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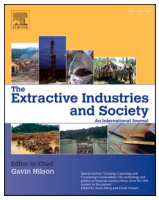

Original article



# Political accountability and development in Africa's resource economies

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ABSTRACT

Sub-Saharan Africa has undergone a profound political transformation since the early 1990s. A partial wave of democratization – affecting countries rich in mineral and fuel resources as well as their resource-poor counterparts – gave rise to a variety of political regime configurations. This article explores the joint consequences of natural resources and political regimes for development outcomes. We analyze cross-national data on the social inclusiveness and economic sustainability of development from the early 1990s through the late 2010s. Using regression-based simulations, we show that electoral democracy is associated with better development outcomes irrespective of natural resources. Where resource-rich nondemocracies have performed poorly, the problem lies more in their dearth of democracy than in their wealth of resources. We also show that democracy's advantages operate through mechanisms of political accountability: electoral competitiveness and programmatic (as opposed to clientelistic) parties. Africa's resource-rich democracies have exhibited one mechanism or the other but not both – gravitating toward either competitive clientelism or programmatic dominant parties. We illustrate the challenges of combining electoral competitiveness with programmatic parties using the examples of Namibia, Ghana, and Zambia.

## 1. Introduction

The extraction of lucrative mineral and fuel resources has long been central to many economies in sub-Saharan Africa. With the transition to renewable energy – which requires inputs such as cobalt, copper, lithium, and rare earth elements – global demand for Africa's natural resources is unlikely to subside anytime soon. Meanwhile, since the end of the Cold War, a range of political regimes has taken root in the region. As of 1990, nearly all residents of Africa lived under nondemocratic regimes. A substantial minority of countries has since made transitions to electoral democracy, and even the democracies have diverse features. In some, such as Ghana and Zambia, elections have led to several alternations of power between political parties. In others, elections, though free and fair, have been won repeatedly by the same party, as in Botswana (until recently) and Namibia.

National trajectories of development have varied widely in Africa since the early 1990s, influenced by countries' resource endowments and political regimes. Development outcomes can be characterized by their social inclusiveness and economic sustainability. Over the past three decades, have resource-rich countries tended to perform better or worse than their resource-poor counterparts on these dimensions? Among resource-rich countries, how does the performance of democracies and nondemocracies compare? Among electoral democracies, have the records of competitive and single-party dominant democracies differed?

An extensive literature on natural resources and economic development emphasizes the mediating role of economic and political institutions. In an influential study, Sachs and Warner (1995) highlighted challenges of resource-led development by identifying a robust, negative relationship between resource dependence and economic growth. Subsequent research has shown that the so-called "resource curse" can be mitigated by appropriate institutions. One strand in the literature focuses on how property rights and the rule of law restrain rent-seeking behavior in the resource sector. Mehlum et al. (2006) find that natural resources hinder economic growth if institutions are "grabber friendly" but enhance it if they are "producer friendly." Similarly, Bulte and Damania (2005) find that "institutional quality" (in particular, the quality of economic governance) is essential for resource-led development. Another strand in the literature focuses on how political regimes influence governments' accountability to their citizens. Robinson et al. (2006) present a theoretical model in which resource booms trigger unproductive public spending sprees in autocracies but not democracies,

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while Andersen and Aslaksen (2008) find empirically that the democratic advantage is confined to countries with parliamentary (rather than presidential) constitutions. A qualification regarding the mitigating role of institutions is that resource dependence is negatively associated with the emergence of the kinds of institutions – economic (Bulte & Damania, 2005; Leite & Weidmann, 1999) and political (Ross, 2015; Wiens et al., 2014) – that are seen to be required. Menaldo (2016) counters that dependence on resource extraction is itself a symptom of bad institutions, meaning that for him what is often called the resource curse is more fundamentally an "institutions curse."

Efforts to analyze interactions between natural resources and institutions in Africa since the early 1990s have been limited. Perhaps the most influential statistical study of intraregional variation reported a negative association between resource dependence and democracy, claiming that (except for South Africa) "the transition to democracy has been successful *only* in resource-poor countries" (Jensen & Wantchekon, 2004, 816, emphasis added). The bulk of the data in that study was from the Cold War era, and the analysis overlooked or downplayed the existence of resource-rich democracies like Namibia and Botswana.[1] In any case, early assessments of the developmental potential of Africa's new democracies were pessimistic. As of the late 1980s, many regimes featured "big-man" personal rule with rampant rent-seeking and nonexistent political accountability, and many observers expected these unfavorable attributes to persist in new democracies (Bratton & van de Walle, 1997; cf. Mkandawire, 2015). Skeptics wrote democratization off as nothing more than a ruse to satisfy Western aid donors – a "fairy--story" (Bayart & Ellis, 2000, p. 226) or an institutional "façade" (Chabal & Daloz, 1999, p. 119). The existence, let alone developmental potential, of resource-rich democracies in Africa has not received much attention.

The aim of this article is to clarify how natural resources and political regimes have shaped development trajectories in Africa. To capture national development, we use aggregate indicators of social inclusiveness and economic sustainability, compiled over roughly three decades since 1990. To capture key features of political regimes, we classify countries as democracies and nondemocracies. We further distinguish democracies based on their electoral competitiveness and the nature of political parties' linkages with citizens (from programmatic to clientelistic). We use statistical methods to estimate joint associations of natural resources and political regimes with development outcomes. Then we use the estimates to run evidence-based simulations of resource-rich and resource-poor countries under different regime configurations. Finally, we present brief case studies of three resource-rich democracies with different regime configurations – Namibia, Ghana, and Zambia – to illustrate the challenges of political accountability in resource economies. Our focus on aggregate indicators of social inclusiveness and economic sustainability means that issues of sectoral governance and local community impact are beyond the scope of the article. Yet we believe considerable insight can be gained from analyzing the varied trajectories of development in Africa that have emerged in countries with different resource endowments under different political regimes.

To preview our results, we find that development outcomes differ markedly by regime configuration – although for any given configuration, outcomes for resource-rich and resource-poor countries are similar. The presence of political accountability mechanisms – rooted in electoral competitiveness or programmatic political parties – predicts better development outcomes. That is, the more leverage citizens have to hold their governments accountable, the more likely it is that development will be socially inclusive and economically sustainable. Resource-rich democracies have tended to lack one major accountability mechanism or the other: they have either been electorally competitive or have had programmatic parties, but not both. The examples of Namibia, Ghana, and Zambia illustrate the challenges of combining both mechanisms. On the other end of the political spectrum, we find that where resource-rich nondemocracies have performed poorly, the problem lies more in their dearth of democracy than in their wealth of resources.

