadratically, in Keefer and Knack (2002), or transformed according to a formula that links fractionalization more precisely to their formalization of polarization, in Reynal-Querol (2002). The focus here, however, is on the political variables and the linear specification was retained.

institutional environment is better, since this raises the fraction of income that is dependent on the institutional environment rather than natural endowments. The analysis below therefore considers poorer countries separately, adding a control for income per capita.

This strategy recognizes that the vast majority of civil wars occur in countries that are poorer than the world median in the year that they occur. In the period 1975 – 2000, 57 conflicts broke out in countries with income per capita at or less than the world median. Moreover, of the remaining 15 countries in which conflict occurred, nine had no income data. Of these, at least six were near or below the median per capita in the year before war broke out.[8] Examining poorer countries separately is therefore a sensible estimation strategy regardless of concerns about spurious multicollinearity in the right hand side variable, unless one has strong priors that the dynamics of civil war are on average the same in poor and rich countries. The arguments above suggest that these priors should be in the opposite direction, however.

The second hazard of omitting income per capita is the possibility that income captures non-political determinants of civil war that are themselves correlated with the political variables. In this case, the omission of income gives rise to a spurious correlation between the political variables and the probability of insurgency. This hazard seems slight, however. In fact, the foregoing arguments make a strong argument in the opposite direction: that the effects of income per capita advanced in the literature are more appropriately tested precisely with the political variables employed here.

Does political credibility reduce the risk of conflict?

Table 1 presents estimates of the effects of political variables for all countries. All of the political variables are significant in each of the three specifications in Table 1. Their effects are also economically meaningful. To see this more clearly, the table reports the odds ratios, constant across parameter values, rather than coefficient values.[9] The presence of a programmatic governing party reduces the odds of conflict by half relative to the odds in countries lacking a programmatic governing party. Every additional year by which the age of

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[8] Azerbaijan, Moldova, Georgia, Liberia, Afghanistan and Yemen.

[9] The odds ratios tell us how the odds of conflict change after a one-unit increase in the independent variable relative to before the increase. That is, if the odds prior to the change in variable are 3:1 and the odds after are 4:1, the odds ratio is 1.33. The marginal effects of coefficient changes estimated from logistic specifications depends on parameter values.

the governing party exceeds the years a ruler has been in office reduces the odds of conflict by approximately two percent a year.

Among other determinants of insurgency, oil is statistically significant in only one regression; religious and ethnic fractionalization are significant determinants of insurgency in all cases. Consistent with the earlier arguments that these operate through their credibility effects, the omission of any of them substantially boosts the significance of the two party variables. Population size is also significant: countries with larger populations have a greater likelihood of experiencing conflict in this specification, as others have found.[10]

More than 85 percent of conflicts occur in poorer countries. It is reasonable to suspect, therefore, that different processes might generate insurgency in poor countries and to ask whether the determinants of insurgency are the same in richer and poorer countries. Table 2 reports the results of regressions that, in every year, consider only countries at or below the median income. These specifications *include* income per capita; the political results strengthen if income is excluded, as in Table 1. Nevertheless, despite the presence of income per capita, the relevant political variables are highly significant and the odds ratios are little changed from the results in Table 1.

Equally important, however, is that the significance of other commonly investigated correlates of rebellion changes substantially in poorer countries. Though income is significant in the sample of all countries, it is insignificant in the sample of poor countries in Table 2. It appears that income effects are driven by the complete absence of conflicts among the richest 30 percent of countries, excluded in Table 2. The effects of oil exports and ethnic and religious fractionalization all fall significantly compared to Table 1. This is not due to the inclusion of income per capita; if income is excluded, ethnic fractionalization and oil exports remain insignificant.

The hypotheses related to the institutionalization of political parties are relevant to both democracies and non-democracies. Since most civil wars occur in non-democracies, Table 3 reports the results of tests only among non-democracies (the years of continuing competitive elections are omitted, since they are obviously meaningless in the context of this subsample). Two sets of regressions are presented, those looking only at democracies using

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[10] Collier and Hoeffler (1998) attribute this to the increased desire for secession in larger countries. Fearon and Laitin (2003) point to the greater difficulties that larger populations create for control by the state. The argument in this paper suggests a third explanation: the costs to politicians of making credible appeals to citizens rises with population size.

the specification of Table 1; and those looking only at poor non-democracies, using the specification of Table 2.

