

# Africa beyond aid? The effects of foreign aid cutbacks on party competition and clientelism

Avi Ahuja \*

June 13, 2024

## Abstract

How do reductions in foreign aid affect party competition and clientelism in sub-Saharan Africa? Conventional debates have focused on the perverse effects of aid on governance and democratic accountability in the region, but have not looked at the downstream effects of aid reduction on politics. I empirically test this question using the International Development Association's (IDA) country income thresholds for concessional fund eligibility as an instrument for changes in foreign aid levels. Using cross-national data, I first find that foreign aid hinders the development of programmatic party competition in Africa, but the same effect is not found in other developing regions. Then, through a district-level analysis of aid disbursements in Ghana, a West African country that experienced a large cutback in foreign aid after crossing the IDA threshold, I use a difference-in-differences strategy of heterogeneous treatment exposure to find that citizens in districts experiencing the largest reductions in aid report healthier forms of party competition and a lower incidence of clientelistic practices such as vote buying. I discuss two potential mechanisms driving this result: (1) the inability of domestic political parties to commit to distinct policy positions in the face of conditional and sometimes volatile aid flows, and (2) the lack of incentives for parties to compete on distinct issues when voters cannot clearly attribute who is providing public services. This study brings to light new evidence about the role that aid reductions may be playing in impeding African democratic development, particularly its party systems.

---

\*3rd year PhD Student at the Wilf Family Department of Politics, New York University.

# 1 Introduction

This study examines the relationship between foreign aid, clientelism, and party competition in sub-Saharan Africa. After independence from colonialism, many African<sup>1</sup> countries witnessed severe economic and political crises, from unsustainable debt to civil conflict. International development assistance agencies such as the World Bank stepped in to provide economic relief through grants and low-interest loans. While aid<sup>2</sup> flows have decreased over the past two decades, many African countries continue to depend on volatile aid flows as a major source of government revenue. As of the year 2018, 20 sub-Saharan African countries were receiving a fourth of their government expenditure in aid<sup>3</sup>. Fourteen of these countries received net aid that equals half or more of their total expenditure. As a region, sub-Saharan Africa has steadily exceeded the rest of the developing world combined in net Overseas Development Aid (ODA) received per capita<sup>4</sup>. This overstated presence of foreign aid in public expenditure in the region is only exacerbated by the volatile nature of aid flows. Since the late 1990s, 1 in 5 African country-years experienced a decrease in aid that was in excess of 5% of the recipient’s GDP (Briggs, 2015). The effects of the cutbacks in foreign aid are therefore an increasingly important area of study.

The literature on the effects of aid on democracy is somewhat divided. One camp highlights aid’s potential to provide public goods, build state capacity, and accelerate democratic consolidation (Dietrich and Wright, 2015, Dunning, 2004). The other camp, focused on “aid dependence,” illustrates aid’s negative effects on governance, corruption, and electoral outcomes in low-income countries (Alesina and Weder, 2002, Bräutigam and Knack, 2004). There have been numerous studies of aid and clientelism (Jablonski, 2014), but few have looked at whether cutbacks in aid affect the incidence of clientelism. Further, while much has been studied about aid’s impact on corruption and accountability, there is relatively little focus on its effects on party competition in recipient countries.<sup>5</sup> This study addresses these gaps by examining the effects of aid *cutbacks* on party competition and clientelism in African countries.

I theorize firstly in this paper that the availability of foreign aid enables and sustains clientelism

---

<sup>1</sup>Throughout this paper, I use the term ‘Africa’ to refer only to the countries of sub-Saharan Africa.

<sup>2</sup>I use the term ‘aid’ or ‘foreign aid’ to mean economic or development assistance aid throughout this paper. This is distinct from ‘democracy aid’, which is used to support the development of civil society and democratic institutions and works through decidedly different channels than economic aid. For a discussion on the distinction between economic aid and democracy aid, see (Dietrich and Wright, 2012, p.12-13)

<sup>3</sup>. Organization of Economic Co-operation and Development - Development Assistance Committee (OECD-DAC)

<sup>4</sup>Net official development assistance (ODA) consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients.

<sup>5</sup>“Party competition” as referred to in this paper is conceived of as a measure of either (1) how meaningfully *distinct* the ideologies, policies, and/or visible campaign platforms of the main competing parties are from one another in a democratic context; or (2) how competitive are the major political parties across regions. This necessarily assumes the existence of at least nominal multiparty elections for theoretical consistency.

in African countries. This occurs because large volumes of development aid, as a share of government expenditure, are often captured by elites and redistributed by incumbent governments. Foreign aid becomes an "easy money" resource that creates incentives for targeted redistribution in countries with certain structural characteristics (de Mesquita and Smith, 2013). While this argument parallels the resource curse literature, it has not been systematically studied in the context of aid cutbacks at a cross-country level. Aid cutbacks are not simply the inverse of aid provision. The distinctiveness of aid withdrawal lies in its timing and sequence, which creates different dynamics than when aid provision increases. When aid is reduced, incumbent governments lose a significant source of discretionary funds, forcing them to adjust their strategies for maintaining political support. This adjustment period can disrupt established clientelistic networks and may prompt a shift towards different forms of party-constituent linkages as politicians seek alternative ways to appeal to voters. Therefore, studying aid withdrawal in the period shortly after it occurs is interesting as it reveals how political actors adjust to the removal of aid, a dynamic different from the initial provision of aid.

Next, I argue that dependence on donor aid for public expenditure has hindered the emergence of party competition along programmatic lines in Africa. This may be for two reasons. First, voters often cannot attribute the provision of services to the state, a mechanism I refer to as the **"attribution mechanism"** for the remainder of this paper. A growing body of evidence has shown that voters are unable to distinguish between donor-provided and state-provided public services, and over-reliance on donor aid doesn't undermine the legitimacy of the state (Baldwin and Winters, 2020, Blair and Roessler, 2021, Dolan, 2020). I argue that this lack of clear attribution reduces the incentives for political actors to build and compete on meaningful policy positions, instead relying on ethnic or regional identity appeals. Second, what I refer to as the **"commitment mechanism"** arises because political parties in African countries dependent on aid are unable to commit to distinct policy positions in the face of economic uncertainty (Bleck and Van de Walle, 2013). Government reliance on conditional and volatile aid flows for public expenditure means that parties avoid campaigning on strong, differentiated policy platforms to prevent backlash from donors for over-committing fiscal expenditure and from voters for reneging on campaign promises.

I contend that a combination of structural characteristics - relatively recent adoption of democracy, a low fiscal base/sources of domestic revenue, salience of ethnic politics, and the sheer volume of aid (as a percentage of overall government revenue) make these effects particularly salient in African beneficiary countries. It is reasonable to argue that there is a lot of variation in these characteristics within the subsample of African countries, and some of these individual characteristics might be driving the effects that I am attributing to an entire region of borrower countries. To show that this is not the case, I employ a few different robustness checks in the empirical analysis to confirm that these effects are not driven purely by any one structural factor such as the level of

democracy, or state capacity. In using an interaction term for African borrowers, I argue there are systematic reasons that as a *region*, Africa experiences aid cutbacks differently than the rest of the developing world combined. This is not to understate the variation in institutional characteristics within the subcontinent but to highlight that at the *aggregate*, its politics interacts with foreign aid differently than other non-African borrower countries.

I test my main theoretical propositions using exogenous variation provided by the International Development Association (IDA)’s<sup>6</sup> income thresholds for concessionary-loan eligibility, an arbitrary cutoff that determines whether or not a developing country remains eligible for the most concessional form of World Bank financing. The cutbacks in foreign aid that a country experiences as a result of crossing this threshold allow me to test my argument that African countries become less clientelistic and that their party systems become more programmatic once they are no longer heavily aid-dependent. At a cross-country level, I use the IDA income threshold as an instrument for foreign aid and test these theoretical predictions. I find evidence at the cross-national level that African party systems become more programmatic and competitive once they experience aid cutbacks. However, I do not find evidence at the cross-national level that the incidence of clientelism in African countries diminishes following an exogenous reduction in foreign aid.

I then examine these relationships between aid cutbacks and political outcomes at the sub-national level in Ghana, a West African nation that crossed over the IDA’s income per capita threshold for concessionary-loan eligibility in the late 2000s. I compare clientelism and party competition in Ghanaian districts that experienced large cuts in foreign aid in the period following Ghana’s threshold crossing with similar districts that did not experience the same cuts after the crossing using a differences-in-differences estimation design. I find suggestive evidence from public opinion data that districts experiencing a large withdrawal in donor aid experience healthier party competition, and a lower incidence of clientelism (using self-reported measures such as vote buying and voting freedom) in the period after crossing.

In this article I contribute to the literature on the political effects of foreign aid in a few ways. First, as mentioned earlier, very little attention has been paid in the literature thus far to the effects of foreign aid on party competition in beneficiary countries from a comparative perspective. Second, while much has been studied about the links between aid provision and corruption in Africa (Briggs, 2015, Jablonski, 2014), less attention has been paid to the downstream political effects of aid cutbacks. Further, most of these studies have been single-country cases that investigate the subnational relationship between aid and clientelism. While national-level and sub-national studies of the misuse of aid by incumbents are important, my cross-national study helps provide a macro-level picture of the political effects of aid in different beneficiary regions. A third important addition this paper makes is to test how these effects vary between African and other low-income countries that were also eligible for development assistance, and whether these patterns

---

<sup>6</sup>The IDA is the World Bank’s lender to low-income countries around the world.

are unique to the continent. The prevailing theories of clientelism and party competition that have characterized contemporary scholarship on Africa (Lindberg and Morrison, 2008, Van de Walle, 2003, 2007) can be further enriched by looking at dependence on foreign aid as an explanatory variable. Fourth, by tying cross-national evidence to subnational patterns among districts in Ghana, a West African country that used to be heavily aid-dependent but for a period in the 2010s experienced sizeable aid cutbacks, helps illuminate the specific sub-measures of clientelism and party competition that cannot readily be studied at a cross-country level. Finally, I propose two novel mechanisms that may be driving the relationship between aid and party competition in this study, attribution and commitment.

The rest of this paper will proceed as follows. Section 2 reviews the existing literature on clientelism, party competition and aid dependence in Africa to motivate a theoretical foundation behind my central research question. It then proceeds to focus on three main mechanisms - the resource curse of aid, attribution, and commitment problems to develop a set of theoretical predictions. Section 3.1 reviews the institutional background of the IDA's concessionary financing program, while Section 3.2 offers a description of why Ghana is an appropriate subnational case for this study. Section 4 details the data, sample, estimation strategy and results from my cross-national analysis. Section 5 details the data, sample, estimation strategy and results from my subnational district-level analysis from Ghana. Section 6 discusses the future scope of research on this project and concludes.

## 2 Theoretical Framework

In this section, I first offer a brief general overview of the existing literature on clientelism and party competition in Africa. I then proceed to describe its linkages with foreign aid and highlight three relevant theoretical mechanisms that drive the association. The mechanisms I propose driving this relationship are (1) the elite capture of foreign aid by incumbent politicians, (2) the lack of incentives for parties to compete on distinct issues when voters cannot clearly attribute who is providing public services, and (3) the inability of domestic political parties to commit to policy platforms in the face of lender exigencies and voter expectations. These mechanisms are accordingly developed into a set of three testable hypotheses about the effects of aid withdrawal on politics.

### 2.0.1 Standard Explanations of Clientelism and Party Competition in Africa

Kitschelt et al. (2007) propose that the nature of clientelism is affected by the structural characteristics of the country – its level of economic development, state capacity, and experience with multipartyism. Voters in poorer countries with weaker state capacity and smaller tax bases are

more susceptible to clientelistic appeals by politicians. The synergistic links between poverty and clientelism have been empirically established by a number of studies (Keefer, 2006, Wantchekon, 2003). As of 2020, sub-Saharan Africa remains the single poorest region in the world <sup>7</sup>. Younger democracies are said to be particularly susceptible to clientelism (Keefer, 2007). Multiparty elections in Africa were only established after the 1990s, a phenomenon which political scientists have called the “Third Wave of Democratization”. Moreover, the salience of ethnic identity in African politics has been said to be an important enabler of clientelism. Ethnic identity enables clientelism, with voters favoring their ethnic group’s candidates due to limited strategic choice (Bratton et al., 2012, Posner, 2005, Van de Walle, 2007). Taken together, poverty, the relatively nascent experience with democracy, and the salience of ethnic identity makes the region especially prone to clientelism.

At the same time, programmatic politics or policy/ideology-based political competition has been relatively slow to develop in Africa <sup>8</sup>. There has been very little programmatic debate between competing political parties in Africa, with most adopting vague policy positions that are not meaningfully distinct from one another (Elischer, 2012). Explanations such as limited democratic experience, the absence of pre-democratic legacies necessary for political competition, and lack of internal party cohesion have been said to contribute to this phenomenon, (Kitschelt et al., 2007, Van de Walle, 2007).

Why do we care about these two specific aspects of African democracy? Clientelism, defined as targeted transfers of benefits for political support, leads to distributive inefficiency and loss of social welfare, as resources are allocated based on political value rather than need. Studies have shown ethnoregional favoritism in Kenya and the DRC, resulting in systematic underdevelopment of certain regions (Hodler and Raschky, 2014, Kramon and Posner, 2013). Compared to programmatic systems, clientelistic systems underprovide public goods (Hicken and Simmons, 2008, Keefer, 2007). Clientelism also reinforces incumbency advantage and may decrease government accountability (Jablonski, 2014, Kitschelt et al., 2010, Lyne, 2007, Stokes, 2005). Additionally, clientelist appeals can reinforce ethnic voting, leading to political violence in multiethnic societies (Wantchekon, 2003). These patterns are linked to party competition, which in Africa often lacks distinct policy positions, allowing politicians to use ethnic, religious, or regional identities to mobilize voters (Elischer, 2012, Van de Walle, 2007). In the next two sections, I flesh out three mechanisms that link the presence of foreign aid to this prevailing characterization of African politics.

---

<sup>7</sup>World Bank Data 1990-2020 as visualized in *Global Extreme Poverty* by [Our World in Data](#).

<sup>8</sup>I also interpret healthy party competition to mean major competing parties resort to fewer divisive appeals such as ethnic identity, or how broad-based competition may be at the level of the region (which may serve as the-regional voting enclaves for parties as described earlier)

## 2.0.2 Foreign Aid as Easy Money

There exist two conflicting sets of theories about the political effects of foreign aid on African countries. The more positive or “promotion” theories attribute democratic consolidation to foreign aid but are specific either to conditional foreign aid or democratic aid (Dunning, 2004).<sup>9</sup> These scholars argue that aid can serve as a tool for democratization and governance reform by pressuring authoritarian regimes financially to reduce corruption and build institutional capacity. To the contrary, the “perversity” theory which speaks to the corruption and moral hazard problems that aid creates has many takers in the literature as well (Alesina and Weder, 2002, Bräutigam and Knack, 2004, Moyo, 2009). They argue that aid is subject to elite capture by corrupt politicians that may enrich undemocratic regimes and that dependence on aid lowers state capacity in these countries.

I argue that development aid enables and sustains clientelism in African countries due to their structural characteristics—new democracies with low fiscal bases and high dependence on foreign aid. Africa receives the largest share of overseas development aid (as a share of gross national income) in the world, more than other developing countries in the world combined. Under such settings, incumbent governments seeking re-election may use foreign aid to their advantage by allocating aid to the most politically valuable groups in society. Foreign aid that flows through the recipient country government’s coffers, then, becomes a kind of “easy money” resource, subject to elite capture (de Mesquita and Smith, 2013).

Why might foreign donors allow aid to be captured for clientelistic purposes? Although some scholars, have shown that donors avoid investing in countries with poor institutions (Dietrich et al., 2018), there are reasons why aid may still be subject to clientelistic capture. First, donors often lack the capacity and information to monitor aid delivery comprehensively, necessitating delegation to recipient governments with informational advantages (Jablonski, 2014). Second, donor incentives can align with those of recipient governments; meeting annual aid disbursement targets may require compliance with host government terms to ensure project success (Kuziemko and Werker, 2006). de Mesquita and Smith (2013) similarly discuss how foreign aid as “easy money” affects temporary UN Security Council members. In nascent democracies, such resources create moral hazard problems, enabling leaders to pay off supporters without relying on tax revenues.

Cutbacks in foreign aid should then be expected to improve politics, as the material availability of clientelistic goods decreases. Aid cutbacks should create a disruption in the incumbent government’s ability to distribute aid resources for political gain. This forces political actors to adjust their strategies, potentially leading to normative improvements such as reduced clientelism

---

<sup>9</sup>In this paper, I will focus only on economic or “development” aid (without controlling for conditionality) and its impact on local democracy as measured through clientelism and party competition, not on democracy aid, which operates through decidedly different channels.



and alternative forms of party-constituent linkages and competition. It has the capacity to break established clientelistic networks and prompt a shift towards more programmatic or issue-based party-constituent linkages. This leads to my first hypothesis:

- ***Hypothesis 1:*** *African countries should expect to witness a reduction in clientelistic politics after cutbacks in foreign aid.*

### 2.0.3 Lack of Attribution

Several explanations have been offered for the slow development of programmatic or policy-based party competition in Africa, as reviewed earlier. Here, I highlight a mechanism that has been relatively well established in the literature: the impact of foreign aid on the ability of voters to attribute the provision of public goods to the state, which I term the “attribution mechanism.” A growing body of evidence has shown that voters often cannot distinguish between donor-provided and state-provided public services, and that reliance on donor aid does not necessarily undermine the legitimacy of the state (Baldwin and Winters, 2020, Blair and Roessler, 2021, Dolan, 2020). This contrasts with earlier concerns that foreign aid might weaken the “fiscal contract” between states and citizens, wherein the state is expected to provide services in exchange for taxes and votes (Moore, 2008). Scholars have argued that even when donors are heavily involved in public goods provision, it does not significantly detract from the perceived legitimacy of the state (Blair and Roessler, 2021, Dietrich and Wright, 2015). Instead, the key issue is that the presence of foreign aid blurs the lines of accountability, making it difficult for voters to attribute the benefits they receive to specific political actors or parties.

I argue that this lack of clear attribution reduces the incentives for political actors to build and compete on meaningful policy positions. When voters cannot clearly identify whether the state or foreign donors are responsible for providing public services, political parties and candidates are less likely to campaign on distinct policy platforms. Instead, they may rely more heavily on ethnic or regional identity appeals, which are easier for voters to recognize and respond to in the absence of clear policy-based differentiation. This dynamic is particularly pronounced in the context of African countries, where the salience of ethnic identity is already high (Posner, 2005, Van de Walle, 2007).

In the aftermath of aid cutbacks, however, the situation changes. As donor-provided resources diminish, the state becomes the primary provider of public goods once again. This shift creates a new space for political competition based on policy and programmatic positions. Parties seeking to mobilize voters must now offer clear and distinct policy alternatives to fill the gap left by the withdrawal of donor aid. This creates an opportunity for the development of more programmatic party systems, as political actors compete to signal their ability to effectively manage and provide public services.



## 2.0.4 Lack of Commitment

So far, the theoretical emphasis has been on the perverse incentives that donors create for domestic political actors in recipient countries to not have to compete on differentiated policy grounds. This interpretation assumes that domestic political actors are not interested in staking out distinct policy positions. But what if we were to relax that assumption, why then is African party competition so slow to become programmatic? This brings me to the other mechanism linking foreign aid availability and party competition in Africa - what I refer to as an “inability to commit”.

A small literature has documented the prominence of “valence” issues in African politics. These are issues that have broad consensus - for instance, law and order, defense, and increasingly, morality issues - issues over which little room for disagreement or differentiation between competing political actors exists (Stokes, 1963).<sup>10</sup> Competing on valence terms means sidestepping any real policy/ideological differentiation, and instead relying on a politician being perceived as more charismatic, competent, or having greater campaign resources to mobilize voters (Egan, 2008). Political parties in Africa are said to be characterized as competing on these broad-consensus “valence issues” instead of staking out distinct ideological or policy positions for themselves (Bleck and Van de Walle, 2013, Grossman, 2015). One of the reasons African parties do not choose to differentiate themselves ideologically in the run-up campaign to an election is part of what Bleck and Van de Walle (2013) describe as an “uncertainty” mechanism - the inability to uphold a policy position once elected into office due to economic uncertainty from a low fiscal base and high reliance on volatile foreign flows.

I argue similarly that government reliance on conditional and volatile aid flows for public expenditure in African countries means that parties hold back from campaigning on strong, differentiated policy platforms to simultaneously avoid backlash from donors for over-committing fiscal expenditure and backlash from voters for renegeing on campaign promises. The conditionality imposed on these countries by international financial institutions in exchange for low-interest loans means they are not in a position to campaign on specific economic policy positions out of fear of sanctions by donors (Moss et al., 2006). Simultaneously, they must contend with “retrospective” voters during elections (Fiorina, 1981), who may punish them at the ballot for unfulfilled policy promises they were unable to uphold. This dual crisis of commitment to both donors and voters forces political parties in Africa to take the easy middle ground - vague and equivocal positions on broad-consensus issues such as defense, law and order, and development without adopting any kind of economic specificity or ideological differentiation.