The rest of the article proceeds as follows. We present the concepts and measures underpinning our approach in Section 2. In Section 3, we describe our statistical methods and present the results as regression-based simulations. Section 4 discusses the findings, aided by three country studies. A concluding summary follows.

## 2. Concepts and measures

We analyze the extent to which initial conditions in the early 1990s and subsequent regime configurations predict development outcomes in the late 2010s. Fig. 1 summarizes the logic. Outcomes are the social inclusiveness and economic sustainability of development. Initial conditions include lagged values of the outcomes – starting points for each country's post-1990 development record. Controlling for lagged outcomes focuses the analysis on how outcomes have changed over the next three decades. Other initial conditions are mineral and fuel rents per capita and non-rent gross domestic product (GDP) per capita. Regime features are averages from 1990 to 2019: the proportion of years each country spent as an electoral democracy, and the extent to which this gave rise to electoral competitiveness and programmatic party-citizen linkages.

### 2.1. Development outcomes

Successful development by definition must be socially inclusive and economically sustainable. We analyze inclusiveness and sustainability as separate dimensions. The distinction allows the possibility that a country's development trajectory might be inclusive but not sustainable or sustainable but not inclusive.

#### 2.1.1. Social inclusiveness

The social inclusiveness of development reflects how broadly basic conditions of human well-being are distributed in society. The Human Development Index (HDI) is an alternative to purely income-based indicators of development. It balances income per capita with widely available indicators of health (life expectancy at birth) and education (mean and expected years of schooling) (United Nations Development Program, 2024). The HDI thus gives empirical expression to the proposition that development must advance human capabilities in ways that cannot be reduced to economic growth.

We measure social inclusiveness as an average of the health and education components of the HDI. (We exclude the income component because income per capita fails to capture the distribution of income in society, and income distribution data for Africa is patchy.) Data for the health and education components are widely available for African countries from 1990 onward.[2] Details of the HDI calculations have changed slightly over the years. To ensure comparability, we apply the 2019 methods directly to source data (United Nations Development Program, 2020).

#### 2.1.2. Economic sustainability

Economic sustainability reflects the accumulation of produced and human assets, adjusted to account for the depletion of natural resources. The Hartwick (1977) rule provides a criterion: for economic growth based on the extraction of nonrenewable resources to be economically

[1] The Polity III (Jaggers & Gurr, 1996) data they used classified both countries as democracies from independence, 1990 for Namibia and 1966 for Botswana.

[2] Data for Eritrea are only available from independence in 1995; we use these in place of the period average for the early 1990s. Education data are unavailable for Cape Verde, Equatorial Guinea, and Somalia in the early 1990s; we use period averages based only on the scaled health data.

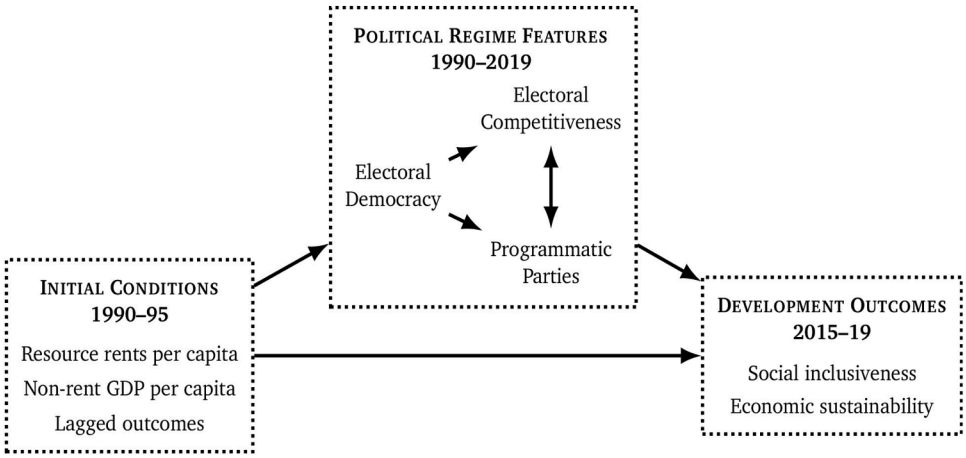


**Fig. 1.** Structure of the analysis.

sustainable, resource rents must be offset by investments in reproducible physical and human capital. The World Bank (2021a), working within the natural capital ("green") accounting tradition, developed measures of "total wealth" that track the depletion of natural capital alongside changes in produced and human capital (see, e.g., Hamilton, 2001).

We measure economic sustainability using World Bank (2021b) data on total wealth per capita (log transformed). Data are available for 38 sub-Saharan African countries between 1995 and 2018. The 1995 values serve as measures of initial conditions, and we use the geometric mean for 2015 through 2018 to measure contemporary outcomes.[3] Estimates of total wealth are far from exact. They incorporate estimates of resource rents, for example, which in turn require country- and commodity-specific data on extraction costs that can only be approximated (Lange et al., 2020). Moreover, normative questions persist about which assets to measure, how to value them, and the substitutability of natural and other assets (Yamaguchi et al., 2022). Despite these limitations, the total wealth estimates capture economic sustainability more fully than conventional measures based primarily on GDP.

#### 2.1.3. *Social inclusiveness and economic sustainability in Africa*

Development trajectories in Africa have varied considerably since the early 1990s. Fig. 2 plots changes in social inclusiveness and economic sustainability for the 38 countries with data for both indicators. All countries improved on inclusiveness, with positive changes on our indicator of health and education. Nine countries moved backward on sustainability: their total wealth per capita was lower on average in the late 2010s than in 1995, meaning that asset depletion exceeded new investment. Among the backward movers, resource economies broke the Hartwick rule and consumed resource rents at an unsustainable pace. Across the full sample, performance in the two dimensions was modestly correlated, as shown by the upward slope of the regression line in the Fig. 2.

### 2.2. *Political regime features*

The wave of political change that began in the early 1990s swelled the ranks of electoral democracies in Africa. To qualify as an electoral democracy, a country must have regular elections that are broadly recognized as free and fair. To capture differences among electoral democracies, we consider two regime features central to political accountability: electoral competitiveness and the nature of party-citizen linkages.