The presence of a programmatic governing party has an even stronger effect on outcomes (the presence of a programmatic party lowers the odds of conflict more than in Table 2), whether one looks at all non-democracies, or only poor non-democracies. The same is true for the party age variable, looking only at poor democracies. While the party age variable is insignificant in the sample of all non-democracies, other common determinants of conflict are uniformly insignificant across all four regressions. Income per capita is insignificant in the sample of poor non-democracies. The magnitudes of the effects of oil exports and religious and ethnic fractionalization drop substantially; they are insignificant in both sub-samples. Only population, among the alternative explanations of insurgency, continues to matter.

Do credible institutions exacerbate the effect of oil on conflict?

The earlier discussion predicts, first, that oil rents discourage rulers from adopting institutions that ensure broad political credibility. Second, to the extent that those institutions already exist, rulers have incentives to reverse them in order to increase their rents from the natural resources. The presence of these institutions therefore may increase the probability of civil war when natural resource rents are high.

Evidence supports both of these contentions. Each of the three indicators of political credibility is significantly lower in oil exporting than non-oil exporting countries, controlling for other broad country characteristics that might influence regime choice, including income per capita, land area, the fraction of the population that is rural and the fraction that is young. In these simple estimations oil exporters exhibit, on average, 7.5 fewer years of continuous years of competitive elections; 15 years less difference between the age of the governing party and the years in office of the executive; and a 16.6 percent lower probability of exhibiting a programmatic ruling party. Ross (2001) similarly finds that fuel exports as a fraction of GDP reduce the Polity measure of democracy.

The second implication of the earlier discussion is that over some range, increases in the fraction of society protected by institutions of credible commitment exacerbate the effects of natural resource rents on conflict. higher rents give rulers incentives to dismantle institutions, but since the beneficiaries of these institutions are better organized than citizens

generally, they have more opportunity to launch an organized military response. The threshold value of the institutional variables at which this ceases to be true (at which rulers refrain from responding to rent increases by changing the rules of the game because the share of the population that benefits from institutions of credible commitment is so large) cannot be specified *ex ante*. However, one can reasonably assume that the richest countries are also the countries in which the highest fraction of society is protected by institutions of credible commitment.

To evaluate this hypothesis, the regressions in Tables 1, 2 and 3 are augmented with an interaction term between the political variable and oil variable. The interaction is expected to be positive (increasing the probability of conflict) as long as the political variable is below the threshold at which the ruler decides the risk of civil war outweighs the potential rent gains. To the extent that the effect is non-linear and that countries with the highest incomes are those where institutions protect the largest fraction of the population, we expect the interaction term to be least significant in the Table 1 regressions, including all countries, than in the other regressions.

The first three columns of Table 4 report just the interaction coefficients between the oil dummy and the corresponding political variable from the corresponding augmented regressions in Tables 1, 2 and 3. As before, the odds ratios are reported: odds ratios greater than one and positive indicate that political institutions exacerbate the odds of civil war when oil rents increase. As expected, in the sample of all countries, including those for which institutional coverage extends to most citizens, the interaction is weakest, though still highly significant in the case of programmatic parties. However, among poor countries and non-democracies, rich and poor, six out of seven interactions are statistically significant (and the seventh nearly so): natural resource rents have a significantly more negative effect in countries with higher values of the credibility variables.

Do credible institutions exacerbate the conflict effects of social fragmentation?

The variables used to capture social polarization in the literature and in the regressions here describe the *possibility* of polarization, as given by the distribution of ethnic or religious types in the society. The earlier arguments suggest that fragmentation should result in polarization (and, hence, insurgency) only when politicians can make credible promises to treat some social groups systematically better than others. The fragmentation

variables are therefore more likely to turn into polarization and to drive insurgency in more credible political settings. To see if this is true, an interaction term between fragmentation and political variables are added to the regressions in Tables 1, 2 and 3. As in the natural resource case, the interaction effect should be insignificant above an institutional threshold that cannot be identified *ex ante*. For the same reason, the interaction term is expected to be least significant in the Table 1 sample that includes the richest countries, where the most citizens are likely to be protected by institutions of credible commitment.

