Critical Junctures: Independence Movements and Democracy in Africa*

Omar García-Ponce
University of California, Davis
ogarciaponce@ucdavis.edu

Léonard Wantchékon
Princeton University
lwantche@princeton.edu

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Abstract

We show that current levels of democracy in Africa are linked to the nature of its independence movements. Using different measures of political regimes and historical data on anti-colonial movements, we find that countries that experienced rural insurgencies tend to have autocratic regimes, while those that faced urban protests tend to have more democratic institutions. The statistical association between the type of independence movement and democracy is robust to a number of potential confounding factors and sensitivity checks. Furthermore, we provide evidence for causality in this relationship by using an instrumental variables approach and a difference-in-differences design with fixed effects. These findings suggest that urban protests enabled participants to develop norms of peaceful political expression, which provided cultural bases for liberal democracy. In contrast, armed rebellions generated a culture of political exclusion that perpetuated the use of violence as a form of political dissent.

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1 INTRODUCTION

The notion that economic prosperity drives political development in the form of democratic change is both intuitive and normatively appealing. Following the seminal work by Lipset (1959), several social scientists have looked at the relationship between development and democracy by focusing on the role of income (Barro, 1999; Benhabib, Corvalan and Spiegel, 2011; Londregan and Poole, 1996), growth (Papaioannou and Siourounis, 2008; Przeworski and Limongi, 1993), education (Glaeser, Ponzetto and Shleifer, 2007), and factor mobility (Boix, 2003), among other *modernization*-related variables. These studies provide mixed empirical evidence. For instance, Glaeser, Ponzetto and Shleifer (2007) find that education has a positive effect on democratization. However, Acemoglu et al. (2008) show that the cross-country statistical association between income and democracy becomes insignificant when including country fixed effects.

Acemoglu et al. (2008) argue that the positive correlation between income and democracy may be due to the fact that societies embarked on divergent development paths at certain critical historical junctures. Other influential works in economics, political science, and sociology have also emphasized the lasting impact of choices made during critical moments in history on institutional outcomes (Collier and Collier, 1991; Engerman and Sokoloff, 1997; Lipset and Rokkan, 1967; Moore, 1966).[1] In this paper, we build on the critical junctures framework and show that post-Cold War democracy in Africa can be explained by the form of political dissent originated from African independence movements.

Using a unique dataset on social movements and anti-colonial insurgencies in Africa, we show that countries that experienced major *rural* insurgencies tend to have autocratic regimes, while those that mostly experienced *urban* mass protests—or non violent forms of dissent—tend to have more democratic institutions. We argue that anti-colonial mass protests generated norms of peaceful political expression and compromise, which provided cultural bases for liberal democracy. In contrast, armed rebellions led to the emergence of a culture of political

[1] For a review of applications of the critical junctures framework in analyses of institutional development, see Capoccia and Kelemen (2007).

exclusion that tends to perpetuate the use of violence as a form of political dissent.

Our argument bears some similarity to recent work by Chenoweth and Stephan (2011), who explore the effectiveness of violent and non violent campaigns in conflicts between non-state actors and state actors. Using quantitative and qualitative methods to analyze 323 campaigns between 1990 and 2006, the authors provide evidence that non violent campaigns are more successful than violent campaigns, and are linked to more sustainable democracies. Other scholars, such as Huet-Vaughn (2017), Sharp (2005), and Nepstad (2011), have also shown that non violent social movements are more effective than violent strategies in achieving political goals.

The statistical association between type of independence movement and democracy that we document in this study is robust to a number of potential confounding factors, which include: time-invariant geographic features and natural resources in each country before independence; social and institutional changes induced by colonialism; and a host of post-independence controls, including income per capita, population size, ethnic cleavages, and religious fractionalization. Our baseline results suggest that the average level of democracy among rural insurgency countries is about 0.2 points lower (on a 0–1 scale) than the average level of democracy achieved by urban protest countries during the post-1990 period. This result remains statistically significant at the conventional levels across different measures of democracy.

Since the type of anti-colonial movement could be endogenous to past democratic or quasi-democratic institutions or experiences, we provide evidence for causality of the relationship between the type of independence movement and level of democracy by employing an instrumental variables approach that exploits exogenous variation in terrain conditions to predict anti-colonial rural insurgencies. This strategy relates the degree of terrain roughness to the level of democracy through its impact on the probability that a country experienced an anti-colonial rural insurgency. We rule out alternative accounts by showing that rough terrain does not affect income, violent conflict, ethnic diversity, or religious fractionalization after independence. Additionally, we perform a sensitivity analysis that relaxes the exclusion restriction assump-

tion (Conley, Hansen and Rossi, 2012), and confirm that our estimated treatment effect remains significant even when the degree of violation of this assumption is high.

Most of our econometric analysis is cross-sectional because the type of independence movement is time-invariant. This approach precludes the estimation of country fixed effects, which may raise legitimate concerns of potential omitted variable bias. To incorporate country fixed effects in our analysis, we exploit the structural break in the democracy data observed after the end of the Cold War. We argue that the collapse of the Soviet Union served as a plausibly exogenous shock that allowed domestic political actors in Africa to play a more decisive role in shaping local institutions without much international pressure. We employ a difference-in-differences design to test whether democracy levels changed differentially after the end of the Cold War in rural insurgency versus urban protest countries. Our findings confirm that democratic development is significantly lower in rural insurgency countries in the post-1990 period.

After presenting robust empirical evidence linking current-day levels of democracy in Africa to the type of independence movement experienced by each country, we test potential mechanisms. We adjudicate between two competing hypotheses. One focuses on institutional channels, such as accumulation of democratic capital and constitutional arrangements, and the other on political culture. We find support for the latter hypothesis. Urban mass protests led to non-radical forms of political expression, such as demonstrations or workers strikes, which facilitated peaceful transfers of power, political compromise and ultimately the consolidation of democratic reforms after the Cold War. The reverse is true where rural armed rebellion was the dominant strategy: armed rebellions created norms of violent collective action and repressive forms of government, which hindered the development of democratic institutions. Additionally, using Afrobarometer data we provide evidence that respondents from rural insurgency countries are significantly more likely to support the use of violence and one-party rule than respondents from urban protest countries.

The main contribution of this study to the literature on democracy and development is to

highlight the impact of historical events and political culture on democratic change. The remainder of the article is organized as follows. We present a brief historical background in Section 2. We explain our theoretical argument in Section 3 and describe our data sources in Section 4. We then turn to explain our empirical approach and report the main findings in Section 5. We discuss potential mechanisms in Section 6. The last section concludes.

2 Historical Background

The decade following the end of World War II is widely perceived as a foundational moment for African political development (Cooper, 1996, 2002, 2008; Mamdani, 1990, 1996).[2] The isolated and sporadic movements to resist colonial rule that started at the beginning of the twentieth century evolved into large-scale Pan-African social movements, coinciding with the emergence of political parties, labor unions, newspapers, and a new generation of highly educated political elites. Among other cases, this was true of the African Democratic Rally (ADR), which became one of the most important forces that pushed for independence from France in West and Equatorial Africa, as well as the Convention People's Party (CPP) and the Tanganyika African National Union (TANU), which campaigned for independence from the British empire in Ghana and Tanzania, respectively.

These new Pan-African political organizations were well integrated into the international socialist and labor movement, and as such, reflected its internal ideological divide. One wing was composed of Western European-style socialists, such as Kwame Nkrumah in Ghana, and Julius Nyerere in Tanzania (Cooper, 2008).[3] There were also the more radical Maoist leaders, including Frantz Fanon in Algeria, Dedan Kimathi in Kenya, and Ruben Um Nyobé in Cameroon

[2]French and British colonial governments implemented major institutional reforms with the explicit goal of containing the growing influence of independence movements. For example, in Francophone Africa, the colonial administration granted French citizenship to all natives as a way of maintaining their loyalty to the empire (Cooper, 2002), whereas the British colonies adopted policies of gradual devolution of power to local authorities (Mamdani, 1996).

[3]Other examples include Houphouet Boigny in Ivory Coast, Lamine Gueye in Senegal, Modibo Keita in Mali, and Sourou-Migan Apithy in Dahomey (Benin).

(Mbembé, 1996). These two sets of leaders advocated radically different paths towards independence. While Nkrumah and Nyerere advocated urban protests, mass mobilization and non violent strategies, Fanon, Kimathi, and Um Nyobé encouraged violent rebellion. For instance, in a May 1958 address to his party, Nyerere stressed the importance of non-violent opposition to the colonial administration:

> We shall wage a relentlessly determined battle against [colonialism] until we are free. We shall use no violence. We shall stoop to no dishonest methods. We shall be as clean in our methods as we are in our aims. We shall publicly declare our methods as we publicly declare our aims (Nyerere, 1967, pp. 59–60).

In contrast, Fanon (1961) colorfully advocated the use of violence as a necessary strategy of emancipation:

> [At the national level] insurgents' violence unifies the people [...] At the level of individuals, [it] is a cleansing force. It frees the native from his inferiority complex and from his despair and inaction; it makes him fearless and restores his self-respect (p. 94).[4]

In the wake of this ideological divide, by the end of 1959, a dozen African countries had followed Fanon's strategy, conducting long, protracted rural armed rebellions. This was the case in Madagascar from 1947–1948 (García-Ponce and Wantchekon, N.d.), in Kenya with the Mau Mau uprising (1952-1960), and in Cameroon with the Union of the Peoples of Cameroon (UPC). In total, 43% of African independence movements relied heavily on rural violent conflict. The remaining countries followed Nyerere and Nkrumah's "positive action" (non violent) strategy, organizing peaceful demonstrations—mainly in urban areas or capital cities, such as Dakar (Senegal) and Accra (Ghana)—against the fading colonial rule.

[4] In his preface to Fanon (1961), Jean-Paul Sartre synthesized the thinking of Fanon as follows: "When the peasant takes a gun in his hands, the old myths grow dim and the prohibitions are one by one forgotten. The rebel's weapon is the proof of his humanity. For in the first days of the revolt you must kill: to shoot down a European is to kill two birds with one stone, to destroy an oppressor and the man he oppresses at the same time: there remain a dead man, and a free man; the survivor, for the first time, feels a national soil under his foot" (Fanon, 1961, p. 22) .

The choice between these contrasting strategies was driven in part by geographic conditions, with enormous consequences for post-independence political institutions.[5] To illustrate how geography dictated the choice between rural insurgency and urban protest, consider the case of Guinea Bissau and Cape Verde. Despite the Maoist ideological leaning of the African Party for the Independence of Guinea and Cape Verde (PAIGC), the leaders of the movement chose the urban protest strategy in the flat terrain of Cape Verde. The armed resistance occurred in the dense jungle of Guinea-Bissau. PAIGC's founder, Amilcar Cabral, wrote:

> Everyone knows that in general the guerrilla force uses the mountains as a starting point for the armed struggle. We had to convert our people themselves into the mountain needed for the fight in our country, and we had to take full advantage of the jungles and swamps in our country to create difficult conditions for the enemy in his confrontation with the victorious advance of our armed struggle (Cabral, 1969, p. 18).

These historical accounts illustrate very well the theoretical foundations of our paper. We argue that crucial choices made by countries on their road to independence—in particular, the way countries chose to resist and fight colonial rule—significantly shaped both current institutions and norms of behavior. In the following section, we outline the key components of our theoretical argument.

3 Theoretical Argument

Despite strong cross-country similarities in economic development, Africa is the continent with the greatest variation in political regimes (see Figure A1 in the Online Appendix). While a number of countries such as South Africa, Ghana, and Benin have experienced major democratic reforms after the end of the Cold War, others such as Cameroon, Congo, and Zimbabwe, either

[5] Anti-Nazi resistants in Greece faced similar choices, i.e., between urban and rural insurgencies. The communist party leaders were split into two groups: those favoring military operations in the mountains and those who wanted to move the operations in the capital city, Athens (Woodhouse, 1976).

remained autocratic or became unstable democracies plagued with political violence. There is a drastic divergence in democratic trajectories between these two sets of countries. We argue that this divergence in development paths is linked to the type of independence movement experienced by each country. Mass protests enabled participants to develop norms of peaceful political expression and compromise, which facilitate the emergence of democracy. In contrast, armed rebellions generated a culture of political exclusion that tends to perpetuate the use of violence as a form of political expression and conflict resolution.