#### 2.2.1. *Electoral democracy*

Our measure of electoral democracy is a dummy variable based on six discrete conditions. Together they define "minimally competitive, multiparty elections with universal suffrage for legislature and executive" (Skaaning et al., 2015, p. 1497). The most restrictive condition requires that "elections are, in principle, sufficiently free to enable the opposition to gain power if they were to attract sufficient support from the electorate" (Skaaning et al., 2015, p. 1501). Countries whose multiparty elections fail on this condition are electoral autocracies, a form of nondemocratic rule.

#### 2.2.2. *Electoral competitiveness*

We deem an electoral democracy to be electorally competitive if it has completed an electoral turnover of power from one political party to another. We measure it using an annual dummy variable for electoral turnover. Countries that are not electoral democracies or have not yet had a turnover get values of zero. Once a country has experienced a turnover, we code it as competitive for as long as it remains an electoral democracy. Although the theoretical possibility of removing the government in an election exists in all democracies, not all countries have realized this possibility.[4]

#### 2.2.3. *Party-citizen linkages*

"Party-citizen linkages" refers to major political parties' appeals to citizens, on a continuum from "programmatic" to "clientelistic" (Bizzarro et al., 2017, p. 7; Kitschelt & Wilkinson, 2007). Programmatic parties emphasize the delivery of policies, programs, and public goods. Clientelistic parties emphasize targeted personal benefits like jobs, private goods, and cash. Programmatic linkages are more conducive to political accountability, as voters share a common interest in removing a government that fails to deliver. Clientelistic linkages allow the government to play voters off each other by discarding disaffected voters from in its coalition and redirecting clientelistic benefits to others.

We measure party-citizen linkages using a continuous variable from the Varieties of Democracies project (Coppedge et al., 2024). It is available for all countries where one or more parties are legally recognized, irrespective of whether they are electoral democracies. The values characterize "the most common" type of linkage among "major parties" in the country, coded by country experts. Between the poles of programmatic and clientelistic parties, intermediate values correspond with the distribution of local or regional public goods or mixes of

[3] The geometric mean is the arithmetic mean of the log-transformed values.

[4] Huntington (1993, p. 267) proposed a two-turnover test of democratic consolidation, and Carbone and Pellegeta (2017) have shown electoral turnovers to be useful markers of political accountability in Africa (Carbone & Pellegeta, 2017).

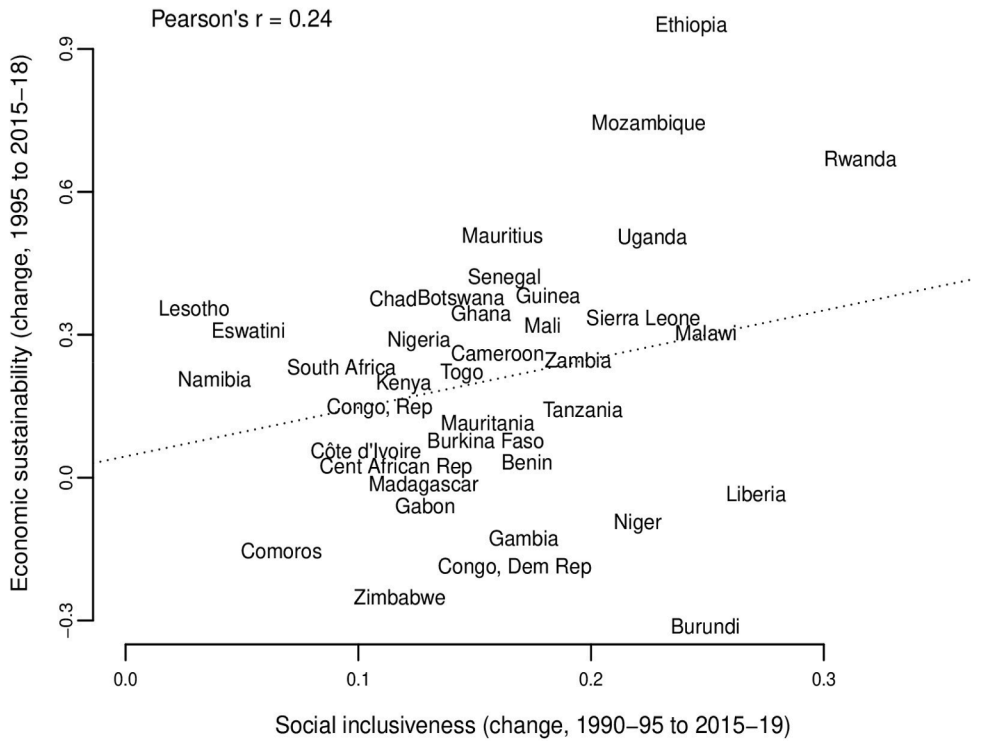


**Fig. 2.** Trajectories of socially inclusive and economically sustainable development in sub-Saharan Africa, 1990–2019.

programmatic and clientelistic distribution.

#### 2.2.4. *Regime configurations in Africa*

In the statistical analysis, a country's average annual values on the three regime features from 1990 to 2019 characterize its regime configuration – "regime" for short. To illustrate the diversity of regimes in Africa, Fig. 3 presents a snapshot from 2021, with "resource intensive" countries according to the International Monetary Fund (2021, p. 2) capitalized. Twenty of forty-seven countries were electoral democracies as of 2021, and more than half of these had completed at least one electoral turnover. Nine of twenty-two resource economies qualified as electoral democracies, a similar proportion to non-resource economies.

