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## Persistent Patronage? The Downstream Electoral Effects of Administrative Unit Creation in Uganda

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## Abstract

In recent decades a proliferation of the number of subnational administrative units can be seen in countries around the world, a trend that is particularly prominent in developing contexts. Political economy approaches to this phenomenon suggest that incumbent politicians supply new administrative units as a form of clientelism to help increase their probability of re-election. However, these approaches do not incorporate temporal considerations of new unit creation and the material motivations for voter behavior. This article puts forward a theory of administrative unit proliferation in which incumbents initially benefit from new unit proliferation but the downstream effects of creating new units on incumbent vote share are dependent on the provision of goods and services. Using panel data models and the synthetic control method, this article finds evidence from Uganda for administrative unit creation having no positive downstream effect on incumbent vote share, a result that is potentially mediated by perceptions of the government's ability to provide services.

**LSE Keywords:** Decentralization, Econometrics, Governance

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## Contents

<b>1</b>	<b>Introduction</b>	<b>2</b>
<b>2</b>	<b>Literature Review</b>	<b>4</b>
2.1	Strategic Creation of New Units . . . . .	5
<b>3</b>	<b>Theory: The Downstream Electoral Effects of Administrative Unit Proliferation</b>	<b>7</b>
<b>4</b>	<b>Context: Administrative Unit Creation and Elections in Uganda</b>	<b>11</b>
<b>5</b>	<b>Empirical Methodology and Data</b>	<b>16</b>
<b>6</b>	<b>Results</b>	<b>20</b>
<b>7</b>	<b>Discussion</b>	<b>27</b>
<b>8</b>	<b>Conclusion</b>	<b>32</b>
<b>9</b>	<b>Bibliography</b>	<b>34</b>
	<b>Appendix A</b>	<b>41</b>

# 1 Introduction

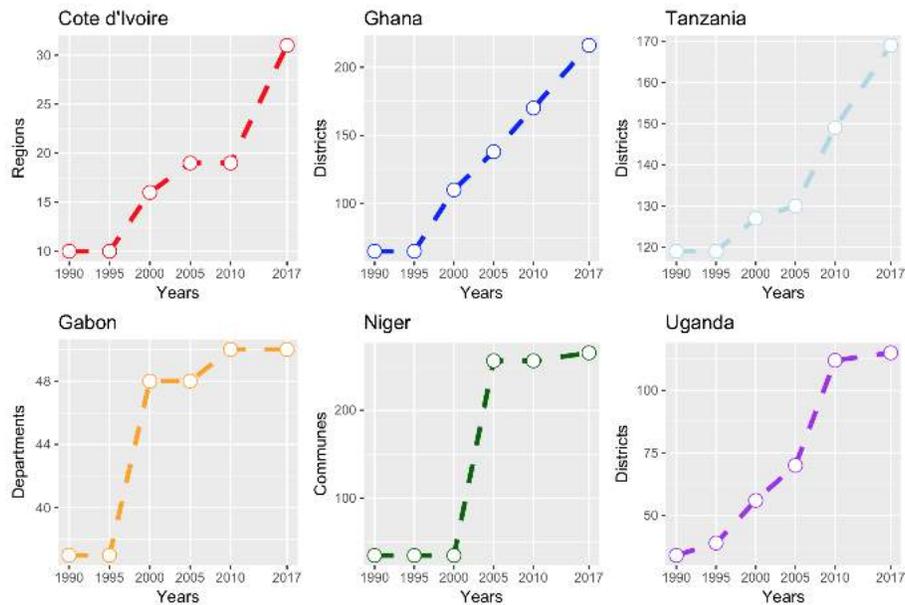
The number of subnational administrative units has steadily been increasing in countries around the world over the past few decades. This trend is most prominently seen in developing regions, where approximately 85 percent of countries that have a population greater than five million have enacted decentralizing reforms that increase the size of the administrative apparatus (Dillinger 1994). Spurred by both internal and external forces, the first widespread move towards increasing the number of administrative units in developing countries began in the early 1990s. From the outside, the international financial institutions began to press for the inclusion of these reforms in structural adjustment programs (SAPs) on the basis of improving accountability and efficiency (Faguet 2014, Kolehmainen-Aitken 1999, Mohan 1996, World Bank 2000). Internally, increasing the number of administrative units became an attractive option for leaders to assuage disaffected citizens angered by SAP-imposed austerity and contain growing ethnic tensions by granting certain powers to subnational entities (Mohan 1996, Oluwu 1991).

Although administrative unit proliferation is not specific to the region, it is very prominent in sub-Saharan Africa, where approximately half of all countries have increased the number of subnational units by at least 20 percent in the period since 1990 (Grossman and Lewis 2014). In some countries this change has been prolific: Uganda increased its number of districts from 34 in 1990 to 115 in 2017 (Uganda Ministry of Local Government 2017). Figure 1 depicts the rapid growth of administrative units across select sub-Saharan countries. Administrative unit creation can have sweeping implications for the social, political, and economic life of countries and their communities. An increase in the number of administrative units tends to decrease the size of both the newly created unit and the rump district<sup>1</sup>, consequently making both more socially homogenous (Grossman and Lewis 2014). This has the potential to transfer power to previously marginalized groups (Kimura 2013), harden ethnic attachments (Hassan 2016), increase collective action capacity, and alter the balance of power between central and local governments (Grossman and Lewis 2014). Administrative unit creation can also influence electoral dynamics by offering incumbents a new opportunity to disburse patronage (Green 2010) or by creating new legislative constituencies (Malesky 2009). However, in spite of the dramatic shifts in the administrative

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<sup>1</sup>The old unit from which the new unit was formed.

Figure 1: Administrative unit creation in select sub-Saharan countries



*Note:* This figure shows the number of certain administrative units in select countries during the period 1990 to 2017. Data is from Grossman and Lewis (2014), UNICEF (2016), Stanford Branner Library (2012), Ninno and Mills (2015) and Statoids (2016).

topography of states, the causes and effects of new unit creation remain relatively understudied topics and have only recently attracted greater attention (Green 2010).