This means that once cutbacks in foreign aid start to occur, the donor exigencies that prevent political parties from adopting differentiated policy positions are no longer as much of a barrier,

---

<sup>10</sup>Morality issues such as religion and LGBTQIA+ rights (or the lack thereof) are another instance of such broad-consensus topics that most major competing parties in conservative Christian African countries have been well documented to campaign on (Grossman, 2015).

opening up the space for less uniform campaign promises by competing parties. Taken together, the attribution and commitment mechanisms lead me to my other main hypotheses:

- **Hypothesis 2a:** *Following cutbacks in foreign aid, political parties in African countries will have greater incentives to compete on programmatic grounds, leading to more distinct and policy-based party competition.*
- **Hypothesis 2b:** *Competition between major African political parties should expect to become less organized along ethnic, regional, or personalistic lines and become more broad-based in nature following a withdrawal of foreign aid.*

Note that the proposed mechanisms above are theoretical arguments that are yet to be tested in the literature and outside the immediate scope of this paper. The reader may wonder whether the proposed hypotheses about the perverse political effects of foreign aid apply to other low-income countries outside sub-Saharan Africa. As I demonstrate in Section 4 of this paper, Africa has consistently been the single most aid-dependent region in the world, more so than the rest of the developing world combined. This makes the material availability, and, therefore, *withdrawal* of foreign aid particularly salient in African politics. The subsequent empirical analyses in this paper will therefore test whether these predicted effects of aid withdrawal are particular to Africa and whether they differ between Africa and the rest of the developing world. This is intentional, given the theoretical motivation of this paper.<sup>11</sup>

## 3 Institutional Background

### 3.1 IDA's Threshold for Concessional Lending

The International Development Association (IDA) is the World Bank's lender to low-income countries. The IDA's concessional finance or "soft loan" lending scheme restricts access to countries that fall below a precise per capita income (GNI) level.<sup>12</sup> Between 1987 to 2021, there were 93 countries that were at some point considered eligible for IDA's concessional lending using this criterion<sup>13</sup>. Once a country is found to be above the IDA income threshold for three consecutive years, it kickstarts negotiations towards graduation from the IDA and into the International Bank for Reconstruction and Development (IBRD), a World Bank entity that provides financing to

---

<sup>11</sup>Robustness checks for structural factors, such as democracy, and state capacity test if these individuals factors are driving the findings being attributed to African borrower countries in this paper.

<sup>12</sup>Note that this excludes countries that graduated and then reverted back under the threshold into IDA eligibility. Most of these cases happened before 1980 and eight were between 1980-1990. Pre-1980 graduates were, on average, richer when they graduated, and had limited dependence on the IDA's concessional financing prior to graduation. The graduates during the 1980s were poorer, and more dependent on IDA funding, and reverse graduated due to commodity shocks in the 80s.

<sup>13</sup>[Borrowing Countries, International Development Association.](#)

lower-middle-income and middle-income countries at higher interest rates.<sup>14</sup> Final graduation depends on both meeting the three-year consecutive threshold crossing criterion as well as an opaque “creditworthiness risk” assessment by high-ranking World Bank staff. Once a country graduates from the IDA, it can only receive high interest IBRD loans, loses access to debt relief, and typically tends to lose the majority of multilateral and bilateral donor aid from other non-IDA donors as well, who use the IDA threshold as the standard for determining their own borrowing eligibility criteria (Moss and Majerowicz, 2012). Over the same period, 20 countries have graduated from IDA and become IBRD-only borrowers. Candidate countries that meet the consecutive crossing criterion but fail the creditworthiness requirement remain in what is official called “blend” status, whereby they are eligible for limited funding from the IDA and some funding from the IBRD, but both at higher interest rates than concessional financing. That is, transitioning to “blend” status is still accompanied by reductions in aid in the form of concessional grants.

The income cutoffs determining graduation *eligibility* are calculated using a predetermined formula about the state of the world economy established in 1987 during IDA meetings, when a need to address the reverse graduation of several developing countries back under the historical cutoff was recognized<sup>15</sup>. The cutoff using this formula is revised every year during IDA meetings, where the IDA brings together board members and other stakeholders to raise funds for the next three-year fund replenishment cycle. So while the actual graduation process is subject to a creditworthiness assessment and negotiations between the candidate country and the World Bank, graduation *eligibility* over these thresholds cannot be manipulated by countries in advance.<sup>16</sup> These graduation eligibility thresholds have thus been utilized as a source of plausibly exogenous variation to identify the causal effects of foreign aid on economic growth (Galiani et al. (2017); Dreher and Lohmann (2015)).<sup>17</sup>

## 3.2 The Case of Ghana

Applying the study of cross-national foreign aid at a subnational level requires choosing an appropriate country case where one might anticipate similar effects playing out. Ghana provides an excellent test case for this subnational analysis. The IDA was Ghana’s largest and most significant

---

<sup>14</sup>Review of IDA’s graduation policy. 2012. IDA16. Washington, D.C. : World Bank Group.

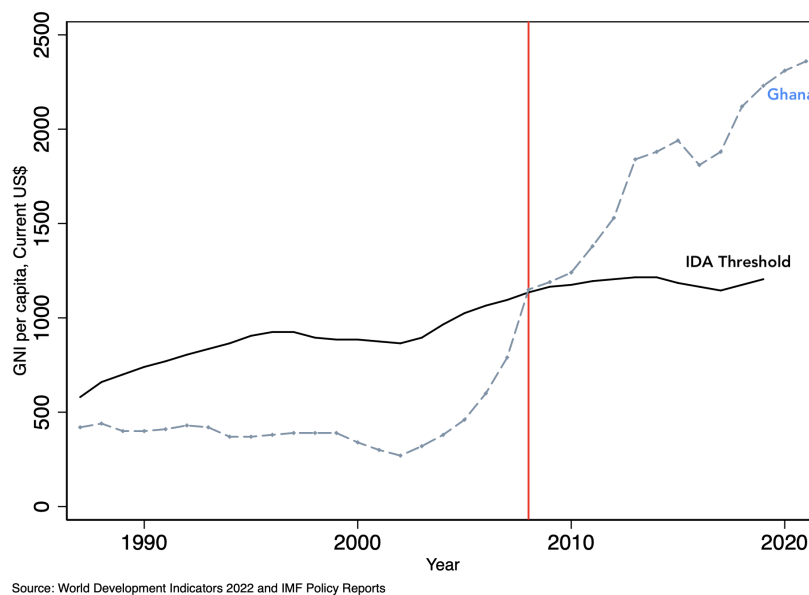
<sup>15</sup>Review of IDA’s Graduation Policy, 2012

<sup>16</sup>That being said, it is important to acknowledge the potential for some manipulation or strategic behavior around these thresholds, as found by some other scholars. For example, Dolan (2020) highlights instances where countries may revise their GDP estimates around critical thresholds to influence their classification. She also finds that market actors might begin to respond to countries nearing graduation, affecting political ratings and creditworthiness ratings even before actual graduation occurs. These considerations of threshold manipulation and its attendant effects are given due attention as alternative explanations of this paper.

<sup>17</sup>Carnegie and Samii (2019) use exogeneity provided by a second tier of graduation cutoffs, namely from the IBRD into developed-country status to study the effects of crossing over into a rich-country category on political liberalization reforms.

lender for almost thirty years till the late 2000s (OECD-DAC 2012)<sup>18</sup>. It received over \$250 million dollars in overseas development aid from the IDA, about a fifth of total ODA received till that point in time. Due to a GDP rebasing exercise to account for growth in previously unaccounted sectors such as telecommunications and banking, Ghana suddenly found that its official GDP was \$1,363 and not under \$800 as previously estimated (Moss and Majerowicz, 2012). Overnight, Ghana was pushed over the limit for IDA’s concessional finance, and was considered to be in the category of “lower-middle-income” countries<sup>19</sup>. According to my calculations using historical GNI per capita, Ghana crossed the IDA’s threshold sometime in 2008 (see Figure 1).<sup>20</sup> It started witnessing a withdrawal of foreign aid shortly after the crossing.

**Figure 1: Ghana’s GNI per capita and IDA threshold (Current US\$)**



In Figure 2, I disaggregate changes in foreign aid three years after crossing the IDA threshold by funder type. Recall that the IDA is the lender to lowest-income category of countries and the IBRD is the lender to lower-middle-income and middle-income countries, the next category after countries graduate over the IDA lending threshold. I look at these disaggregated funding trends three years post-crossing for the sample of countries that crossed over the threshold <sup>21</sup>. This figure shows that in the three-year period after crossing the threshold, Ghana’s loss of IDA

<sup>18</sup>Development Co-operation Report, OECD, 2012.

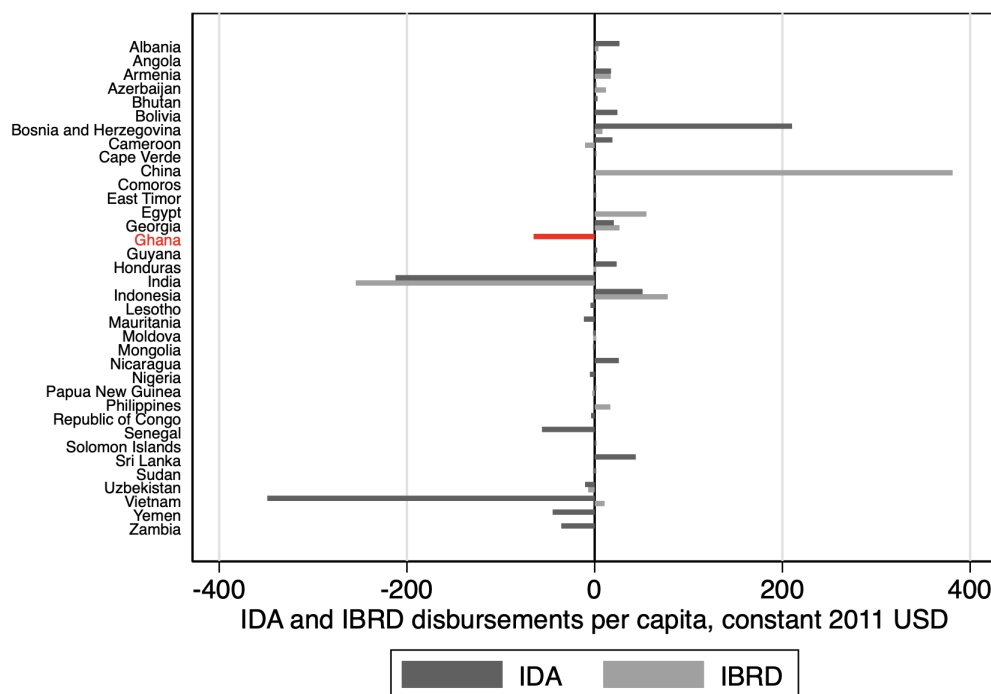
<sup>19</sup>Note that the key difference between GDP and GNI is that GNI also includes income accrued by a country’s residents abroad, but the two are very similar in per capita terms.

<sup>20</sup>This makes sense because the GDP rebasing reflected changes that had been building over a few years. Moss and Majerowicz (2012) conclude that it is likely that Ghana’s growth in the years before 2010 may have been underestimated. Consistent with this, Galiani et al. (2017) report Ghana’s year of crossing the IDA’s threshold in 2009.

<sup>21</sup>Note that this figure is limited to only those countries that crossed over the threshold prior to 2012 owing to the limitations of the data that distinguishes between IDA and IBRD funds (Aid Data, 2015).

funding was not offset by IBRD money.<sup>22</sup> It also becomes apparent that relative to other African countries that crossed the threshold during the same period, the three-year loss in per capita IDA disbursements is also the largest in Ghana. By 2011, just a couple of years after the crossing, Ghana had witnessed a reduction of over \$50 in per capita IDA disbursements.<sup>23</sup>

Figure 2: **Changes in country-specific IDA/IBRD disbursements three years after crossing the threshold**



Source: Calculations using AidData (2015)

The IDA threshold was seemingly arbitrary, and so while Ghanaians did not experience some sudden economic boom after 2009, crossing over carried real implications for Ghana’s foreign aid landscape. The single biggest implication was the loss of access to concessional financing from multilateral donors. Besides the IDA, the African Development Bank, and the International Monetary Fund (IMF) also routinely refer to the IDA’s income threshold for their own concessional finance eligibility criteria.<sup>24</sup> <sup>25</sup> As Ghana consistently stayed above the threshold for three consecutive years, it was officially moved to IDA/IBRD “blend” status in 2012, which entailed the accelerated repayment of its existing debt, and access to IBRD lending at higher interest rates. Borrowing on blend terms came with the expectation that Ghana was on the track to fully graduate from

<sup>22</sup>The idea to examine whether a decline in IDA funding was offset by IBRD funding is inspired by [Dreher and Lohmann \(2015\)](#), who investigate the effects of changes in foreign aid disbursements owing to crossing the IDA threshold on subnational economic growth using nighttime light density.

<sup>23</sup>Own calculations using [AidData \(2015\)](#), Geocoded data from the World Bank IBRD-IDA, version 1.0.

<sup>24</sup>See for instance, the IMF’s “[Eligibility to Use the Fund’s Facilities for Concessional Finance Report](#)” from 2019.

<sup>25</sup>Also similarly, see [Prizzon et al. \(2016\)](#) for the African Development Bank’s policies.

the IDA (pending a creditworthiness assessment) that would make it ineligible for all soft loan assistance from the World Bank. As I specified above, crossing the IDA threshold serves as an important signal to other multilateral and bilateral donors as well about a country’s neediness, even while it is in “blend” status.<sup>26</sup>

Besides the large withdrawal in donor aid that Ghana witnessed following its crossing of the IDA threshold, there are other reasons that Ghana is a useful case study for this analysis. Ghana is one of the African countries that has been said to experience a shift away from ethnic politics in its recent electoral history. There has been evidence in recent years of an increase in performance-based voting and greater electoral competition in Ghana (Bratton et al., 2012). The two major political parties, the National Democratic Party (NDC), and the New Patriotic Party (NPP), have well organized party machines that regularly compete to mobilize votes through party brokers (Brierley and Nathan, 2021, Ichino and Nathan, 2013). The extent to which the interaction between these normatively positive developments in politics are associated with the large cutbacks in foreign aid Ghana experienced warrants closer examination.

## 4 Cross-National Analysis

### 4.1 Data, Sample, and Outcome Measures

I detail in the appendix section 6.1 my sources of data on foreign aid. As is the convention in much of the previous foreign aid literature, I make use of the Net Overseas Development Aid (ODA) as a percentage of gross national income (GNI) obtained from the World Bank’s World Development Indicators <sup>27</sup>. Figure 3 illustrates trends in ODA per capita between the African sample and the non-African set of IDA beneficiaries to illustrate the relatively large aid-dependence in Africa compared to the rest of the developing world.

Next, I make use of the World Bank International Development Association’s (IDA) thresholds for concessionary-loan eligibility to identify countries whose GNI per capita exceeded the IDA threshold between 1990 to 2020 (my sample period of interest).<sup>28</sup> I detail the coding process in the Appendix Section 6.1.

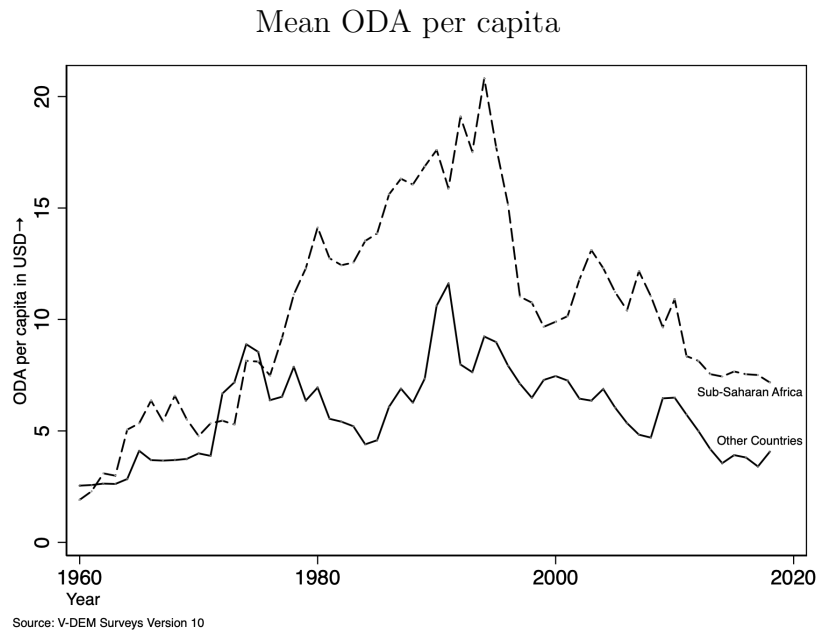
---

<sup>26</sup>I empirically test for changes in all overseas development assistance countries experience upon crossing the IDA threshold in my cross-country analysis (Section 4).

<sup>27</sup>This data was most recently updated in the [May 2022 release](#).

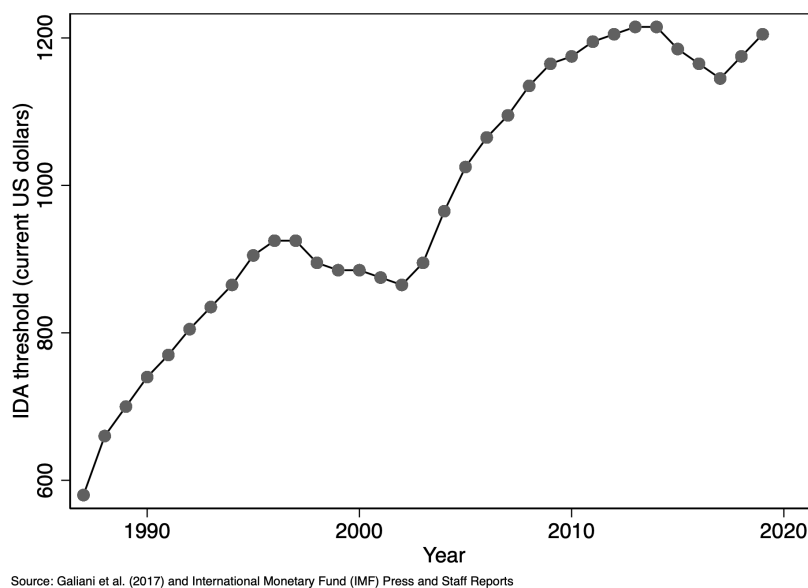
<sup>28</sup>IDA concessionary loan thresholds started to be seriously operationalized only in 1987, with the purpose of rationing scarce IDA funds. Before 1987, a lower threshold (now referred to as the “historical cutoff”) was in effect, but several economic crises in developing countries in the early and mid-1980s led to an increase in the demand for IDA funds (World Bank (1989). *IDA eligibility*. IDA 9 Discussion Paper No. 3. March. Washington, DC: The World Bank). As a result, most of these countries reverted back under this cutoff in the 80s. This necessitated a new higher cutoff, which was established in 1987 and operationalized thereafter. It is for this reason that I restrict my sample to the period starting in the 1990s, when the new lower cutoff for concessionary lending took effect.

**Figure 3: ODA per capita over time (African vs non-African IDA beneficiaries)**



*Notes:* This figure depicts the time series trend of the amount of average Overseas Development Assistance (ODA) per capita received by IDA-beneficiaries between 1960-2020. The dashed lines depict the trend for the 41 African aid recipient countries in this sample, whereas the solid lines depict the trend for the remaining 41 non-African countries in the sample.

**Figure 4: IDA GNI per capita threshold for concessionary-loan eligibility over time**





In total, there were 93 countries that were at some point between 1987-2020 eligible for IDA concessionary-loan assistance.<sup>29</sup> The sample of countries that cross over IDA’s threshold between 1990 and 2020 using updated data are shown in the [Table 1](#) below. Between 1990 to 2020, 49 of the 93 countries crossed over the IDA threshold at least once. 17 of these crossover countries were from sub-Saharan Africa. The rest belong to different parts of the world (Asia, Latin America, Eastern Europe, North Africa, the Middle East and Oceania). 20 countries in total graduated from the IDA to IBRD-only status.<sup>30</sup>

Table 1: **Sample of Countries and Years Crossing the IDA Threshold**

| Country                | Year of Crossing (Graduation) | Country               | Year of Crossing (Graduation) |
|------------------------|-------------------------------|-----------------------|-------------------------------|
| Albania                | 1999 (2008)                   | Kenya                 | 2014                          |
| Angola                 | 2004 (2014)                   | Kiribati              | 1991                          |
| Armenia                | 2003 (2014)                   | Lao PDR               | 2012                          |
| Azerbaijan             | 2005 (2011)                   | Lesotho               | 2008                          |
| Bangladesh             | 2015                          | Maldives              | 1997                          |
| Benin                  | 2018                          | Mauritania            | 2008                          |
| Bhutan                 | 2003                          | Moldova               | 2007 (2020)                   |
| Bolivia                | 1997 (2017)                   | Mongolia              | 2006 (2020)                   |
| Bosnia and Herzegovina | 1997 (2014)                   | Myanmar               | 2016                          |
| Cabo Verde             | 1992                          | Nicaragua             | 2001                          |
| Cambodia               | 2017                          | Nigeria               | 2008                          |
| Cameroon               | 2006                          | Pakistan              | 2014                          |
| China                  | 2000 (1999)                   | Papua New Guinea      | 2008                          |
| Comoros                | 2005                          | Philippines           | 1994 (1993)                   |
| Congo, Rep.            | 2005                          | Sao Tome and Principe | 2012                          |
| Cote d’Ivoire          | 2012                          | Senegal               | 2010                          |
| Egypt, Arab Rep.       | 1995 (1999)                   | Solomon Islands       | 1997                          |
| Equatorial Guinea      | 2001 (1999)                   | Sri Lanka             | 2003 (2017)                   |
| Georgia                | 2003 (2014)                   | Sudan                 | 2008                          |
| Ghana                  | 2008                          | Timor-Leste           | 2006                          |
| Guyana                 | 2002                          | Uzbekistan            | 2010                          |
| Haiti                  | 2012                          | Vietnam               | 2010 (2017)                   |
| Honduras               | 2000                          | Yemen, Rep.           | 2010                          |
| India                  | 2010 (2014)                   | Zambia                | 2010                          |
| Indonesia              | 1995 (2008)                   |                       |                               |

*Notes:* Year of crossing was determined by triangulating data using the WDI (2022) GNI per capita (Atlas Method, Current US\$) data, [Galiani et al. \(2017\)](#) for the IDA cutoffs up to 2010, and manual searches through scattered IMF Policy press releases for the cutoffs for each year between 2011-2020. Note that some countries, such as China and Philippines were graduated on a fast-track even before they were above the income-eligibility threshold due to strong economic potential. This list also includes the countries that crossed back under the IDA threshold and then crossed over twice.