### 2.3. *Initial conditions*

Besides lagged development outcomes, predictors include resource rents per capita and non-rent GDP per capita in the early 1990s (log transformed). They capture conditions at the beginning of the wave of political change. We use initial resource rents to distinguish resource-rich and resource-poor countries. Rents are "unearned" profits from natural resource sales beyond the costs of extraction and a normal return to capital, due to their scarcity. High rent potential is an important difference between resource extraction and other forms of economic production, which can shape the dynamics of economic development (see, e.g., Auty & Gelb, 2001; Ross, 2012, pp. 34–39). We measure rents per capita as the annual average from 1990 to 1995, using World Bank (2024) estimates for minerals and petroleum (oil and natural gas). Then we subtract them from GDP to get non-rent GDP per capita.[5]

## 3. Methods and results

Our statistical analysis clarifies the development outcomes associated with different political regimes in resource-rich and resource-poor countries.[6] We first run cross-national regressions to estimate empirical patterns. This grounds the analysis in actual development trajectories in sub-Saharan Africa between the early 1990s and the late 2010s. Next we construct hypothetical country profiles that contrast four regime configurations with two levels of resource rents. We then apply the regression estimates to the profile of each hypothetical country to generate a batch of simulated development outcomes.[7] Finally, we plot and compare the simulations. The approach highlights the main quantities of substantive interest: the development outcomes predicted for each multivariate country profile (King et al., 2000).[8]

Table 1 presents the linear (ordinary least squares) regression results. All variables are z-scores, meaning the coefficients are on a standardized scale. The estimates used for the simulations are in columns 3 and 6; other columns contain baseline estimates for comparison.[9]

We simulate development outcomes for eight hypothetical country profiles. Lagged outcomes and non-rent GDP per capita are set to their sample means. Other predictors are set at "realistic" values that avoid statistical extrapolation (with one exception that we identify) (King &

[5] Averaging rents over several years reduces sensitivity to international price volatility. We add one dollar to rents per capita before taking logarithms to avoid undefined values for countries with zero rents.

[6] For data and R code to replicate the analysis, see Alence & Ndlovu, 2025.

[7] The simulations are based on the full variance-covariance matrix from the regression, not just the point estimates.

[8] In doing so, it eschews less relevant null-hypothesis tests of individual regression coefficients (Imbens, 2021).

[9] We considered more flexible models with interactions between rents and regime features, but cross-validation favored the simple, additive specification. We also considered a joint seemingly-unrelated-regression model of both outcomes, but it did not improve efficiency. Finally, we checked robustness with respect to civil war (defined by more than one thousand battle deaths per year (Davies et al., 2024; Gleditsch et al., 2002)) – by including the proportion of years in war as a predictor and separately by limiting the sample to countries with no war-years – and our findings did not change substantively.

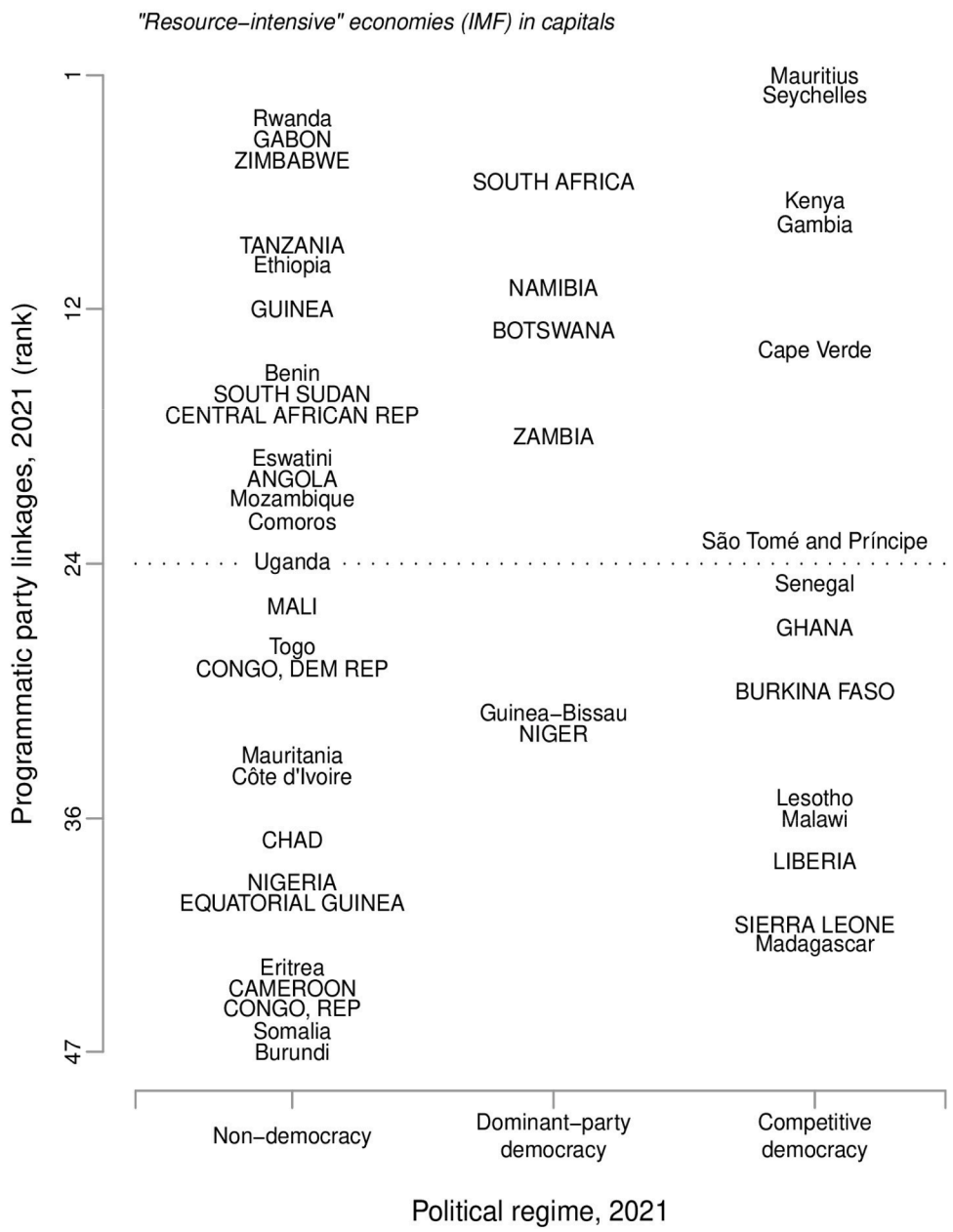


**Fig. 3.** Regime configurations and "resource intensity," 2021.

Zeng, 2007; implemented using Stoll et al., 2020). Profiles include four regime configurations, each with a resource-rich and a resource-poor variant. Table 2 describes the regimes. "Low" and "high" values on each feature correspond with the eighteenth and eight-second percentiles. The nondemocratic regime has low values for all three features. All three democratic regimes are assigned high values on electoral democracy. The first approximates a competitive democracy, with competitiveness set to high and programmatic linkages at the mean. The second approximates a dominant-party democracy, with programmatic linkages at high and competitiveness at its mean. The final regime combines the best of both worlds: high values on electoral competitiveness and programmatic parties. Profiles for resource-poor and resource-rich countries differ by one standard deviation on rents per capita: roughly two dollars per capita (as of the early 1990s) for resource-poor and twenty dollars per capita for resource-rich.