This article focuses on the role of administrative unit creation as a form of clientelism used by national executives in semi-democratic regimes to increase their long-term chances of electoral survival. Current literature documents an electoral return to incumbents in areas where they create new administrative units (Green 2010, Grossman and Lewis 2014). However, the literature also surmises that the effects of administrative unit creation on incumbent vote share should be durable beyond the first subsequent election since new administrative units entail future prospects of goods and services (Gottlieb et al. *working paper*). However, in this article I argue that rather than presenting a persistent form of patronage that can continually shore up the incumbent vote share, any observed electoral effects of administrative unit creation should diminish over time if they are not accompanied by increased perceptions of public goods quality.

This article proceeds as follows: Section 2 reviews the current literature on administrative unit proliferation, paying particular attention to three distinct yet interrelated theories for the strategic creation of new units; Section 3 introduces a theory of diminishing downstream returns to new

unit creation; Section 4 situates this theory in the context of district creation in Uganda; Section 5 describes the main empirical strategy and data sources used for testing the theory; Section 6 presents the main results; Section 7 discusses these findings and uses the synthetic control method to shed greater light on the theory at the county-level; and Section 8 concludes.

## 2 Literature Review

Administrative unit proliferation is a phenomenon that often accompanies but is distinct from decentralization. Decentralization takes on different forms in practice, but broadly entails a transfer of governmental authority from the central government to more localized levels. The different forms of decentralization can be grouped into three categories: decentralization of fiscal authority, administrative authority, and political authority (Rodden 2004). Fiscal decentralization pertains to the transfer of responsibilities related to government revenue and expenditure (Escobar-Lemmon 2001), administrative decentralization shifts certain policymaking responsibilities to lower levels (Strumpf and Oberholzer-Gee 2002), and political decentralization refers to the creation of subnational arenas of political competition, such as local legislatures or executives (Brancati 2008).

Administrative unit creation refers strictly to the process by which existing subnational units of administration are broken up into a larger number of subnational units. Although the two processes often occur at the same time, administrative unit creation does not in its own right constitute decentralization: creating more units does not alter the degree of power transferred to the subnational units. Administrative unit creation and decentralization should therefore be thought of as separate yet often contemporaneous events. The prevailing logic for why the two policies often go hand in hand is that, once decentralizing reforms are announced, local communities demand their own administrative unit which, if acquiesced to by the national government, will result in an expansion in the number of units (Grossman and Lewis, 2014).

Arguments in favor of the creation of new units are generally made on the basis of maximizing the efficiency of the provision of public goods and services. Studies suggest that under centralized provision, often only a small fraction of allocated resources manage to reach their intended destination (Ahmad et al. 2005). Administrative unit proliferation allows for the spatial “deconcentration” of state functions to lower levels (Boone 2003), thereby bringing services closer to the people (Aye

2012). Consequently, administrative unit creation coupled with decentralization presents an opportunity for local preferences to be met in a financially efficient manner (Faguet 2001; Litvak, Ahmad and Bird 1998; Asimwe and Musisi 2004).

However, the efficiency based argument does not delve into the strategic reasons for why politicians choose to enact policies of decentralization and administrative unit creation. As Boone (2003) points out, these sorts of arguments fail to take into account the “pervasive systems of constraint and incentive within which rulers are forced to operate.” In order for new administrative units to be created, the central government must be willing to supply them. In recent years, the literature has increasingly considered the ‘political economy’ of administrative unit proliferation (Pierskalla 2016). The following subsection addresses the strategic reasons for why administrative unit creation might appeal to self-interested politicians.

## 2.1 Strategic Creation of New Units

Three interrelated explanations are found in the literature for why government leaders supply new administrative units. These explanations will be referred to as the *interests* argument, the *patronage* argument, and the *survival* argument. The *interests* argument posits that new unit creation is brought about by the merging of interests between local elites and the national executive. From the demand side of the equation, it asserts that marginalized local populations seeking improved public goods and services are able to successfully lobby the government for a new unit (Grossman and Lewis 2014, Pierskalla 2016). Gottlieb et al. (*working paper*) argue that local elites demand new administrative units because unit creation signals a longer-term commitment to bring services to an area. The central government is generally amenable to these demands because its goal is to guarantee electoral support from the area in question (Grossman and Lewis, 2014). The *supply* of new units is therefore a consequence of electoral strategy that happens to align with the interests of certain local populations.

Relatedly, the *patronage* argument suggests that newly created units function as a sort of patronage that can be used to help win elections (Kasara 2006). In the context of Uganda, Green (2010) contends that the SAPs beginning in the 1980s diminished the ability of President Museveni to rely on traditional forms of clientelism. These methods, such as vote-buying or the guarantee of employment in exchange for support (Stokes 2009), became more difficult under SAP-enforced

austerity. However, many African politicians continue to engage in clientelistic behavior through alternative methods (Van de Walle 2001). The creation of new administrative units is one such alternative means of patronage. Because electoral politics in much of sub-Saharan Africa has an ethnic dimension and because most ethnic groups are territorially bound (Bates 1983), granting an administrative unit to a particular ethnic group presents executives with the opportunity to buy the support of that group's elite, and by extension, much of the group's non-elite (Baldwin 2013). By broadening their base of electoral support, patron-client relations including administrative unit creation present a means of ensuring regime security (Arriola 2009).

The *survival* argument asserts that national executives strategically create new units in areas where they are most likely to reap electoral benefits. In countries where politicians face competitive elections, they must be strategic about allocating patronage via new administrative units to maximize their probability of electoral survival. Incumbents will target swing-vote units where the potential benefits of creating a new unit outweigh the costs (Hassan 2016, Hassan and Sheely 2016). Moreover, the short-term benefits of creating a new unit are more important than longer term considerations; the objective is only to make it through the next election. Evaluating the use of administrative unit creation in Kenya after the return to multi-party rule under President Moi, Hassan (2016) finds that new units were created only in areas that were the most electorally strategic.