<sup>29</sup>For the full list of borrowing countries, see: [IDA Borrowing Countries](#).

<sup>30</sup>It is also worth noting that within this sample, some small, island economies continue to receive IDA assistance even after they have been over the threshold for several consecutive years due to a special IDA policy that protects them from vulnerability to economic shocks(Review of IDA’s Graduation Policy (2012)). I exclude these small, island economies in my analysis as a robustness check because they do not experience the same withdrawal in IDA funds.

Studying political outcomes at a cross-country level involves reliance on certain expert-coded measures which typically assign 'scores' to the quality of various political institutions or to the probability of different political phenomena taking place. Accordingly, I draw from a couple of the most widely used and highly regarded cross-country political measures. I primarily utilize the Varieties of Democracy (V-Dem) Surveys compiled by the University of Gothenburg to study the variation in clientelism and party competition, my main outcomes of interest.<sup>31</sup> I explore the variation in clientelism induced by changes in foreign aid received (or expected) by a country during a given year using a number of different measures in the V-Dem. The V-Dem "clientelism index" in this analysis is a measure of the extent to which politics are based on clientelistic relationships. To measure party competition and ideological heterogeneity between major political parties in developing countries, I rely on a couple of different variables coded by country experts in the V-DEM. The first measures the share of political parties with representation in national-level politics that have distinct policy platforms, as measured by the availability of their publicly available party platforms/manifestos. To be counted as such, parties must have platforms that are both distinct (either in terms of content or generalized ideology) and publicly disseminated.<sup>32</sup> The second measure I employ concerns the nature of party competition across regions. This measure looks at whether the electoral support for the country's most major parties is concentrated in one or two regions of the country, or whether they are competitive in a few or more regions. This measure is proxied using the share of political parties that have permanent local party branches outside the capital.

## 4.2 Cross-National Analysis: An Instrumental Variable Approach

For my cross-national identification strategy, I instrument foreign aid using the IDA's GNI per capita threshold for concessionary-loan graduation *eligibility*. For reasons described in Section 3.1, this threshold provides a plausibly exogenous instrument to study the effects of changes in foreign aid on political outcomes in beneficiary countries. The IDA threshold is annually adjusted for inflation, but it remains an arbitrary threshold. Nothing tangible occurs when countries cross over the threshold; they remain in the same group, remain eligible for loans, and no political or economic reforms are stipulated (Carnegie and Samii, 2019). It only kickstarts a negotiation process that precedes actual graduation from the IDA's lowest-income category to "blend" status, which may take up to several years. It is only after a country is deemed "credit worthy" enough<sup>33</sup>, in addition to staying above the income threshold for a few consecutive years, that its actual

---

<sup>31</sup>I use [Version 12 of the V-Dem](#) from March 2022.

<sup>32</sup>V-Dem does not measure how much the public actually *knows* about these platforms or whether they are important in structuring policymaking using this variable, and my interpretation of this variable is consistent with theirs.

<sup>33</sup>[Moss and Majerowicz \(2012\)](#) discuss the highly confidential nature of the World Bank's country creditworthiness assessments, which are apparently only available to high ranking World Bank staff members.

graduation process begins, first losing access to the most concessional loan terms, then losing access to IDA funds altogether. Instrumenting aid using the threshold thus allows us to get around possible endogeneity of aid in political outcomes. In the subsequent sections, I present the econometric models that guide my cross-national analysis.

#### 4.2.1 First-Stage

To establish the validity of IDA threshold crossings as an instrument for foreign aid, I begin by testing the first-stage assumption. Even though the graduation process itself takes several years, multilateral, regional, and bilateral donors alike utilize the crossing of the IDA income thresholds for their own lending eligibility criterion (Moss and Majerowicz, 2012). The African Development Bank, a large regional donor for assistance to sub-Saharan Africa, for instance, cites the crossing of the IDA threshold as one of the major criteria in its concessionary loan eligibility reports (Prizzon et al., 2016). Limited donor aid budgets result in directing funding to the neediest countries, and crossing this arbitrary IDA threshold may signal to donors that a country is no longer in the neediest category. Galiani et al. (2017) find that ODA flows as a share of GNI dropped, on average, by approx. 59% when a country crosses over the IDA aid-eligibility threshold. I formally test this claim using my updated sample of countries with the following first-stage equation:

$$ODA_{it} = \alpha + \beta_1 IDACross_{i,t-1} + \beta_2 GNIpc_{i,t-1} + \gamma_i + \delta_t + e_{it} \quad (1)$$

The null hypothesis here is that crossing the IDA’s concessionary-loan threshold has a null effect on the ODA (as a % of GNI) received by a country. For a given country  $i$  in year  $t$ , let  $ODA$  represent the amount of overseas development aid (as a % of GNI) received. For a given country  $i$  in year  $t - 1$ , let  $IDACross$  be an indicator variable that takes on the value 1 if it has crossed the gross national income (GNI) threshold for not being eligible for IDA aid and takes on the value 0 if it is below the GNI threshold for IDA aid-eligibility. The estimated  $\beta_1$  represents the effect of crossing over in year  $t - 1$  on the availability of ODA in year  $t$  in that country.  $\gamma_i$  represents the country fixed-effects and  $\delta_t$  denotes the year fixed-effects.  $\beta_2$  represents the coefficient on GNI per capita during year  $t - 1$ , which I include as a control as it is the running variable determining IDA eligibility.  $e_{it}$  denotes the error term in the estimation, which I cluster at the country level to account for serial correlation.

Table A1 in the appendix presents the results of the first stage. It provides strong evidence for the first-stage ie. the relationship between the instrumental variable (threshold crossing) and the endogenous variable (foreign aid availability). Column (1) shows that crossing the GNI threshold leads to a 23.3% reduction in ODA as a share of GNI in the next year. Column (3) shows that relationship holds even two years after crossing. Columns (2) and (4) provide evidence that net per capita ODA received by a country falls by 43.8 USD and 45.9 USD one year and two years after

crossing the threshold respectively. I include a falsification test in the specification in Column (5) whereby I include an indicator for “future crossing” ( $t+2$ ) as an additional explanatory variable<sup>34</sup>. This future crossing should in expectation be orthogonal to current ODA received, and indeed the coefficient on the future crossing indicator is not statistically significant. This falsification exercise helps me establish the strength of the instrument, given the persistent magnitude and significance of the coefficient on the  $t-2$  crossing instrument in Column (5). The relationship is robust to the inclusion of country and year-fixed effects in all specifications, which further bolsters the strength of this instrument. The F-statistic (a test for the weakness of an instrument) is above 10 in specifications (1) and (3), but below 10 for specification (2) and (4) when using ODA per capita as the dependent variable. For this reason, I use  $\ln(\text{ODA}/\text{GNI})$  as the endogenous variable for the second stage. The reduced form specifications and analysis are all included in [Appendix Section 6.2.2](#).

#### 4.2.2 Second-Stage

The second-stage equation estimates the impact of the availability of overseas development aid (ODA) on political competition and clientelism. I propose the following model to test the null hypothesis that the availability of foreign aid has no effect on political outcomes:

$$y_{it} = \alpha + \beta_1 \text{ODA}_{i,t-1} + \beta_2 \text{ODA}_{i,t-1} \times I(\text{Africa})_i + \beta_3 \text{GNIPc}_{i,t-1} + \gamma_i + \delta_t + e_{it} \quad (2)$$

For a given country  $i$  in year  $t$ , let  $y$  represent the outcomes of interest (party competition and clientelism). For country  $i$  in year  $t-1$  (or  $t-2$ ,  $t-3$ ),  $\text{ODA}$  is my explanatory variable, which measures the amount of overseas development aid as a % of GNI (in current US dollars) available. The estimated  $\beta_1$  would represent the effect of an additional percentage point of ODA available in the previous year(s) on the political outcome of interest for that country. The coefficient  $\beta_2$  on the interaction term between aid and an indicator for sub-Saharan African countries represents the additional effect of an additional percentage point of ODA on political outcomes in the subsample of African countries.  $\beta_2$  is again the main coefficient of interest, and helps test my theoretical prediction that changes in foreign aid levels affect African politics differently than politics in other low-income countries.  $\gamma_i$  represents the country fixed-effects and  $\delta_t$  denotes the year fixed-effects. The inclusion of country fixed effects precludes the need to include an indicator variable for African countries separately as a control in my equation.  $\beta_3$  represents the coefficient on GNI per capita during year  $t-1$  (or  $t-2$ ), which I include as a control as it is the running variable determining IDA eligibility.  $e_{it}$  denotes the error term, which I cluster at the country level to account for serial correlation.

I undertake both an OLS fixed-effects and IV-2SLS (two-stage least squares) regression to

---

<sup>34</sup>I borrow this false experiment idea from [Miguel et al. \(2004\)](#)

estimate this equation. In the latter, I instrument ODA (as a % of GNI) received using the IDA crossing as my instrumental variable. For reasons discussed before, the level of ODA a country receives may be endogenous to the political outcomes of interest. For instance, countries with more competitive political systems may be performing better economically (Ghosh, 2010), making them ineligible to receive higher volumes of aid. In other cases, foreign donors may condition the availability of development assistance on certain political reforms by beneficiary governments. It is for this reason that instrumenting the availability of foreign aid with a seemingly arbitrary income threshold which makes countries ineligible for the most concessionary form of aid is useful for the identification of causal effects. Accordingly, in the 2SLS specifications, I instrument aid in year  $t - 1$  (i.e.,  $ODA_{i,t-1}$ ) with a dummy variable indicating whether the country has crossed the IDA threshold by the end of year  $t - 2$ , that is,  $IDA_{cross,i,t-2}$ . Main results are reported in the tables below.

Table 2 looks at the relationship between the availability of foreign aid (ODA as a % of GNI) <sup>35</sup> and the distinctness of party platforms/generalized ideology between major national-level parties, my measure of programmatic party competition. Columns (1) through (5) of Table 9 report the second stage estimation results using OLS with fixed effects. Here I investigate the direct effect of an additional % point of net aid received in the previous  $t - 1$  or  $t - 2$  year on programmatic competition in year  $t$ . As before, I include an interaction term of the explanatory variable with an indicator variable for African countries, while restricting my sample to countries that crossed over the IDA threshold at some point between 1990-2020. In specifications reported in Columns (2) and (3), I exclude 8 small, island economies, which continue to receive aid on concessional terms from the IDA even after they cross over the threshold for three consecutive years. In two specifications reported in columns (4) and (5), I restrict the sample to include only countries that crossed the threshold just *once* during the sample period. <sup>36</sup> I find that the coefficient on the interaction term with the Africa dummy is negative and statistically significant across all five specifications, however, the relationship is strongest when excluding small, island economies. This makes intuitive sense given that these countries do not have to experience the same withdrawal of aid from crossing the IDA threshold as larger economies <sup>37</sup>. Columns (6) - (8) report the two-stage least square estimation of my second-stage equation. Here I instrument the endogenous term, availability of aid during  $t - 1$  (or  $t - 2$ ), using the IDA crossing during  $t - 2$  (or  $t - 3$ ) as my instrumental variable. In different specifications, I instrument aid in  $t - 1$  using the crossing 2 years and 3 years before. Across all specifications, I find that the interaction term between ODA

---

<sup>35</sup>As discussed in the first stage, I follow the convention of the previous foreign aid literature and utilize the logged ratio of net ODA to GNI in current US dollars. The first stage relationship in Table 1 also found that this measure of foreign aid availability is very strongly influenced by the IDA crossing.

<sup>36</sup>I exclude Bolivia, Cote d'Ivoire, Indonesia, and Yemen, all of which crossed the threshold more than once. They reverted back under the threshold and crossed over again during the 30-year sample period.

<sup>37</sup>This is because the IDA's policy guarantees continuing concessionary loan assistance to all small, island economies due to their vulnerability to economic shocks (Review of IDA's Graduation Policy, 2012)

Table 2: Second Stage (Foreign Aid and Distinct Parties)

| VARIABLES                                   | Dependent Variable: Distinct Parties |                      |                      |                     |                    |                     |                     |                     |
|---|--------------------------------------|----------------------|----------------------|---------------------|--------------------|---------------------|---------------------|---------------------|
|   | (1)<br>OLS                           | (2)<br>OLS           | (3)<br>OLS           | (4)<br>OLS          | (5)<br>OLS         | (6)<br>2SLS         | (7)<br>2SLS         | (8)<br>2SLS         |
| Net ODA (% of GNI), $t - 2$                 | 0.066<br>[0.063]                     |                      | 0.102*<br>[0.052]    |                     | 0.081<br>[0.067]   |                     |                     | 0.609<br>[0.691]    |
| Africa $\times$ Net ODA (% of GNI), $t - 2$ | -0.161*<br>[0.092]                   |                      | -0.229***<br>[0.066] |                     | -0.183*<br>[0.100] |                     |                     | -0.564**<br>[0.259] |
| Net ODA (% of GNI), $t - 1$                 |                                      | 0.116*<br>[0.061]    |                      | 0.107<br>[0.076]    |                    | 0.684<br>[0.772]    | 0.620<br>[0.667]    |                     |
| Africa $\times$ Net ODA (% of GNI), $t - 1$ |                                      | -0.251***<br>[0.070] |                      | -0.223**<br>[0.098] |                    | -0.644**<br>[0.292] | -0.608**<br>[0.269] |                     |
| GNI per capita, $t - 1$                     | 0.011<br>[0.039]                     | -0.010<br>[0.016]    | -0.011<br>[0.016]    | 0.008<br>[0.040]    | 0.007<br>[0.039]   | 0.044<br>[0.114]    | 0.037<br>[0.097]    |                     |
| GNI per capita, $t - 2$                     |                                      |                      |                      |                     |                    |                     |                     | 0.036<br>[0.102]    |
| Observations                                | 1,445                                | 1,249                | 1,213                | 1,360               | 1,321              | 1,249               | 1,249               | 1,209               |
| R-squared                                   | 0.164                                | 0.205                | 0.188                | 0.199               | 0.177              | 0.859               | 0.868               | 0.880               |
| Country FE                                  | Yes                                  | Yes                  | Yes                  | Yes                 | Yes                | Yes                 | Yes                 | Yes                 |
| Year FE                                     | Yes                                  | Yes                  | Yes                  | Yes                 | Yes                | Yes                 | Yes                 | Yes                 |
| Instrument (Crossing)                       | No                                   | No                   | No                   | No                  | No                 | $\leq t - 2$        | $\leq t - 3$        | $\leq t - 3$        |
| Countries                                   | 48                                   | 40                   | 40                   | 44                  | 44                 | 40                  | 40                  | 40                  |

*Notes:* Robust standard errors, clustered at the country level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. The dependent variable is a measure of the distinctness of platforms /generalized ideology of the major national-level political parties in the country. The specifications in Columns (1) - (5) estimate the second stage using OLS with country and year fixed effects, whereas Columns (6) - (8) use IV-2SLS with foreign aid instrumented by the crossing of the IDA threshold at different points in time. The 2SLS specifications include a dummy for sub-Saharan African countries (not shown). In Column (2) I exclude small, island countries which remain eligible for IDA concessionary-loan assistance even after graduating from the threshold. In columns (4) and (5), I exclude countries that reverse graduate under the threshold and then cross back over. The IV-2SLS specifications exclude small, island economies that do not experience a real shift in their foreign aid even after crossing due to IDA policies to protect vulnerable small island economies. The explanatory variable for Net ODA (as a % of GNI) received has been transformed using its natural logarithm, as described in the first stage. GNI per capita is calculated in current USD using the Atlas method from the 2022 release of the World Development Indicators.

received and the African dummy is negative and statistically significant. The 2SLS results are also robust to the inclusion of country and year fixed effects.

Taken together, the results from this table suggest that the availability of foreign aid has a negative and significant effect on programmatic party competition in African aid-beneficiary countries. The same effect is not seen for the developing world as a whole (ie. among the sample of all IDA beneficiaries). This provides strong evidence supporting that hypothesis that cutbacks in aid would be associated with greater programmatic competition in Africa. Next, I perform a similar analysis using the other two outcome variables of interest from my reduced form analysis – namely, party competition across regions, and clientelism index.

In [Table 3](#) I first investigate the direct effect of an additional % point of net aid received in the previous  $t - 1$  or  $t - 2$  year on party competition across the country's regions in year  $t$  using an OLS fixed effects regression. This is measure of local party competition that proxies for competitiveness using the number of permanent local party branches in regions of the country outside the capital. A higher score is indicative of more broad-based party competition, with a higher number of parties operating through permanent local party branches. Columns (1) through (5) report the different specifications using OLS. Column (1) includes the full sample of IDA crossing countries, Columns (2) and (3) exclude the small, island economies, whereas Columns (4) and (5) restrict the sample to countries that crossed just once. I find that the coefficient on the interaction term of ODA and Africa is negative and significant when we focus on the non-small-island sample. Columns (6) - (8) report the two-stage least square estimation of the same second-stage equation. I find (weakly) significant negative effects of aid availability on regional party competition in the subsample of African beneficiaries when I instrument aid received in the previous year and  $t - 2$  year using threshold crossing at least three years ago (year  $t - 3$ ). The same effect disappears when I instrument aid in year  $t - 1$  by threshold crossing in  $t - 2$ . The 2SLS results in Columns (7) and (8) are also robust to the inclusion of country and fixed effects.

Taken together, the results from this table suggest that the availability of foreign aid has a negative and weakly significant effect on regional party competition in African aid-beneficiary countries. It provides suggestive evidence that it takes at least three years after a country crosses over the IDA threshold that the reduction in foreign aid following the crossing has an effect on regional political competition in African beneficiary countries. It is suggestive evidence in the direction of my theoretical prediction that party competition becomes more inclusive (here, conceived of as broad-based) once African countries are no longer heavily aid-dependent. As before, the same effect is not generally detected among all IDA beneficiary nations, and is unique to the African subsample.

Finally, in the appendix [Table A7](#) I utilize the same estimation strategy as the previous tables, using the V-Dem's clientelism index as my dependent variable. I do not find significant effects across specifications, using both OLS and 2SLS estimation. In the second stage I fail to reject



Table 3: **Second Stage (Foreign Aid and Local Party Competition)**

| VARIABLES                                   | Dependent Variable: Permanent Local Party Branches |                     |                     |                   |                   |                              |                               |                    |
|---|--|---------------------|---------------------|-------------------|-------------------|------------------------------|-------------------------------|--------------------|
|   | (1)<br>OLS   | (2)<br>OLS          | (3)<br>OLS          | (4)<br>OLS        | (5)<br>OLS        | (6)<br>2SLS                  | (7)<br>2SLS                   | (8)<br>2SLS        |
| Net ODA (% of GNI), $t - 2$                 | 0.020<br>[0.074]                                   |                     | 0.065<br>[0.075]    |                   | 0.020<br>[0.079]  |                              |                               | 0.138<br>[0.711]   |
| Africa $\times$ Net ODA (% of GNI), $t - 2$ | -0.071<br>[0.089]                                  |                     | -0.188**<br>[0.080] |                   | -0.065<br>[0.097] |                              |                               | -0.498*<br>[0.302] |
| Net ODA (% of GNI), $t - 1$                 |  | 0.053<br>[0.097]    |                     | 0.029<br>[0.098]  |                   | -0.209<br>[0.800]            | 0.058<br>[0.722]              |                    |
| Africa $\times$ Net ODA (% of GNI), $t - 1$ |  | -0.205**<br>[0.095] |                     | -0.105<br>[0.100] |                   | -0.449<br>[0.316]<br>[0.673] | -0.509*<br>[0.308]<br>[0.639] | [0.579]            |
| GNI per capita, $t - 1$                     | 0.037<br>[0.056]                                   | -0.010<br>[0.031]   | -0.010<br>[0.031]   | 0.037<br>[0.058]  | 0.036<br>[0.057]  | -0.084<br>[0.113]            | -0.044<br>[0.100]             |                    |
| GNI per capita, $t - 2$                     |  |                     |                     |                   |                   |                              |                               | -0.032<br>[0.102]  |
| Observations                                | 1,445  | 1,249               | 1,213               | 1,360             | 1,321             | 1,249                        | 1,249                         | 1,209              |
| R-squared                                   | 0.0930   | 0.105               | 0.113               | 0.103             | 0.102             | 0.746                        | 0.775                         | 0.803              |
| Country FE                                  | Yes  | Yes                 | Yes                 | Yes               | Yes               | Yes                          | Yes                           | Yes                |
| Year FE                                     | Yes  | Yes                 | Yes                 | Yes               | Yes               | Yes                          | Yes                           | Yes                |
| Instrument (Crossing)                       | No   | No                  | No                  | No                | No                | $\leq t - 2$                 | $\leq t - 3$                  | $\leq t - 3$       |
| Countries                                   | 48   | 40                  | 40                  | 44                | 44                | 40                           | 40                            | 40                 |

*Notes:* Robust standard errors, clustered at the country level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. The dependent variable is a measure of how broad-based political competition is at the regional level, whereby a higher score indicates more broad-based competition between major political parties across the countrys regions. This is proxied using the number of permanent local party branches in parts of the country outside the capital. A higher score is indicative of more broad-based party competition, with a higher number of parties operating through permanent local party branches. The specifications in Columns (1) - (5) estimate the second stage using OLS with country and year fixed effects, whereas Columns (6) - (8) use IV-2SLS with foreign aid instrumented by the crossing of the IDA threshold at different points in time. The 2SLS specifications include a dummy for sub-Saharan African countries (not shown). In Column (2) I exclude small, island countries which remain eligible for IDA concessionary-loan assistance even after graduating from the threshold. In columns (4) and (5), I exclude countries that reverse graduate under the threshold and then cross back over. The IV-2SLS specifications exclude small, island economies that do not experience a real shift in their foreign aid even after crossing due to IDA policies to protect vulnerable small island economies. The explanatory variable for Net ODA (as a % of GNI) received has been transformed using its natural logarithm, as described in the first stage. GNI per capita is calculated in current USD using the Atlas method from the 2022 release of the World Development Indicators.

the null hypothesis that the availability of foreign aid has no effect on clientelism using this cross-country measure.