Our argument builds on the notion that democratic institutions are a contingent outcome of conflicts (Przeworski, 1988). Democracy can be an immediate and direct form of conflict resolution between rival political forces, but it is conceivable that conflict can lead to an intermediate ''regime" which may not be democratic, yet facilitates the eventual emergence of democracy. For example, this could happen if the conflict helps to develop norms of civic engagement and political participation. But conflict can also generate norms of violent political behavior and autocratic leadership styles that set the stage for autocratic regimes.

The logic of the argument is as follows. The organization of an opposition movement—whether in the form of a mass protest or an armed rebellion—is a risky collective action. Individuals or groups decide to participate in the movement depending on their assessments of the likelihood that others would join them. In other words, independence movements can be regarded as coordination games between groups and individuals. There are at least two possible mechanisms to solve the coordination problem. One is through the use of violent actions to manipulate citizens' beliefs about the unpopularity of the government and to induce participation in the rebellion (Bueno de Mesquita, 2010). The other is through organizing a peaceful revolutionary mass movement. Members of the opposition movement can hold an internal consultation or a vote to find out whether enough of them are willing to take part in a mass protest. It is a weakly dominated strategy for a member to vote in favor of a mass protest and not show up to the protest—this would make the movement more likely to fail, which is costly for every

member (Cabrales, Calvó-Armengol and Wantchekon, 2007).

The type of pubic signal chosen—"armed rebellion" or "mass protest"—may depend on geography, demography, and economic factors. For instance, members of the opposition movement may choose the use of violence or armed rebellion if the country is covered by mountainous terrain (Fearon and Laitin, 2003). In contrast, they may be more likely to choose mass protests or peaceful demonstrations if they are located in urban settings with flat terrain.

Now the question is: Why do these two types of movements leave opposing institutional legacies? Mass protests are social movements with a relatively horizontal organizational structure. Chenoweth and Stephan (2011) argue that unarmed resistance enhances legitimacy and increases broad-based participation, attracting diverse groups of participants. Physical and informational barriers to participation are also lower in these campaigns, making individuals more willing to engage in collective action. Thus, by their very nature, non violent resistance enables participants to learn values of peaceful political participation and expression as well as those of political compromise and openness. As such, mass protests and demonstrations may provide the cultural and perhaps the institutional basis for civil liberties and liberal democracy (Dahl, 1971).

In contrast, rural armed rebellions are violent social movements with relatively vertical, hierarchical organizational structures. If they fail, they are likely to generate self-censorship as in Madagascar following the 1947 rebellion (García-Ponce and Wantchekon, N.d.). If they succeed, they can result in tighter state censorship and limits to free expression—e.g., restricting access to the state only to those who "fought in the bush." Furthermore, there is empirical evidence that those who formerly used violence rarely shift to unarmed strategies (Svensson and Lindgren, 2011). As a result, armed rebellion may facilitate the emergence of autocratic regimes.

4 DATA

To empirically estimate the effect of anti-colonial rebellions on democratic development in Africa, we combine data from a number of sources: (i) in-depth reviews of historical events to code each country as either having a legacy of rural rebellion or urban protest; (ii) cross-country annual measures of democracy levels, based on Polity IV and Freedom House scores; (iii) data on rough terrain and other time-invariant geographic characteristics; (iv) colonial and pre-colonial factors, such as urbanization, colonial origins, slave exports, and European descent; and (v) a set of contemporaneous controls, including income per capita, population measures and ethnic and religious fractionalization.

4.1 RURAL INSURGENCY VERSUS URBAN PROTEST

Our independent variable of interest distinguishes countries that experienced major *rural* anti-colonial insurgencies from those that manifested anti-colonialism through *urban* protests. "Rural insurgency" refers to armed rebellions, predominantly based in rural settings, and organized in the style of Mao's Red March. This involves the implementation of guerrilla-like tactics, which are often associated with rough terrain (Buhaug and Gates, 2002; Fearon and Laitin, 2003; Hegre and Sambanis, 2006). On the other hand, the concept of "urban protest" refers to social movements that rely heavily on non-violent forms of dissent (Opp, 2009). This includes the organization of mass protests and demonstrations, as well as the creation of underground political organizations that operate without violence, two acts which are more likely to occur in urban settings and flat terrain.

Based on in-depth reviews of the geographical origins, recruitment strategies, organizational structure and rebellion tactics of the major African anti-colonial movements covering the period between 1900 and the year of independence (c.1950s)[6], we coded each country as either having a

[6]Only seven countries were independent before 1960: Egypt (1922), Libya (1951), Morocco (1953), Sudan (1956), Tunisia (1956), Ghana (1957), and Guinea (1958). And only six countries achieved independence after the 1960s: Guinea Bissau (1974), Angola (1975), Mozambique (1975), Zimbabwe (1980), Namibia (1990), and Eritrea (1993).

legacy of rural insurgency or urban protest. While these two forms of struggle are not necessarily mutually exclusive, we found that all African independence movements were characterized by the adoption of strategies and tactics of political dissent that were either mostly rural (armed rebellion) or mostly urban (mass protest).

A country is coded as having a legacy of rural insurgency on the basis of the following criteria: (i) at least one anti-colonial revolt took place between 1900 and the year of independence; (ii) the rebel group originated in a rural area or in the country's periphery; (iii) the goal was independence or regime change; (iv) guerrilla-like tactics were employed during the conflict; (v) the estimated death toll was at least 1,000. If these conditions are met, the rural insurgency variable is coded as 1, and 0 otherwise. Therefore, cases not coded as rural insurgency are considered as cases of urban protest or unarmed resistance.[7] Figure 1 shows a map of Africa with the dominant type of movement experienced by each country.[8] A summary of the cases and additional details are available in the Online Appendix.

4.2 Measures of Democracy

We use Polity IV and Freedom House scores as measures of democracy.[9] The former evaluates the openness of political regimes on a scale from –10 (strongly autocratic) to 10 (strongly democratic). Components of this index include competitiveness of political participation, openness and competitiveness of executive recruitment, and constraints on the chief executive. This dataset covers all major, independent states from 1800 to 2010. The latter index is an annual

[7] One objection to this coding protocol is that if a country experienced both urban riots and peaceful urban mass protests, it is broadly considered a case of unarmed resistance or peaceful demonstration. However, there were very few cases in which both significant rioting and mass protests happened (for instance, in Algeria), and even in such cases non violent resistance was the dominant strategy. We document this in further detail in the Online Appendix, and address potential concerns regarding the empirical analysis by excluding such cases from a number of tests.

[8] There are 54 territories in Africa recognized as sovereign states by the United Nations. Our study only excludes five of these countries. South Sudan is excluded from the analysis because is a newly formed country (July 2011). Liberia is not included in our analysis because it was never colonized. Burundi, Djibouti and Lesotho are treated as part of Rwanda, Somalia and South Africa, respectively. In the first and second cases, it is practically impossible to treat these countries separately because Burundi and Djibouti were part of Rwanda and Somalia before the 1960s. In some cases, due to the lack of data on democracy levels, Sao Tome and Principe and Seychelles are dropped from the dataset.

[9] Data available at http://www.systemicpeace.org/polity/polity4.htm and http://www.freedomhouse.org/.

assessment of political rights and civil liberties in 194 countries (published since 1972). Each country is evaluated on a scale from 1 (most free) to 7 (least free). To make our results perfectly comparable across these two different measures of democracy, we normalized both Polity IV and Freedom House scores on a scale ranging from 0 (strongly autocratic/least free) to 1 (strongly democratic/most free). We take into consideration annual scores of these indices for all African countries between the year of independence and 2010.

4.3 Rough Terrain and Other Geographic Conditions

Theories that focus on feasibility to explain the causes of civil war suggest that geographical factors such as rough terrain or natural resources—e.g., oil and diamonds—play a critical role in determining how a conflict is fought (Collier and Hoeffler, 2007; Ross, 2006; Weinstein, 2005). To explain why some countries have experienced rural rebellions rather than urban protests, it is important to understand the conditions that favor rural uprising. Recent studies in political science have consistently shown that the presence of rough terrain is an important determinant of violent conflict (Buhaug and Gates, 2002; Fearon and Laitin, 2003; Hegre and Sambanis, 2006). As argued by Buhaug and Gates (2002):

> Rough terrain is ideal for guerrilla warfare and difficult for a government army to control. Mountain areas, giving advantage to rebel troops, allow the rebels to expand the scope of conflict, whereas forests provide cover, particularly against detection or aerial attack. This aids in the freedom of movement and shipment of arms, thereby associated with a wider zone of conflict (p. 422).

Our analysis utilizes the percentage of country area covered by mountains as a measure of rough terrain,[10] based on data from Collier and Hoeffler (2004).[11] We also incorporate other

[10] Other measures of rough terrain such as the ruggedness index proposed by Nunn and Puga (2012) capture small-scale terrain irregularities (e.g., caverns, caves, and cliff walls) which could potentially facilitate guerrilla tactics. However, we find that large-scale terrain irregularities, as defined by a country's area covered by mountains, is a better predictor of rural insurgency.

[11] This measure of rough terrain is based on work by geographer A.J. Gerard for the World Bank's "Economics of Civil War, Crime, and Violence" project, and it has also been used by Fearon and Laitin (2003).

relevant geographic characteristics in the analysis, such as: land size, the percentage of the land surface area of each country that has fertile soil, the percentage of desert, and the percentage of tropical climate, as well as the average distance to nearest ice-free coast, an indicator for presence of oil, and another indicator for the presence of gem-quality diamond extraction.[12]

4.4 Colonial Data

Democracy levels may be correlated with factors induced by colonialism, such as demographic changes and institutions. More politically sophisticated societies during the colonial era may have become naturally suitable for democracy and the use of non violent forms of political dissent. To gauge the extent to which a country had developed a politically sophisticated society, we incorporate the average urban population growth rate between 1950 and 1955—i.e., around the time of independence for most countries—, based on data from the World Bank. Likewise, it may be possible that the variation in democracy levels across Africa is explained by the type of institutions or policies implemented by the colonizers, which may also correlate with the type of independence movement. Therefore, we include indicators for British and French colonial origin, as well as estimates of the number of slaves exported between 1400 and 1900 in Africa's four slave trades (Nunn and Wantchekon, 2011), and the percentage of the population of European descent (Nunn and Puga, 2012).[13]

4.5 Contemporaneous and Post-Independence Data

Since our independent variable of interest is time-invariant, the core of our econometric analysis is cross-sectional and excludes post-treatment (i.e., post-independence) measures of relevant control variables to avoid biases in our estimates of the effect of rural insurgency on democracy. However, as shown in the following section, our results are robust to the inclusion of post-independence and contemporaneous socio-economic characteristics, which are plausibly rele-

[12] These data come from Nunn and Puga (2012).

[13] The European descent estimates are based on the percentage of the year 2000 population in every country that is descended from people who resided in Europe in 1500.

vant in shaping political institutions. Specifically, we incorporate contemporaneous measures of GDP per capita and population size for the 1960-2010 period (based on data from the World Bank), as well as measures of ethnic and religious fractionalization during the 1990s (Fearon and Laitin, 2003).

Furthermore, in order to test whether anti-colonial armed struggles perpetuated political violence, we use data on the number of attempted coups d'etat, armed rebellions, peaceful demonstrations, and workers' strikes during the 1960s. The data come from the Black Africa Handbook (Morrison et al., 1972).

4.6 Summary of Descriptive Statistics

Table 1 shows the descriptive statistics of the key variables used in the analysis. Note that the democracy data from Freedom House is available for 49 African countries, whereas the Polity IV scores are only available for 47. The two missing countries in the Polity IV data are Sao Tome and Principe, and Seychelles. For brevity, and because the core of the econometric analysis is cross-sectional, we do not show descriptive statistics of panel-level variables.