All three theories contain a key similarity. In each, the supply of a new administrative unit is a product of clientelistic behavior—the exchange of a new unit for the electoral support of those living in that unit. Where they differ is in the underlying impetus to pursue administrative unit creation and in their anticipated longer-term consequences. In the *interests* argument, the timing of administrative unit creation is explained by the alignment of local and national interests. Local elites are the first movers: they petition the government for a new unit and the government then responds. Moreover, since the creation of administrative units is “sticky”, with promises of continual transfers from the center, the *interests* theory posits that the electoral returns for the incumbent should persist over time. Conversely, the *patronage* and *survival* arguments suggest that new unit creation is done explicitly for electoral purposes; consequently, one would expect administrative unit proliferation to occur in the years directly prior to an election. Indeed, Green (2010) documents the creation of new units in countries around Africa in the immediate lead-up to

a presidential or parliamentary election. While the *patronage* theory does not delve into the longer-term considerations of unit creation, the *survival* theory argues that incumbents discount long-term objectives (Hassan 2016); new unit creation is a short-term solution to winning the next election rather than a long-term compact with constituents. Although the creation of a new unit is indeed “sticky,” there is no guarantee that the central government will follow through on their commitment to improve public goods and services in new units. Consequently, the longer-term electoral effects of administrative unit proliferation may diverge from the short-term electoral effects. The temporal considerations of administrative unit proliferation for incumbent electoral performance are explored at a theoretical level in the following section.

### 3 Theory: The Downstream Electoral Effects of Administrative Unit Proliferation

Since the downstream effects of administrative unit creation are not dealt with in existing literature, I rely upon a simple analytical model to shed light on incumbent behavior and its downstream electoral consequences. In this section and the remainder of the article, I limit the discussion to the decision-making of the national executive rather than lower level politicians. As Hassan (2016) observes, it is the leaders with strong executive control that are most able to shape the administrative apparatus of the state. Following notation adopted in Laitin and Christensen (2017), the executive’s decision-making strategy for any set of policies can be expressed as:

$$\max_{\{p \in P\}} \{S(p)[B(p) - C(p)] - [1 - S(p)]C(p)\} \quad (1)$$

where  $p$  is a policy chosen from the set of all possible policies  $P$ ,  $S(p)$  is the probability of the executive remaining in office subject to pursuing policy  $p$ ,  $B(p)$  is the benefit the executive receives from that policy, and  $C(p)$  is the cost of the policy.  $[1-S(p)]$  is therefore the probability that the executive does not remain in office. The executive does not benefit from leaving office.

I consider two different distributive policies that could be used by incumbents seeking to gain an electoral advantage: (1) transferring resources to fund public goods and services, and (2) creating new administrative units. Thus, the policy set available to the executive is:

$$p \in (\text{goods and services, unit creation})$$

Which will be notated as:

$$p \in (GS, UC)$$

This analysis remains agnostic about any differences between  $S(GS)$  and  $S(UC)$ . As Green (2010) documents in the case of Uganda, the move towards new unit creation in Uganda only came about circa 1997 as a lower-cost substitute for other forms of clientelism. It is implied that, aside from cost, traditional forms of patronage are sufficient strategies to ensure a high probability of winning an election. The incumbent therefore faces equal probabilities of winning under optimal pursuit of either strategy. In short,  $S(GS) = S(UC) = S$ , where  $S$  is the probability of survival unconditional on policy. In this context, the incumbent's policy decision simplifies to:

$$\max_{\{p \in (GS, UC)\}} \{S[B(p) - C(p)] - [1 - S]C(p)\} \quad (2)$$

The benefits that can be derived from remaining in office are manifold, including—among others—both reputational and economic considerations. Leaders around the world have been accused of using their power for personal enrichment (Venook 2017, Pallister 2002). In the African context, neopatrimonial rule has brought forth allegations of corruption and personal gain at the highest levels of government (Diamond 2013, Hassan 2014, Pitcher 2012, Van de Walle 2007). Many sitting presidents in Africa have amassed vast fortunes through either unscrupulous behavior or legitimate business ventures, although it is often alleged that executives promote their businesses while serving in official capacities (Nzioki 2016). The benefits of remaining in office,  $B(p)$ , are therefore considerable. The benefits received under a policy of unit creation are likely to be at least as great, if not greater, than the benefits received under a policy of distributing goods and services. Through the creation of employment opportunities in new administrative units, the executive is able to co-opt local elites into the administrative apparatus and “neutralize” leaders that could otherwise threaten regime stability (Green 2010). Moreover, the creation of new units enhances the surveillance capacity of the central government and increases its ability to stir up support for the incumbent during elections (Hassan 2016). Therefore,  $B(UC) \geq B(GS)$ .

The costs of creating a new unit,  $C(UC)$  are strictly less than the costs of pursuing a strategy of

providing goods and services,  $C(GS)$ . As Green (2010) notes with respect to the Ugandan context, the cost of creating a new unit is very low at a figure of between “21.8 shillings (\$0.01) and 41.4 shillings (\$0.02) USh per citizen per year.” Since the strategy of administrative unit creation emerged as a substitute for the more expensive provision of goods and services,  $C(UC) < C(GS)$ .

Collecting terms in equation (2), the incumbent’s decision simplifies to:

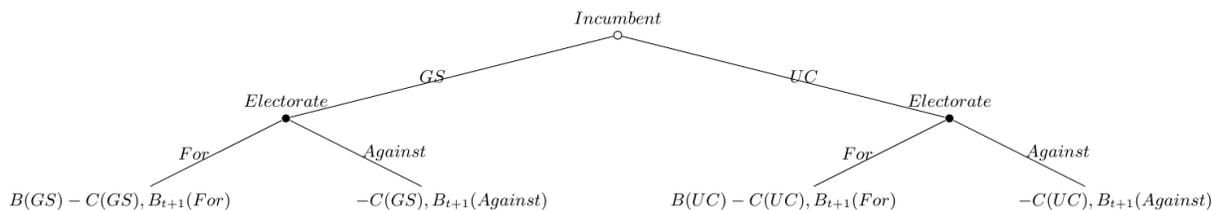
$$\max_{\{p \in (GS, UC)\}} \{SB(p) - C(p)\} \quad (3)$$

This expression makes intuitive sense—the incumbent’s strategy is to maximize the benefits of remaining in office subject to the probability of being re-elected while minimizing the costs of the electoral strategy. The equation clearly increases in  $B(p)$  and decreases in  $C_S(p)$ . Since the previous argumentation demonstrates that  $B(UC) \geq B(GS)$  and  $C_S(UC) < C_S(GS)$ , the executive’s optimal strategy should always be to pursue administrative unit creation rather than a policy of goods and services.