### 4.2.3 Additional Robustness Checks

#### Electoral Democracy Status (Regime Type)

It is reasonable for us to wonder whether the party competition effects I find are systematically driven by the regime type of the government receiving foreign aid. For instance, it is plausible to imagine that opposition parties in electoral autocracies may not see the need to (or be allowed to) establish distinct ideological positions through publicly available manifestos or permanent party branches in the provinces outside the capital if party competition is highly restricted. To test whether the results are robust to the regime type of aid-recipient government, I include an indicator for countries that have been classified as "electoral democracies" during a given year by Freedom House <sup>38</sup> as an additional control and re-estimate the OLS and 2SLS specifications from [Table 2](#) and [Table 3](#) above. The results of this robustness check are reported in [Appendix Table A8](#) and [Appendix Table A9](#) for distinct parties and local party competition respectively. The effects I find are robust to the inclusion of the Freedom House electoral democracy classification, which suggests that it is not simply the regime type of recipient countries that is driving the association between foreign aid withdrawal and party competition.

#### Manipulation of the IDA Threshold

Since my identification strategy relies on the exogeneity of the IDA threshold, one possible threat could be if aid-recipient developing countries were able to manipulate the reporting of their GNI per capita to artificially stay below the threshold and continue to receive concessionary aid from the World Bank. Indeed, as I described in [Section 3.1](#), this appears to be one of the rationales behind why the IDA tends to be secretive about the exact income threshold each year as a hedge against possible manipulation by beneficiary governments. If this were the case, then the IDA threshold would no longer serve as a valid instrument for this study. An endogenous manipulation of the GNI per capita reported would imply that countries that artificially remain below the threshold are likely to have systematically different characteristics that may plausibly be correlated with my political outcomes of interest relative to the countries that cross over the threshold. Therefore, while it is unlikely that countries are precisely gaming the thresholds in advance of their annual public release by the IDA, it is still worth testing for possible manipulation.

One of the methods to test for artificial sorting of units above or below a threshold in regression discontinuity designs was developed by [McCrary \(2008\)](#)<sup>39</sup>. [Appendix Figure A1](#) depicts the fitted

---

<sup>38</sup>[Freedom House, List of Electoral Democracies \(2022\)](#).

<sup>39</sup>This test has also specifically been used in a couple other studies that exploit the discontinuity produced by the IDA and IBRD thresholds (for instance, see [Galiani et al. \(2017\)](#) and [Carnegie and Samii \(2019\)](#)).

kernel density functions below and above the IDA income threshold. If there were manipulation of GNI per capita reported by countries, we might expect to see a discontinuous jump in the density function around the threshold. As [Appendix Figure A1](#) shows, there does not appear to be evidence of bunching below the IDA threshold in the data.

## Country’s Statistical Reporting Capacity

Related to the robustness check above, it may also be the case that countries are not deliberately manipulating their reported national income statistics to stay below the IDA threshold, but there is variation in the capacity of different countries’ national statistical offices. Countries with lower statistical capacity may be unintentionally misreporting their gross national income statistics as part of their national accounts submitted to the World Bank. The low technical capacity of official statistics producing bodies in sub-Saharan Africa has been particularly well documented ([Jerven \(2013\)](#)). This introduces another potential source of endogeneity to my identification strategy, namely, that the associations between crossing the IDA threshold and political outcomes I find may be driven in no small part by the lack of reliable national statistics among the subsample of African IDA-beneficiaries. Countries may then find themselves on either side of the IDA threshold due to reasons that are associated with the political outcomes I am interested in, such as governance and state capacity. I therefore perform a check to rule out variation in statistical reporting capacity as the driver of my results.

In [Appendix Table A10](#) and [Appendix Table A11](#) I include the World Bank’s ‘Overall Statistical Reporting Capacity Score’ as an additional covariate in my second-stage equation<sup>40</sup>. This score is an aggregate country-level index of a country’s statistical capacity based on how well and how frequently it calculates and reports 25 different subindices ranging across measures such as the periodicity of census data collection, poverty surveys, national accounts, external debt reporting, and so on. The index I use aggregates the statistical capacity calculated by this World Bank measure between 2004-2020 for each IDA country in my sample. A higher score indicates higher reliability of the country’s national-level statistics.<sup>41</sup> The results in [Appendix Table A10](#) and [Appendix Table A11](#) using distinct party platforms and local party competition as the outcome respectively are robust to the inclusion of this statistical capacity score (the standard errors get slightly larger but the significance and magnitude of the effects remains unchanged). Because the inclusion of country fixed effects is tantamount to the inclusion of an aggregate country-level statistical capacity score, I attempt the same specification without an aggregate score and use the yearly country scores instead, and find that the results are still robust (not reported). As before, with the local party competition as my dependent variable in [Appendix Table A11](#), the effects are concentrated in the sample that excludes 8 small island IDA beneficiaries where IDA crossing

---

<sup>40</sup>The idea for this robustness check was borrowed from Martinez (2022), who studies to what extent countries’ official GDP statistics can be manipulated by autocracies.

<sup>41</sup>The data for the World Bank statistical capacity score was downloaded from [here](#).

does not lead to the same magnitude of aid withdrawal. I now turn to my investigation of these relationships at the subnational level, using my country case of Ghana. The availability of more granular information on clientelistic political practices may help bear evidence supporting my theoretical predictions that foreign aid enables clientelism in African countries at the subnational level.

## 5 Subnational Analysis: Evidence from Ghana

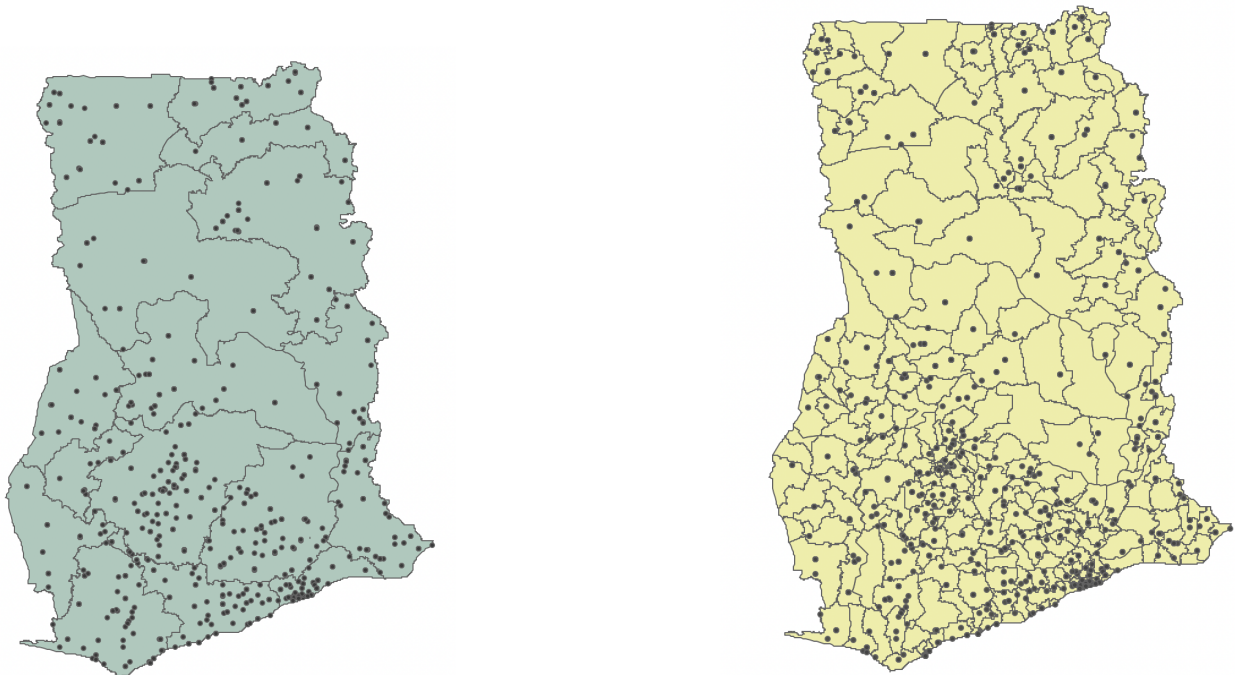
### 5.1 Data and Sample

#### 5.1.1 District-level Aid Disbursements in Ghana

To study the relationship between foreign aid and politics at a subnational level, I require data on subnational disbursement of foreign aid. For this purpose, I use Aid Data’s “World Bank Geocoded Aid Data”<sup>42</sup>, which is a geocoded dataset containing all projects approved from 1995-2014 in the World Bank IBRD/IDA lending lines. It tracks over 630 billion USD in World Bank aid, and 5,684 World Bank/IDA projects across 61,243 project locations.

This project data is available at both the region (the first administrative unit) and district (the second administrative unit) level for Ghana, my country case. Across Ghana, the dataset includes 1,084 unique World Bank project locations, ranging across sectors such as agriculture, education, health, water supply and sanitation, and other social services. [Figure 7](#) displays the project locations available in the dataset overlayed on the country’s two main administrative divisions: region on the left, and district on the right.

Figure 6: **IDA/IBRD Project Locations in Ghana approved between 1995-2014**



To the best of my knowledge, this is the most comprehensive available data on subnational aid project locations in Ghana available for the period under study. The dataset includes information

---

<sup>42</sup>[AidData. 2017. WorldBank-GeocodedResearchRelease\\_Level1\\_v1.4.2 geocoded dataset.](#) Williamsburg, VA and Washington, DC: AidData.

about the start and end year of each project, the total amount committed (in US dollars) at the start of the project, and the total amount disbursed (in US dollars) at the end of the project. After cleaning the dataset for administrative changes that occurred over the sample period, I find that the 1,084 project locations were spread out over 188 districts<sup>43</sup> and 10 regions<sup>44</sup>. The mean project commitment amount per project location was \$2,094,572, and the mean project disbursement amount per project location was \$1,749,836 over the course of study. By dividing the total amount disbursed per project location by the project duration<sup>45</sup>, I estimate the yearly aid disbursements received by each of the 188 districts in Ghana between 1995 and 2018<sup>46</sup>. I also calculate the yearly commitment amounts per district for new projects that were committed during any year, as well as a count of active IDA/IBRD projects during any year in the district.

### 5.1.2 Subnational Political Outcomes

As for relevant year-on-year subnational political outcomes, I am limited to public opinion surveys. Fortunately, Ghana is one of the few African countries that undertakes regular public opinion polls which include several topics related to democracy, governance, and politics. I utilize six geocoded rounds of the Afrobarometer surveys from Ghana, spanning a time period between 2001 and 2017 for my analysis<sup>47</sup>. The Afrobarometer is conducted in rounds roughly every 3 years, and for the purposes of my analysis I map the year immediately before and after the survey to the year in which it was conducted. Note also that since the same respondents are not interviewed in each round, as with most public opinion surveys, the data serves as a time-series cross-section, and not as a panel.

The Afrobarometer contains several relevant measures for my study of the relationship between foreign aid, clientelism, and party competition. As I detailed in Section 2, the theoretical predictions about the prevalence and effectiveness of vote buying, a commonly studied measure of clientelism, are rather mixed in Africa, and therefore this becomes an important measure for this study to consider. I was not able to study this at a cross-national level, owing to large amounts of missing data in the V-Dem on vote and turnout buying in my sample period of interest. However, the Afrobarometer in Ghana allows me an opportunity to study the prevalence of vote buying at a subnational level. The following question, is available across most rounds of the Ghana survey: *During the last general elections in [...], how often, if ever, did a candidate or someone from a*

---

<sup>43</sup>Many of the project locations in the data were coded as “populated centers” instead of districts, which through manual searches I mapped back to the associated district in which that populated center falls.

<sup>44</sup>Note that Ghana presently has 16 regions. 6 new regions were created following a referendum in 2018 (*Ghana Permanent Mission to the United Nations*).

<sup>45</sup>(Project End Year - Project Start Year) + 1

<sup>46</sup>While the last project approval year in the data is 2014, some of those project durations run up to 2018.

<sup>47</sup>These geocoded data are not publicly available and only available upon request from the [Afrobarometer Data Management Unit](#) at the University of Cape Town, to whom I am grateful. I would like to also acknowledge the work of the [Center for Democratic Development, Ghana](#) who were responsible for the data collection and cleaning of the different rounds of the Afrobarometer.

*political party offer you something, like food, a gift, or money, in return for your vote?* <sup>48</sup>

In addition to the prevalence of vote buying, I also identify a few other useful measures from the Afrobarometer:

- A measure of the health of party competition in the country.<sup>49</sup>
- A measure of whether parties are seen as providing viable electoral alternatives to constituents or not. <sup>50</sup>
- A measure of citizen's trust in the ruling party and opposition parties.
- A measure of voting freedom or whether citizens feel coerced to vote for particular candidates in elections.
- A measure of party loyalty or how "close" a citizen felt to a particular political party.

Further details about the merging of the project disbursements data with the Afrobarometer are in the appendix Section.

## 5.2 Subnational Analysis

I then proceed to focus on the variation in foreign aid after crossing the threshold at the level of districts in Ghana. While the graduation process from IDA concessionary loan eligibility occurs for the country as a whole and is not staggered by district, I find that some places which are relatively more aid dependent prior to the graduation witness a greater withdrawal in foreign assistance than others following the graduation, controlling for levels of other observable characteristics such as population and poverty. It is the comparison between these two sets of districts experiencing differential levels of foreign aid withdrawal after the IDA crossing that I leverage for my subnational investigation. A district-level analysis has the added advantage of estimating the effects of a per capita loss in foreign aid dollars on certain constituency-level political outcomes such as vote buying, which cannot readily be studied at a cross-national level. The geocoded World Bank project disbursement dataset I utilize is also appropriate for this subnational study because it includes all active IDA/IBRD projects in Ghana between 1995-2018. Thus, the entities defining the borrowing eligibility and those providing the foreign aid under study are one and the same, making this a good setup for this investigation.

For this subnational analysis, I will be employing a classic difference-in-differences (two-way fixed-effects) estimator to isolate the effects of changes in foreign aid disbursements following the IDA crossing in 2008 on a number of district-level outcomes measured using the Afrobarometer.

---

<sup>48</sup>I acknowledge that survey responses about vote buying are subject to social desirability bias. There have been some notable examples that have gotten around this bias. For example, [Kramon \(2013\)](#) studies vote buying via a list experiment in Kenya.

<sup>49</sup>*In this country, how often does competition between political parties lead to conflict?*

<sup>50</sup>*How strongly do you agree with Statement A or Statement B?* A: Political parties create division and confusion; it is therefore unnecessary to have many political parties in Ghana. B: Many political parties are needed to make sure that Ghanaians have real choices in who governs them.



To remind the reader, the outcomes of interest include the prevalence of vote buying, the health of party competition, trust in the ruling party, trust in the opposition, voting freedom, programmatic alternatives, and party loyalty. I estimate a model of the following form:

$$y_{dit} = \alpha + \beta_1 Post\_Crossing_t + \beta_2 Treat_{dit} + \beta_3 (Treat_{dit} \times Post\_Crossing_{dit}) + X_{dt} + X_{it} + \gamma_d + \delta_t + e_{it} \quad (3)$$

where for district  $d$  in region  $i$  during year  $t$ ,  $\beta_3$  will be the diff-in-diff (D-i-D) estimator of interest denoting the effect of crossing the IDA threshold among districts experiencing large withdrawals of aid.  $y_{dit}$  denotes the district-level outcomes of interest from the Afrobarometer.  $Post\_Crossing$  is an indicator variable for whether that district in region  $i$  was in the post-IDA threshold crossing period for Ghana (ie. post 2008)<sup>51</sup> in year  $t$ .  $Treat_{dit}$  is an indicator variable for treated districts (which I define below as those districts experiencing the greatest reductions in foreign aid).  $X_{dt}$  and  $X_{it}$  are vectors of district-specific and region-specific controls respectively<sup>52</sup>.  $\gamma_d$  and  $\delta_t$  are district fixed effects<sup>53</sup> and time fixed effects respectively. Errors are clustered at the level of the region to allow for serial correlation between districts.

### 5.2.1 Defining Treated and Comparison Districts

The need to employ a difference-in-differences design in the context of this subnational study is to rule out two potential sources of endogeneity. The first is that I cannot simply compare the pre-crossing and post-crossing outcomes of treated districts, because that estimation would not account for time trends or other changes that occurred between the two periods which may be correlated with the outcomes. The second is that I cannot simply compare the post-crossing outcomes of the treated and comparison districts either, because comparing post-treatment outcomes does not allow me to attribute the differences in outcomes to the treatment (withdrawal in aid disbursements resulting from the crossing).

Naturally, then, the reliability of my estimates depends on how I define the treatment. I undertake a few steps to do this. I first utilize three rounds of the Ghana Population and Housing Census Data<sup>54</sup> to input the district populations. Since the census takes place just once every 10 years, I calculate the district-level population growth rate<sup>55</sup> to arrive at yearly population estimates

---

<sup>51</sup>As a robustness check, I define this post period to include post-2009 and post-2010 observations only. Results of these specifications are reported in forthcoming tables.

<sup>52</sup>I utilize yearly population estimates and a poverty score as my controls.

<sup>53</sup>In alternative specifications, I include region fixed effects instead.

<sup>54</sup>The data from the 2000 and 2010 version of the Population and Housing Census is available upon request from IPUMS. The data from the 2021 census has not been publicly released, so I rely on preliminary reports by the Ghana Statistical Service of the 2021 census for the districts I can find from their [website](#).

<sup>55</sup>Simply,  $(\frac{Population_{2010} - Population_{2000}}{Population_{2000}}) \times 10$  for the yearly growth rate over the 10-year period between census rounds.

using the district-level population changes between 2010 and 2000, and likewise between 2021 and 2010.<sup>56</sup> Given that many administrative divisions took place over this 20-year period, particularly in 2008 and 2018, updating district populations across census rounds is a bit challenging. For this reason, in districts where administrative splits took place, I input the region-level (one administrative unit higher than district) population growth rate to calculate yearly population estimates. I subsequently am able to arrive at the per capita foreign aid disbursement in each of the 188 Ghanaian districts, for each year between 1995-2018, which will serve as my main variable for defining treatment eligibility. I then define the following criteria for treatment eligibility:

- (1) The district must receive an above-average amount of per capita World Bank aid disbursements in the period prior to crossing the IDA threshold (2008 and before). This average is calculated using the national average per capita aid disbursements.
- (2) The district must experience a loss of at least 50% in World Bank aid disbursements in the post IDA-crossing period (doesn't have to be below the post-period national average, but simply compared to its own pre-period average).
- (3) The district was above the national average in the pre-period aid disbursements received, and is *below* the national average in the post-period aid disbursements received.

I apply these criteria in a way such that (1) must strictly be met to be considered as a “treated district”, whereas (2) and (3) are either/both criteria. Though I have accounted for pre-treatment population differences between my proposed treated and comparison districts by using per capita aid disbursements, there may be systematic differences in the pre-treatment levels of poverty in these districts that drives differential levels of foreign aid investment. I perform a simple balance test or “difference in means” test between my proposed treatment and comparison districts on a select number of pre-treatment characteristics that may drive foreign aid provision. For this test, I select a handful of relevant characteristics from four consecutive rounds of the Afrobarometer in Ghana leading up to 2008 which include measures of respondent access to different basic services such as schooling, an electric grid, piped water, a sewage system, and health clinics for the geocoded enumeration area in which the interview takes place.<sup>57</sup> I construct a ‘Poverty Score’ using these 5 characteristics which runs from 0-5 and is determined by whether the individual respondent had access to an electricity grid, piped water system, a sewage system, a school and/or a health clinic in their immediate enumeration area (0 being no service availability or high poverty to 5 being all services available or low poverty). This provides a useful and relatively objective measure of pre-treatment district-level poverty that does not rely on self-report from respondents<sup>58</sup>.

---

<sup>56</sup>Since the complete 2021 census data has not been released, I rely on the population growth rates between 2000 and 2010 for the districts I could not locate.

<sup>57</sup>Afrobarometer samples enumeration areas in a way as to get representative data from every area of the country, aggregated to a level below district, but it by no means stands in for a fully representative census. It is a reliable source for my district-level analysis of pre-treatment characteristics in the absence of robust census data.

<sup>58</sup>Note that the Afrobarometer has several questions about the economic wellbeing of citizens, all of which rely

|  |          | Difference-in-Means Test |
|--|----------|--------------------------|
| Pre-Treatment Characteristics of Districts |          |                          |
| Schools                                    | -0.00397 | (-0.23)                  |
| Electric Grid Access                       | -0.0657* | (-2.04)                  |
| Piped Water System                         | -0.0376  | (-1.14)                  |
| Sewage System                              | -0.0226  | (-0.75)                  |
| Health Clinics                             | 0.00110  | (0.03)                   |
| Poverty (Composite Score)                  | -0.183   | (-1.72)                  |
| $N$  | 798      |                          |
| $N(Treat)$                                 | 308      |                          |
| $N(Control)$                               | 490      |                          |

$t$  statistics in parentheses.  $N$  is the number of district-years in the data prior to the IDA crossing in 2008.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

As the balance test reports, pre-treatment access to basic services between my proposed treatment and comparison districts is fairly well balanced across all characteristics, with the exception of electric grid access. There appears to be a weakly significant difference in electric grid access between my proposed treatment and control districts during the pre-treatment period. However, when I construct the composite poverty score using access to all basic services, the districts are reasonably well balanced. I will therefore consider the districts that fit my above defined criteria as the treated sample. [Figure 7](#) offers a visualization of the changes in the levels of per capita foreign aid disbursements before and after Ghana crosses the IDA threshold for the treated and comparison districts.