We ran one hundred statistical simulations for each of the eight country profiles. Fig. 4 displays the simulated values. Each point represents the social inclusiveness and economic sustainability of a single simulation. The simulations for each profile appear as a cloud of points, centered around the most likely outcomes, with their spread reflecting estimation uncertainty. Panels in the figure distinguish the four regime configurations, while plotting symbols distinguish resource-rich and resource-poor simulations within each panel.

Two immediate takeaways emerge. First, for any given regime configuration, simulated development outcomes for resource-rich and resource-poor countries overlap considerably. Given a country's regime, its initial level of resource rents per capita is not very useful in predicting its development trajectory. If anything, resource richness predicts slightly better outcomes. Second, all three democratic configurations outperform the nondemocratic one. Nearly all simulated outcomes for nondemocracy are in the lower-left quadrant of the panel, meaning they are below the sample means for social inclusiveness and economic sustainability. In contrast, nearly all outcomes for the three democratic configurations lie in the upper-right quadrant, above the mean for both dimensions of development. Countries that spent much of the three decades since 1990 as electoral democracies have enjoyed consistently

**Table 1**
Predictors of development outcomes, 1990–2019.

| | Development outcomes | | | | | |
|---|---|---|---|---|---|---|
| | Social inclusiveness | | | Economic sustainability | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Lagged outcome | | 0.90 | 0.86 | | 0.79 | 0.72 |
| | | (0.13) | (0.11) | | (0.11) | (0.11) |
| Non-rent GDP per capita (log) | 0.65 | −0.07 | −0.26 | 0.78 | 0.19 | 0.12 |
| | (0.12) | (0.13) | (0.13) | (0.10) | (0.10) | (0.10) |
| Rents per capita (log) | −0.04 | 0.04 | 0.15 | 0.21 | 0.01 | 0.09 |
| | (0.12) | (0.08) | (0.08) | (0.10) | (0.07) | (0.07) |
| Electoral democracy | | | −0.10 | | | 0.01 |
| | | | (0.10) | | | (0.08) |
| Competitive elections | | | 0.23 | | | 0.07 |
| | | | (0.10) | | | (0.08) |
| Programmatic parties | | | 0.34 | | | 0.18 |
| | | | (0.09) | | | (0.07) |
| Observations | 47 | 47 | 47 | 38 | 38 | 38 |
| Adjusted $R^2$ | 0.38 | 0.71 | 0.79 | 0.73 | 0.89 | 0.91 |

Note: OLS regression estimates and standard errors; all variables are standardized

**Table 2**
Regime configurations used in the simulations.

| Regime configuration | Electoral democracy | Electoral competitiveness | Programmatic party linkages |
|---|---|---|---|
| Nondemocratic | low | low | low |
| Competitive/ clientelistic | high | high | mean |
| Dominant/ programmatic | high | mean | high |
| Competitive/ programmatic | high | high | high |

Note: "Low" is the eighteenth percentile; "high" is the eighty-second.

superior outcomes on our two aggregate outcomes.

Democracy's advantages are tied to regime features conducive to political accountability. Electoral democracy in itself does not directly predict better development outcomes. Its contribution is to provide foundations for electoral competitiveness, to induce parties to be more programmatic, or both.[10] Simulated outcomes in the off-diagonal panels (top-left and bottom-right) – for competition among clientelistic parties and for rule by a programmatic dominant party – are similar. Electoral competitiveness and programmatic parties are partial substitutes, yielding similar developmental advantages. Theory suggests that, compared to nondemocracy, competitive democracy should promote greater social inclusiveness (by strengthening electoral incentives to appeal to broad segments of the electorate), and dominant-party democracy should promote greater economic sustainability (by extending governments' time horizons). Other studies of development outcomes in African democracies offer some support for these hypotheses (e.g., Carbone & Pellegeta, 2017; Hickey et al., 2020). Modest differences between the off-diagonal panels also conform with theoretical expectations, with slightly greater inclusiveness in the competitive configuration (top-left) and slightly greater sustainability in the dominant-party configuration (bottom-right). In the bigger picture, though, outcomes for these two configurations have much more in common with each other than either does with the outcomes for the nondemocratic configuration.

Resource-rich and resource-poor countries perform similarly under each regime configuration, but the simulations do clarify important challenges for Africa's resource economies. For resource-rich non-democracies with disappointing development records, the message is clear: the problem has more to do with a dearth of democracy than with a wealth of resources. For resource-rich democracies, the message is more subtle. Of the eight profiles in Fig. 4, the only "unrealistic" profile – that is, the only one not present within the range of the observed data – was a resource-rich country with competitive elections between programmatic parties. The empirical absence of this profile has persisted, as confirmed by the 2021 snapshot in Fig. 3. Nine countries that the IMF classified as resource-intensive qualified as democracies in that year. Among them, every competitive democracy fell below the median on programmatic linkages, and every one above the median on programmatic linkages had a dominant party. The challenge for resource-rich democracies is to break out of the alternative patterns of competitive clientelism or rule by dominant programmatic parties.

## 4. Discussion of country experiences

Three resource-rich African democracies – Namibia, Ghana, and Zambia – illustrate challenges of combining electoral competitiveness with programmatic parties. Namibia is a classic case of a dominant-party democracy: strong on programmatic linkages but unusually weak on electoral competitiveness. Ghana is a classic case of a competitive democracy: strong on electoral competitiveness but with clientelistic parties. Zambia is an intermediate case.