The voter decides whether to vote for or against the incumbent as a function of the chosen distributive policy. Economic models of voting posit that voters make decisions both retrospectively and prospectively (Key 1966, Downs 1957). That is, voters consider both the current economic situation as well as the future economic outlook. Empirical studies of voting behavior in developed countries have found support for both the retrospective (Alvarez and Nagler 1995, Norpoth 2004) and the prospective theories (Fiorina 1981, Lewis-Beck 1988, Nadeau and Lewis-Beck 2001). The explanatory power of economic voting is also found in developing democracies (Bratton, Mattes, and Gyimah-Boadi 2005; Youde 2005), where dissatisfaction with the state of the economy—measured either retrospectively or prospectively—is a key determinant of whether or not constituents vote for the incumbent (Posner and Simon 2002).

Drawing on this result and holding all other factors constant, a simple model of voting behavior in the context of the two distributive policies is a function of the economic benefits already received through distributive policy  $p$ , the potential future economic benefits under policy  $p$ , and the probability that the voter will receive those benefits under policy  $p$  if they vote for or against the incumbent. While current benefits received under policy  $p$  cannot be altered by the voter’s decision, the electorate can use its vote to shape the benefits it expects to receive in the future.

Figure 2: The incumbent’s electoral strategy and electorate’s response.



Note: The payoff  $B(UC)-C(UC), B_{t+1}(For)$  is the optimal outcome for both the electorate and the incumbent, and therefore the incumbent engages in a policy of unit creation and the electorate votes for the incumbent.

The voter’s decision is therefore:

$$\max_{\{v \in V\}} \{P(v)B_{t+1}(v)\} \tag{4}$$

where  $v$  is the voting decision chosen from the set of possible voting decisions  $V$ , where  $V = (For, Against)$ .<sup>2</sup> Holding all else constant, voters decide based on whether their expected future benefits are maximized under the incumbent or under the opposition, where expected future benefits are conditional on the distributive policies announced by the candidates— $B_{t+1}(v)$ —and the probability that the candidates will actually follow through on those promises— $P(v)$ .

In this analysis the incumbent is the first-mover and their optimal choice is to always engage in a policy of administrative unit creation. Initially, due to the ‘stickiness’ of institutions, residents in these new units will view this reform as a signal of increased future transfers from the central government (Gottlieb et al. *working paper*). This signifies an increase in both their expected future benefits,  $Benefits_{t+1}(v)$ , and the probability that the incumbent will make good on the provision of these future benefits  $P(v)$ . Thus, in an election directly following strategic administrative unit creation, the attractiveness of voting for the incumbent increases, holding the opponent’s electoral strategy constant. The strategic logic of the incumbent and the electorate can be seen in Figure 2. In the first period, the incumbent and the electorate are made best off by creating new units and voting for the incumbent, respectively. The executive remains in office at minimal cost and the electorate’s expected future benefits are maximized since new unit creation is ostensibly a credible commitment to send future transfers.

Yet after the election has been won with a policy of administrative unit creation, the incumbent’s rational strategy is to renege on their promise to improve goods and services. The incumbent has

<sup>2</sup>Where ‘For’ and ‘Against’ refer to the vote vis-à-vis the incumbent.

already met their short-term goal of remaining in office and future elections can be secured via further administrative unit proliferation. For the incumbent, the optimal strategy continues to be the creation of more units rather than the provision of goods and services. The incumbent's payoff will be maximized via a strategy of successive administrative unit proliferation before each election, thereby avoiding the costlier strategy of funneling funds for goods and services to already existing districts. This logic can partly be seen in Figure 1, where the number of administrative units continues to proliferate across time and, per Green (2010), particularly in the years directly preceding executive elections.

However, if constituents realize that the incumbent's commitment was not credible and service provision has not improved, they will update their beliefs about the future benefits of voting for the incumbent.  $Benefits_{t+1}(For)$  and  $Probability(For)$  will decrease as they reflect these updated beliefs. Consequently, one would expect the incumbent's share of the vote in new units to be greatest in the first post-split period and decrease in elections thereafter. Additionally, one would expect the perceived quality of goods and services to remain the same or even diminish following district creation. The core hypotheses of this article are therefore:

*H1: Incumbent vote share should increase in the first election following administrative unit creation but then decrease in subsequent elections.*

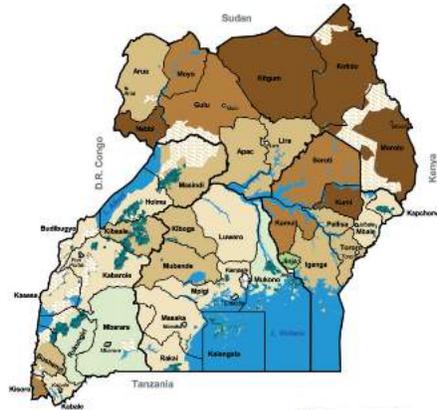
*H2: Perceptions of the quality of goods and services should remain the same or decrease following the creation of a new district.*

Voting against the incumbent will become increasingly attractive as the executive's promise to use district creation to improve goods and services is shown to be less than credible. If constituents update their beliefs in accordance with the theory presented here, the strategy of voting against the incumbent becomes optimal, producing a payoff for the electorate—per Figure 2—of  $B_{t+1}(Against)$ . The following section puts this theory into context in the case of Uganda, which is the setting for the remainder of this article.

## 4 Context: Administrative Unit Creation and Elections in Uganda

As seen in Figure 1, Uganda has undergone several periods of administrative unit proliferation in the period since 1990, in the process increasing the number of districts from 34 to a current count of 115.