It becomes apparent that the loss in per capita World Bank aid disbursements among my sample of treated districts after Ghana crossed over the IDA threshold is significantly large relative to my sample of control districts. Per my calculations, the mean loss in per capita WB aid in the treated sample of 48 Ghanaian districts is 83.8%.<sup>59</sup> By comparison, the same loss in the sample of control districts is -18%, indicating that they actually witnessed a small increment in per capita aid dollars received, albeit quite small in magnitude.

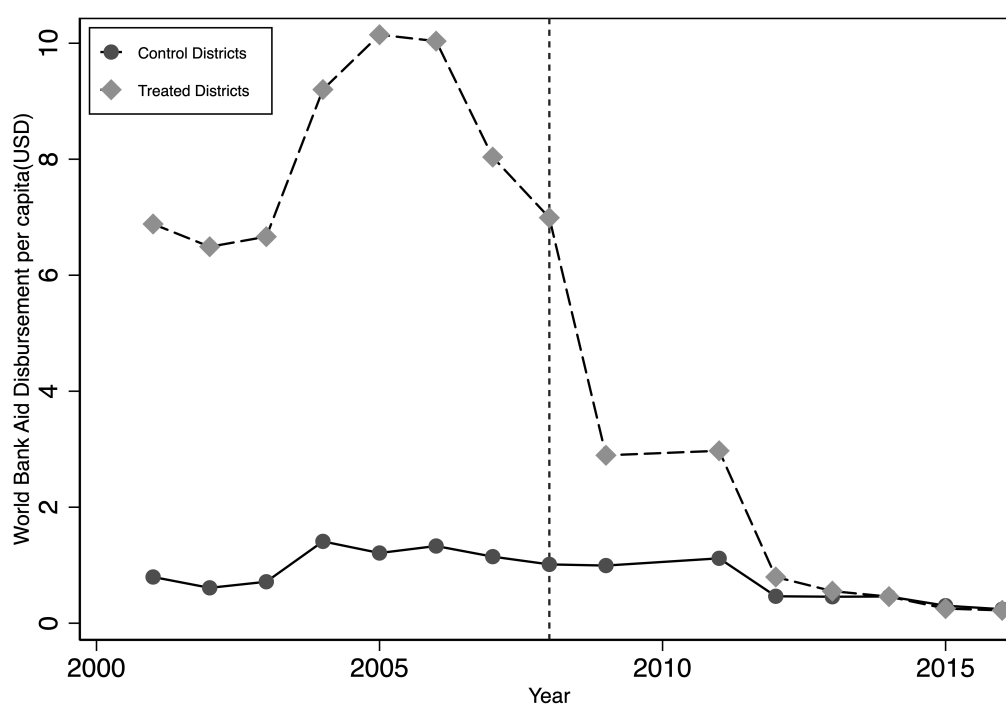
One final sanity check for the validity of my D-i-D model using these treated and comparison districts before proceeding with estimating regression equation (4) involves looking for parallel trends in my outcomes of interest between the treated and control districts in the pre-crossing period. The availability of multiple rounds of geocoded Afrobarometer Ghana data starting in 2000 through to the crossing year allows me to undertake this check for parallel trends. Displayed

---

on self-report.

<sup>59</sup>Calculated using the difference in the mean project disbursement per district in the pre-crossing and post-crossing period.

Figure 7: Ghana district-level World Bank aid disbursements over time

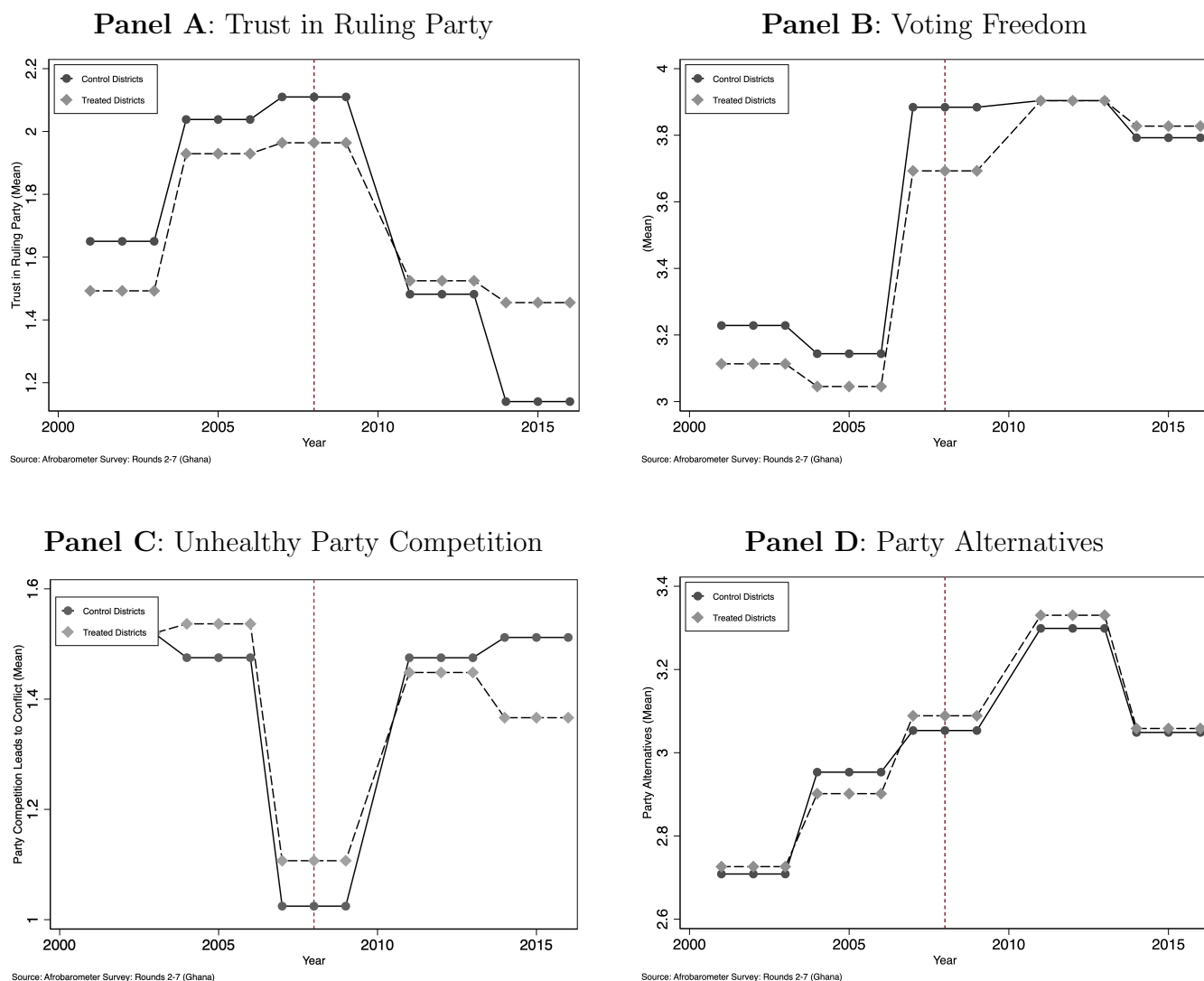


Source: World Bank Geocoded Aid Data v.1.4.2, AidData (2017)

The short dashed vertical line denotes the year Ghana crossed the IDA's concessionary-loan income threshold (2008).

in Figure 8 are selected outcomes where I test for parallel trends between the treated and control districts in the pre-crossing period.

**Figure 8: Parallel Trends Assumption**



*Notes:* The dashed maroon line indicates the year that Ghana crossed over IDA's income threshold for concessionary-loan eligibility.

In Figure 8, Panel A depicts trust in the ruling party (a higher score indicates higher levels of self-reported trust). Panel B is a measure of voting freedom which depicts how free citizens feel to vote for the candidate of their choice without feeling pressured (a higher score indicates greater voting freedom). Panel C depicts a measure of the health of party competition, specifically how

often respondents believe competition between political parties leads to conflict (a higher score indicates *less* healthy party competition). [Panel D](#) is concerned with whether different parties provide viable alternatives to Ghanaian voters ie. whether voters approve of multiparty competition (a higher score indicates a greater approval of multiple parties competing for votes). The fulfilment of the parallel trends assumption for the internal validity of my D-i-D estimation strategy requires that, even if treatment and comparison districts have different levels of the outcome prior to the crossing of the threshold (treatment), their trends in pre-treatment outcomes should be the same. I see that this assumption is more or less fulfilled in the first three panels, however, it is most strongly fulfilled in [Panel A](#) and [Panel B](#) for trust in ruling party and voting freedom respectively. The parallel trend assumption appears to be violated in [Panel D](#) when using party alternatives as the outcome. The outcomes for the treated and control districts in [Panel C](#) (unhealthy party competition) appear to be trending in parallel during the five years before the crossing too, but not for the entire duration of the pre-period.

### 5.2.2 Subnational Results

I now report the results from estimating my two-way fixed effects model using different outcome variables of interest. [Table 4](#) reports the results when using the incidence of vote buying as the outcome. I use several specifications to test the null hypothesis that crossing the IDA's concessionary loan eligibility threshold has no effect on vote buying among treated districts (those that experience a large withdrawal in aid post-crossing). I find strong evidence to reject the null across specifications, as evidenced by the statistical significance of the negative coefficient on the interaction term between the treatment indicator and the post-crossing indicator ( $\beta_3$  from the model). This relationship is robust to the inclusion of the poverty score<sup>60</sup> (Column 2). These results are robust to the use of both district fixed effects (Column 1 and 2) as well as region fixed effects (Column 3 and Column 4), which helps rule out any time-invariant location-specific characteristics that may be driving the association between the withdrawal of foreign aid and vote buying. Finally, the relationship holds even when I treat the crossing year to be 2009, and use the post-2009 period as my post-treatment period.<sup>61</sup> Taken together, the results from this table offer strong evidence that the large aid cutbacks in the treated districts after Ghana crossed the IDA threshold are associated with a lower incidence of vote buying during elections in those districts. Vote buying is one of the most commonly used measure of clientelism in the literature ([Hicken, 2011](#)), and this subnational analysis has offered me the ability to provide evidence to the specific relationship between foreign aid and vote buying in the context of an African country.

[Table 5](#) estimates a similar relationship, between foreign aid and voting freedom. I consider

---

<sup>60</sup>Constructed as described earlier using an aggregated measure of access to basic public goods in the district, namely, schools, electric grids, health clinics, piped water, and sewage systems.

<sup>61</sup>This is a useful robustness check because [Galiani et al. \(2017\)](#) use 2009 as the year of Ghana's crossing per their income calculations.

Table 4: **Foreign Aid Cutbacks and Vote Buying in Ghana**

| VARIABLES                              | (1)<br>Vote Buy   | (2)<br>Vote Buy   | (3)<br>Vote Buy   | (4)<br>Vote Buy   | (5)<br>Vote Buy   | (6)<br>Vote Buy   |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Treated District x Post Crossing(2008) | -0.21**<br>[0.08] | -0.21**<br>[0.08] | -0.18**<br>[0.07] | -0.17**<br>[0.07] |                   |                   |
| Treated District (dummy)               |                   |                   | 0.09<br>[0.07]    | 0.07<br>[0.06]    |                   |                   |
| Treated District x Post Crossing(2009) |                   |                   |                   |                   | -0.21**<br>[0.08] | -0.21**<br>[0.08] |
| Poverty Score                          |                   | 0.03<br>[0.03]    |                   | 0.04**<br>[0.01]  |                   | 0.03<br>[0.03]    |
| Observations                           | 1,206             | 1,206             | 1,206             | 1,206             | 1,206             | 1,206             |
| R-squared                              | 0.87              | 0.87              | 0.82              | 0.82              | 0.87              | 0.87              |
| District FE                            | Yes               | Yes               | No                | No                | Yes               | Yes               |
| Year FE                                | Yes               | Yes               | Yes               | Yes               | Yes               | Yes               |
| Poverty Controls                       | No                | Yes               | No                | Yes               | No                | Yes               |
| Standard Errors                        | Region            | Region            | Region            | Region            | Region            | Region            |
| Mean dep var                           | 0.798             | 0.798             | 0.798             | 0.798             | 0.798             | 0.798             |
| Crossing Year                          | 2008              | 2008              | 2008              | 2008              | 2009              | 2009              |

*Notes:* Robust standard errors, clustered at the region level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. Note that the dummy variable for the post crossing period has been omitted as it is perfectly collinear with the inclusion of year fixed effects. In specifications (1), (2), (5), and (6), the dummy variable for treated districts is also omitted as it is perfectly collinear with the inclusion of district fixed effects.



to be this another measure of the extent to which clientelistic relationships exert influence over political life. Baldwin (2013) has spoken to the coercive voting decisions that local clientelistic brokers such as chiefs tend to induce in African countries. This measure of voting freedom (whether or not citizens feel pressured to vote for specific candidates), allows us to directly test the extent to which the availability of foreign aid may preserve those clientilistic relationships and coerce voting decisions. Here too I find strong evidence that the withdrawal of foreign aid (after Ghana crosses the IDA threshold) in treated districts is associated with a significant increase in citizens' reported voting freedom. This result too is robust to the inclusion of poverty controls (Column 2 and 4), district fixed effects (Columns 1 and 2), region fixed effects (Columns 3 and 4), and to the use of 2009 as the threshold crossing year as well (Columns 5 and 6). This evidence lends credence to my theoretical prediction that the availability of large amounts of foreign aid tends to preserve clientelistic politics in African countries. As discussed in Section 2, clientelistic brokers such as chiefs tend to coerce voting for their patrons among voters. That makes this a highly noteworthy result for the study of the political effects of aid on clientelism in Ghana. Voters in districts that have transitioned from being heavily aid dependent report feeling less pressured to vote for certain candidates in the post withdrawal period.

I then turn my attention to the health of political competition among treated districts once they experience a large aid cutback following Ghana's IDA crossing. Table 6 reports the results using citizen's self-reported belief about how often party competition leads to conflict as the outcome variable. I find weakly significant negative associations between aid cutbacks and unhealthy political competition in the treated districts across 4 of the 6 specifications. Recall my theoretical prediction that political parties in African democracies may need to substitute identity-based linkages with programmatic appeals following a reduction in foreign aid to be successful with voters. The public opinion data from Ghana suggests that citizens in treated districts indeed report less divisive political competition between parties following the withdrawal of large amounts of aid <sup>62</sup>. This relationship appears robust to the inclusion of region fixed effects (Columns 3 and 4), but not to the inclusion of district fixed effects (Columns 1 and 2). However, when the post period is restricted to the post-2009 period, the relationship holds. This may be suggestive that it takes a few years for voters to experience a shift in the nature of party competition following a withdrawal of aid in their district/constituency.

I shall keep the discussion of the results using my remaining outcomes brief, all reported in the appendix. In Table A12 I report that I do not detect a similarly strong relationship between aid cutbacks in treated districts after Ghana crosses the IDA threshold, and public approval of multiparty competition. The exact variable measures the extent to which Ghanaians agree that multiple parties are needed to ensure that they have a real choice in who governs them. While

---

<sup>62</sup>As before, note that there is a significant degree of overlap between parliamentary constituencies and districts in Ghana, with most districts assigned between 1-2 seats (Benign, 2012). There are 275 parliamentary constituencies for 261 districts.

Table 5: Foreign Aid Cutbacks and Voting Freedom in Ghana

|  | Dependent Variable: Voting Freedom |                   |                    |                    |                   |                   |
|--|------------------------------------|-------------------|--------------------|--------------------|-------------------|-------------------|
|  | (1)                                | (2)               | (3)                | (4)                | (5)               | (6)               |
| Treated District x Post Crossing       | 0.10***<br>[0.02]                  | 0.10***<br>[0.02] | 0.10***<br>[0.03]  | 0.10***<br>[0.03]  |                   |                   |
| Treated District (dummy)               |                                    |                   | -0.08***<br>[0.02] | -0.08***<br>[0.02] |                   |                   |
| Treated District x Post Crossing(2009) |                                    |                   |                    |                    | 0.10***<br>[0.02] | 0.10***<br>[0.02] |
| Poverty Score                          |                                    | 0.01*<br>[0.00]   |                    | 0.00<br>[0.00]     |                   | 0.01*<br>[0.00]   |
| Observations                           | 1,800                              | 1,800             | 1,800              | 1,800              | 1,800             | 1,800             |
| R-squared                              | 0.85                               | 0.85              | 0.79               | 0.79               | 0.85              | 0.85              |
| District FE                            | Yes                                | Yes               | No                 | No                 | Yes               | Yes               |
| Year FE                                | Yes                                | Yes               | Yes                | Yes                | Yes               | Yes               |
| Poverty Controls                       | No                                 | Yes               | No                 | Yes                | No                | Yes               |
| Standard Errors                        | Region                             | Region            | Region             | Region             | Region            | Region            |
| Mean dep var                           | 3.626                              | 3.626             | 3.626              | 3.626              | 3.626             | 3.626             |
| Crossing Year                          | 2008                               | 2008              | 2008               | 2008               | 2009              | 2009              |

*Notes:* Robust standard errors, clustered at the region level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. Note that the dummy variable for the post crossing period has been omitted as it is perfectly collinear with the inclusion of year fixed effects. In specifications (1), (2), (5), and (6), the dummy variable for treated districts is also omitted as it is perfectly collinear with the inclusion of district fixed effects.

Table 6: **Foreign Aid Cutbacks and the Health of Party Competition in Ghana**

|  | Dependent Variable: Party Competition Leads to Conflict |                 |                  |                  |                  |                  |
|--|---|-----------------|------------------|------------------|------------------|------------------|
|  | (1)   | (2)             | (3)              | (4)              | (5)              | (6)              |
| Treated District x Post Crossing       | -0.09<br>[0.06]   | -0.09<br>[0.06] | -0.11*<br>[0.05] | -0.11*<br>[0.05] |                  |                  |
| Treated District (dummy)               |   |                 | 0.05*<br>[0.03]  | 0.05<br>[0.03]   |                  |                  |
| Treated District x Post Crossing(2009) |   |                 |                  |                  | -0.12*<br>[0.06] | -0.12*<br>[0.06] |
| Poverty Score                          |   | 0.01<br>[0.02]  |                  | 0.02<br>[0.01]   |                  | 0.01<br>[0.02]   |
| Observations                           | 1,800   | 1,800           | 1,800            | 1,800            | 1,800            | 1,800            |
| R-squared                              | 0.38  | 0.38            | 0.19             | 0.19             | 0.38             | 0.38             |
| District FE                            | Yes   | Yes             | No               | No               | Yes              | Yes              |
| Year FE                                | Yes   | Yes             | Yes              | Yes              | Yes              | Yes              |
| Poverty Controls                       | No  | Yes             | No               | Yes              | No               | Yes              |
| Standard Errors                        | Region  | Region          | Region           | Region           | Region           | Region           |
| Mean dep var                           | 1.409   | 1.409           | 1.409            | 1.409            | 1.409            | 1.409            |
| Crossing Year                          | 2008  | 2008            | 2008             | 2008             | 2009             | 2009             |

*Notes:* Robust standard errors, clustered at the region level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. Note that the dummy variable for the post crossing period has been omitted as it is perfectly collinear with the inclusion of year fixed effects. In specifications (1), (2), (5), and (6), the dummy variable for treated districts is also omitted as it is perfectly collinear with the inclusion of district fixed effects.

there is a negative effect of being in a treated district post crossing, the effect is not statistically significant at the conventional levels, even with the inclusion of poverty controls, region fixed effects, and changing the crossing year to 2009.

## 6 Conclusion

In this paper, I have used both cross-national and subnational evidence to bring to light an important relationship between foreign aid and politics in African countries. The paper finds that cutbacks in aid are associated with a normative improvement in the health of party competition in African countries, with more programmatic party systems emerging after such cutbacks. Parties in these places start to compete on policy grounds, use less divisive rhetoric to mobilize voters, and enjoy more inclusive, broad-based support at the regional level instead of support concentrated in one or two regions. I also found suggestive subnational evidence that suggests foreign aid preserves clientelistic linkages between voters and politicians in Ghana, and that the districts experiencing the largest cutbacks in aid report a reduction in clientelistic practices such as vote buying and coercive voting.

This paper has hypothesized that the presence of foreign development aid may pose a hindrance to the democratic development of sub-Saharan Africa and seeks to provide additional evidence in support of the perversity theory of aid dependence. I have attempted to theoretically argue and set up testable hypotheses about the specific measures of party competition and clientelism that foreign aid may be affecting in African politics. However, there remains some work done on this project before I am able to demonstrate the two proposed mechanisms behind the party competition effects I find. First, I argued that one of the key mechanisms behind how foreign aid hinders the development of programmatic competition in African politics is a lack of attribution - that voters do not distinguish between donor and state-provided goods. I also propose that political parties in the face of donor conditionalities may be facing a commitment crisis that makes programmatic competition risky. A public opinion survey of state versus non-state public good provision would help highlight the key linkage between donor-provided aid and party competition suggested in this paper, but this was unfortunately not a measure the data offered me. Second, to illuminate whether the “commitment mechanism” is behind these effects - there remains work for me to detail the evolution of party appeals and party ideology in response to different levels of donor-funded public good provision, particularly through the digitization of party manifestos from Africa. Incorporating the more recent electoral platforms of social media would also be an important component of this analysis. This exercise would involve looking for instances where the major competing political parties in countries have meaningfully distinguishable policy positions on salient issues such as economic development, social welfare, unemployment, inflation, security, etc., and coding them as *competitive* when they offer distinctly viable alternatives on policy issues

to voters. A second part of this exercise will be to code identity-based appeals (either on regional, ethnic, or religious grounds) in election manifestos as non-competitive.