### 4.1. Namibia

Namibia is a dominant-party democracy in which political accountability has depended on the governing party's programmatic linkages. The country's leading export is diamonds, with other exports including uranium and gold. Much of its land is arid, and it is among the world's most sparsely populated countries, with a population just below three million. Once the German settler colony of South West Africa, South Africa took over its administration during the First World War (Melber, 2014, pp. 7–22). It gained independence in 1990 after a long armed struggle led by the South West Africa People's Organization (SWAPO). Transforming itself from a liberation movement to a political party, SWAPO became overwhelmingly electorally dominant. It won the first five cycles of presidential and legislative elections with majorities of 73 per cent or more. The first dent in this dominance came in 2019. SWAPO's presidential candidate, Hage Geingob, saw his vote share drop to 56 per cent, down from 87 per cent five years later, and the party lost its two-thirds majority in parliament. In 2024, Geingob's successor, Netumbo Nandi-Ndaitwah, got 58 per cent, but SWAPO's parliamentary slide continued, winning just 53 per cent of elected seats.

SWAPO espouses an inclusive nationalism rooted in its history as a liberation movement. A 1976 resolution of the United Nations General Assembly recognized SWAPO as the "sole and authentic representative of the Namibian people," and a struggle slogan proclaimed that "SWAPO is the nation, and the nation is SWAPO" (Melber, 2020, p. 13). Despite its small population, Namibia is ethnically, regionally, and racially diverse, with among the highest levels of income inequality in the world (Levine & Roberts, 2013). The electoral regime is a closed-list proportional representation with no minimum threshold. A party with as little as one per cent of the vote can earn a parliamentary seat. Although such an electoral regime is conducive to minority representation, it provides incentives for party fragmentation. SWAPO's success in translating its inclusive rhetoric into supermajority support has, therefore, been far from assured.

Namibia's development since the early 1990s has been stronger on economic sustainability than social inclusiveness. As shown in Fig. 2, it had the second smallest increase on our health- and education-based

[10] The coefficients for electoral democracy in table 1 are close to zero with the other two regime features included. As a check whether the disadvantages of autocracy were solely due to a higher propensity for war, we reran the regressions with the proportion of years with at least one thousand battle deaths (based on Gleditsch et al., 2002) as a covariate, and the estimates did not differ substantively.

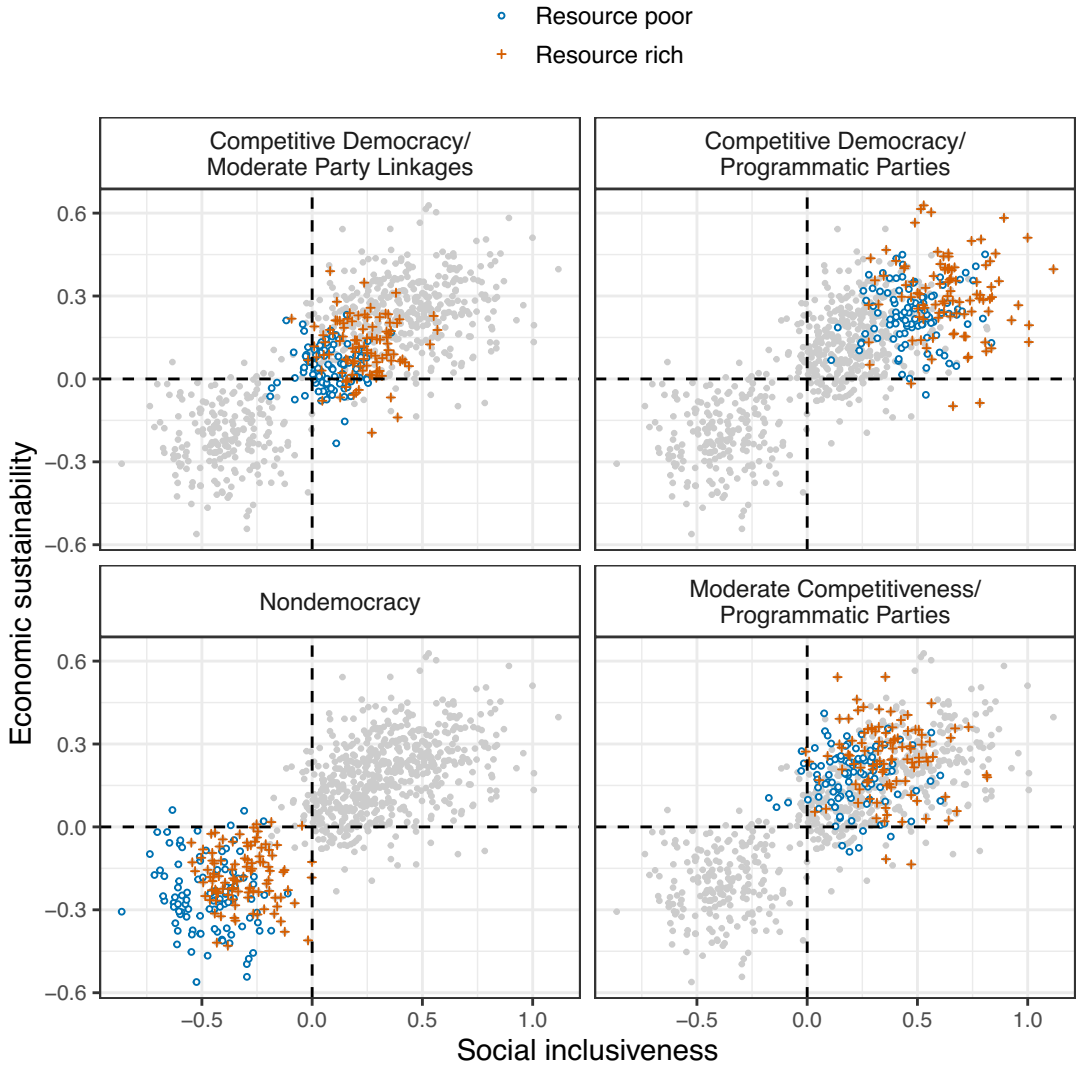


**Fig. 4.** Simulated development outcomes for resource-rich and resource-poor African countries under four regime configurations.

indicator of inclusive development – a cumulative total of 4 per cent. Meanwhile, on total wealth per capita, our measure of sustainability, it has achieved an increase of 21 per cent. The small improvement on inclusiveness partly reflects a high "base" value in the early 1990s – fifth out of 47 countries in the sample – and the country still placed eleventh in the late 2010s. Yet controlling for initial conditions, Namibia still markedly underperformed on inclusiveness (a standardized residual of -1.6). Its exposure to the Southern African HIV/AIDS pandemic, which sharply reduced life expectancy during the late 1990s, was a factor. But other countries with similar exposure did better, and Namibia's performance on inclusiveness has fallen short. Explaining the country's slow progress on poverty reduction, for example, Levine and Roberts (2013, p. 185) attributes it partly to "persistent inequalities in access to quality public services, especially health and education."