Figure 3: Map of Districts in Uganda, 1992

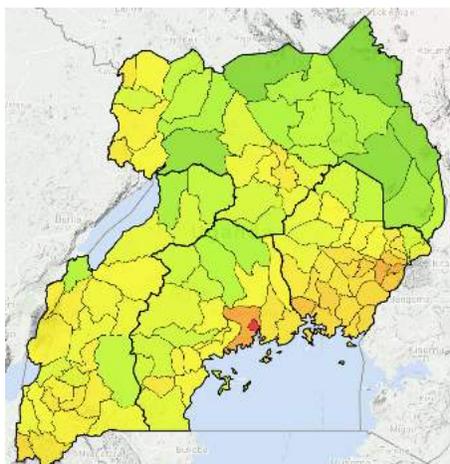


*Source:* Ugandan Bureau of Statistics (2004). The shading of the districts has no import for the purposes of this article. There are 34 districts in 1992.

The extent to which this district creation has reshaped the administrative apparatus can be seen in Figures 3 and 4. Uganda’s current administrative apparatus emerged after the National Resistance Movement (NRM) took power in 1986 and began to promote local empowerment via Resistance Councils (RCs), which were established to negate the power of bureaucrats appointed under the previous regime (Awortwi 2011, Grossman and Lewis 2014). These RCs were later transformed into Local Councils, or LCs, that now forms the basis of Ugandan sub-national organization. Today, the Local Council system operates on five tiers: in order from highest to lowest—the village (LCI), the parish (LCII), the sub-county (LCIII), the county (LCIV), and the district (LCV) (Kavuma 2009). Administrative unit proliferation has occurred at multiple levels in Uganda (Parliament of Uganda 2015), but this article is concerned solely with *districts* because it is the highest level of sub-national administration and the most likely to be used by the national executive for the purposes of patronage and electoral advantage (Hassan and Sheely 2016).

Districts in Uganda are governed by an elected local council as well as appointed technical bureaucrats. The council is led by an elected chairperson and a chief administrative officer designated by the central government (Kavuma 2009). In the last few decades, the central government has continued to devolve duties and responsibilities to the lower tiers of governance. The combination of local electoral representation, extension of the administrative apparatus, and increased budgetary autonomy signifies that in its current form the district system embodies elements of “administrative, political and fiscal” decentralization (Awortwi 2011, Lambright 2011). The bulk

Figure 4: Map of Districts in Uganda, 2016



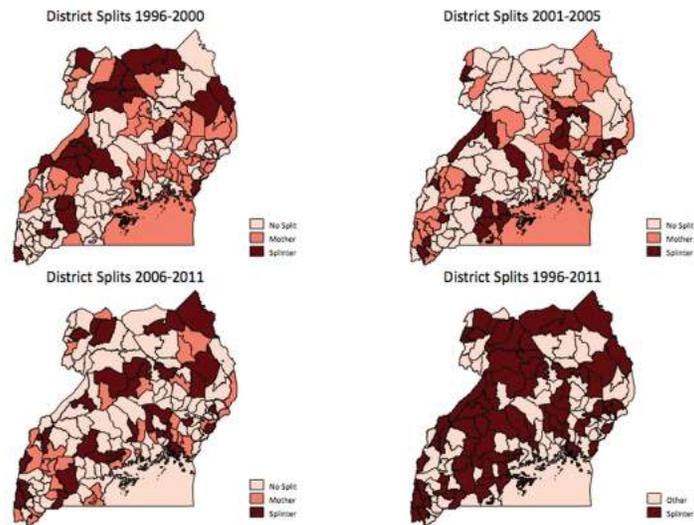
*Source:* Ugandan Bureau of Statistics (2016) and City Population (2016). The shading of the districts again has no significance for this article. There are 115 districts in 2016.

of the new districts in Uganda emerged in several distinct waves of district proliferation: in 1994, 1997, 2000, 2005, 2009-2010, and 2015 (Green 2010, Namutebi 2009, Parliament of Uganda 2015, Statoids 2016). Green (2010) argues that these waves have electoral significance because district creation most frequently takes place in the years immediately proximate to the presidential elections.<sup>3</sup> Figure 5 depicts the waves of district creation that occurred in the lead-up to the elections of 2001, 2006, and 2011.

The current President of Uganda, Yoweri Museveni, has run as the incumbent in each of the elections from 1996 onwards. The press has argued that Museveni utilizes district creation to gain an electoral advantage and notes that he has historically performed better in newly created districts than in other regions of the country (*The East African* 2016, Clarke 2011, Atuhaire 2015). In 2006, Museveni received 73.6 percent of the vote in the new districts compared to an average of 59.3 percent of the vote across the entire country (Green 2010). Figure 6 shows that similar trends can generally be observed in the other elections. Although Ugandan elections have been characterized by certain deficiencies of legitimacy (Moehler 2009, Klimek et al. 2012, Murison 2013, Helle and Rakner 2014), election observers routinely consider them to have met international standards of being ‘free and fair’ (Green 2010, Grossman and Lewis 2014, IGAD 2016, Kangethe 2016). In the context of free and fair elections, it is in the incumbent’s best interest to maximize the vote share

<sup>3</sup>Ugandan Presidential elections have taken place in 1996, 2001, 2006, 2011, and 2016.