5 The Effect of Independence Movements on Democracy

To estimate the effect of the type of independence movement on democracy, we employ a number of empirical strategies, each of which is meant to address different potential concerns regarding the identification of causal effects. We start by assessing the strength of the relationship between the type of movement (rural versus urban) and democracy level over time, and find that countries that experienced anti-colonial rural insurgencies tend to be less democratic than those that experienced urban protests. The gap in democracy levels between these two sets of countries becomes fairly large and statistically significant at the 5% level in the post-1990 period. In the second subsection, we report the results from a series of cross-sectional OLS regressions of post-1990 democracy on rural insurgency, controlling for a number of potential confounders. We

then address potential endogeneity concerns by employing an instrumental variables approach that relates exogenous variation in rough terrain to democracy levels through its impact on rural insurgency. Finally, to exploit variation over time and to control for both observable and unobservable time-invariant characteristics of the countries, we estimate difference-in-differences and fixed-effects models.

5.1 Relationship between Type of Independence Movement and Democracy

The development of democracy in Africa has been unevenly distributed. While the average level of democracy has significantly increased over the course of the past 20 years, a number of countries have experienced little or no democracy to date. Figure 2 displays the relationship between the type of independence movement and democracy levels over time, as measured by the Polity IV and Freedom House indices. The data indicate that countries exposed to a legacy of rural insurgency tend to be less democratic than their counterparts. This trend seems to run parallel to the so-called "third wave of democratization" and is very clear after 1990, that is, after the end of the Cold War. Note, however, that some interesting patterns can be identified before the 1990s. The gap in Freedom House scores between these two sets of countries is rather narrow during the 1970s and 1980s, but the gap in Polity IV scores becomes visible since the late 1970s. This suggests that institutional changes preceded the expansion of civil and political rights.

The relationship between the type of independence movement and level of democracy is shown in regression form in Figure 3. Specifically, we estimate ordinary least squares (OLS) regressions of the average level of democracy on the rural insurgency indicator by decade. The point estimates plotted in Figure 3 show that the effect of rural insurgency on democracy is negative and statistically significant at the 5% level during the 1990s and 2000s. For these two decades, a legacy of rural insurgency decreases the average level of democracy by about 0.2 points on a 0-1 scale. As for the previous decades, the estimated effect is negative, but smaller

in magnitude and not statistically significant at the 5% level.

We hypothesize this post-Cold War effect is due to the fact that it was not until the collapse of the Soviet Union that African countries became relatively free from the influence of international geopolitical factors, and as a consequence, domestic political actors started playing a more decisive role in shaping local institutions. In other words, democracy levels in Africa tended to be lower during the Cold War for reasons that provisionally nullified the effect of the type of anti-colonial movement. One such reason could be that in wartime the West and the Soviets supported dictators who aligned with them. This hypothesis is consistent with the evidence presented by Boix (2011) that the great powers blocked, either directly or indirectly, a number of democratic transitions in the ideologically polarized context of the Cold War.[14]

It is also worth noting that the gap in democracy levels between the two types of countries (rural versus urban) widens further in the 2000s, particularly after the September 11, 2001 attacks on the United States. On one hand, we see the level of democratic development increasing among the set of urban protest countries, and on the other, rural insurgency countries either stagnating (Polity IV) or experiencing a democratic reversal (Freedom House).

5.2 OLS Estimates

In this subsection we present evidence that the statistical association between rural insurgency and post-1990 (i.e., post-Cold War) levels of democracy is robust to a number of potential confounding factors and sensitivity checks. Specifically, we estimate the following cross-sectional regression:

$$y_i = \beta_0 + \beta_1 RURAL_i + \mathbf{X}_i'\phi + \varepsilon_i \tag{1}$$

where y_i is the post-1990 average level of democracy, as measured by either Polity IV or

[14]Several other studies have shown that the end of the Cold War reduced the influence of geopolitical criteria in promoting democracy across the world (Dunning, 2004; Gleditsch and Ward, 2006; Levitsky and Way, 2005; Meernik, Krueger and Poe, 1998).

Freedom House, for country i; $RURAL_i$ is a dummy variable that takes on a value of 1 if a country is coded as having a legacy of rural insurgency, and 0 otherwise; and $\mathbf{X}_i'$ is a vector of control variables, which varies across specifications. As usual, β_0 is a constant, and ε_i is a disturbance term. The parameter of interest is β_1, which measures the effect of rural insurgency on democracy.

5.2.1 Main Results

The results shown in Tables 2 and 3 confirm that the statistical association between rural insurgency and democracy is robust to a number of *geographic*, *colonial*, and *contemporaneous* potential confounders. For the sake of clarity, we assess the robustness of our estimates by isolating each subset of covariates, and then by including the full set of controls. The results reported in column (1) of each table show the estimated effect of rural insurgency on democracy without controls, which is –0.16 (standard error 0.07) based on Polity IV data, and –0.21 (standard error 0.07) using the Freedom House index. These are fairly large effects if we take into account that the mean Polity IV and Freedom house scores during the post-1990 period in Africa are 0.50 and 0.39, respectively.

In the models reported in column (2) of each table, we introduce a subset of relevant geographic controls affecting level of democracy and institutional development across Africa: the log of the percentage of fertile land surface in each country, the log of the percentage of desert, the log of the percentage tropical climate, the average distance to the closest coast (in thousands of kilometers), the land area, a dummy variable that is equal to 1 if a country has oil, and a dummy variable that is equal to 1 if a country has gem-quality diamonds. The estimated effect is about the same size as previously estimated and remains statistically significant at the conventional levels. Column (3) presents the results controlling for the following colonial factors (as defined in the data section): urban growth during the 1950s, colonial origins (British and French), slave exports, and European descent. These models yield almost identical results as

those reported in columns (1) and (2).

The results shown in column (4) include a subset of contemporaneous controls: the log of the average post-1990 GDP per capita, the log of the average population size during the same period, and average levels of ethnic and religious fractionalization during the 1990s. The estimated effect on Polity IV scores remains practically unchanged, whereas the estimated effect on Freedom House scores is slightly smaller in magnitude and less precise (significant only at the 10% level). We should, however, interpret these results with some caution. Within our estimation framework, post-independence measures of these variables are potentially affected by the treatment (rural insurgency), and their inclusion could induce post-treatment bias in our estimation of the relationship between rural insurgency and democracy.

Column (5) presents evidence that our estimates are robust to the inclusion of both geographic and colonial controls. Again, the estimated effect of size of rural insurgency remains almost unchanged and statistically significant at the 5% level. This is our benchmark specification, as it includes the full set of pre-treatment covariates. In column (6), we add the contemporaneous controls so that we control for the full set of pre-treatment and post-treatment covariates. The estimated effect is larger and very precisely estimated. But again, this is the less preferred specification, since it is likely to suffer from post-treatment bias.

5.2.2 Sensitivity to Specific Countries and Subregions

One legitimate concern with regard to the evidence presented thus far is the possibility of miscoding various types of independence movements. Some countries are unquestionably either rural or urban, but other cases are not clean cut. Algeria is one such case. The Algerian War for independence took the form of both large-scale guerrilla warfare and urban mass protests. We have coded Algeria as a rural insurgency country for two main reasons. First, the FLN (French acronym of Front of National Liberation) had a military wing, the ALN (the Army of National Liberation)—which killed several civilians (e.g., in Philippeville in 1955 and 1956). Second, the

FLN evolved into a disciplined fighting force by gaining control of strategic mountainous regions. Nonetheless, some may argue that the insurgent groups relied heavily on urban-based movements such as the Triumph of Democratic Freedoms (MTDL), and hence it is troubling to code Algeria as having one legacy, either of rural insurgency or urban protest. Ultimately, the two types of independence movements are not mutually exclusive.

The question is then whether our main results are robust to the exclusion of specific countries such as Algeria. Similarly, one could worry that the observed treatment effect is driven by one single case, or by one specific subregion. To address these concerns, we test the sensitivity of our results to the exclusion of individual countries and entire subregions—North Africa, East Africa, West Africa, Middle Africa, and Southern Africa, as defined by the United Nations. We evaluate the influence of individual countries and subregions by estimating the effect of rural insurgency in the absence of each country or subregion. Specifically, we estimate a regression of post-1990 democracy on rural insurgency, controlling for both geographic and colonial controls—our preferred specification. The results visualized in Figure A2 in the Online Appendix indicate that our main findings remain statistically significant regardless of which country or subregion is excluded from the analysis.

Additionally, even though our analysis is cross-sectional, we can condition on subregion dummies to assess whether the effects are coming from specific areas of Africa. This will allow us to account for large differences in the type and timing of (de)colonization and national policies, among other factors. To explore which regions are more likely to be driving the established association, we estimate a series of regression models that allow for interactions between the rural insurgency variable and subregion dummies. Figure 4 shows the marginal effects conditional on the five major subregions in the continent. As we can see, the effects seem larger and more precisely estimated for North Africa, Southern Africa, and West Africa. However, the effects are negative in all cases, which is reassuring given the small sample size. The full set of results from these interaction models are reported in Table A1 in the Online Appendix.

5.2.3 Robustness to Pre-colonial Institutions, Ethnic Partitioning, and Settler Mortality

We have shown so far that the relationship between rural insurgency and democracy is empirically robust. However, there is a major challenge to causal identification in the relationship between the type of dependence movement and democracy: rural insurgency and urban protest countries may differ in ways that are correlated with both democracy and the probability of having experienced a particular kind of anti-colonial movement. One such possibility is that the degree of democratization achieved by pre-colonial or colonial societies explains both the type of anti-colonial movement and the type of institutional arrangement after independence. In other words, the adoption of rural insurgency as a form of political dissent during colonial times could be endogenous to the existence of past democratic institutions, experiences, or norms of behavior. In fact, recent work by Michalopoulos and Papaioannou (2013) provides empirical evidence that pre-colonial ethnic political centralization is a strong predictor of regional development in Africa.

Table A2 in the Online Appendix shows that our main result—the effect of rural insurgency on democracy—is robust to the inclusion of a measure of "pre-colonial institutions," which we define as the number of jurisdictional hierarchies at and beyond the local community during pre-colonial times, based on Murdock (1959)'s classification. The sample size in these regressions is smaller because Murdock (1959)'s coding is only available for 40 countries, which is why we exclude this variable from most of our empirical analysis.[15]

We also show that the effect of the type of anti-colonial insurgency on democracy remains virtually identical when controlling for the ethnic partitioning that occurred during the Scramble for Africa, which we measure using the country-level index of state artificiality employed by Michalopoulos and Papaioannou (2016). These results are reported in Table A3 in the Online Appendix. Similarly, following Acemoglu et al. (2008), it could be the case that democracy is

[15]Compared to column (1) of Table 3, we lose almost one-fifth of our sample by including this variable in the analysis. More specifically, we lose the following countries: Cape Verde, Comoros, Congo, Eritrea, Gambia, Mauritius, Sao Tome & Principe, Seychelles, and Swaziland.

related to settler mortality, which may capture the degree of inclusiveness of colonial institutions and therefore be correlated with the type of independence movement. It is thus important to control for the cross-sectional variation in settler mortality. Table A4 in the Online Appendix shows that our estimates remain similar in magnitude and significant in most specifications when controlling for an index of settler mortality and the full set of controls included in the main results.[16]

5.2.4 Coefficient Stability

Despite the fact that the statistical association between the type of independence movement and democracy is robust to numerous potential confounders, one could still argue that some unobserved, or hard-to-account for, characteristics of the countries explain the association between these two variables. Although it is impossible to test whether some unobserved factor is spuriously driving this correlation, it is possible to obtain an estimate of how large the bias from unobservables as opposed to observables is. One approach is to perform the test developed by Altonji, Elder and Taber (2008), which estimates the degree of bias from different degrees of selection on unobservables. In a recent study, Oster (Forthcoming) demonstrates that the approach developed by Altonji, Elder and Taber (2008) is not sufficiently conservative and proposes an extension of such method to calculate treatment effects and the relative degree of selection under proportional selection of observables and unobservables in linear models. We employ the method proposed by Oster (Forthcoming) using our benchmark specification, which includes the full set of geographic and colonial controls. As shown in Figure A3 in the Online Appendix, even when the proportion of selection on unobservables is large, our main estimates remain negative and fairly stable.[17]

[16] Again, note the sample size in these regressions is smaller because the data on settler mortality are only available for 34 countries, which is why we exclude this variable from the remainder of the analysis.