SWAPO's strong electoral dominance, with Namibia's electoral regime, helps account for the country's post-independence development trajectory. While proportional representation typically results in fragmented party systems and consensual coalition governance, these expectations fail where a single party is electorally predominant. SWAPO so far has had no need to form a coalition government. Meanwhile, the closed-list system has allowed party leadership to select both the president and members of parliament, rendering checks and balances between the executive and the legislature largely ineffective (Van Cranenburgh, 2006, pp. 595–96). Political centralization appears to have enabled SWAPO to rely on programmatic appeals to voters, with proportional representation weakening incentives for a dominant party to cultivate clientelistic links with subnational constituencies.

SWAPO's declining dominance since 2019 has the potential to alter Namibia's trajectory of development. In terms of the simulations in Fig. 4, the trend resembles a transition from the profiles in the lower-right panel to those in the upper-right, corresponding with increasing electoral competitiveness in the presence of programmatic parties. Citizens' ability to hold the government more accountable hinges on the viability of alternative parties. SWAPO's sharply reduced majorities in the two most recent elections may signal the end of its two-decade "honeymoon" following the struggle for independence. Dominant parties that face real risks of losing elections must consolidate broad political support, as reflected in the empirical association between electoral competitiveness and social inclusiveness. For this reason, if elections in Namibia are increasingly competitive, the government is likely to face growing pressure to make development more inclusive.

### 4.2. *Ghana*

Ghana is a case of competitive democracy, in which power has alternated regularly between two parties that rely heavily on

clientelistic linkages. Its main mineral export is gold. It also exports other minerals, such as bauxite and manganese, and since 2011, has exported oil extracted offshore. Its population in 2022 was 33 million. A former British colony, it became independent in 1957 after three hotly contested elections between rival nationalist movements. For the thirty-five years after independence, single-party and military governments prevailed, with two short spells of electoral democracy that ended in military coups. Since returning to democracy in 1992, electoral success has alternated between the center-left National Democratic Congress (NDC) and the center-right New Patriotic Party (NPP) every eight years.

The competitiveness of elections has reinforced tendencies toward clientelism. The 1992 constitution combines a directly elected president with first-past-the-post legislative constituencies. National elections are every four years, and the president is limited to two terms. Parties' geographic support patterns resemble those in late colonial elections. The NPP continues a political tradition centered in the Ashanti region, wealthy as a result of cocoa and gold exports. The rest of the country leans toward the NDC, whose core support comes from the Volta region, home of its late founding leader, Jerry Rawlings. Local variation in turnout and vote shares from election to election has been large enough to alternate power between parties in 2000, 2008, 2016, and 2024. Competition within narrow margins has encouraged clientelistic linkages between parties and voters, centered on promises of basic local infrastructure and services (Driscoll, 2020). A manifestation has been a pattern of pronounced "electoral budget cycles," in which government spending and fiscal deficits balloon in election years (Quartey et al., 2023, pp. 6–7).

Development in Ghana since the early 1990s has been strong on social inclusiveness, and it has also outperformed Namibia on economic sustainability. The regression estimates in table 1 show electoral competitiveness to be a stronger predictor of inclusiveness than of sustainability. Case studies of Ghana have credited democratization for raising the priority of education and health spending (Abdulai & Hickey, 2016; Carbone, 2011). The country's record on inclusiveness is roughly in line with the regression model, but its record on sustainability overperforms the model (with a standardized residual of +1.1). Favorable economic outcomes reflect impressive GDP growth, driven partly by a resurgence in mining during the 1990s and later by the development of an offshore oil industry. Our measure of sustainability, which adjusts for natural resource depletion, shows an average annual increase in total wealth per capita of about 1.5 per cent from 1995 to the late 2010s.

The central challenge facing Ghana is the mirror image of Namibia's: Ghanaian politics is electorally competitive but lacks programmatic parties. Despite its solid economic record, political clientelism has taken a toll. Surges in public spending in election years have contributed to an average inflation rate of more than 15 per cent over the three decades from 1990 (calculated using the local currency GDP deflator (World Bank, 2024)). Narrow political considerations distort the allocation of social spending and have hindered its targeting and effectiveness (Abdulai & Hickey, 2016). Competition between clientelistic parties has also undermined institutional capacity by politicizing bureaucratic appointments and discouraging public-sector reforms (Appiah & Abdulai, 2017). In terms of the simulations in Fig. 4, the challenge resembles a transition from the upper-left to the upper-right panel, corresponding with increasingly programmatic parties in an electorally competitive environment. Although Ghana has achieved comparatively favorable outcomes, such a transition is associated with improvements in both dimensions.

### 4.3. Zambia

Zambia's regime characteristics make it an intermediate case: more electorally competitive than Namibia but less so than Ghana, with parties more programmatic on average than Ghana but less so than Namibia. Copper is Zambia's main mineral export by far; others include cobalt and gemstones. Formerly the British colony of Northern Rhodesia, it became independent in 1964 and has a population of about 20 million. The country was governed by founding president Kenneth Kaunda and his United National Independence Party (UNIP) from independence until 1991, with opposition parties banned in 1972. With a return to democracy in 1991, Kaunda and UNIP were voted out. They were defeated by Frederick Chiluba and the Movement for Multiparty Democracy (MMD). Two party alternations have since occurred in the elections of 2011 and 2021.

The evolution of the Zambian party system has differed substantially from the pattern in Ghana, despite both countries experiencing electoral turnover within similar electoral regimes. Like Ghana, Zambia has a directly elected president and first-past-the-post legislative constituencies, but with five-year terms. The MMD was electorally dominant for the first decade of multiparty democracy, winning the 1991 and 1996 elections with majorities exceeding 70 per cent. Its support fell dramatically in 2001, as the party fragmented over Chiluba's unsuccessful effort to remove presidential term limits (Rakner & Svåsand, 2004). The MMD's Levy Mwanawasa won with a plurality of only 29 per cent and secured reelection five years later with 43 per cent. His closest competition in 2006 was from MMD breakaway parties: Michael Sata of the left-populist Patriotic Front (PF) and Hakainde Hichilema of the center-right United Democratic Alliance (UDA). Zambia's first electoral turnover came in 2011, when Sata and the PF defeated the MMD's Rupiah Banda (who succeeded Mwanawasa after his death). The second came in 2021, when Hichilema and the United Party for National Development (UPND) defeated the PF's Edgar Lungu (who succeeded Sata after his death). Zambia's party system has evolved very differently from Ghana's, which quickly settled into a stable menu of two major parties. In Zambia, the menu has changed frequently, with politicians constructing coalitions of ethnoregional and economic blocs that shifted each electoral cycle (Kim, 2017; also see Posner, 2005). Elections in Ghana have been about voters choosing parties; elections in Zambia have been at least as much about politicians trying to cobble winning coalitions of voters.