Figure 5: Administrative unit proliferation in Uganda

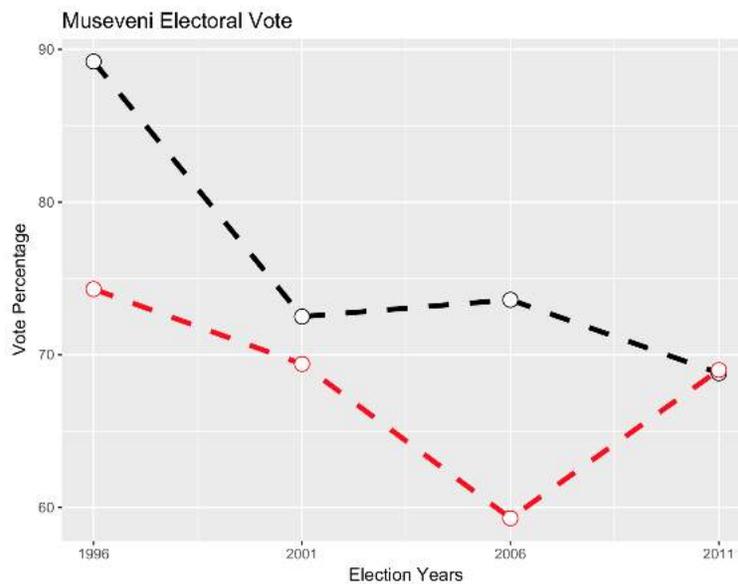


*Note:* Figure from Grossman and Lewis (2014). The boundaries of the figure show all counties (one administrative unit lower than district) in Uganda as of 2011. The darkest counties are those that received a new district, the slightly lighter colored regions are the rump areas, and the lightest regions are those in which no split occurred. The top left panel is the period prior to the 2001 election; the top right panel is prior to the 2006 election; the bottom left panel is prior to the 2011 election; and the bottom right panel shows new districts across the entire period from 1996 to 2011.

they receive from the electorate. The theoretical argument presented in section 3 posits that the incumbent’s optimal strategy is to utilize administrative unit creation as an electoral strategy; the historical timing of district creation in Uganda indicates that Museveni is indeed pursuing this strategy and his electoral return in the new districts suggests that he is being rewarded for it, at least in the short-term. Museveni’s pledge to continue the creation of new districts in the future implies a belief that this strategy will continue to be fruitful (Arinaitwe and Mafabi 2015).

Although Museveni seems to have profited from district creation, it is unclear if residents in those areas actually benefit in terms of goods or services. As Kavuma (2010) notes, Ugandans in newly created districts were initially optimistic that new districts would improve services such as health care and education; however, the capacity of newly created districts remains very low. A lack of bargaining capacity—a product of the small size of new districts—precludes them from petitioning the central government for greater transfers and their own nascent local administrative capacity is insufficient to independently provide goods and services (Lewis 2014). While the creation of new districts entails the hiring of supervisory technical staff—such as “a Chief Administrative Officer (CAO), Resident District Commissioner (RDC), deputy CAO, deputy RDC, and a District

Figure 6: Administrative unit proliferation in Uganda



*Note:* Data from Green (2010) and Grossman and Lewis (2014). The black line shows the vote share received by Museveni in newly created districts while the red line shows the vote share received in the entirety of Uganda. Museveni has generally performed better in the newly created districts than he has overall.

Auditor” (Green 2010) among many others, the outcome is “a great many salaried supervisors with very little to supervise” (Kavuma 2010). The costs of setting up a new district are extensive and much of the available funding from the central government is put towards administrative rather than developmental purposes. For instance, in Soroti district, 43 percent of the annual budget goes towards staff salaries, 28 percent towards other administrative costs, and only 29 percent towards the improvement of goods and services (Kavuma 2010). Consequently, administrative unit proliferation has contributed to the trend of districts reducing their budget allocations for public goods and services (Akin, Hutchinson, and Strumpf 2004), a problem exacerbated by the declining share of the national budget that go towards the districts (Grossman and Lewis 2014). With very low capacity to collect taxes at the district level—for instance, Soroti and Serere districts are only able to meet 2 percent of their budgetary needs via local taxation (Kavuma 2010)—critics have argued that “the only thing more districts bring is poverty” (Kavuma 2009). In the context of district creation without service improvement, it is important to empirically assess whether the electorate continues to support the incumbent in subsequent presidential elections and whether district creation improves perceptions of service provision. The following section details the methodology used to conduct this analysis.

## 5 Empirical Methodology and Data

This article relies primarily on panel data methods to empirically assess the two hypotheses. The main limitation of this approach is that the estimates must be interpreted correlationally rather than causally due to the potential for unobserved confounders.<sup>4</sup> The first part of hypothesis 1—an expected increase in incumbent vote share in the first election following district creation in Uganda—is assessed with the following panel model:

$$y_{it} = \beta_0 + \beta_1 D_{it} + \beta_2 X'_{it} + \delta_t + \alpha_i + \varepsilon_{it} \quad (5)$$

where the outcome variable  $y_{it}$  is the vote share received by Museveni in county  $i$  and election year  $t$ .  $D_{it}$ , the variable of interest, is a binary variable that indicates whether county  $i$  received a new district in the period prior to election year  $t$  such that  $D_{it} \in [0,1]$  and  $D_{it}$  is equal to 1 if a county receives a district before election year  $t$  and is equal to zero otherwise.  $X'_{it}$  is a vector of controls incorporated into the model: an indicator for a county becoming in a rump district, perceptions of the quality of public services, perceptions of the government's effectiveness at handling the economy, regional indicators, and ethnic indicators. The term  $\delta_t$  captures time effects, or trends that vary across electoral periods but not across the counties, while  $\alpha_i$  captures unit fixed effects that vary across counties but not across time.  $\varepsilon_{it}$  is an error term.

Although the focus of this article is on district creation rather than county creation, the data is indexed by county because counties are the recipients of district creation; one or more constituent counties of a district will be broken off to form its own district and therefore indexing the data at the county-level gives a clearer interpretation of the electoral consequences of receiving a new district. There are observations for 163 counties across four electoral periods (1996 through 2011) for a total of 652 county-year observations. Some counties received new districts early in this period while others have never received a new district: the structure of the data therefore allows for an investigation of the medium-term downstream effects of district creation on incumbent vote share. I use data on incumbent vote share (the outcome variable), district creation (the independent variable of interest), region, and ethnicity from Grossman and Lewis (2014). Region and ethnicity

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<sup>4</sup>However, the discussion section of this article will also incorporate some analysis of synthetic control models that attempt to negate the potential for confounding via processes of weighting and matching.

are included in order to control for identity-based voting behavior (Posner and Simon 2002, Ichino and Nathan, 2013). Incumbent vote share is realized as the proportion of the vote that Museveni received in each of the counties, district creation is constructed as described above, the regions—Western, Northern, Eastern, and Central—correspond to the four administrative provinces under British Colonial rule, and ethnicity is operationalized as a factor denoting the majority ethnic group in each county.