[17] According to our estimates, selection on unobserved characteristics would need to be between 2.6 and 4.8 times larger than selection on observables such that the effect of rural insurgency is equal to zero.

5.3 AN INSTRUMENTAL VARIABLES APPROACH

To address additional concerns of bias stemming from reverse-causality, we employ an instrumental variables (IV) approach that exploits exogenous variation in a country's terrain to predict rural insurgency. Specifically, this strategy relates the percentage of rough terrain to the level of democracy achieved after the 1990s through its impact on the probability of having experienced rural insurgency as the dominant form of struggle for independence. The first stage can be represented as follows:

$$RURAL_i = \beta_0 + \gamma TERRAIN_i + \mathbf{X}_i'\rho + \vartheta_i \tag{2}$$

where $TERRAIN_i$ is the log of the percentage of country i's area covered by mountains. Thus, the second stage is given by:

$$y_i = \beta_0 + \lambda \widehat{RURAL}_i + \mathbf{X}_i'\eta + \omega_i \tag{3}$$

Equations (2) and (3) are estimated in one step via 2SLS. A causal interpretation of these estimates requires a valid first stage and that the exclusion restriction to be satisfied. Variation in terrain roughness is plausibly exogenous to democratic institutions, and strongly correlated with rural insurgency. Table 4 shows the results from logistical (Logit) regressions and Linear Probability Models (LPM) of the first-stage relationship between rough terrain and rural insurgency. The 0.22 coefficient reported in column (1) of Panel A indicates that a country twice as mountainous as another has a 15 percentage points higher probability of having a legacy of rural insurgency. This finding is robust to geographic and colonial controls, and statistically significant at the 1% level across estimation methods.[18]

We find these results indicative of a strong relationship between local terrain conditions and the forms of political dissent under colonial rule. Anti-colonial movements in countries covered

[18] We also show that rough terrain is a strong predictor of rural insurgency even after controlling for pre-colonial institutions, ethnic partitioning, and settler mortality (see Tables A5, A6, and A7 in the Online Appendix).

by mountains, jungle, or other types of terrain irregularities may have exploited the peculiarities of their geography by adopting guerrilla-like tactics. Opposition movements in countries where the terrain is rather flat would have found it unfeasible to organize themselves as violent rebel groups, and hence decided to fight colonialism by conducting mass protests and implementing other strategies of peaceful dissent, such as the creation of clandestine newspapers, civic associations, and underground political organizations, among others.

Table 5 shows that higher levels of rough terrain are significantly associated with less democracy in the reduced-form regressions, controlling for different subsets of covariates. This is the first piece of evidence suggesting that terrain conditions affect democratization. The second-stage equation estimates are reported in Table 6. The results are robust to a number of controls and statistically significant at the conventional levels. In particular, the point estimates for our preferred specification—which includes both geographic and colonial controls—imply that, all else equal, rural insurgency countries are about 0.28 or 0.41 points less democratic than their counterparts, as measured by the Polity IV and Freedom House indices, respectively.

5.3.1 Potential Violations of the Exclusion Restriction

To satisfy the exclusion restriction, rough terrain should affect the post-1990 average level of democracy only through its effect on the adoption of rural insurgency as a means to achieve independence. One potential violation of the exclusion restriction is that terrain conditions may affect democracy through income-related channels. For instance, irregularities in the terrain may block access to resources and hence affect both income and democracy.[19] One could also argue that mountainous terrain may affect the prospects for democracy through mobility or mixing of the population—e.g., by shaping ethnolinguistic or religious diversity, which are often viewed as determinants of political development (Michalopoulos, 2012). A more plausible violation

[19] Recent work by Nunn and Puga (2012) indicates that ruggedness is positively correlated with economic development in Africa since more rugged African countries have experienced less slave exports. It should be noted, however, that Nunn and Puga (2012) focus on "small-scale terrain irregularities, such as caverns, caves, and cliff walls, that afforded protection to those being raided during the slave trades" (p. 21), while our emphasis is on large-scale terrain irregularities—as defined by a country's area covered by mountains—which are better predictors of rural insurgency.

of the exclusion restriction is the possibility that rough terrain may facilitate the adoption of guerrilla tactics, not only before, but also after independence.

We address these concerns in two ways. First, we conduct a series of falsification exercises that estimate the potential effects of rough terrain on post-independence measures of economic performance (income and economic growth), social diversity (ethnic and religious fractionalization), and violent conflict (number of civil wars and civil war years). If rough terrain is likely to affect democracy through any of these channels, we should then observe that there is a significant statistical association between rough terrain and the measure of the channel in question. Second, we explore the sensitivity of our IV estimates to different degrees of violation of the exclusion restriction, following the methods proposed by Conley, Hansen and Rossi (2012), which we explain in greater detail below.

We report the results from our falsification exercises in Table 7. As shown in Panel A, rough terrain is not statistically associated with a country's income per capita or economic growth between the year of independence and 1989. This suggests that a potential violation of the exclusion restriction is unlikely to occur through the impact of rural insurgency on economic performance. Panel B provides evidence that the effects of rural insurgency on ethnic and religious fractionalization are statistically indistinguishable from zero, which helps us rule out the social diversity channel as an alternative account. Finally, the results reported in columns (1) and (4) of Panel C indicate that rough terrain is positively correlated with the number of civil wars (or civil war years) experienced by a country between the year of independence and 1989. However, this relationship becomes statistically insignificant when controlling for other geographic conditions, colonial factors, or both.

A key part of our argument is that rough terrain helps explain why some countries decided to fight colonialism via rural insurgency, but it does not necessarily explain why the use of violence as a form of political expression and conflict resolution is perpetuated during the post-independence period. Evidence from the relevant political science literature suggests that the

presence of mountainous terrain is positively correlated with the onset of civil war (Buhaug and Gates, 2002; Fearon and Laitin, 2003; Hegre and Sambanis, 2006). To further examine the relationship between rough terrain and conflict onset within Africa, we have replicated the main results from Fearon and Laitin (2003, p. 84), restricting the sample to the subset of African countries. The results shown in columns (1) and (5) of Table A8 in the Online Appendix indicate that rough terrain—defined as the log of the percentage of country area covered by mountains[20]—is positively correlated with two different measures of civil war onset over the 1960-1999 period.[21] Note, however, that the results are not statistically significant for "ethnic" war (see column (3)).[22]

In columns (2), (4) and (6) of Table A8 in the Online Appendix, we estimate the same regression models as in columns (1), (3), and (5), but with the rural insurgency dummy ($RURAL_i$). The results indicate that the coefficient on rural insurgency is positive and statistically significant across specifications, whereas the estimated effect of rough terrain becomes statistically insignificant.[23]. Within this estimation framework, the type of independence movement—i.e., rural insurgency—should be interpreted as an intermediate outcome between rough terrain and the endpoint outcome —i.e., civil war onset after independence. Therefore, the fact that the relationship between rough terrain and civil war onset "goes away" after controlling for the intermediate outcome may be indicative that post-independence civil wars are shaped, to a large extent, by the legacy of rural insurgency independence movements.

Based on the results from the falsification exercises, we feel confident that rough terrain does not affect democracy levels through either income, social diversity, or post-independence violent conflict. Nevertheless, given that the exclusion restriction is fundamentally untestable, legitimate doubts about the extent to which the exclusion restriction holds may remain. We

[20]To be consistent with variable names from Fearon and Laitin (2003), the rough terrain variable is reported as *log(% mountainous)* in Table A8 in the Online Appendix.

[21]In column (1), the dependent variable is a dummy variable for civil war onset, coded as "1" for all country-years in which a civil war started and "0" for all others, based on the original data collected by Fearon and Laitin (2003). In column (5), the dependent variable is a dummy for civil war onset, as defined in the Correlates of War (COW) project.

[22]In this model, the dependent variable marks the onset of wars coded as "ethnic" or "partially ethnic" by Fearon and Laitin (2003).

[23]Furthermore, Table A9 in the Online Appendix shows that these results remain virtually identical if we restrict the time period of analysis to 1960–1989

provide additional evidence that our main IV estimates—reported in columns (4) and (8) of Table 6—remain statistically significant even assuming large departures from perfect exogeneity. Specifically, we undertake a sensitivity analysis based on the methods proposed by Conley, Hansen and Rossi (2012) to construct confidence intervals under the assumption that the direct effect of the instrument is near zero, but perhaps not exactly zero. This approach relaxes the exclusion restriction assumption, but still provides valid inference statements for any beliefs about the validity of the instrument (Conley, Hansen and Rossi, 2012, p. 261).

Following Conley, Hansen and Rossi (2012), we employ two strategies to construct confidence intervals around the treatment parameter while relaxing the exclusion restriction. The first strategy requires only to specify a range of plausible values for the direct effect of the instrument—without requiring complete specification of a prior distribution—to compute the union of symmetric intervals.[24] The second strategy uses a large-sample approximation that models uncertainty about the direct effect of the instrument as being the same order of magnitude as sampling uncertainty. The econometric jargon for this strategy is that the direct effect of the instrument is treated as being "local-to-zero."[25] We use different priors for the direct effect of rough terrain on democracy. These priors are indexed by the parameter δ.

Figure 5 visualizes the results of the sensitivity analysis using the the local-to-zero approximation method.[26] The set of dashed lines denote 95% confidence intervals around the estimated effect of rough terrain on democracy through rural insurgency. We observe that the IV estimates remain statistically significant even with substantial departures from the assumption that the direct effect of the instrument is zero. To be precise, the direct effect of rough terrain on democracy should be between –0.02 (Polity IV) and –0.04 (Freedom House) so that our results become insignificant, which represents about 40 and 50 percent, respectively, of the estimated effect in the reduced-form regressions (see columns (4) and (8) of Table 5). We believe this is very unlikely to

[24] See Conley, Hansen and Rossi (2012, p. 262) for additional details about the "Union of Confidence Intervals with γ Support Assumption."

[25] See Conley, Hansen and Rossi (2012, p. 264) for additional details about "γ Local-to-Zero Approximation."

[26] All estimations were performed using the full set of controls.

be the case since we have already ruled out alternative accounts such as income, violent conflict, ethnic diversity, and religious fractionalization after independence.[27].

5.4 A Difference-in-Differences Approach

In this subsection we address additional concerns regarding potential omitted variable bias. Given the time-invariant nature of our treatment, most of our econometric analysis has relied on exploiting cross-sectional variation. One obvious drawback of this approach is that it precludes the estimation of country fixed effects, given that the unit effect dummies and the rural insurgency variable would be perfectly collinear. To incorporate country fixed effects in our analysis, i.e. to account for time-invariant characteristics of the countries, we exploit the structural break in the democracy data generated by the collapse of the Soviet Union.[28]

The evidence presented thus far consistently shows that the effect of rural insurgency on democracy is more noticeable after the end of the Cold War. As previously discussed, we argue this is because foreign political actors exerted power and influence in African politics during the Cold War, and it was not until the collapse of the Soviet Union that domestic political actors started playing the decisive role in shaping local institutions. In this regard, the end of the Cold War served as an exogenous shock that altered the political environment of African countries and made effective the legacy of their independence movements. If this argument is correct, we should see that democracy levels change differentially after the end of Cold War in rural insurgency versus urban protest countries. At first sight, this is what the data in Figure 2 suggest. A simple difference in means across the two sets of countries suggests that rural insurgency countries became –0.11 less democratic than urban protest countries after the end of the Cold War, based on Polity IV data. If we use the Freedom House scores instead, the differential change

[27] Figure A4 in the Online Appendix shows the results of the sensitivity analysis using the union of symmetric 2SLS 95% confidence intervals

[28] The logic behind using this structural break in the data resembles an interrupted time series design (Marcantonio and Cook, 1994). In this case, we will test the effect of the end of the Cold War on democracy levels across two groups (rural insurgency and urban protest countries), and then assess whether the difference in democratic change induced by the Cold War across these two groups is statistically significant. This is therefore equivalent to the standard difference-indifferences approach.

in democracy levels is equal to –0.14.