Zambia's developmental gains from the early 1990s to the late 2010s have been solid by regional standards. With electoral competitiveness and programmatic parties, the regression estimates predict favorable outcomes on social inclusiveness and economic sustainability. Zambia has exceeded these slightly (with standardized residuals of +0.4 and +0.5). Average trends over three decades obscure important medium-term variation, though. The country's thirty-year average on programmatic linkages rides on high values during the years of unchallenged MMD dominance in the 1990s (similar to Namibia's programmatic linkages under SWAPO dominance). Its average score on competitiveness rides on high values during the years following the electoral turnover of 2011. Yet its highest scores on both dimensions of development came during the intervening years 2004 to 2013. That period coincides with the MMD's fragmentation and decline – but also with booming world copper prices (interrupted briefly by the global financial crisis). Interactions between politics and economics were ambivalent. For example, in 2008, the MMD government introduced a windfall tax on copper to fund social spending – a policy the PF promoted – yet abandoned it the next year when copper prices fell, and the PF reversed its position (Cheeseman & Hinfelaar, 2009, pp. 65–66; Fraser, 2010, pp. 19–21). The PF, after coming to power on a "pro-poor" platform, centralized presidential power and pursued clientelistic linkages with citizens (Siachiwena & Seekings, 2023). Democratic "backsliding" was so pronounced that from 2016 through 2020, the country ceased to be

coded as an electoral democracy according to our criteria (see Hinfelaar et al., 2022).

Zambia's politics changed course in the 2021 election. Hichilema and the UPND defeated Lungu and the PF. Perhaps more importantly, it was party-switching by voters that drove the outcome, rather than politicians' coalition-shifting as in the past (Siachiwena & Wahman, 2024).[11] The UPND's accession has increased emphasis on programmatic appeals by parties (Coppedge et al., 2024). Positive political developments have coincided with a post-Covid rise in world copper prices. In terms of the simulations in Fig. 4, Zambia's configuration has varied erratically since the 1990s, but since 2021 it seems to be close to the upper-right combination of electoral competitiveness with programmatic parties. Time will tell if these trends will hold, but if so, Zambia will break new ground among Africa's resource-rich democracies.

## 5. Conclusion

This article has analyzed how natural resources and political regimes have shaped development trajectories in sub-Saharan Africa. The region experienced a profound political transformation after the Cold War, which gave rise to a variety of regime configurations, among resource-rich and resource-poor countries alike. Using cross-national data, we have estimated the consequences for socially inclusive and economically sustainable development over roughly three decades, from the early 1990s to the late 2010s. Our regression-based simulations revealed a clear pattern: electoral democracy predicts better development outcomes irrespective of natural resources. Moreover, the advantages of democracy stem from enhanced mechanisms of political accountability, in the forms of electoral competitiveness and programmatic (rather than clientelistic) political parties. Where citizens have a realistic opportunity to remove a non-performing government and where their engagements with parties focus on the provision of public goods, they have used this leverage to demand and receive development outcomes that are more inclusive and sustainable in the aggregate.

Our results have two main implications for Africa's resource-rich countries. The first implication is that where resource-rich nondemocracies have performed poorly, the blame lies more with their dearth of democracy than with their wealth of resources. Under any given political regime, resource-rich countries perform no worse (perhaps slightly better) than their resource-poor counterparts. Resource-rich countries systematically underperform regional trends in social inclusiveness and economic sustainability only if they are nondemocratic. The second implication applies to resource-rich democracies, which have gravitated either toward electorally competitive democracy with clientelistic parties or toward rule by a programmatic dominant party. Although these regime configurations yield developmental benefits, a challenge is to reap the benefits of electoral competitiveness and programmatic parties simultaneously.

The article contributes to the understanding of the comparative political economy of development in sub-Saharan Africa. By clarifying the consequences of resources and regimes within the region, it provides a panoramic view of the "forest" of aggregate development trends spanning three decades. Even allowing for quibbles about data and methods, the findings provide empirical grounding for some stylized facts about regional trends while contradicting others. In light of our findings, for example, it would be hard to deny a general tendency for democracies in Africa to outperform nondemocracies on our aggregate measures of development, all else being equal. It would also be hard to claim that resource-rich countries face fundamental disadvantages in the pursuit of socially inclusive and economically sustainable development.

Further research can help clarify the trees within this forest. Our brief case studies of Namibia, Ghana, and Zambia revealed that country-specific trends and challenges cannot be reduced to simple instances of regional statistical patterns. Moreover, effective governance of mineral and fuel resources requires sectoral policies, which regulate the behavior of national and international firms, to which we have given little direct attention. Resource extraction can also have a major impact on livelihoods in affected communities. Sectoral and local impacts may not always be large or consistent enough to register significantly on aggregate indicators, even if they are highly consequential for particular segments of society. This article has sought to clarify cross-national empirical patterns in aggregate indicators over a period of three decades. It provides context for more granular analysis, including of accountability mechanisms that operate at the levels of sectoral and local governance.

## CRediT authorship contribution statement

**Rod Alence:** Writing – review & editing, Writing – original draft, Methodology, Investigation, Data curation, Conceptualization. **Xichavo Alecia Ndlovu:** Writing – review & editing, Writing – original draft, Methodology, Investigation, Conceptualization.

## Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

Both co-authors are guest co-editors of a special issue of this journal, but the article was refereed independently.

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[11] Despite the competitiveness of the 2021 election, Zambia is listed as a dominant-party democracy in Fig. 3. This is because our definition "resets" following a spell of nondemocracy (2016 through 2021 in this case). A country is only reclassified as "competitive" at the first turnover after regaining democratic status.

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