The control variable *Economy* is constructed so as to capture attitudinal perceptions of the government’s handling of the economy. The control *Services* is constructed to capture beliefs regarding the government’s handling of the provision of public services. Data on perceptions of the economy and service provision are included in order to control for the material interests of the electorate (Posner and Simon 2002). These two variables are constructed using data from the 2000, 2005, and 2010 rounds of the Afrobarometer survey in Uganda. There are six questions that are consistent across the three rounds and that pertain to perceptions of the handling of the economy generally or of the provision of services. The Afrobarometer labels for these six questions are given below:<sup>5</sup>

- Handling jobs
- Handling prices
- Handling income gaps
- Handling crime
- Handling education
- Handling basic health services

The first three items relate broadly to perceptions of the government’s overall economic performance while the last three items refer more specifically to service provision. Due to idiosyncratic measurement error the six variables, when taken on their own, are noisy indicators of the broader trends in the public’s perceptions of the economy and service provision. Instead, following Baldwin and Huber (2010), factor analysis is used to confirm that the two groups of three questions load

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<sup>5</sup>The full wording of the six questions is included in the appendix.

onto two underlying common factors. This analysis affirms that there are in fact two underlying factors<sup>6</sup> and that the six questions load onto those two factors in the predicted manner: the first three onto one factor—dubbed *Economy*—and the final three onto another factor—dubbed *Services*. The factor loadings of the first three questions onto the *Economy* variable are

Variable Name	Factor 1 Loadings
Handling Jobs	0.7233
Handling Prices	0.7454
Handling Income Gaps	0.8016

and the factor loadings of the last three questions onto the *Services* variable are

Variable Name	Factor 2 Loadings
Handling Crime	0.5617
Handling Education	0.8291
Handling Basic Health Services	0.8069

With loadings greater than 0.5 in all cases, the two sets of questions have strong associations with the underlying variables. Regression scoring is then used to predict the underlying factor scores (DiStefano, Zhu, and Mindrila 2009) and the two underlying factors are then averaged at the county level. The resultant ranges of the two factors, *Economy* and *Services*, are (-1.22, 1.49) and (-1.75, 1.08). Since each of the variables is a composite of three questions, the units associated with these variables cannot be meaningfully interpreted; rather, large positive observations represent the greatest approval of the government’s handling while large negative observations represent the greatest disapproval. Summary statistics for all variables used in the empirical analysis are included in the appendix.

The downstream effects of district creation on incumbent vote share are assessed using the same model as equation (5) except with  $D_{it}$  replaced by its lagged values, denoted  $D_{i,t-1}$  and  $D_{i,t-2}$ ,

<sup>6</sup>A scree plot is included in the appendix.

where:

$$D_{i,t-1} = \begin{cases} 1, & \text{if a county receives a district before the election one period prior} \\ 0, & \text{otherwise} \end{cases}$$

$$D_{i,t-2} = \begin{cases} 1, & \text{if a county receives a district before the election two periods prior} \\ 0, & \text{otherwise} \end{cases}$$

The correlation between prior district creation and Museveni's vote share in the second election after the formation of a new district is recovered by the model:

$$y_{it} = \beta_0 + \beta_1 D_{i,t-1} + \beta_2 X'_{it} + \delta_t + \alpha_i + \varepsilon_{it} \quad (6)$$

and the correlation between prior district creation and Museveni's vote share in the third election after the formation of a new district is recovered by:

$$y_{it} = \beta_0 + \beta_1 D_{i,t-2} + \beta_2 X'_{it} + \delta_t + \alpha_i + \varepsilon_{it} \quad (7)$$

The same panel data set-up used to assess the downstream association between district creation and incumbent vote share in equations (5) through (7) is used to test the second hypothesis—that perceptions of the quality of public goods and services should not increase following the creation of a new district. Rather than the outcome variable being incumbent vote share, the outcome variable for the following set of regressions is *Services* in county  $i$  at time  $t$ , represented in the following models by  $\theta_{it}$ . The election years included in these models are only 2001, 2006, and 2011 due to the year 2000 being the first round of Afrobarometer data available for Uganda. The first period correlation between district creation and perceptions of service provision is modeled by:

$$\theta_{it} = \beta_0 + \beta_1 D_{it} + \beta_2 X'_{it} + \delta_t + \alpha_i + \varepsilon_{it} \quad (8)$$

where the right-hand side variables remain the same as in the previous regressions, with the exception of *Services* now being the dependent variable. Similarly, the  $t+1$  and  $t+2$  downstream effects

of district creation on services are given by equations (9) and (10):

$$\theta_{it} = \beta_0 + \beta_1 D_{i,t-1} + \beta_2 X'_{it} + \delta_t + \alpha_i + \varepsilon_{it} \quad (9)$$

$$\theta_{it} = \beta_0 + \beta_1 D_{i,t-2} + \beta_2 X'_{it} + \delta_t + \alpha_i + \varepsilon_{it} \quad (10)$$

The six models presented in equations (5) through (10) form the basis of the empirical results presented in the following section.

## 6 Results

The results from model (5), which recover the correlation between district creation and incumbent vote share in the first subsequent election, are presented in Table 1. Regression 1 in this table presents the simplest specification, including only the indicators for a county receiving a new district, a county being in a rump district, year effects, county fixed effects, and an intercept. In this regression, the coefficient associated with the new district indicator is 0.028 and significant at the 0.05 level.<sup>7</sup> The substantive interpretation of this result is that the granting of a new district to a county is associated with an increase of 2.8 percentage points in the incumbent's total vote share. The coefficient for being in a rump district is small and not statistically distinct from zero. Taken together, this signifies an overall increase in the incumbent's survival chances. The specifications in columns (2) through (4) add various controls to the model. In all cases, including the variables for *Economy* and *Services* diminishes the statistical significance of the coefficient associated with new district creation. Although the coefficient for *New District* remains positive, it is not statistically significant at conventional levels. However, the positive sign indicates that—at least in the short term—district creation does not harm the incumbent's chances of remaining in office. The results for equation (5) provide some weak support for part of the first hypothesis: district creation may increase the incumbent's vote share in the immediately subsequent period, although that effect appears to be outweighed by material concerns—such as perceptions of the state of the economy.