To empirically test this hypothesis, we employ a difference-in-differences (DID) approach with country and year fixed effects, which compares democracy levels before and after the end of the Cold War in rural insurgency versus urban protest countries. Specifically, we estimate the following regression:

$$y_{it} = \alpha_i + \tau_t + (RURAL_i \times POST_t)\theta + \mathbf{X}'_{it}\psi + \varepsilon_{it} \tag{4}$$

where y_{it} is the level of democracy, as measured by either Polity IV or Freedom House, for country i in year t; α_i are country fixed effects that control for both observable and unobservable time-invariant characteristics of the countries; τ_t are year fixed effects that capture time-specific shocks common to all countries; $RURAL_i \times POST_t$ interacts the rural insurgency variable with a post-1990 indicator; $\mathbf{X}'_{it}$ is a vector of time-varying controls; and ε_{it} is a disturbance term. The coefficient of interest is θ, which captures the differential change in expected levels of democracy in rural insurgency versus urban protest countries after the end of the Cold War. We estimate equation (4) via OLS and use robust standard errors clustered at the country level in all specifications.

The results are reported in Table 8. In columns (1) and (5), we estimate the effect of rural insurgency on Polity IV and Freedom House scores, respectively, controlling for geographic characteristics of the countries interacted with the post-1990 indicator. In columns (2) and (6), we incorporate the set of colonial controls interacted with the post-1990 indicator. Additionally, in columns (3) and (7), we control for per capita income and population size.[29] We also acknowledge the possibility of democracy trends that may vary between subregions by incorporating subregion-specific linear time trends in columns (4) and (8).[30] The data confirm our previous

[29]The models that include annual income per capita and population size should be interpreted with caution, since their inclusion may cause post-treatment bias in our estimates of the effect of rural insurgency on democracy levels. However, the robustness of our results to the inclusion of these contemporaneous controls is reassuring.

[30]Subregions include North Africa, East Africa, West Africa, Middle Africa, and Southern Africa, as defined by the United Nations.

findings, which strengthens the plausibility of causation. On average, rural insurgency countries became between –0.18 and –0.12 less democratic than urban protest countries after the end of the Cold War. Compared to results reported in previous subsections, the estimated effect of rural insurgency on democracy is smaller in magnitude, but remains substantial and statistically significant at the conventional levels.

6 Potential Mechanisms

Having estimated the effect of independence movements on levels of democracy in Africa, we now investigate the mechanisms of this relationship. Following the standard approach in the empirical analysis of historical processes, we consider two alternative pathways through which African independence movements could affect contemporary political outcomes: institutions and political culture.[31] Our first hypothesis focuses on institutions. We examine the role of early post-independence constitutional arrangements in shaping future democratic development. Anti-colonial rural insurgencies may have generated exclusive institutions immediately after independence, reflecting the "zero-sum" nature of violent conflicts, whereas urban protests may have generated inclusive constitutional arrangements, reflecting the broad diversity of mass movements. The underlying implication is that early post-independence institutions resulting from the type of independence movement experienced by each country may account for the variation in current levels of democracy.

Our second hypothesis is that armed struggles may have perpetuated political violence, making post-colonial armed rebellions, (attempted) coups d'etat, and civil wars more likely to occur in countries that fought violently for their independence.[32] This could be because rural

[31] See Nunn and Wantchekon (2011) for an illustration of this approach.

[32] According to Kagwanja (2003), the Mau Mau movement left a legacy that partially explains political violence in Kenya today. In particular, he examines the Mungiki movement, a radical religious-political group that "has been responsible for human rights violation, and insecurity in Nairobi and Central Kenya" (p. 29). Mungiki leaders openly embrace their ties to the Mau Mau legacy: its National Coordinator Ibrahim Waruinge, declared: "We [Mungiki] have Mau Mau blood in us and our objectives are similar. Mau Mau fought for land, freedom and religion [...] and so do we." (Kagwanja, 2003, p. 30)

insurgencies legitimated the use of violence as a form of political expression and facilitated the spread of arms.[33] Conversely, urban mass protests may have facilitated the emergence of a civil society.

We operationalize these hypotheses as follows. First, it is important to underscore that there were brief periods of representative institutions or democratic experience before the end of the Cold War. Therefore, although most democracies in Africa emerged during the third wave of democratization—i.e., during the post-Cold War period—, it may be the case that the legacy of independence movements influenced the accumulation of "democratic capital" during the Cold War years. Following Persson and Tabellini (2006), we construct a measure of democratic capital to examine this specific mechanism.[34] This measure of democratic capital takes into account a country's historical experience with democracy between independence and 1989.[35] Along the same lines, we investigate the relationship between rural insurgency and alternative outcomes related to the institutional channel. Specifically, we test whether rural insurgency is associated with the pre-1990 average levels of competitiveness of executive recruitment, constraints on the executive power, and the fraction of years that a country had a directly elected legislatures and presidents—-as defined in the Polity IV data[36]—-during the Cold War years (i.e., from independence to 1989). This may tell us whether the experience of an anti-colonial rural insurgency influenced constitutional provisions established immediately after independence. We estimate regressions of these outcomes on rural insurgency via OLS.

Second, we test whether the rural insurgency dummy is associated with higher incidence of attempted coups and armed rebellions, and lower incidence of peaceful demonstrations and

[33] Another aspect of the cultural channel could be the persistence of militaristic and hierarchical forms of organizations inherited from rural insurgencies.

[34] Figure A5 in the Online Appendix shows the relationship between democratic capital and type of independence movement over time.

[35] To construct this measure, we follow the definition outlined in Persson and Tabellini (2006), which assumes that democratic capital accumulates in years of democracy, and depreciates geometrically in years of autocracy. This implies that democratic experience is more valuable the closer to the present it is.

[36] Operationally, the variable measuring constraints on the executive "refers to the extent of institutionalized constraints on the decision making powers of chief executives, whether individuals or collectivities." The variable measuring competitiveness of executive recruitment "refers to the extent that prevailing modes of advancement give subordinates equal opportunities to become superordinates" (Marshall, Jaggers and Gurr, 2011).

workers' strikes from independence to 1969.[37] We also test whether the rural insurgency dummy is associated with higher levels of intrastate conflict during the Cold War measured as the number of civil wars, total civil war years, and the fraction of civil war years between independence and 1989.[38] When the outcome of interest is a count variable, we estimate Poisson regressions.[39] Additionally, as we will discuss later, we use individual-level survey data to assess whether rural insurgency is associated with higher levels of support for violence and authoritarian rule.

The results shown in Panel A of Table 9 reveal that the relationship between rural insurgency and institutional outcomes (democratic capital, executive constraints, competitiveness, and direct legislatures) during the Cold War years is not significantly different from zero. The data suggest that rural insurgency is negatively correlated with the accumulation of democratic capital, but this association is not statistically significant when controlling for a country's geographic and colonial characteristics (see column (2) in Panel A). The coefficient estimates in columns (3)–(6) indicate that there is no significant difference between urban protest countries and rural rebellion countries in terms of pre-1990 competitiveness and the use of elections to fill political offices. In addition, the results reported in columns (7) and (8) suggest that the type of independence movement did not immediately influence the extent to which countries institutionalized constraints on the decision-making powers of their chief executives.

We find support for the second hypothesis. Rural insurgency countries exhibit a higher incidence of political violence in the form of coups and armed rebellion, and lower incidence of peaceful social movements, than urban protest countries (see Table 9, Panel B). Furthermore, rural insurgency countries exhibit a higher incidence of violent conflict, measured by either the number of civil wars, the number of civil war years, or the fraction of years affected by civil war, between independence and 1989 (see Panel C). The most conservative estimate, reported

[37] The econometric analysis is restricted to the set of countries for which the data from the Black Africa Handbook (Morrison et al., 1972) are available.

[38] In this case, the econometric analysis is restricted to the set of countries for which the data on civil wars from Collier and Hoeffler (2004) and the Correlates of War (COW) project are available.

[39] The results are qualitatively identical if we use the average number of attempted coups, armed rebellions, demonstrations, strikes, and estimate OLS regressions instead.

in columns (1) and (5) of Panel C, suggests that rural insurgency countries experienced almost seven times as many years of civil war during the Cold War as urban protest countries.

In Table 10, we show estimates of the effect of rural insurgency on post-1990 democracy, controlling for the outcome variables used in Panels B and C of Table 9, i.e., the number of social movements from independence to 1969, and the number of years of civil war from independence to 1989. This allows us to assess the extent to which these variables mediate the relationship between the type of independence movement and the level of democracy in the post-Cold War era. According to the results presented in Table 10, Panel A, the number of attempted coups is negatively correlated with post-Cold War democracy, while the number of strikes is positively correlated with post-Cold War democracy.[40] By comparing the estimated coefficients on rural insurgency with and without the inclusion of the social movements variables, we observe that about 30% of the estimated relationship between the type of anti-colonial movement and post-1990 democratic development can be explained by the social movements that took place during 1960s.

In Panel B of Table 10, we conduct a similar analysis to assess the extent to which the incidence of civil wars during the Cold War mediates the relationship between the type of independence movement and post-Cold War democracy.[41] The results are reassuring. The intervening variable, as measured by either Fearon and Laitin (2003) or Collier and Hoeffler (2004), is negatively and significantly correlated with post-Cold War democracy. By comparing the estimated coefficients on rural insurgency with and without the inclusion of the mediating variable, we consistently observe that around one third of the estimated relationship between rural insurgency and post-1990 democracy can be explained by the incidence of civi wars during the Cold War.

In Table A10 in the Online Appendix, we provide additional empirical evidence in support of the political culture hypothesis. We present the results of a series of regressions using the

[40] Since we only have 29 observations in these regressions, we do not include controls.
[41] These regressions include the full set of covariates used in previous specifications.

Afrobarometer survey data[42] to assess whether rural insurgency countries are more (or less) likely to accept violence and autocracy than urban protest ones. Specifically, we estimate the effect of rural insurgency on support for the use of violence in politics[43], and support for one-party rule[44]. The estimated equation is of the following form:

$$y_{jc} = \beta_0 + \beta_1 RURAL_c + \mathbf{X}_j'\zeta + \varepsilon_{jc} \tag{5}$$

where y_{jc} is the outcome of interest, i.e., a dummy equal to 1 if respondent j from country c supports the use of violence in politics (or supports one-party rule). $RURAL$ is an indicator that equals 1 if the respondent lives in a country that is coded as having a legacy of rural insurgency; $\mathbf{X}'$ is a vector of individual controls that includes age of the respondent, a gender indicator variable, an indicator variable that equals 1 if the respondent lives in a rural location, five fixed effects for the respondent's living conditions, ten fixed effects for the educational attainment of the respondent and ten fixed effects for the ethnicity of the respondent.[45] Since our independent variable of interest (rural insurgency) only varies across countries, we cluster the standard errors in all regressions at the country level.

The results shown in Table A10 indicate that rural insurgency is positively correlated with both support for violence and support for one-party rule. These results are robust to the inclusion of individual controls and statistically significant at the conventional levels across estima-

[42]The Afrobarometer measures public attitudes on economic, political, and social matters in more than a dozen African countries. Surveys are conducted on a regular cycle. The data are publicly available at: www.afrobarometer.org.

[43]In the Afrobarometer Round 3, which was conducted in 18 countries of Sub-Saharan Africa during 2005, respondents were asked to choose which of the following statements was closest to their view: (A) "The use of violence is never justified in politics" or (B) "In this country, it is sometimes necessary to use violence in support of a just cause." Answer options included: (i) agree very strongly with A, (ii) agree with A, (iii) agree with B, (iv) agree very strongly with B, (v) agree with neither. We have recoded this variable as an indicator that equals 1 if "agree with B" or "agree very strongly with B", and 0 otherwise.

[44]Rounds 2, 3 and 4 of the Afrobarometer—conducted in 2002, 2005, and 2008, respectively—asked the following question: "There are many ways to govern a country. Would you disapprove or approve of the following alternative? Only one political party is allowed to stand for election and hold office." Answer options included: (i) strongly disapprove, (ii) disapprove, (iii) neither approve nor disapprove, (iv) approve, and (v) strongly approve. We recoded this variable as an indicator equal to 1 if the respondent approves or strongly approves one-party rule, and 0 otherwise.

[45]Additionally, we include Afrobarometer Round fixed effects in all regressions that use support for one-party rule as the outcome variable.

tion methods (LPM and Logit). The most conservative estimates show that, *ceteris paribus*, the probability of approving the use of violence in politics is 6% higher if a respondent is from a country with a legacy of rural insurgency. Likewise, the probability of agreeing to have only one party in elections increases by 9% if a respondent is a from a rural insurgency country.