Third, an analysis of aid disbursements with other district-level political outcomes such as electoral margins and past corruption audits in Ghana is a promising avenue for ongoing work on this project. I am in the process of linking project aid disbursements with electoral outcomes to see if stronger party competition in districts experiencing the largest cutbacks in aid is translating into tighter vote margins. For the next phase of this project, I am digitizing district-level governments budgets from a recently procured dataset from the Ghanaian Ministry of Finance and Economic Planning in the years following Ghana's transition. The next version of this paper will also incorporate interviews with district-level government officials in a subsample of districts where the shift in Ghana's aid landscape affected their expenditure and relationship with constituents. Unfortunately, due to timing, I was not able to complete these tasks prior to the conference in order to incorporate new administrative and interview data into this draft version of the paper.

Fourth, this project has looked at a large subset of donor aid - development assistance aid provided mostly by Western/multilateral donors for whom data was available for the period under study. However, with the large onslaught of Chinese development finance and infrastructure projects in sub-Saharan Africa over the last few years, the links between voters, donors, and politicians suggested in this paper may be pulled in different directions. Future iterations of this research will thus have to control for the presence of Chinese aid in Africa.

# References

- Alberto Alesina and Beatrice Weder. Do corrupt governments receive less foreign aid? *American economic review*, 92(4):1126–1137, 2002.
- Kate Baldwin. Why vote with the chief? political connections and public goods provision in zambia. *American Journal of Political Science*, 57(4):794–809, 2013.
- Kate Baldwin and Matthew S Winters. How do different forms of foreign aid affect government legitimacy? evidence from an informational experiment in uganda. *Studies in Comparative International Development*, 55(2):160–183, 2020.
- Raymond Baguio Bening. The creation of districts and constituencies in ghana: Some pertinent issues in the current dispensation. *Ghana Journal of Geography*, 4:1–17, 2012.
- Robert A Blair and Philip Roessler. Foreign aid and state legitimacy: Evidence on chinese and us aid to africa from surveys, survey experiments, and behavioral games. *World Politics*, 73(2): 315–357, 2021.
- Jaimie Bleck and Nicolas Van de Walle. Valence issues in african elections: Navigating uncertainty and the weight of the past. *Comparative Political Studies*, 46(11):1394–1421, 2013.
- Michael Bratton, Ravi Bhavnani, and Tse-Hsin Chen. Voting intentions in africa: ethnic, economic or partisan? *Commonwealth & Comparative Politics*, 50(1):27–52, 2012.
- Deborah A Bräutigam and Stephen Knack. Foreign aid, institutions, and governance in sub-saharan africa. *Economic development and cultural change*, 52(2):255–285, 2004.
- Sarah Brierley. Combining patronage and merit in public sector recruitment. *The Journal of Politics*, 83(1):182–197, 2021.
- Sarah Brierley and Noah L Nathan. The connections of party brokers: Which brokers do parties select? *The Journal of Politics*, 83(3):884–901, 2021.
- Ryan C Briggs. The influence of aid changes on african election outcomes. *International Interactions*, 41(2):201–225, 2015.
- Allison Carnegie and Cyrus Samii. International institutions and political liberalization: evidence from the world bank loans program. *British Journal of Political Science*, 49(4):1357–1379, 2019.
- Michael A Clemens, Steven Radelet, Rikhil R Bhavnani, and Samuel Bazzi. Counting chickens when they hatch: Timing and the effects of aid on growth. *The Economic Journal*, 122(561): 590–617, 2012.
- Bruce Bueno de Mesquita and Alastair Smith. Aid: Blame it all on “easy money”. *Journal of Conflict Resolution*, 57(3):524–537, 2013.
- Simone Dietrich and Joseph Wright. Foreign aid and democratic development in africa. Technical report, WIDER Working Paper, 2012.
- Simone Dietrich and Joseph Wright. Foreign aid allocation tactics and democratic change in africa. *The Journal of Politics*, 77(1):216–234, 2015.

- Simone Dietrich, Minhaj Mahmud, and Matthew S Winters. Foreign aid, foreign policy, and domestic government legitimacy: Experimental evidence from bangladesh. *The Journal of Politics*, 80(1):133–148, 2018.
- Lindsay R Dolan. Rethinking foreign aid and legitimacy: views from aid recipients in kenya. *Studies in Comparative International Development*, 55:143–159, 2020.
- Axel Dreher and Steffen Lohmann. Aid and growth at the regional level. *Oxford Review of Economic Policy*, 31(3-4):420–446, 2015.
- Thad Dunning. Conditioning the effects of aid: Cold war politics, donor credibility, and democracy in africa. *International organization*, 58(2):409–423, 2004.
- Patrick Egan. Policy initiatives and valence advantages in the spatial model of elections. *Manuscript. NYU. Accessed October*, 11:2017, 2008.
- Sebastian Elischer. Measuring and comparing party ideology in nonindustrialized societies: taking party manifesto research to africa. *Democratization*, 19(4):642–667, 2012.
- Morris P Fiorina. *Retrospective voting in American national elections*. Yale University Press, 1981.
- Sebastian Galiani, Stephen Knack, Lixin Colin Xu, and Ben Zou. The effect of aid on growth: Evidence from a quasi-experiment. *Journal of Economic Growth*, 22(1):1–33, 2017.
- Saibal Ghosh. Does political competition matter for economic performance? evidence from sub-national data. *Political Studies*, 58(5):1030–1048, 2010.
- Guy Grossman. Renewalist christianity and the political saliency of lgbs: Theory and evidence from sub-saharan africa. *The Journal of Politics*, 77(2):337–351, 2015.
- Allen Hicken. Clientelism. *Annual review of political science*, 14:289–310, 2011.
- Allen Hicken and Joel W Simmons. The personal vote and the efficacy of education spending. *American Journal of Political Science*, 52(1):109–124, 2008.
- Roland Hodler and Paul A Raschky. Regional favoritism. *The Quarterly Journal of Economics*, 129(2):995–1033, 2014.
- Nahomi Ichino and Noah L Nathan. Do primaries improve electoral performance? clientelism and intra-party conflict in ghana. *American Journal of Political Science*, 57(2):428–441, 2013.
- Ryan S Jablonski. How aid targets votes: the impact of electoral incentives on foreign aid distribution. *World Politics*, 66(2):293–330, 2014.
- Morten Jerven. Poor numbers—how we are misled by african development statistics and what to do about it (uzuazo etemire). *VRÜ Verfassung und Recht in Übersee*, 46(3):336–340, 2013.
- Philip Keefer. Programmatic parties: Where do they come from and do they matter? *Development Research Group*, 2006.
- Philip Keefer. Clientelism, credibility, and the policy choices of young democracies. *American journal of political science*, 51(4):804–821, 2007.



- Herbert Kitschelt, Steven I Wilkinson, et al. Citizen-politician linkages: an introduction. *Patrons, clients, and policies: Patterns of democratic accountability and political competition*, 2007:1–49, 2007.
- Herbert Kitschelt, Kirk A Hawkins, Juan Pablo Luna, Guillermo Rosas, and Elizabeth J Zechmeister. *Latin American party systems*. Cambridge University Press, 2010.
- Eric Kramon and Daniel N Posner. Who benefits from distributive politics? how the outcome one studies affects the answer one gets. *Perspectives on Politics*, 11(2):461–474, 2013.
- Eric Jonathan Kramon. *Vote buying and accountability in democratic Africa*. University of California, Los Angeles, 2013.
- Ilyana Kuziemko and Eric Werker. How much is a seat on the security council worth? foreign aid and bribery at the united nations. *Journal of political economy*, 114(5):905–930, 2006.
- Staffan I Lindberg and Minion KC Morrison. Are african voters really ethnic or clientelistic? survey evidence from ghana. *Political Science Quarterly*, 123(1):95–122, 2008.
- Mona M Lyne. Rethinking economics and institutions: the voter’s dilemma and democratic accountability. *Patrons, Clients and Policies: Patterns of Democratic Accountability and Political Competition*, pages 159–181, 2007.
- Luis R Martinez. How much should we trust the dictator’s gdp growth estimates? *Journal of Political Economy*, 130(10):000–000, 2022.
- Justin McCrary. Manipulation of the running variable in the regression discontinuity design: A density test. *Journal of econometrics*, 142(2):698–714, 2008.
- Edward Miguel, Shanker Satyanath, and Ernest Sergenti. Economic shocks and civil conflict: An instrumental variables approach. *Journal of political Economy*, 112(4):725–753, 2004.
- Mick Moore. Between coercion and contract: competing narratives on taxation and governance. *Taxation and state building in developing countries: Capacity and consent*, pages 34–63, 2008.
- Todd J Moss and Stephanie Majerowicz. No longer poor: Ghana’s new income status and implications of graduation from ida. *Center for Global Development Working Paper*, (300), 2012.
- Todd J Moss, Gunilla Pettersson Gelandar, and Nicolas Van de Walle. An aid-institutions paradox? a review essay on aid dependency and state building in sub-saharan africa. *Center for Global Development working paper*, (74):11–05, 2006.
- Dambisa Moyo. *Dead aid: Why aid is not working and how there is a better way for Africa*. Macmillan, 2009.
- Daniel N Posner. *Institutions and ethnic politics in Africa*. Cambridge University Press, 2005.
- Annalisa Prizzon, Shakira Mustapha, and Andrew Rogerson. Graduation from adb regular assistance: a critical analysis and policy options. *ADB Strategy and Policy Department*, 2016.
- Donald E Stokes. Spatial models of party competition. *American political science review*, 57(2): 368–377, 1963.

- Susan C Stokes. Perverse accountability: A formal model of machine politics with evidence from argentina. *American political science review*, 99(3):315–325, 2005.
- Nicolas Van de Walle. Presidentialism and clientelism in africa’s emerging party systems. *The Journal of Modern African Studies*, 41(2):297–321, 2003.
- Nicolas Van de Walle. Meet the new boss, same as the old boss? the evolution of political clientelism in africa. *Patrons, clients and policies: Patterns of democratic accountability and political competition*, 1:50–67, 2007.
- Leonard Wantchekon. Clientelism and voting behavior: Evidence from a field experiment in benin. *World politics*, 55(3):399–422, 2003.

# Appendix

## 6.1 Data and Measures

### 6.1.1 Foreign Aid and IDA Thresholds

Net official development assistance (ODA) consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients. As an additional population-weighted measure of foreign aid received by a country, I also employ the net ODA received per capita (in current US\$ terms) from the same source<sup>63</sup>.

Next, I describe my approach to coding the IDA thresholds for concessional finance eligibility. While [Galiani et al. \(2017\)](#) have coded these thresholds up to the year 2010, I undertake two additional steps. First, I manually update the thresholds up till the year 2020 (the last year in my sample) by parsing through scattered International Monetary Fund policy press releases where the updated thresholds decided during the previous annual IDA meeting is communicated.<sup>64</sup> Second, I also update the historical Gross National Income per capita data reported by countries using the most recent release of the World Bank’s World Development Indicators, which corrects misreporting or inconsistencies between past releases<sup>65</sup>. Subsequently, I am not only able to identify countries that crossed over the IDA threshold in the post-2010 period, but also account for reporting discrepancies to update the exact year that countries in the [Galiani et al. \(2017\)](#) sample crossed over the threshold. The evolution of the GNI per capita cutoff over the sample period is depicted in [Figure 4](#).

### 6.1.2 Outcomes

The V-Dem clientelism index is constructed using three major variables:

- The prevalence of vote and/or turnout buying in the country’s national election (as an ordinal variable).<sup>66</sup>
- The main form of party-constituent linkage, which refers to the sort of “good” that the party offers in exchange for political support and participation in party activities.<sup>67</sup>

---

<sup>63</sup>Calculated by dividing net ODA received by the midyear population estimate for each country

<sup>64</sup>Note, however, that these yearly thresholds are not readily accessible on the IDA’s website, most probably out of concerns of statistical manipulation by lower income country governments. For example, see the 2020 operational cutoff hidden in a footnote on page 36 of this [IMF policy report](#). The suggestion to look in the IMF policy reports for these cutoffs came from [Martinez \(2022\)](#), who updates the IDA cutoffs till the year 2012 as part of his study to determine whether autocratic countries are more likely to misreport official national statistics.

<sup>65</sup>GNI per capita, Atlas method (current US\$), [WB World Development Indicators](#).

<sup>66</sup>Vote and turnout buying here refers to the distribution of money or gifts to individuals, families, or small groups in order to influence their decision to vote/not vote or whom to vote for. It does not include legislation targeted at specific constituencies.

<sup>67</sup>The responses include three distinct categories, and two categories that are a mix of the distinct three. The three distinct categories of party-constituent linkages as interpreted by my analysis are: (1) “clientelistic”, wherein voters are rewarded with material benefits in exchange for political support (goods, cash, jobs etc); (2) “local collective”, wherein voters are rewarded with local collective goods in exchange for political support (essentially public goods which benefit local development only), and (3) “policy/programmatic” linkages wherein voters respond to a party’s position on national policies, general party programs, and visions for society. The two other categories

- How “particularistic” vs. “public goods” is the social and infrastructural spending in the country’s national budget? <sup>68</sup>

### 6.1.3 Subnational Data on Aid and Politics

I merge the yearly project disbursements with the time-series cross-section Afrobarometer data at the level of the district. Due to several administrative splits in Ghana over the course of the sample period, particularly the creation of new municipal constituencies, the process of matching districts over time becomes a little complicated. In some instances, the names of the new districts and the old districts are straightforward to match (for example, the Ketu District in the Volta Region was divided into two districts named Ketu North and Ketu South in 2008<sup>69</sup>). Others are less straightforward, so I ran a web search of the names of the villages/towns in which the interviews were conducted to update the corresponding district it fell under. In the cases where the names of the villages/towns were not found online, I matched the historical district boundaries with the latitude and longitude of the interview location provided in the geocodes of the Afrobarometer. This exercise allows me to minimize the error in matching the World Bank project locations with the Afrobarometer interview locations at the level of the district. It is worth noting, finally, that there is a significant degree of overlap between parliamentary constituencies and districts in Ghana, with most districts assigned between 1-2 seats, and some of the larger metropolitan districts assigned 3-4 seats (Bening, 2012).<sup>70</sup> Political power in Ghana is decentralized between 216 local governments: one local government per district. Local governments are sometimes known as district, municipal, or metropolitan assemblies (these classifications are based on the population of the district). These local governments are responsible for the development of districts, including the provision of basic infrastructure and public services (Brierley, 2021). This justifies the use of district-level political outcomes for this study.

## 6.2 Additional Results

### 6.2.1 First Stage

I estimate the first stage equation using both the natural logarithm of official development assistance (ODA) over gross national income (GNI) in US dollars <sup>71</sup> as the dependent variable (Columns (1) and (3)), as well as the net ODA per capita received in current US dollars as the dependent variable (Columns (2) and (4)). Using the sample of IDA beneficiaries during my sample period of 1990-2020, in separate specifications I estimate panel regressions of the effect of crossing over the threshold at least 1 and 2 years earlier on the availability of foreign aid in a given year.

---

are a mix of (1) & (2) and (2) & (3).

<sup>68</sup>Particularistic spending is narrowly targeted on a specific corporation, sector, social group, region, party, or set of voters. Such spending may be referred to as “clientelistic”, or “private goods.” Public-goods spending is intended to benefit all communities within a society, though it may be means-tested so as to target poor, needy, or otherwise underprivileged constituents. For my analysis, I will condense this ordinal variable into three indicator variables representing (1) majority particularistic spending, (2) equal parts particularistic and public goods spending, or (3) majority public goods spending.

<sup>69</sup>From the district government website: [Ketu North District](#).

<sup>70</sup>As of 2018, after the last administrative changes, there were 275 parliamentary seats for Ghana’s 261 districts.

<sup>71</sup>This follows the convention of previous studies of the effect of aid on economic growth that use the logged ratio of net ODA to GNI in current US dollars as the explanatory variable (see (Clemens et al., 2012, Galiani et al., 2017)).

In all specifications, I include country and year fixed effects that partial out any time-invariant country-specific characteristics and any year-specific factors respectively that may be driving the relationship between threshold crossing and future foreign aid availability. In all specifications, I also control for GNI per capita (the running variable determining IDA eligibility).

Table A1: **First Stage (Country-Year)**

| VARIABLES                                      | (1)<br>ln(ODA/GNI)   | (2)<br>ODA per capita | (3)<br>ln(ODA/GNI)   | (4)<br>ODA per capita | (5)<br>ln(ODA/GNI)   |
|--|----------------------|-----------------------|----------------------|-----------------------|----------------------|
| D(crossed threshold atleast 1 year earlier)    | -0.233***<br>[0.069] | -43.800**<br>[19.478] |                      |                       |                      |
| D(crossed threshold atleast 2 years earlier)   |                      |                       | -0.233***<br>[0.071] | -45.886**<br>[20.659] | -0.200***<br>[0.070] |
| D(crossed threshold atleast 2 years in future) |                      |                       |                      |                       | -0.056<br>[0.075]    |
| GNI per capita (lagged)                        | -0.122***<br>[0.034] | 8.777<br>[6.465]      | -0.120***<br>[0.034] | 9.265<br>[6.623]      | -0.121***<br>[0.034] |
| Observations                                   | 2,780                | 2,780                 | 2,780                | 2,780                 | 2,780                |
| R-squared                                      | 0.354                | 0.0799                | 0.354                | 0.0805                | 0.355                |
| Country FE                                     | Yes                  | Yes                   | Yes                  | Yes                   | Yes                  |
| Year FE  | Yes                  | Yes                   | Yes                  | Yes                   | Yes                  |
| Countries                                      | 90                   | 90                    | 90                   | 90                    | 90                   |

*Notes:* Robust standard errors, clustered at the country level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. Note here that the full IDA sample of 90 countries (for whom data is available) that were at some point eligible for IDA concessional funding are included, along with the lagged GNI per capita, the running variable determining IDA eligibility. The inclusion of the running variable precludes the need to restrict the sample to just the crossover countries.

Below, I group the data into three-year periods, corresponding with the IDA's own three-year replenishment cycles, and rerun the first-stage estimation. I do this for two reasons. First, the three-year IDA periods are a natural way of grouping this data because IDA's fund allocation policies among eligible beneficiaries are only modified between IDA periods, never *within* an IDA period (World Bank 2010). Second, three year periods allow room for potential income fluctuations, that may lead to a fluctuation in a country's eligibility for concessionary loans from the IDA. This is in keeping with the IDA's policy whereby a country should have remained over the income threshold for three consecutive years (a replenishment cycle) before discussions about reductions in IDA funding start taking place (Moss and Majerowicz, 2012). Table A2 displays the first-stage estimates having grouped the data into three-year replenishment periods.

The strength of the first-stage holds when I group the data into three-year periods. Column (1) shows that crossing the GNI threshold leads to a 26.9% reduction in ODA as a share of GNI in the next period. Column (3) shows that relationship holds even two periods after crossing, although the magnitude of the reduction in ODA is slightly lower at 24.9%. Columns (2) and (4) provide evidence that net per capita ODA received by a country falls by 72 USD and 80 USD one and two periods after crossing the threshold respectively. The relationship is robust to the inclusion of a control for the running variable determining IDA eligibility (GNI per capita during the last period) as well as country and period fixed effects in all specifications.

Table A2: **First Stage (Country-Replenishment Period)**

| VARIABLES                                      | (1)<br>ln(ODA/GNI)   | (2)<br>ODA per capita | (3)<br>ln(ODA/GNI)   | (4)<br>ODA per capita |
|--|----------------------|-----------------------|----------------------|-----------------------|
| D(crossed threshold atleast 1 period earlier)  | -0.269***<br>[0.077] | -72.068**<br>[28.887] |                      |                       |
| D(crossed threshold atleast 2 periods earlier) |                      |                       | -0.249***<br>[0.084] | -79.995**<br>[33.085] |
| GNI per capita (lagged)                        | -0.107***<br>[0.037] | 16.016*<br>[9.049]    | -0.104***<br>[0.037] | 17.733*<br>[9.429]    |
| Observations                                   | 997                  | 997                   | 997                  | 997                   |
| R-squared                                      | 0.357                | 0.116                 | 0.353                | 0.118                 |
| Country FE                                     | Yes                  | Yes                   | Yes                  | Yes                   |
| Period FE                                      | Yes                  | Yes                   | Yes                  | Yes                   |
| Countries                                      | 90                   | 90                    | 90                   | 90                    |

*Notes:* Robust standard errors, clustered at the country level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. Note here that the full IDA sample of 90 countries (for whom data complete ODA data is available) that were at some point eligible for IDA concessional funding are included, along with the period-lagged GNI per capita, the running variable determining IDA eligibility. The inclusion of the running variable precludes the need to restrict the sample to just the crossover countries.

### 6.2.2 Reduced Form

I then proceed to estimate the reduced-form effect of crossing the IDA threshold on my outcomes of interest. I estimate the following fixed-effects model in order to test the null hypothesis that crossing the eligibility threshold for concessionary foreign development assistance has no effect on party competition and clientelism in a country:

$$y_{i,t} = \alpha + \beta_1 IDAcross_{i,t-1} + \beta_2 IDAcross_{i,t-1} \times I(Africa)_i + \beta_3 GNIpc_{i,t-1} + \gamma_i + \delta_t + e_{it} \quad (4)$$

For a given country  $i$  in year  $t$ , let  $y$  represent the outcome of interest (some measure of party competition and clientelism, as borrowed from the V-Dem Survey or Polity V). As before, for a given country  $i$  in year  $t - 1$  (or  $t - 2$ ,  $t - 3$ , and so on), let  $IDAcross$  be an indicator variable that takes on the value 1 if it has crossed the gross national income (GNI) threshold for not being eligible for IDA aid and takes on the value 0 if it is below the GNI threshold for IDA aid-eligibility<sup>72</sup>. The estimated  $\beta_1$  represents the reduced-form effect of crossing over in year  $t - 1$  on the outcome  $y$  in year  $t$  in that country. The coefficient  $\beta_2$  on the interaction term between threshold crossing and an indicator for sub-Saharan African countries represents the additional effect of crossing the threshold on political outcomes in the subsample of African countries.  $\beta_2$  is the main coefficient of interest, and helps test my theoretical prediction that reductions in foreign aid affect African politics differently than politics in other low-income countries.  $\gamma_i$  represents the country fixed-effects and  $\delta_t$  denotes the year fixed-effects. Note that the inclusion of country fixed effects precludes the need to include an indicator variable for African countries separately as a control in my equation (the two would be perfectly collinear).  $\beta_3$  represents the coefficient on GNI

<sup>72</sup>As noted earlier, I coded the year of IDA crossing using historical GNI per capita data and IMF policy reports containing information about the updated IDA operational cutoff for concessionary loan eligibility.

per capita during year  $t - 1$ , which I include as a control as it is the running variable determining IDA eligibility.  $e_{it}$  denotes the error term, which I cluster at the country level to account for serial correlation.