The first three columns of Table 4 report the estimated interaction coefficients of ethnic fragmentation and political variables from the corresponding regressions in Tables 1, 2 and 3. The earlier discussion concluded that the political variables are not necessary conditions for religious fragmentation to become religious polarization since religions, for the most part, are already organized. Consistent with this, religious interaction terms are nowhere significant and are not reported. As in the natural resource case, the ethnic interaction term is least significant in the sample including the richest countries. Nevertheless, the interaction with programmatic parties significantly increases the risk of civil war. The interaction term is significant in five of the remaining seven cases. Taken together, the results in Table 4 provide strong evidence that, although the political variable reduces the odds of conflict, this effect is weaker the more a country is ethnically fragmented or endowed with natural resources.

Institutions of credible commitment versus constitutional institutions

Reynal-Querol (2002) concludes that more inclusive democracies (those with proportional representation as opposed to majoritarian or presidential systems) limit the odds of ethnic civil war. With only fifteen democracies experiencing civil war in the data used here, these propositions are difficult to investigate. However, the Database of Political Institutions contains variables with which to examine at least the robustness of the credibility variables of concern here and to revisit the question of how institutions affect conflict. The three key variables are controls for whether countries are parliamentary, or presidential or semi-presidential; whether they are majoritarian, as reflected in their district magnitudes (low indicates more majoritarian) and whether they use plurality or majoritarian electoral rules.

The addition of these formal institutional variables has no effect on the results reported in Tables 1 and 2: the significance of the credibilty variables is little changed. The

effect of these formal institutions on the probability of civil war also differs from previous research. Neither district magnitudes nor electoral proportionality are significant determinants of insurgency. Regime type has a significant effect, but contrary to expectations, the odds of a conflict occurring are significantly *higher* in parliamentary systems. This result contrasts with predictions in the insurgency literature, and is related to an ongoing debate in the literature regarding the stability of presidential and parliamentary systems. Cheibub (2006) also finds that presidential systems, contrary to received wisdom, are not less stable once one controls for whether democracy is preceded by military government or not.

Conclusion

The credibility of political promises plays a crucial role in "normal" politics. The evidence presented here shows that it also heavily influences the transition from normal politics to civil war. In both democratic and non-democratic countries, where political actors are unable to make credible promises to a sufficient fraction of citizens, not only does the tolerance for insurgent movements increase (because incomes are lower and public policy more likely to be welfare-reducing when political competitors are not credible), but the willingness of governments to build anti-insurgency capacity declines. As a consequence, and whether proxied by the age of the ruling party or whether it is programmatic, or by the years of continuing competitive elections, political credibility significantly reduces the probability of civil war.

At the same time, though, countries in which politicians are partially credible are more vulnerable to civil war caused by social polarization or natural resource rents. Politicians seeking to expand their ability to make impersonal credible commitments in the context of an ethnically fragmented society may be tempted to build links with particular ethnic groups, giving them incentives to make ethnically-targeted policies that polarize society and trigger civil war. An increase in natural resource rents, on the other hand, leads rulers to dismantle institutions that allow them to make credible promises to a larger fraction of the population. This again increases the probability of civil war. It is in this sense of partial credibility that notions of partial or incompletely consolidated democratization may pose special risks of violence and civil war.

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Table 1:   Credibility, omitting income per capita

Dependent variable: conflict onset (0-1)			
Age of the largest party – Years in office	.987 *(0.04)*		
Years of continuous competitive elections		.959 *(0.02)*	
Largest government party programmatic? (1-0)			.507 *(0.05)*
Income/capita			
Ln(Population)	1.186 *(0.06)*	1.145 *(0.12)*	1.175 *(0.07)*
Oil	1.797 *(0.04)*	1.466 *(0.15)*	1.387 *(0.31)*
Ethnic fractionalization	3.036 *(0.05)*	2.890 *(0.07)*	3.486 *(0.03)*
Religious fractionalization	4.174 *(0.05)*	4.074 *(0.04)*	3.301 *(0.06)*
*N (*country-years*)*	2603	2822	2847
Log-likelihood	-272.233	-298.801	-310.844
Pseudo R^2	0.059	0.057	0.054

Note: Logistic estimation with clustered standard errors. All time-varying independent variables lagged one year. Odds-ratios reported with *p*-values in parentheses: *coefficient values below one indicate the odds of conflict increase with increases in the corresponding variable. p*-values for years and party age calculated assuming the interaction term is zero. Political variables from the Database of Political Institutions, conflict variables from Correlates of War, and control variables from Fearon and Laitin (2003). All variables are from year *t-1*, where the crisis year is *t*. Other independent variables (non-contiguous state territory, mountainous terrain) and constant not reported.