While these results are merely indicative of a correlation between the type of independence movement and the extent to which citizens legitimate the use of violence, they are consistent with the idea that the adoption of rural insurgency normalized the use of violence as a form of political expression and conflict resolution, thus eroding democratic norms and facilitating the emergence of autocratic regimes.

7 Concluding Remarks

This study advances the understanding of the transformative and long-term consequences of *critical junctures*. We do so by explicitly mapping choices made at foundational moments in African political history onto future development paths. We investigate the institutional legacies of African independence movements, and find that countries that experienced major rural insurgencies tend to be more autocratic than those with a legacy of anti-colonial urban protests. The evidence also suggests that the adoption of rural insurgency in the struggle for independence perpetuated the use of violence as a form of political dissent in the post-colonial era. Thus, we show that colonial history matters for African political development not only because of "extractive" or inefficient policies enacted by the colonial administration, but also because of the way African pro-independence leaders chose to oppose colonizers.

Our focus on past political events to explain current institutional outcomes does not imply that structural factors such as current levels of economic development, inequality, ethnic diversity, and education are not important in explaining political change. However, we argue that social movements, broadly defined, mediate the relationship between structural variables and institutional change. For instance, economic inequalities and ethnic diversity may contribute

to the radicalization of social movements, which in turn facilitates the emergence of autocratic regimes. In contrast, economic prosperity and urbanization may lead to the emergence of moderate mass movements, which facilitate the implementation of democratic reforms.

A possible avenue for future research would be the study of the impact of social movements (the type independence movement in this case) on a broader range of development outcomes. This is in line with the growing literature that looks at the long-term effects of conflict on different measures of development, such as income, health, human capital, among others. For example, Besley and Reynal-Querol (2014) find that pre-colonial conflict in Africa is negatively correlated with subsequent patterns of economic development within countries. In Figure A6 in the Online Appendix we show the relationship between type of independence movement and income per capita between from 1950–2010. A striking divergence is observed in the post-Cold War period: income per capita is significantly lower in rural insurgency countries. This suggests that contemporary economic development in Africa may be linked to the nature of its independence movements.

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Table 1: SUMMARY OF DESCRIPTIVE STATISTICS

VARIABLES	OBSERVATIONS	MEAN	STD. DEV.	MIN.	MAX.
Dependent variables					
post-1990 Polity IV	47	0.50	0.24	0.05	1.00
post-1990 Freedom House	49	0.39	0.28	0.00	0.99
Independent variables of interest					
Rural insurgency	49	0.43	0.50	0.00	1.00
Rough terrain	49	1.59	1.29	0.00	4.31
Geographic controls					
Fertile soil	49	3.17	0.94	0.01	4.49
Desert	49	0.83	1.33	0.00	4.33
Tropical climate	49	2.99	1.94	0.00	4.62
Distance to coast	49	0.32	0.24	0.00	0.81
Land size	49	9.89	2.14	3.83	12.38
Oil	49	0.07	0.16	0.00	0.45
Gems	49	0.29	0.46	0.00	1.00
Colonial controls					
Urban growth 1950s	47	3.32	1.82	0.00	8.50
French colony	49	0.39	0.49	0.00	1.00
British colony	49	0.39	0.49	0.00	1.00
Slave exports	49	8.85	5.12	0.00	15.10
European Descent	47	0.56	0.93	0.00	3.75
Contemporaneous controls					
GDP per capita	47	6.29	1.07	4.63	8.81
Population	47	15.89	1.38	12.99	18.65
Ethnic fractionalization	44	0.67	0.24	0.04	0.95
Religious fractionalization	44	0.44	0.23	0.00	0.78

Notes: The *post-1990 Polity IV* and *post-1990 Freedom House* variables measure the average level of democracy for each country between 1991 and 2010; *Rural insurgency* is coded as 1 if a country experienced an anti-colonial rural insurgency in the road to independence (see Data section); *Rough terrain* is the natural log of the percent of a country's area covered by mountains; *Fertile soil* is the log of the percentage of the land surface area of each country that has fertile soil; *Desert* is the log of the percentage of desert; Tropical climate is the log of the percentage tropical climate; *Distance to coast* is the log of the average distance to the closest ice-free coast (in thousands of kilometers); *Land size* is the log of the land area; *Oil* is a dummy equal to 1 if a country has oil; *Gems* is a dummy equal to 1 if a country has gem-quality diamonds; *Urban growth 1950s* is the average urban population growth rate between 1950-1955; *British* and *French* are colonial origin indicators; *Slave exports* is the log of the estimated number of slaves exported between 1400 and 1900 in Africa's four slave trades; *European descent* is the log of the percentage of European descent; *GDP per capita* is the log of the 1991-2010 average GDP per capita; *Population* is the log of the average population size during the 1991-2010 period; and *Ethnic* and *Religious* fractionalization measure the average levels of ethnic and religious fractionalization during the 1990s.

Table 2: RURAL INSURGENCY AND POST-1990 POLITY IV SCORE

DV IS POST-1990 POLITY IV	(1)	(2)	(3)	(4)	(5)	(6)
Rural insurgency	-0.16**	-0.19**	-0.17**	-0.16**	-0.21***	-0.33***
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.09)
Geographic controls						
Fertile soil		0.07*			0.08*	0.07*
		(0.04)			(0.05)	(0.04)
Desert		0.00			0.04	0.08*
		(0.05)			(0.04)	(0.04)
Tropical climate		-0.01			0.02	0.10*
		(0.03)			(0.04)	(0.05)
Distance to coast		0.03			0.12	-0.16
		(0.19)			(0.22)	(0.28)
Land size		0.01			0.02	0.15*
		(0.04)			(0.05)	(0.07)
Oil		-0.28*			-0.27	-0.29
		(0.16)			(0.20)	(0.31)
Gems		-0.00			-0.05	-0.20**
		(0.09)			(0.09)	(0.09)
Colonial controls						
Urban growth 1950s			0.01		-0.01	-0.01
			(0.02)		(0.02)	(0.02)
French colony			0.00		-0.04	0.01
			(0.09)		(0.09)	(0.10)
British colony			-0.01		-0.04	0.04
			(0.09)		(0.08)	(0.10)
Slave exports			0.01		0.00	-0.00
			(0.01)		(0.02)	(0.02)
European descent			0.12***		0.13**	0.24***
			(0.04)		(0.05)	(0.07)
Contemporaneous controls						
GDP per capita				0.03		-0.04
				(0.05)		(0.07)
Population				-0.01		-0.07
				(0.03)		(0.05)
Ethnic fractionalization				0.26		-0.48
				(0.20)		(0.30)
Religious fractionalization				0.22		0.55*
				(0.22)		(0.28)
N	47	47	47	43	47	43
R^2	0.12	0.24	0.27	0.25	0.41	0.64
σ	0.23	0.23	0.22	0.22	0.22	0.18

Notes: All estimates are based on OLS regressions. Robust standard errors are shown in parentheses. The *post-1990 Polity IV* variable measures the average level of democracy for each country between 1991 and 2010, which ranges from 0 (strongly autocratic) to 1 (strongly democratic). *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table 3: RURAL INSURGENCY AND POST-1990 FREEDOM HOUSE SCORE

DV IS POST-1990 FREEDOM HOUSE	(1)	(2)	(3)	(4)	(5)	(6)
Rural insurgency	-0.21***	-0.21**	-0.16**	-0.15*	-0.20**	-0.29**
	(0.07)	(0.08)	(0.07)	(0.08)	(0.08)	(0.11)
Geographic controls						
Fertile soil		0.11**			0.09	0.08
		(0.05)			(0.05)	(0.05)
Desert		0.00			0.03	0.05
		(0.05)			(0.04)	(0.06)
Tropical climate		-0.03			0.02	0.08
		(0.03)			(0.05)	(0.06)
Distance to coast		0.06			0.14	-0.16
		(0.23)			(0.24)	(0.29)
Land size		-0.03			0.01	0.14*
		(0.03)			(0.06)	(0.08)
Oil		-0.18			-0.20	-0.39
		(0.17)			(0.20)	(0.37)
Gems		0.02			-0.06	-0.22*
		(0.10)			(0.10)	(0.11)
Colonial controls						
Urban growth 1950s			0.01		-0.00	-0.00
			(0.02)		(0.03)	(0.02)
French colony			0.11		0.07	0.06
			(0.10)		(0.11)	(0.12)
British colony			0.14		0.10	0.14
			(0.11)		(0.10)	(0.14)
Slave exports			0.01		0.01	-0.00
			(0.01)		(0.02)	(0.02)
European descent			0.18***		0.18***	0.23***
			(0.04)		(0.05)	(0.08)
Contemporaneous controls						
GDP per capita				0.06		0.00
				(0.05)		(0.08)
Population				-0.03		-0.09*
				(0.03)		(0.05)
Ethnic fractionalization				0.32		-0.37
				(0.21)		(0.41)
Religious fractionalization				0.15		0.38
				(0.25)		(0.31)
N	49	49	47	43	47	43
R^2	0.13	0.33	0.38	0.23	0.49	0.60
σ	0.27	0.26	0.23	0.25	0.23	0.22

Notes: All estimates are based on OLS regressions. Robust standard errors are shown in parentheses. The *post-1990 Freedom House* variable measures the average level of democracy for each country between 1991 and 2010, which ranges from 0 (strongly autocratic) to 1 (strongly democratic). *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table 4: ROUGH TERRAIN AND RURAL INSURGENCY

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	DEPENDENT VARIABLE IS RURAL INSURGENCY							
Rough terrain	0.22***	1.13***	0.19***	1.22***	0.22***	1.25***	0.19***	1.41***
	(0.04)	(0.35)	(0.04)	(0.40)	(0.05)	(0.37)	(0.06)	(0.49)
N	49	49	49	49	47	47	47	47
R^2	0.31		0.42		0.36		0.44	
σ	0.42		0.42		0.43		0.45	
Geographic controls?			✓	✓			✓	✓
Colonial controls?					✓	✓	✓	✓
Estimation	LPM	Logit	LPM	Logit	LPM	Logit	LPM	Logit

Notes: Estimates are based on Linear Probability Models (LPM) and logistic regressions (Logit). Robust standard errors are shown in parentheses. The *Rough terrain* variable is measured as the natural log of the percent of a country's area covered by mountains [Fearon and Laitin, 2003]. Geographic and colonial controls include those reported in Tables 2 and 3. In Panel B, the *pre-colonial institutions* variable measures the average number of jurisdictional hierarchies at the local and beyond the local community during pre-colonial times, based on Murdock's classification (1959). *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table 5: REDUCED-FORM ESTIMATES: ROUGH TERRAIN AND DEMOCRACY

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	POST-1990 POLITY IV				POST-1990 FREEDOM HOUSE			
Rough terrain	-0.04*	-0.05*	-0.05*	-0.05*	-0.07**	-0.07***	-0.07***	-0.08***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Geographic controls?		✓		✓		✓		✓
Colonial controls?			✓	✓			✓	✓
N	47	47	47	47	49	49	47	47
R^2	0.06	0.18	0.21	0.33	0.10	0.32	0.40	0.49
σ	0.24	0.24	0.23	0.23	0.27	0.26	0.23	0.23

Notes: Estimates are based on OLS regressions. Robust standard errors are shown in parentheses. *Rough terrain* is measured as the natural log of the percent of a country's area covered by mountains. Geographic and colonial controls include those reported in Tables 2 and 3. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table 6: IV ESTIMATES: RURAL INSURGENCY AND DEMOCRACY

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	POST-1990 POLITY IV				POST-1990 FREEDOM HOUSE			
Rural insurgency	-0.21*	-0.26**	-0.21*	-0.28**	-0.32**	-0.38***	-0.32**	-0.41***
	(0.12)	(0.12)	(0.12)	(0.13)	(0.13)	(0.13)	(0.12)	(0.15)
Geographic controls?		✓		✓		✓		✓
Colonial controls?			✓	✓			✓	✓
N	47	47	47	47	49	49	47	47
R^2	0.11	0.22	0.26	0.39	0.09	0.26	0.31	0.39
σ	0.22	0.21	0.20	0.19	0.27	0.24	0.23	0.21