Tables A3 through Table A5 present the reduced form effects using different outcome variables. In Table A3, I investigate the reduced form effect of crossing the IDA threshold on the distinctness of party platforms/generalized ideology between major national-level parties, as coded by country experts in the V-Dem Survey. I employ this as one of my main cross-national measures of programmatic party competition. A higher score indicates more programmatic parties.<sup>73</sup> As depicted in Table 4, I find that the coefficients on the interaction term for IDA crossing and African countries are positive and statistically significant, suggesting that political parties in African countries become more programmatic after they cross over the IDA threshold for concessionary loan eligibility. This is in contrast to the general effect of crossing the threshold on programmatic competition, which runs in the opposite direction and is not statistically distinguishable from a null effect. The association in African countries is robust across specifications, where I include different minimum time periods since crossing the threshold ( $t - 2$  years and  $t - 3$  years in columns (2) and (3) respectively). The specifications are also robust to the inclusion of country and year fixed effects, which accounts for any time-invariant country characteristics or time factors that may be driving this relationship.

Next, in Table A4 I look at the reduced form relationship between IDA crossing and the nature of party competition across regions, also coded by country experts in the V-Dem. This outcome measure is concerned with whether the electoral support for the country’s major parties is concentrated in one or two regions of the country, or if they are competitive in multiple regions. This is proxied using the share of nationally recognized political parties that have permanent local party branches outside the capital of the country. This is a useful measure of the extent to which political competition fosters inclusiveness across the country’s regions, especially given that we know African politics tends to be strongly influenced by ethno-regional considerations<sup>74</sup>. A higher score indicates more broad-based political competition between major political parties across the country’s regions. I employ this as my second cross-national measure of the nature of party competition. I find again that the coefficient on the interaction term between crossing over the threshold and African countries is positive and significant. I interpret this to mean that political competition in African countries becomes more broad-based after they cross over the IDA threshold for concessionary loan eligibility as a greater share of nationally recognizes parties start establishing permanent local party branches in the provinces. The general effect of crossing the threshold on party competition across regions is not statistically distinguishable from zero. The association in African countries is robust across specifications, where I include different minimum time periods since crossing the threshold ( $t - 2$  years and  $t - 3$  years in columns (2) and (3) respectively). In fact, the effect on political competition appears to grow stronger over time when an African country has graduated 3 or more years ago. Here too the specifications are robust to the inclusion of country and year fixed effects.

I also draw on the Polity V for their measures of political competition in the hope of finding a similar reduced form association with threshold crossing. Admittedly, the definition of political competition employed by the Polity V is less specific than the V-Dem’s. The first measure I use is “the competitiveness of participation” which refers to the extent to which alternative preferences

---

<sup>73</sup>This outcome variable from the V-Dem is coded as a z-score, which makes the substantive interpretation of the magnitude of the effect a little difficult.

<sup>74</sup>See Section 2 for a discussion of ethnoregional politics in Africa.



Table A3: **Reduced Form (IDA Crossing and Distinctness of Parties)**

|  | Dependent Variable: Distinct Parties |                    |                    |
|--|--------------------------------------|--------------------|--------------------|
|  | (1)                                  | (2)                | (3)                |
| D(crossed threshold atleast 1 year ago)                  | -0.167<br>[0.105]                    |                    |                    |
| Africa $\times$ D(crossed threshold atleast 1 year ago)  | 0.395***<br>[0.135]                  |                    |                    |
| D(crossed threshold atleast 2 years ago)                 |                                      | -0.142<br>[0.106]  |                    |
| Africa $\times$ D(crossed threshold atleast 2 years ago) |                                      | 0.362**<br>[0.138] |                    |
| D(crossed threshold atleast 3 years ago)                 |                                      |                    | -0.111<br>[0.112]  |
| Africa $\times$ D(crossed threshold atleast 3 years ago) |                                      |                    | 0.336**<br>[0.143] |
| GNI per capita (lagged)                                  | 0.023<br>[0.032]                     | 0.021<br>[0.033]   | 0.019<br>[0.033]   |
| Observations   | 1,536                                | 1,536              | 1,536              |
| R-squared  | 0.202                                | 0.195              | 0.190              |
| Country FE   | Yes                                  | Yes                | Yes                |
| Year FE  | Yes                                  | Yes                | Yes                |
| Countries  | 48                                   | 48                 | 48                 |

*Notes:* Robust standard errors, clustered at the country level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. The dependent variable is a measure of the distinctness of platforms /generalized ideology of the major national-level political parties in the country. A higher score indicates a greater number of programmatic parties. Note here I am restricting the sample to just the countries that crossed over the IDA threshold for whom this outcome data is available.

Table A4: **Reduced Form (IDA Crossing and Local Party Competition Across Regions)**

|  | Dependent Variable: Share of Parties<br>with Permanent Local Branches |                    |                    |
|--|---|--------------------|--------------------|
|  | (1)   | (2)                | (3)                |
| D(crossed threshold atleast 1 year ago)                  | -0.125<br>[0.124]   |                    |                    |
| Africa $\times$ D(crossed threshold atleast 1 year ago)  | 0.369**<br>[0.144]  |                    |                    |
| D(crossed threshold atleast 2 years ago)                 |   | -0.109<br>[0.120]  |                    |
| Africa $\times$ D(crossed threshold atleast 2 years ago) |   | 0.346**<br>[0.148] |                    |
| D(crossed threshold atleast 3 years ago)                 |   |                    | -0.096<br>[0.121]  |
| Africa $\times$ D(crossed threshold atleast 3 years ago) |   |                    | 0.320**<br>[0.153] |
| GNI per capita (lagged)                                  | 0.049<br>[0.048]  | 0.048<br>[0.048]   | 0.047<br>[0.049]   |
| Observations   | 1,536   | 1,536              | 1,536              |
| R-squared  | 0.113   | 0.109              | 0.104              |
| Country FE   | Yes   | Yes                | Yes                |
| Year FE  | Yes   | Yes                | Yes                |
| Countries  | 48  | 48                 | 48                 |

*Notes:* Robust standard errors, clustered at the country level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. The dependent variable is a measure of local party competition that proxies for competitiveness using the proportion of parties with permanent local party branches outside the capital. A higher score is indicative of more broad-based party competition, with a higher proportion of political parties operating through permanent local party branches. Note here I am restricting the sample to just the countries that crossed over the IDA threshold for whom this outcome data is available.

for policy and leadership can be pursued in the political arena. It is a 5-point scale which runs from Repressed<sup>75</sup> (1) to Competitive<sup>76</sup> (5). The second is an aggregate variable for political competition, which also incorporates a measure of the extent to which political participation is regulated by binding rules. The reduced form results using the Polity V measures are reported in [Appendix Table A6](#). I find no statistically significant effects of threshold crossing on Polity V's measures of political competition, even on the interaction term with Africa. My understanding here is that the Polity V's definition of political competition is broader than mine and closer to a classification scheme between authoritarian and democratic party systems. Nonetheless, it is worth reporting in my investigation.

Finally, I turn to the other outcome variable of interest, clientelism. For this, I make use of the V-Dem's clientelism index, a measure of the extent to which politics in a country are based on clientelistic relationships<sup>77</sup>. I found suggestive reduced form evidence in [Table A3](#) and [Table A4](#) that crossing the threshold was associated with more programmatic politics and more broad-based political competition at the local level in the subsample of African IDA beneficiaries. Therefore, it is worth looking descriptively at how the V-Dem's clientelism score in the subsamples of African and non-African IDA beneficiaries trends over time. In [Figure 9](#) I depict the time series trend in the clientelism index (score) for sub-Saharan African countries versus other IDA aid-eligible countries over the sample period. As we can see, the gap in the mean clientelism score between African IDA beneficiaries and other low-income countries has been fluctuating over the sample period, with African countries consistently faring poorer than the rest of the developing world on this index (a higher score is indicative of greater clientelism). Since different countries crossed over the threshold at different points in time over this sample period, I estimate the reduced form equation using the clientelism index as my outcome and splitting the samples into African and non-African IDA beneficiaries. [Table A5](#) reports the results.

African IDA-beneficiaries that cross over the threshold in a previous  $t - n$  year with  $n = 1, 2, 3$  are associated with an improvement in their clientelism score<sup>78</sup> (see the first three columns in [Table 6](#)). I detect no similar effect in the subsample of other non-African IDA beneficiaries (columns (4)-(6) in the table). While the strength of the associations is weakly significant in the African subsample, it provides suggestive evidence of a reduced form relationship between crossing the IDA's concessionary loan eligibility threshold and clientelistic politics in these countries. The association is robust to the inclusion of country and year fixed effects to rule out any time-invariant country specific characteristics or time-specific that may be driving the relationship.

### 6.2.3 Second Stage Results and Robustness Checks

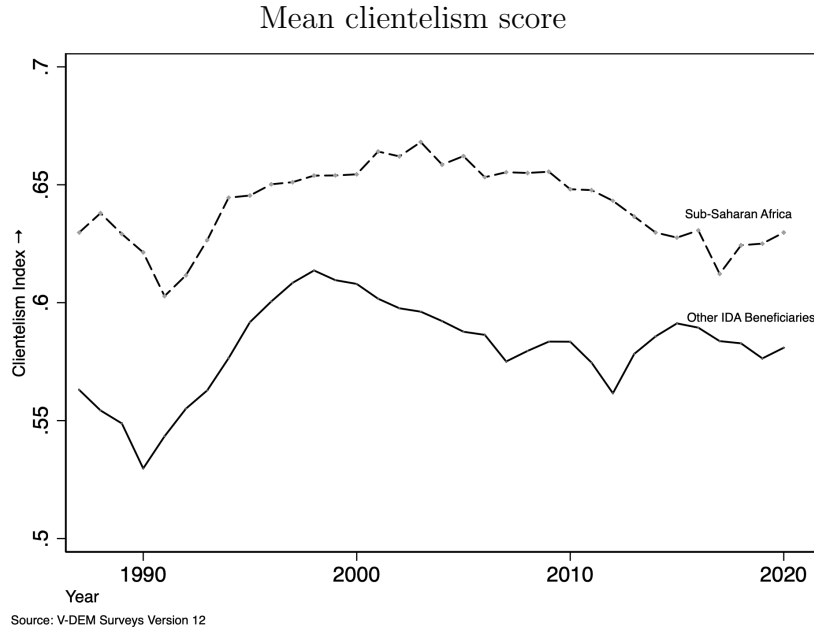
---

<sup>75</sup>Refers to totalitarian party systems, authoritarian military leadership structures etc.

<sup>76</sup>Defined as "relatively stable and enduring, secular political groups which regularly compete for political influence at the national level". While regular party competition at the national-level falls under this category, it doesn't rule out the exclusion of small parties or political groups.

<sup>77</sup>As mentioned in [Section 4.1](#), this score is constructed using three submeasures: the prevalence of vote and/or turnout buying in the country's national election, the nature of social and infrastructural spending, and the main form of party-constituent linkages. The point estimates for this index run from 0 to 1 and have been reversed such that the directionality is opposite to the sub-indices, so lower scores indicate a normatively better situation (e.g. more programmatic) and higher scores a normatively worse situation (e.g. more clientelistic).

<sup>78</sup>I use the log transformed clientelism score since the raw score appears highly skewed to the right. Recall that a higher score is associated with more clientelism in politics.

**Figure 9: Clientelism index over time**

*Notes:* This depicts the time series trend of the mean clientelism index score between 1987-2020 (Source: V-Dem Survey 2022). The dashed lines depict the trend for the 41 African aid recipient countries in this sample, whereas the solid lines depict the trend for the remaining 41 non-African countries in the sample.

**Table A5: Reduced Form (IDA Crossing and Clientelism Index)**

| Dependent Variable: Clientelism Index    |                |         |         |                    |         |         |
|--|----------------|---------|---------|--------------------|---------|---------|
|  | African sample |         |         | Non-African sample |         |         |
| D(crossed threshold atleast 1 year ago)  | -0.102*        |         |         | 0.012              |         |         |
|  | [0.052]        |         |         | [0.061]            |         |         |
| D(crossed threshold atleast 2 years ago) |                | -0.094* |         |                    | -0.009  |         |
|  |                | [0.052] |         |                    | [0.059] |         |
| D(crossed threshold atleast 3 years ago) |                |         | -0.087* |                    |         | -0.021  |
|  |                |         | [0.051] |                    |         | [0.056] |
| GNI per capita (lagged)                  | -0.001         | -0.001  | -0.002  | 0.009              | 0.010   | 0.011   |
|  | [0.005]        | [0.005] | [0.005] | [0.025]            | [0.024] | [0.025] |
| Observations                             | 1,278          | 1,278   | 1,278   | 1,229              | 1,229   | 1,229   |
| R-squared                                | 0.0835         | 0.0800  | 0.0774  | 0.0384             | 0.0383  | 0.0389  |
| Country FE                               | Yes            | Yes     | Yes     | Yes                | Yes     | Yes     |
| Year FE                                  | Yes            | Yes     | Yes     | Yes                | Yes     | Yes     |
| Countries                                | 41             | 41      | 41      | 41                 | 41      | 41      |

*Notes:* Robust standard errors, clustered at the country level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. Note here I am displaying results for the full sample of 82 IDA-eligible countries for whom the clientelism index data is available, split into the African and non-African members. The effects hold when restricting the sample to just the crossover countries, but are similarly weak for the African subsample of countries that crossed over (not reported here).

Table A6: **Reduced Form (IDA Crossing and Polity V Political Competition Measures)**

| VARIABLES   | (1)<br>Competitiveness of<br>Pol. Participation | (2)<br>Political<br>Competition | (3)<br>Competitiveness of<br>Pol. Participation | (4)<br>Political<br>Competition | (5)<br>Competitiveness of<br>Pol. Participation | (6)<br>Political<br>Competition |
|---|---|---------------------------------|---|---------------------------------|---|---------------------------------|
| D(crossed threshold atleast 1 year ago)           | 0.191<br>[0.162]                                | 0.400<br>[0.284]                |   |                                 |   |                                 |
| Africa × D(crossed threshold atleast 1 year ago)  | -0.161<br>[0.263]                               | 0.423<br>[0.504]                |   |                                 |   |                                 |
| D(crossed threshold atleast 2 years ago)          |   |                                 | 0.204<br>[0.152]                                | 0.451<br>[0.313]                |   |                                 |
| Africa × D(crossed threshold atleast 2 years ago) |   |                                 | -0.153<br>[0.253]                               | 0.329<br>[0.495]                |   |                                 |
| D(crossed threshold atleast 3 years ago)          |   |                                 |   |                                 | 0.210<br>[0.152]                                | 0.379<br>[0.357]                |
| Africa × D(crossed threshold atleast 3 years ago) |   |                                 |   |                                 | -0.150<br>[0.251]                               | 0.267<br>[0.488]                |
| GNI per capita (lagged)                           | -0.014<br>[0.026]                               | -0.118**<br>[0.053]             | -0.016<br>[0.027]                               | -0.129**<br>[0.053]             | -0.018<br>[0.028]                               | -0.132**<br>[0.054]             |
| Observations                                      | 1,155   | 1,155                           | 1,155   | 1,155                           | 1,155   | 1,155                           |
| R-squared   | 0.0950  | 0.190                           | 0.0955  | 0.189                           | 0.0957  | 0.184                           |
| Country FE  | Yes   | Yes                             | Yes   | Yes                             | Yes   | Yes                             |
| Year FE   | Yes   | Yes                             | Yes   | Yes                             | Yes   | Yes                             |
| Countries   | 45  | 45                              | 45  | 45                              | 45  | 45                              |

*Notes:* Robust standard errors, clustered at the country level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. “The competitiveness of political participation” dependent variable in Columns (1), (3), and (5) refers to the extent to which alternative preferences for policy and leadership can be pursued in the political arena. It is a 5-point scale which runs from Repressed (1) to Competitive (5). The other dependent variable “Political Competition” is an aggregate variable for political competition, which also incorporates a measure of the extent to which political participation is regulated by binding rules. Both are expert-coded measures by [The Polity Project](#) run by the Center for Systemic Peace

Table A7: **Second Stage (Foreign Aid and Clientelism Score)**

| VARIABLES                                   | Dependent Variable: Clientelism Score |                   |                   |                   |                   |                             |                             |                  |
|---|---------------------------------------|-------------------|-------------------|-------------------|-------------------|-----------------------------|-----------------------------|------------------|
|   | (1)<br>OLS                            | (2)<br>OLS        | (3)<br>OLS        | (4)<br>OLS        | (5)<br>OLS        | (6)<br>2SLS                 | (7)<br>2SLS                 | (8)<br>2SLS      |
| Net ODA (% of GNI), $t - 2$                 | 0.047<br>[0.035]                      |                   | 0.040<br>[0.038]  |                   | 0.042<br>[0.036]  |                             |                             | 0.054<br>[0.345] |
| Africa $\times$ Net ODA (% of GNI), $t - 2$ | -0.032<br>[0.035]                     |                   | -0.020<br>[0.036] |                   | -0.023<br>[0.035] |                             |                             | 0.031<br>[0.157] |
| Net ODA (% of GNI), $t - 1$                 |                                       | 0.040<br>[0.039]  |                   | 0.039<br>[0.037]  |                   | -0.006<br>[0.412]           | 0.027<br>[0.358]            |                  |
| Africa $\times$ Net ODA (% of GNI), $t - 1$ |                                       | -0.015<br>[0.040] |                   | -0.017<br>[0.038] |                   | 0.067<br>[0.186]<br>[0.383] | 0.050<br>[0.167]<br>[0.339] | [0.299]          |
| GNI per capita, $t - 1$                     | 0.007<br>[0.014]                      | 0.010<br>[0.017]  | 0.010<br>[0.016]  | 0.003<br>[0.014]  | 0.003<br>[0.014]  | 0.012<br>[0.049]            | 0.016<br>[0.044]            |                  |
| GNI per capita, $t - 2$                     |                                       |                   |                   |                   |                   |                             |                             | 0.018<br>[0.043] |
| Observations                                | 1,445                                 | 1,249             | 1,213             | 1,360             | 1,321             | 1,249                       | 1,249                       | 1,209            |
| R-squared                                   | 0.0453                                | 0.0414            | 0.0381            | 0.0453            | 0.0448            | 0.837                       | 0.838                       | 0.856            |
| Country FE                                  | Yes                                   | Yes               | Yes               | Yes               | Yes               | Yes                         | Yes                         | Yes              |
| Year FE                                     | Yes                                   | Yes               | Yes               | Yes               | Yes               | Yes                         | Yes                         | Yes              |
| Instrument (Crossing)                       | No                                    | No                | No                | No                | No                | $\leq t - 2$                | $\leq t - 3$                | $\leq t - 3$     |
| Countries                                   | 48                                    | 40                | 40                | 44                | 44                | 40                          | 40                          | 40               |

*Notes:* Robust standard errors, clustered at the country level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. The dependent variable is a measure of the extent to which politics in a country are based on clientelistic relationships, whereby a higher score indicates a normatively worse situation (ie. more clientelistic). As in the reduced form, I use the log transformed score to account for the rightward skew in the index. The specifications in Columns (1) - (5) estimate the second stage using OLS with country and year fixed effects, whereas Columns (6) - (8) use IV-2SLS with foreign aid instrumented by the crossing of the IDA threshold at different points in time. The 2SLS specifications include a dummy for sub-Saharan African countries (not shown). In Column (2) I exclude small, island countries which remain eligible for IDA concessionary-loan assistance even after graduating from the threshold. In columns (4) and (5), I exclude countries that reverse graduate under the threshold and then cross back over. The IV-2SLS specifications exclude small, island economies that do not experience a real shift in their foreign aid even after crossing due to IDA policies to protect vulnerable small island economies. The explanatory variable for Net ODA (as a % of GNI) received has been transformed using its natural logarithm, as described in the first stage. GNI per capita is calculated in current USD using the Atlas method from the 2022 release of the World Development Indicators.