Table 2: Credibility effects in poor countries

Dependent variable: conflict onset (0-1)			
Age of the largest party – Years in office	.982 *(0.04)*		
Years of continuous competitive elections		.968 *(0.10)*	
Largest government party programmatic? (1-0)			.572 *(0.11)*
Income/capita	.597 *(0.14)*	.631 *(0.16)*	.653 *(0.20)*
Ln(Population)	1.178 *(0.07)*	1.135 *(0.21)*	1.155 *(0.10)*
Oil	1.558 *(0.21)*	1.266 *(0.55)*	1.152 *(0.72)*
Ethnic fractionalization	.687 *(0.54)*	.967 *(0.96)*	.926 *(0.89)*
Religious fractionalization	2.741 *(0.20)*	2.33 *(0.29)*	2.961 *(0.14)*
*N (*country-years*)*	1272	1353	1377
Log-likelihood	-185.416	-203.590	-211.887
Pseudo R^2	0.047	0.034	0.043

Note: Logistic estimation with clustered standard errors. All time-varying independent variables lagged one year. Odds-ratios reported with *p*-values in parentheses: *coefficient values below one indicate the odds of conflict increase with increases in the corresponding variable.* *p*-values for years and party age calculated assuming the interaction term is zero. Political variables from the Database of Political Institutions, conflict variables from Correlates of War, and control variables from Fearon and Laitin (2003). All variables are from year *t-1*, where the crisis year is *t*. Other independent variables (non-contiguous state territory, mountainous terrain) and constant not reported. Poor countries in year *t* are those with incomes below world median in year *t*.

Table 3: Credibility effects in non-democracies

Dependent variable: conflict onset, (0-1)	All non-democracies		Poor non-democracies	
Age of the largest party – Years in office	.990 (0.35)		.980 (0.09)	
Largest government party programmatic? (1-0) (*gov1rlc_dum*)		.469 (0.05)		.407 (0.04)
Income/capita			.597 (0.20)	.680 (0.32)
Ln(Population)	1.277 (0.06)	1.250 (0.04)	1.298 (0.09)	1.224 (0.15)
Oil	1.314 (0.41)	1.080 (0.82)	1.049 (0.94)	.883 (0.83)
Ethnic fractionalization	1.519 (0.51)	1.520 (0.52)	.536 (0.38)	.656 (0.50)
Religious fractionalization	3.623 (0.16)	2.820 (0.20)	2.399 (0.41)	2.093 (0.45)
*N (*country-years*)*	1553	1678	1019	1058
Log-likelihood	-202.658	-215.868	-149.379	-156.230
Pseudo R^2	0.038	0.040	0.041	0.046

Note: Logistic estimation with clustered standard errors. All time-varying independent variables lagged one year. Odds-ratios reported with *p*-values in parentheses: *coefficient values below one indicate the odds of conflict increase with increases in the corresponding variable.* *p*-values for years and party age calculated assuming the interaction term is zero. Political variables from the Database of Political Institutions, conflict variables from Correlates of War, and control variables from Fearon and Laitin (2003). All variables are from year *t*, where the crisis year is *t+1*. Other independent variables (non-contiguous state territory, mountainous terrain) and constant not reported. Poor countries in year t are those with incomes below world median in year *t*.

Table 4:   Credibility, natural resources and social polarization

Dependent variable: conflict onset	Oil exporter interacted with			Ethnic fragmentation interacted with		
Specification and sample:	Party age – years in office	Years of elections	Program-matic party?	Party age – years in office	Years of elections	Program-matic party?
All countries (Table 1)	1.01 (.69)	.98 (.74)	**5.04 (.01)**	.99 (.687)	1.14 (.224)	**22.16 (.001)**
Poor countries (Table 2)	**1.09 (.011)**	**1.35 (.085)**	**8.20 (.001)**	**1.05 (.077)**	**1.32 (.039)**	**17.46 (.013)**
All non-democracies (Table 3)	**1.01 (0.759)**	NA	**4.26 (.081)**	1.00 (.913)	NA	**16.76 (.055)**
Poor non-democracies (Table 3)	1.07 (.112)	NA	**6.06 (.052)**	**1.06 (.076)**	NA	10.97 (.18)

Note: See notes, Tables 1 – 3. Each cell contains the estimated coefficient of the interaction term added to the regression specification in the corresponding table; each cell represents a different regression. Coefficients are odds-ratios; *p*-statistics are based on robust, clustered standard errors.