Notes: Estimates are based on two-stage least-squares regressions. Robust standard errors are shown in parentheses. *Rural insurgency* is instrumented by *Rough terrain*, which is is measured as the natural log of the percent of a country's area covered by mountains. Geographic and colonial controls include those reported in Tables 2 and 3. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table 7: FALSIFICATION EXERCISES

	(1)	(2)	(3)	(4)	(5)	(6)
PANEL A: PRE-1990 INCOME AND GROWTH						
	pre-1990 GDP p.c.			*pre-1990 GDP growth*		
Rough terrain	-0.06	-0.02	-0.07	-0.19	-0.17	-0.27
	(0.09)	(0.06)	(0.05)	(0.25)	(0.24)	(0.32)
Geographic controls?		✓	✓		✓	✓
Colonial controls?			✓			✓
N	43	43	43	43	43	43
R^2	0.01	0.59	0.86	0.02	0.44	0.53
σ	0.81	0.57	0.36	2.14	1.78	1.76
PANEL B: PRE-1990 SOCIAL DIVERSITY						
	pre-1990 Ethnic Frac.			*pre-1990 Religious Frac.*		
Rough terrain	-0.02	-0.02	0.01	0.02	0.03	0.01
	(0.03)	(0.02)	(0.02)	(0.03)	(0.02)	(0.02)
Geographic controls?		✓	✓		✓	✓
Colonial controls?			✓			✓
N	42	42	42	42	42	42
R^2	0.01	0.59	0.80	0.12	0.68	0.76
σ	0.24	0.17	0.13	0.22	0.15	0.14
PANEL C: PRE-1990 VIOLENCE						
	pre-1990 No. of Civil Wars			*pre-1990 Civil War Years*		
Rough terrain	0.07***	0.04	0.05	0.06**	0.04	0.03
	(0.02)	(0.03)	(0.04)	(0.02)	(0.02)	(0.03)
Geographic controls?		✓	✓		✓	✓
Colonial controls?			✓			✓
N	42	42	42	42	42	42
R^2	0.12	0.27	0.52	0.11	0.30	0.54
σ	0.26	0.26	0.23	0.24	0.24	0.21

Notes: Estimates are based on OLS regressions. Panel A: in columns (1)-(3), the dependent variable is the country-level average income per capita between the year of independence and 1989; in columns (4)-(6), the dependent variable is the average GDP growth rate during the same time period. Panel B: in columns (1)-(3), the dependent variable is the average level of ethnic fractionalization between the year of independence and 1989; in columns (4)-(6), the dependent variable is the average level of religious fractionalization during the same period. Panel C: in columns (1)-(3), the dependent variable is the average number of civil wars between the year of independence and 1989; in columns (4)-(6), the dependent variable is the fraction of years that a country was involved in a civil war during the same period. Robust standard errors are shown in parentheses. *Rough terrain* is measured as the natural log of the percent of a country's area covered by mountains. Geographic and colonial controls include those reported in Tables 2 and 3. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table 8: DID ESTIMATES WITH COUNTRY FE AND YEAR FE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	POLITY IV				FREEDOM HOUSE			
Rural insurgency × post-1990	-0.14*	-0.18**	-0.17**	-0.13*	-0.14*	-0.14*	-0.17**	-0.12*
	(0.07)	(0.07)	(0.07)	(0.06)	(0.08)	(0.08)	(0.08)	(0.07)
Geographic controls × post-1990?	✓	✓	✓	✓	✓	✓	✓	✓
Colonial controls × post-1990?		✓	✓	✓		✓	✓	✓
Contemporaneous controls?			✓	✓			✓	✓
Subregion-specific time trends?				✓				✓
N	2,196	2,196	1,945	1,945	1,855	1,780	1,621	1,621
Countries	47	47	46	46	49	47	46	46
R^2	0.38	0.45	0.46	0.49	0.24	0.32	0.31	0.37
σ	0.18	0.16	0.16	0.16	0.18	0.17	0.17	0.16

Notes: Estimates are based on OLS regressions. Variables not shown include country and year fixed effects in all cases. Geographic and colonial controls include those reported in Tables 2 and 3 interacted with a post-1990 indicator. Contemporaneous controls include annual measures of GDP p.c. and population. Subregion-specific linear time trends are defined based on the following subregions: North Africa, East Africa, West Africa, Middle Africa, and Southern Africa. Robust standard errors clustered by country are shown in parentheses. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table 9: POTENTIAL MECHANISMS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PANEL A: INSTITUTIONAL OUTCOMES FROM INDEPENDENCE TO 1989								
	Dem. Capital		*Competitiveness*		*Direct Legislature*		*Exec. Constraints*	
Rural insurgency	-0.11*	-0.09	-0.35	-0.25	-0.10	-0.08	-0.26	0.10
	(0.06)	(0.06)	(0.21)	(0.25)	(0.08)	(0.10)	(0.49)	(0.50)
Geographic controls?	✓	✓	✓	✓	✓	✓	✓	✓
Colonial controls?		✓		✓		✓		✓
N	45	45	45	45	44	44	45	45
R^2	0.22	0.55	0.24	0.49	0.25	0.30	0.16	0.59
σ	0.20	0.17	0.82	0.72	0.23	0.24	1.58	1.18
PANEL B: SOCIAL MOVEMENTS FROM INDEPENDENCE TO 1969								
	Attempted Coups		*Armed Rebellions*		*Demonstrations*		*Workers Strikes*	
Rural insurgency	0.28	5.21**	0.42	1.97**	-1.22**	-2.18*	-1.55***	-1.48**
	(0.64)	(2.13)	(0.50)	(0.96)	(0.60)	(1.16)	(0.39)	(0.70)
Geographic controls?	✓	✓	✓	✓	✓	✓	✓	✓
Colonial controls?		✓		✓		✓		✓
N	29	29	29	29	29	29	29	29
Pseudo R^2	0.19	0.42	0.34	0.42	0.26	0.48	0.32	0.37
PANEL C: CIVIL WARS FROM INDEPENDENCE TO 1989								
	Civ. Wars (C&H)		*Civ. Wars (COW)*		*Civil War Years*		*Frac. Civ. War Yrs.*	
Rural insurgency	1.89***	1.94***	2.14***	2.31***	1.89***	2.16***	0.23***	0.17*
	(0.53)	(0.64)	(0.51)	(0.70)	(0.45)	(0.77)	(0.08)	(0.09)
Geographic controls?	✓	✓	✓	✓	✓	✓	✓	✓
Colonial controls?		✓		✓		✓		✓
N	42	42	42	42	42	42	42	42
Pseudo R^2	0.54	0.64	0.57	0.72	0.54	0.67	0.38	0.56

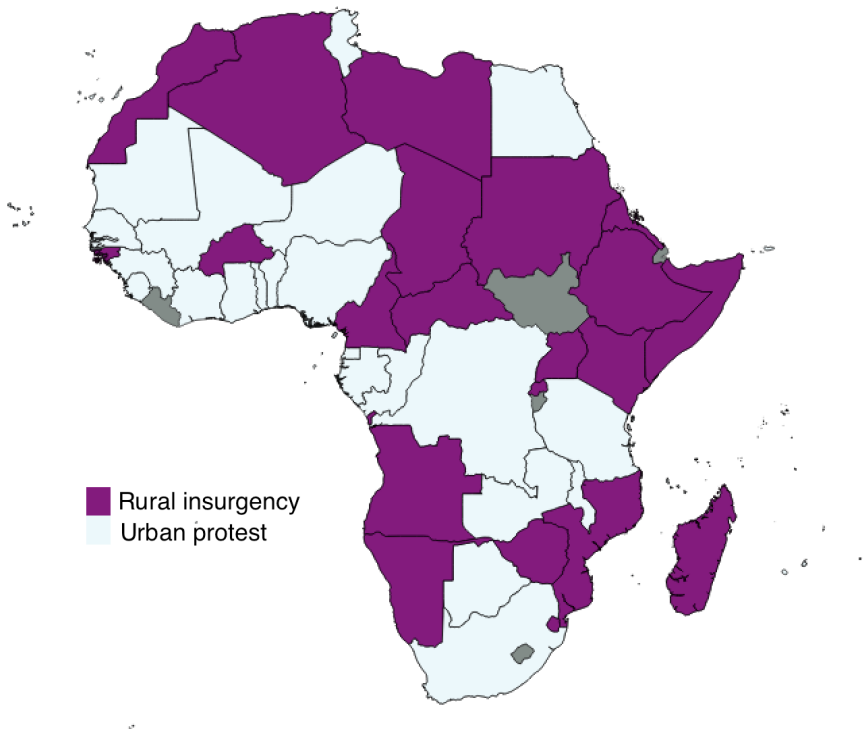
Notes: Estimates reported in Panel A and in Panel C, column (8), are based on OLS regressions. Estimates reported in Panel B and Panel C, columns (1)-(7), are based on Poisson regressions. Controls include the geographic and colonial covariates reported in Tables 2 and 3. Robust standard errors are shown in parentheses. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table 10: MEDIATING EFFECT OF SOCIAL MOVEMENTS AND CIVIL WARS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	POST-1990 POLITY IV				POST-1990 FREEDOM HOUSE			
	PANEL A: SOCIAL MOVEMENTS FROM INDEPENDENCE TO 1969							
Rural Insurgency	-0.15**	-0.16**	-0.12*	-0.11	-0.21***	-0.21**	-0.18**	-0.16*
	(0.06)	(0.06)	(0.06)	(0.07)	(0.07)	(0.08)	(0.08)	(0.08)
No. attempted coups		-0.04		-0.07**		-0.07		-0.10***
		(0.04)		(0.03)		(0.05)		(0.03)
No. armed rebellions		-0.03		-0.03		-0.02		-0.03
		(0.03)		(0.04)		(0.04)		(0.05)
No. demonstrations			0.00	0.00			-0.02	-0.02
			(0.01)	(0.01)			(0.02)	(0.02)
No. workers strikes			0.02***	0.02***			0.03***	0.03***
			(0.01)	(0.01)			(0.01)	(0.01)
N	29	29	29	29	29	29	29	29
R^2	0.15	0.19	0.27	0.36	0.20	0.24	0.35	0.43
σ	0.17	0.18	0.17	0.16	0.21	0.22	0.20	0.19
	PANEL B: CIVIL WARS FROM INDEPENDENCE TO 1989							
Rural Insurgency	-0.22***	-0.17**	-0.17**	-0.16**	-0.21**	-0.16*	-0.17*	-0.14*
	(0.08)	(0.07)	(0.08)	(0.07)	(0.09)	(0.08)	(0.09)	(0.08)
No. Civil Wars		-0.02**				-0.02**		
		(0.01)				(0.01)		
No. Civil War Years			-0.02**				-0.02***	
			(0.01)				(0.01)	
Frac. Civil War Years				-0.32**				-0.28*
				(0.14)				(0.15)
N	42	42	42	42	42	42	42	42
R^2	0.49	0.59	0.56	0.59	0.53	0.60	0.57	0.61
σ	0.20	0.18	0.19	0.18	0.21	0.20	0.21	0.20