Table A8: Robustness Check: Freedom House Electoral Democracy Classification and Distinct Parties

| VARIABLES                                   | Dependent Variable: Distinct Parties |                      |                      |                    |                    |                      |                      |                      |
|---|--------------------------------------|----------------------|----------------------|--------------------|--------------------|----------------------|----------------------|----------------------|
|   | (1)<br>OLS                           | (2)<br>OLS           | (3)<br>OLS           | (4)<br>OLS         | (5)<br>OLS         | (6)<br>2SLS          | (7)<br>2SLS          | (8)<br>2SLS          |
| Net ODA (% of GNI), $t - 2$                 | 0.062<br>[0.061]                     |                      | 0.104**<br>[0.050]   |                    | 0.064<br>[0.066]   |                      |                      | 0.482<br>[0.621]     |
| Africa $\times$ Net ODA (% of GNI), $t - 2$ | -0.138<br>[0.089]                    |                      | -0.218***<br>[0.061] |                    | -0.148<br>[0.098]  |                      |                      | -0.508**<br>[0.230]  |
| Net ODA (% of GNI), $t - 1$                 |                                      | 0.097*<br>[0.053]    |                      | 0.074<br>[0.075]   |                    | 0.477<br>[0.594]     | 0.444<br>[0.542]     |                      |
| Africa $\times$ Net ODA (% of GNI), $t - 1$ |                                      | -0.223***<br>[0.063] |                      | -0.173*<br>[0.098] |                    | -0.515**<br>[0.232]  | -0.492**<br>[0.224]  |                      |
| GNI per capita, $t - 1$                     | 0.009<br>[0.037]                     | -0.011<br>[0.015]    | -0.011<br>[0.015]    | 0.004<br>[0.038]   | 0.005<br>[0.037]   | 0.020<br>[0.084]     | 0.017<br>[0.075]     |                      |
| GNI per capita, $t - 2$                     |                                      |                      |                      |                    |                    |                      |                      | 0.019<br>[0.093]     |
| Electoral Democracy (Freedom House)         | 0.228**<br>[0.091]                   | 0.076<br>[0.048]     | 0.083*<br>[0.049]    | 0.227**<br>[0.099] | 0.233**<br>[0.099] | 0.004<br>[0.107]     | 0.010<br>[0.099]     | 0.037<br>[0.078]     |
| Observations                                | 1,349                                | 1,140                | 1,133                | 1,240              | 1,233              | 1,140                | 1,140                | 1,129                |
| R-squared                                   | 0.200                                | 0.205                | 0.206                | 0.213              | 0.212              | 0.898                | 0.901                | 0.899                |
| Country FE                                  | Yes                                  | Yes                  | Yes                  | Yes                | Yes                | Yes                  | Yes                  | Yes                  |
| Year FE                                     | Yes                                  | Yes                  | Yes                  | Yes                | Yes                | Yes                  | Yes                  | Yes                  |
| Instrument                                  | No                                   | No                   | No                   | No                 | No                 | Crossed $\leq t - 2$ | Crossed $\leq t - 3$ | Crossed $\leq t - 3$ |
| Countries                                   | 48                                   | 40                   | 40                   | 44                 | 44                 | 40                   | 40                   | 40                   |

*Notes:* Robust standard errors, clustered at the country level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. The dependent variable is a measure of the distinctness of platforms /generalized ideology of the major national-level political parties in the country. The specifications in Columns (1) - (5) estimate the second stage using OLS with country and year fixed effects, whereas Columns (6) - (8) use IV-2SLS with foreign aid instrumented by the crossing of the IDA threshold at different points in time. The 2SLS specifications include a dummy for sub-Saharan African countries (not shown). In Column (2) I exclude small, island countries which remain eligible for IDA concessionary-loan assistance even after graduating from the threshold. In columns (4) and (5), I exclude countries that reverse graduate under the threshold and then cross back over. The explanatory variable for Net ODA (as a % of GNI) received has been transformed using its natural logarithm, as described in the first stage. GNI per capita is calculated in current USD using the Atlas method from the 2022 release of the World Development Indicators.

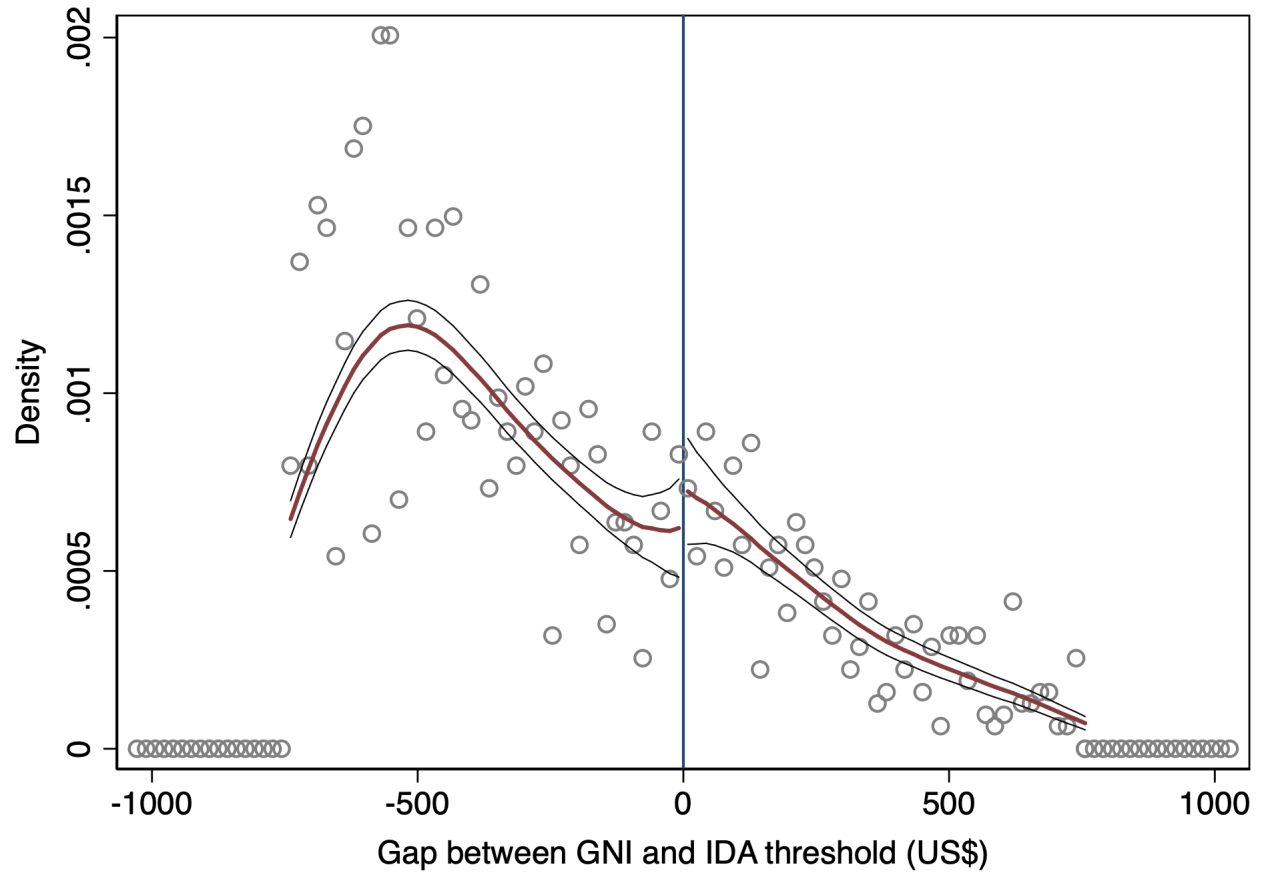


Table A9: **Robustness Check: Freedom House Electoral Democracy Classification and Local Party Competition**

| Dependent Variable: Local Party Competition |                   |                     |                     |                   |                   |                      |                      |                      |
|---|-------------------|---------------------|---------------------|-------------------|-------------------|----------------------|----------------------|----------------------|
| VARIABLES                                   | (1)<br>OLS        | (2)<br>OLS          | (3)<br>OLS          | (4)<br>OLS        | (5)<br>OLS        | (6)<br>2SLS          | (7)<br>2SLS          | (8)<br>2SLS          |
| Net ODA (% of GNI), $t - 2$                 | 0.018<br>[0.071]  |                     | 0.068<br>[0.074]    |                   | 0.013<br>[0.075]  |                      |                      | 0.165<br>[0.756]     |
| Africa $\times$ Net ODA (% of GNI), $t - 2$ | -0.049<br>[0.093] |                     | -0.178**<br>[0.078] |                   | -0.035<br>[0.100] |                      |                      | -0.528*<br>[0.316]   |
| Net ODA (% of GNI), $t - 1$                 |                   | 0.038<br>[0.081]    |                     | 0.003<br>[0.087]  |                   | 0.026<br>[0.686]     | 0.190<br>[0.683]     |                      |
| Africa $\times$ Net ODA (% of GNI), $t - 1$ |                   | -0.173**<br>[0.082] |                     | -0.057<br>[0.098] |                   | -0.481<br>[0.296]    | -0.521*<br>[0.308]   |                      |
| Electoral Democracy (Freedom House)         | 0.112<br>[0.106]  | 0.005<br>[0.095]    | 0.015<br>[0.096]    | 0.148<br>[0.105]  | 0.159<br>[0.105]  | -0.020<br>[0.154]    | -0.043<br>[0.154]    | -0.017<br>[0.127]    |
| GNI per capita, $t - 1$                     | 0.039<br>[0.053]  | -0.012<br>[0.028]   | -0.007<br>[0.029]   | 0.033<br>[0.055]  | 0.039<br>[0.055]  | -0.051<br>[0.097]    | -0.027<br>[0.094]    |                      |
| GNI per capita, $t - 2$                     |                   |                     |                     |                   |                   |                      |                      | -0.034<br>[0.111]    |
| Observations                                | 1,349             | 1,140               | 1,133               | 1,240             | 1,233             | 1,140                | 1,140                | 1,129                |
| R-squared                                   | 0.103             | 0.112               | 0.118               | 0.113             | 0.119             | 0.802                | 0.805                | 0.807                |
| Country FE                                  | Yes               | Yes                 | Yes                 | Yes               | Yes               | Yes                  | Yes                  | Yes                  |
| Year FE                                     | Yes               | Yes                 | Yes                 | Yes               | Yes               | Yes                  | Yes                  | Yes                  |
| Instrument                                  | No                | No                  | No                  | No                | No                | Crossed $\leq t - 2$ | Crossed $\leq t - 3$ | Crossed $\leq t - 3$ |
| Countries                                   | 48                | 40                  | 40                  | 44                | 44                | 40                   | 40                   | 40                   |

*Notes:* Robust standard errors, clustered at the country level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. The dependent variable is a measure of local party competition proxied by the number of political parties that have permanent local party branches outside the capital. The specifications in Columns (1) - (5) estimate the second stage using OLS with country and year fixed effects, whereas Columns (6) - (8) use IV-2SLS with foreign aid instrumented by the crossing of the IDA threshold at different points in time. The 2SLS specifications include a dummy for sub-Saharan African countries (not shown). In Column (2) I exclude small, island countries which remain eligible for IDA concessionary-loan assistance even after graduating from the threshold. In columns (4) and (5), I exclude countries that reverse graduate under the threshold and then cross back over. The explanatory variable for Net ODA (as a % of GNI) received has been transformed using its natural logarithm, as described in the first stage. GNI per capita is calculated in current USD using the Atlas method from the 2022 release of the World Development Indicators.

Figure A1: Testing Manipulation of IDA Threshold by Countries



Source: McCrary(2008). Manipulation of the running variable in the regression discontinuity design: A density test.

This figure depicts the McCrary test for bunching near the threshold. The X-axis denotes the difference between countries' GNI per capita and the IDA threshold (in current US\$). I restrict this difference to be within 750 US\$ of the IDA threshold to study whether bunching is taking place. The sample includes all IDA beneficiary countries between 1990-2020. The discontinuity estimate from the McCrary density test is 0.162 and the standard error is 0.164. Source code for this test was borrowed from [McCrary \(2008\)](#).

Table A10: **Robustness Check: World Bank Statistical Capacity Score and Distinct Parties**

| VARIABLES                                   | Dependent Variable: Distinct Parties |                      |                      |                     |                     |                      |                      |                      |
|---|--------------------------------------|----------------------|----------------------|---------------------|---------------------|----------------------|----------------------|----------------------|
|   | (1)<br>OLS                           | (2)<br>OLS           | (3)<br>OLS           | (4)<br>OLS          | (5)<br>OLS          | (6)<br>2SLS          | (7)<br>2SLS          | (8)<br>2SLS          |
| Net ODA (% of GNI), $t - 2$                 | 0.066<br>[0.064]                     |                      | 0.102*<br>[0.053]    |                     | 0.081<br>[0.069]    |                      |                      | 0.609<br>[0.691]     |
| Africa $\times$ Net ODA (% of GNI), $t - 2$ | -0.161*<br>[0.093]                   |                      | -0.229***<br>[0.067] |                     | -0.183*<br>[0.102]  |                      |                      | -0.564**<br>[0.259]  |
| Net ODA (% of GNI), $t - 1$                 |                                      | 0.116*<br>[0.062]    |                      | 0.107<br>[0.077]    |                     | 0.684<br>[0.772]     | 0.620<br>[0.667]     |                      |
| Africa $\times$ Net ODA (% of GNI), $t - 1$ |                                      | -0.251***<br>[0.071] |                      | -0.223**<br>[0.100] |                     | -0.644**<br>[0.292]  | -0.608**<br>[0.269]  |                      |
| Overall Statistical Capacity Score          | 5.600***<br>[0.650]                  | 6.042***<br>[0.632]  | 5.814***<br>[0.564]  | 5.950***<br>[0.775] | 5.665***<br>[0.724] | 4.433<br>[5.110]     | 4.705<br>[4.337]     | 4.198<br>[4.632]     |
| GNI per capita, $t - 1$                     | 0.011<br>[0.040]                     | -0.010<br>[0.016]    | -0.011<br>[0.016]    | 0.008<br>[0.041]    | 0.007<br>[0.040]    | 0.044<br>[0.114]     | 0.037<br>[0.097]     |                      |
| GNI per capita, $t - 2$                     |                                      |                      |                      |                     |                     |                      |                      | 0.036<br>[0.102]     |
| Observations                                | 1,445                                | 1,249                | 1,213                | 1,360               | 1,321               | 1,249                | 1,249                | 1,209                |
| R-squared                                   | 0.850                                | 0.899                | 0.911                | 0.843               | 0.851               | 0.859                | 0.868                | 0.880                |
| Country FE                                  | Yes                                  | Yes                  | Yes                  | Yes                 | Yes                 | Yes                  | Yes                  | Yes                  |
| Year FE                                     | Yes                                  | Yes                  | Yes                  | Yes                 | Yes                 | Yes                  | Yes                  | Yes                  |
| Instrument                                  | No                                   | No                   | No                   | No                  | No                  | Crossed $\leq t - 2$ | Crossed $\leq t - 3$ | Crossed $\leq t - 3$ |
| Countries                                   | 48                                   | 40                   | 40                   | 44                  | 44                  | 40                   | 40                   | 40                   |

*Notes:* Robust standard errors, clustered at the country level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. The dependent variable is a measure of the distinctness of platforms /generalized ideology of the major national-level political parties in the country. The specifications in Columns (1) - (5) estimate the second stage using OLS with country and year fixed effects, whereas Columns (6) - (8) use IV-2SLS with foreign aid instrumented by the crossing of the IDA threshold at different points in time. The 2SLS specifications include a dummy for sub-Saharan African countries (not shown). In Column (2) I exclude small, island countries which remain eligible for IDA concessionary-loan assistance even after graduating from the threshold. In columns (4) and (5), I exclude countries that reverse graduate under the threshold and then cross back over. In the IV-2SLS specifications in Columns (6)-(8), I exclude the small, island economies. The explanatory variable for Net ODA (as a % of GNI) received has been transformed using its natural logarithm, as described in the first stage. GNI per capita is calculated in current USD using the Atlas method from the 2022 release of the World Development Indicators. Overall Statistical Capacity Score is an aggregate country-level index of a country's statistical capacity based on how it calculates and reports 25 different subindices ranging across measures such as the periodicity of census data collection, poverty surveys, national accounts, external debt reporting status etc. This index aggregates the statistical capacity calculated by this World Bank measure between 2004-2020. A higher score indicates higher reliability of the country's national-level statistics. The data for the World Bank statistical capacity score was downloaded from [the World Bank's data bank](#). The idea for this robustness check was borrowed from [Martinez \(2022\)](#).

Table A11: Robustness Check: World Bank Statistical Capacity Score and Local Party Competition

| Dependent Variable: Permanent Local Party Branches |                     |                     |                     |                     |                     |                      |                      |                      |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|
| VARIABLES  | (1)<br>OLS          | (2)<br>OLS          | (3)<br>OLS          | (4)<br>OLS          | (5)<br>OLS          | (6)<br>2SLS          | (7)<br>2SLS          | (8)<br>2SLS          |
| Net ODA (% of GNI), $t - 2$                        | 0.020<br>[0.075]    |                     | 0.065<br>[0.076]    |                     | 0.020<br>[0.081]    |                      |                      | 0.138<br>[0.711]     |
| Africa $\times$ Net ODA (% of GNI), $t - 2$        | -0.071<br>[0.091]   |                     | -0.188**<br>[0.081] |                     | -0.065<br>[0.099]   |                      |                      | -0.498*<br>[0.302]   |
| Net ODA (% of GNI), $t - 1$                        |                     | 0.053<br>[0.098]    |                     | 0.029<br>[0.100]    |                     | -0.209<br>[0.800]    | 0.058<br>[0.722]     |                      |
| Africa $\times$ Net ODA (% of GNI), $t - 1$        |                     | -0.205**<br>[0.096] |                     | -0.105<br>[0.102]   |                     | -0.449<br>[0.316]    | -0.509*<br>[0.308]   |                      |
| Overall Statistical Capacity Score                 | 4.030***<br>[0.667] | 4.928***<br>[0.971] | 4.512***<br>[0.734] | 4.392***<br>[0.940] | 3.960***<br>[0.749] | 10.144*<br>[5.590]   | 8.078*<br>[4.684]    | 7.030<br>[4.716]     |
| GNI per capita, $t - 1$                            | 0.037<br>[0.057]    | -0.010<br>[0.032]   | -0.010<br>[0.031]   | 0.037<br>[0.059]    | 0.036<br>[0.058]    | -0.084<br>[0.113]    | -0.044<br>[0.100]    |                      |
| GNI per capita, $t - 2$                            |                     |                     |                     |                     |                     |                      |                      | -0.032<br>[0.102]    |
| Observations                                       | 1,445               | 1,249               | 1,213               | 1,360               | 1,321               | 1,249                | 1,249                | 1,209                |
| R-squared  | 0.761               | 0.792               | 0.817               | 0.732               | 0.749               | 0.746                | 0.775                | 0.803                |
| Country FE   | Yes                 | Yes                 | Yes                 | Yes                 | Yes                 | Yes                  | Yes                  | Yes                  |
| Year FE  | Yes                 | Yes                 | Yes                 | Yes                 | Yes                 | Yes                  | Yes                  | Yes                  |
| Instrument   | No                  | No                  | No                  | No                  | No                  | Crossed $\leq t - 2$ | Crossed $\leq t - 3$ | Crossed $\leq t - 3$ |
| Countries  | 48                  | 40                  | 40                  | 44                  | 44                  | 40                   | 40                   | 40                   |

*Notes:* Robust standard errors, clustered at the country level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. The dependent variable is a measure of how broad-based political competition is at the regional level, whereby a higher score indicates more broad-based competition between major political parties across the countrys regions. This is proxied using the number of permanent local party branches in parts of the country outside the capital. A higher score is indicative of more broad-based party competition, with a higher number of parties operating through permanent local party branches. The specifications in Columns (1) - (5) estimate the second stage using OLS with country and year fixed effects, whereas Columns (6) - (8) use IV-2SLS with foreign aid instrumented by the crossing of the IDA threshold at different points in time. The 2SLS specifications include a dummy for sub-Saharan African countries (not shown). In Column (2) I exclude small, island countries which remain eligible for IDA concessionary-loan assistance even after graduating from the threshold. In columns (4) and (5), I exclude countries that reverse graduate under the threshold and then cross back over. In the IV-2SLS specifications in Columns (6)-(8), I exclude the small, island economies. The explanatory variable for Net ODA (as a % of GNI) received has been transformed using its natural logarithm, as described in the first stage. GNI per capita is calculated in current USD using the Atlas method from the 2022 release of the World Development Indicators. Overall Statistical Capacity Score is an aggregate country-level index of a country's statistical capacity based on how it calculates and reports 25 different subindices ranging across measures such as the periodicity of census data collection, poverty surveys, national accounts, external debt reporting status etc. This index aggregates the statistical capacity calculated by this World Bank measure between 2004-2020. A higher score indicates higher reliability of the country's national-level statistics. The data for the World Bank statistical capacity score was downloaded from [the World Bank's data bank](#). The idea for this robustness check was borrowed from [Martinez \(2022\)](#).

Table A12: **Foreign Aid Cutbacks and Approval of Multiparty Competition in Ghana**

|  | Dependent Variable: Approval of Multiparty Competition |                 |                 |                 |                 |                 |
|--|--|-----------------|-----------------|-----------------|-----------------|-----------------|
|  | (1)  | (2)             | (3)             | (4)             | (5)             | (6)             |
| Treated District x Post Crossing       | -0.06<br>[0.10]  | -0.06<br>[0.10] | -0.02<br>[0.09] | -0.02<br>[0.09] |                 |                 |
| Treated District (dummy)               |  |                 | 0.02<br>[0.06]  | 0.02<br>[0.06]  |                 |                 |
| Treated District x Post Crossing(2009) |  |                 |                 |                 | -0.06<br>[0.11] | -0.06<br>[0.11] |
| Poverty Score                          |  | 0.02<br>[0.02]  |                 | 0.01<br>[0.02]  |                 | 0.02<br>[0.02]  |
| Observations                           | 1,800  | 1,800           | 1,800           | 1,800           | 1,800           | 1,800           |
| R-squared                              | 0.38   | 0.38            | 0.21            | 0.21            | 0.38            | 0.38            |
| District FE                            | Yes  | Yes             | No              | No              | Yes             | Yes             |
| Year FE                                | Yes  | Yes             | Yes             | Yes             | Yes             | Yes             |
| Poverty Controls                       | No   | Yes             | No              | Yes             | No              | Yes             |
| Standard Errors                        | Region   | Region          | Region          | Region          | Region          | Region          |
| Mean dep var                           | 3.090  | 3.090           | 3.090           | 3.090           | 3.090           | 3.090           |
| Crossing Year                          | 2008   | 2008            | 2008            | 2008            | 2009            | 2009            |

*Notes:* Robust standard errors, clustered at the region level in all specifications, are reported in parantheses. The stars indicate statistical significance at the 1%(\*\*\*), 5%(\*\*) & 10%(\*) levels. Note that the dummy variable for the post crossing period has been omitted as it is perfectly collinear with the inclusion of year fixed effects. In specifications (1), (2), (5), and (6), the dummy variable for treated districts is also omitted as it is perfectly collinear with the inclusion of district fixed effects.