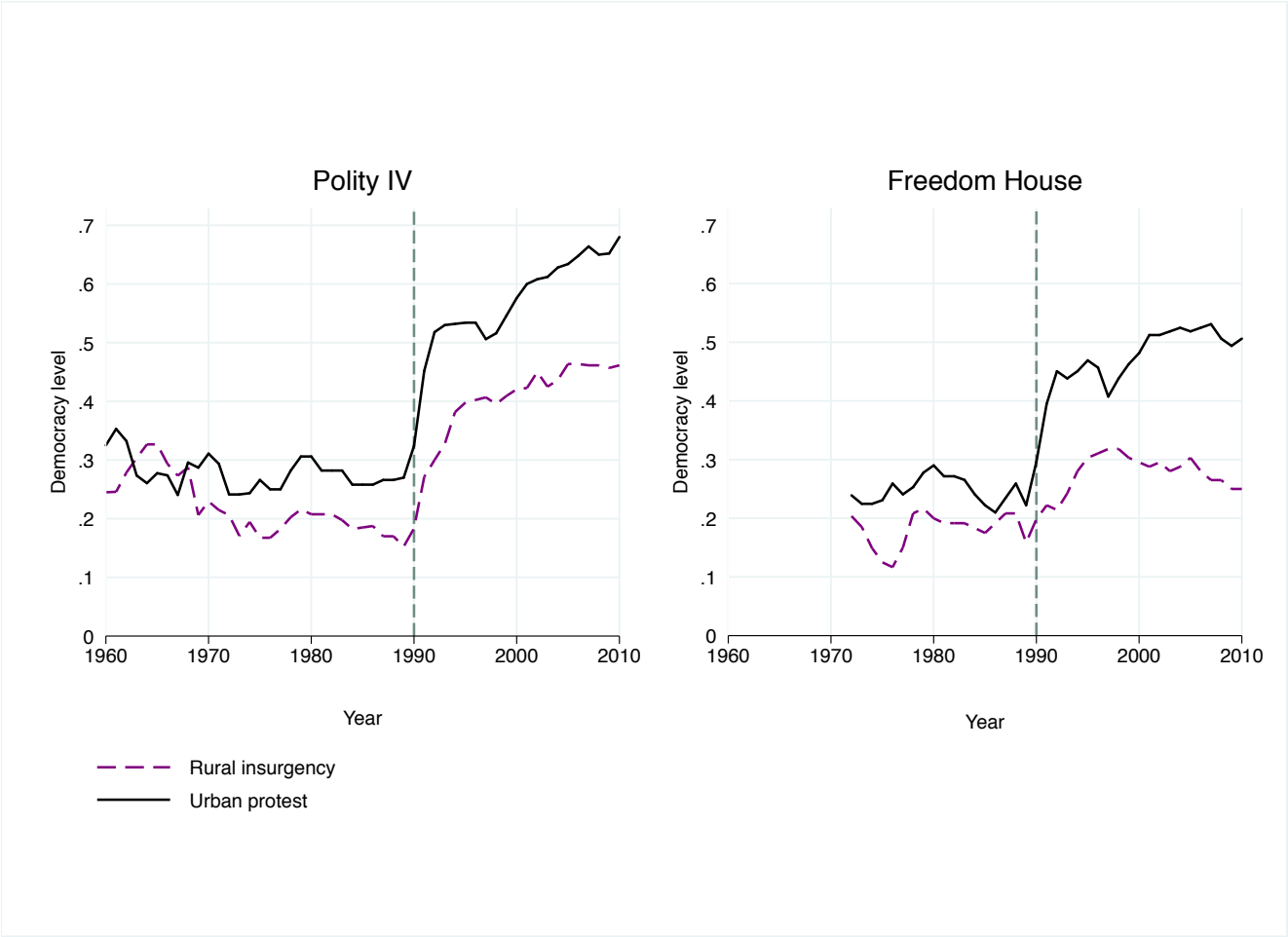
Notes: Estimates are based on OLS regressions. Robust standard errors are shown in parentheses. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Figure 1: TYPES OF INDEPENDENCE MOVEMENTS IN AFRICA



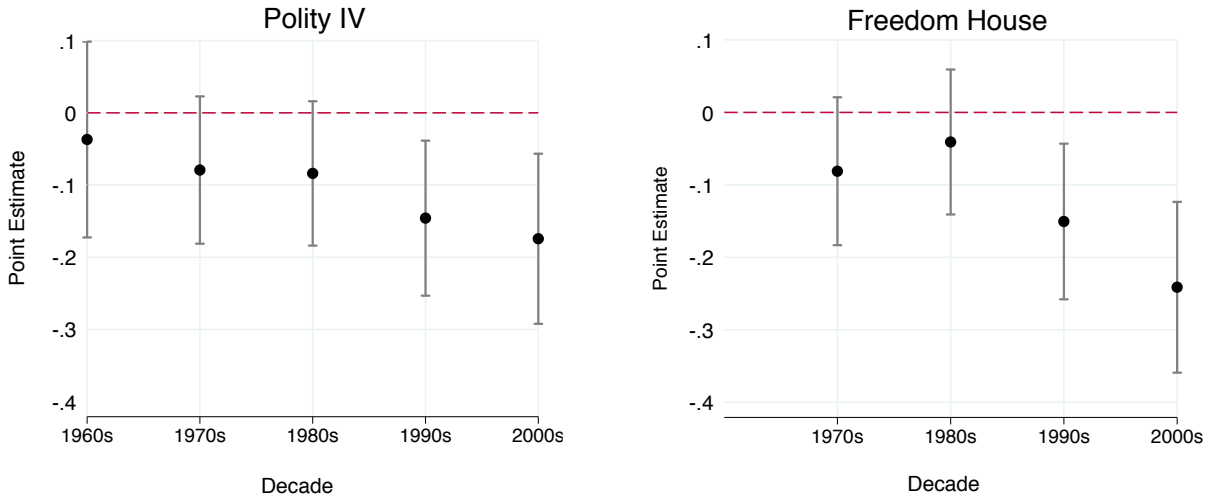
Notes: This figure shows countries where independence movements relied heavily on rural insurgency strategies (purple) versus countries that relied mostly on urban protests (light blue).

Figure 2: DEMOCRACY LEVELS BY TYPE OF INDEPENDENCE MOVEMENT



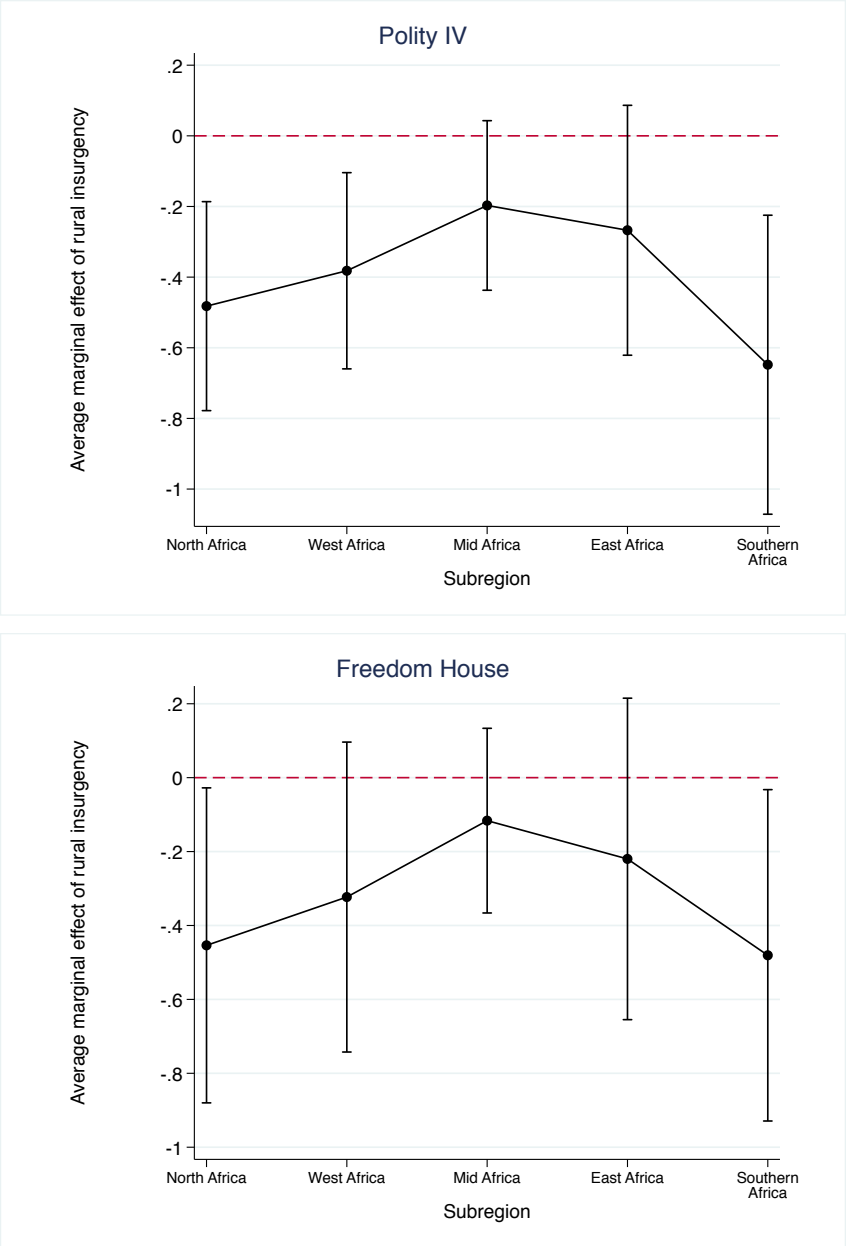
Notes: This figure shows annual changes in the average level of democracy in rural insurgency versus urban protest countries, based on data from Polity IV (left) and Freedom House (right).

Figure 3: ESTIMATED EFFECT OF RURAL INSURGENCY ON DEMOCRACY BY DECADE



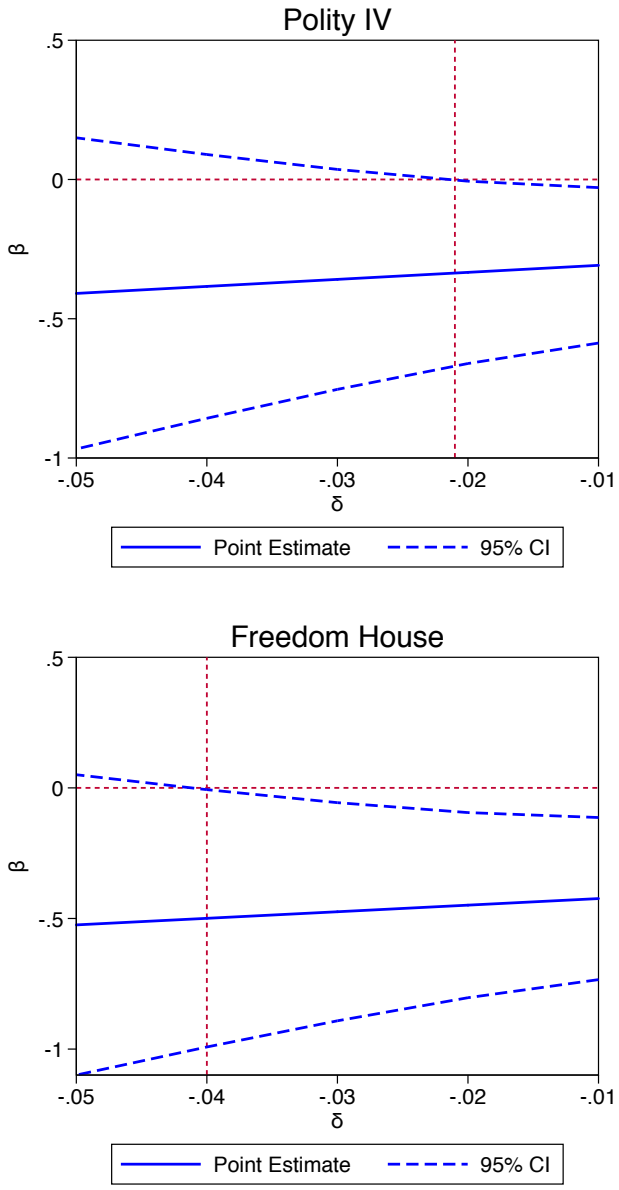
Notes: Black dots represent point estimates from OLS regressions of the average democracy score by decade on the rural insurgency dummy. Vertical bars indicate 95% confidence intervals.

Figure 4: MARGINAL EFFECTS CONDITIONAL ON SUBREGION



Notes: This figure shows point estimates and 95% confidence intervals from a series of regression models that allow for interactions between the rural insurgency indicator and subregion dummies, including the full set of covariates used in Tables 2 and 3.

Figure 5: ROBUSTNESS TO NON-PERFECT EXOGENEITY



Notes: These plots show confidence intervals around the estimated effect of rural insurgency on democracy while relaxing the exclusion restriction, following Conley et al. (2012). All estimates are based on the benchmark specification, which includes the full set of geographic and colonial controls. The set of dashed lines represent 95% confidence intervals based on the local-to-zero approximation method. The solid line corresponds to the point estimate.