Table 2 presents the results from model (6)—the downstream effects in the second election

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<sup>7</sup>It should be noted that this first specification is essentially a replication of a finding in Grossman and Lewis (2014). The subsequent results presented here build on this initial result and are unique to this article.

Table 1: District Creation and Incumbent Vote share in First Subsequent Election

	<i>Dependent variable:</i>			
	Museveni Vote share			
	(1)	(2)	(3)	(4)
New District	0.028** (0.014)	0.018 (0.013)	0.017 (0.013)	0.017 (0.013)
Rump District	0.010 (0.013)	-0.001 (0.013)	0.002 (0.013)	0.002 (0.013)
Economy Perception		0.069*** (0.017)	0.072*** (0.017)	0.072*** (0.017)
Services Perception		-0.010 (0.016)	-0.011 (0.016)	-0.011 (0.016)
Year Indicator	Yes	Yes	Yes	Yes
County Indicator	Yes	Yes	Yes	Yes
Region Indicator	No	No	Yes	Yes
Ethnicity Indicator	No	No	No	Yes
Intercept	0.323*** (0.053)	0.345*** (0.054)	0.346*** (0.053)	0.346*** (0.053)
Observations	644	444	444	444
R <sup>2</sup>	0.875	0.902	0.903	0.903
Adjusted R <sup>2</sup>	0.832	0.844	0.845	0.845

Note: Column 1 is a replication of Grossman and Lewis (2014)

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

following district creation. As with table 1, regression (1) presents the simplest specification while regressions (2) through (4) add additional controls. Across all four specifications, the creation of a new district at time  $t-1$  has no substantive effect and is not statistically significant from the null at conventional levels. This finding provides support for the second part of the first hypothesis: that district creation does not have a positive effect on the incumbent vote share in periods after the initial election. These results demonstrate that creating a unit at time  $t-1$  has no significant effect on Museveni's vote share at time  $t$ .

Table 2: District Creation and Incumbent Vote share in Second Subsequent Election

	<i>Dependent variable:</i>			
	Museveni Vote share			
	(1)	(2)	(3)	(4)
New District $Lag_{t-1}$	0.004 (0.016)	-0.002 (0.017)	-0.005 (0.017)	-0.005 (0.017)
Rump District	-0.007 (0.013)	-0.006 (0.013)	-0.002 (0.013)	-0.002 (0.013)
Economy Perception		0.070*** (0.017)	0.073*** (0.018)	0.073*** (0.018)
Services Perception		-0.009 (0.016)	-0.010 (0.016)	-0.010 (0.016)
Year Indicator	Yes	Yes	Yes	Yes
County Indicator	Yes	Yes	Yes	Yes
Region Indicator	No	No	Yes	Yes
Ethnicity Indicator	No	No	No	Yes
Intercept	0.349*** (0.055)	0.357*** (0.053)	0.358*** (0.053)	0.358*** (0.053)
Observations	482	444	444	444
R <sup>2</sup>	0.892	0.901	0.903	0.903
Adjusted R <sup>2</sup>	0.836	0.843	0.845	0.845

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Similarly, table 3 presents the results of model (7), which captures the correlation between district creation and downstream incumbent vote share in the third subsequent election. Across all four specifications, the coefficient associated with district creation at time  $t-2$  is positive and substantively large, with coefficients suggesting a downstream incumbent return of between 1.7 and 4.3 percentage points. However, these coefficients are not statistically significant at conventional

levels; although the correlations appear substantively large, their standard errors are also sizeable. Consequently, the estimates cannot be considered statistically distinct from zero. This result falls into line with what one would expect under the second part of the first hypothesis: that there is no discernible downstream incumbent advantage of creating new districts. The results presented in Tables 1 through 3 are robust to an alternative realization of the ethnicity indicator.<sup>8</sup>

Table 3: District Creation and Incumbent Vote share in Third Subsequent Election

	<i>Dependent variable:</i>			
	Museveni Vote share			
	(1)	(2)	(3)	(4)
New District $Lag_{t-2}$	0.017 (0.028)	0.043 (0.027)	0.037 (0.028)	0.037 (0.028)
Rump District	-0.027 (0.019)	-0.024 (0.018)	-0.019 (0.019)	-0.019 (0.019)
Economy Perception		0.057*** (0.021)	0.059*** (0.021)	0.059*** (0.021)
Services Perception		-0.052** (0.021)	-0.052** (0.021)	-0.052** (0.021)
Year Indicator	Yes	Yes	Yes	Yes
County Indicator	Yes	Yes	Yes	Yes
Region Indicator	No	No	Yes	Yes
Ethnicity Indicator	No	No	No	Yes
Intercept	0.333*** (0.070)	0.361*** (0.063)	0.363*** (0.063)	0.363*** (0.063)
Observations	326	311	311	311
R <sup>2</sup>	0.905	0.927	0.927	0.927
Adjusted R <sup>2</sup>	0.809	0.845	0.845	0.845

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Tables 4 through 6 present the results of the models with *Services* as the dependent variable. These models test the second hypothesis: that the provision of services will not improve when a county receives a district. Table 4 presents the relationship between district creation at time  $t$  with perceptions of service provision at time  $t$ . As previously mentioned, the units associated with *Services* are not directly interpretable because the measure is a composite. Across all four specifications presented in Table 4, the coefficient for *New District* is not statistically significant

<sup>8</sup>The results remain the same when ethnicity is realized as an indicator for being in a Bantu-speaking region—an indicator for ethnicity motivated by Green (2010).

at conventional levels and the relationship between district creation and incumbent vote share at time  $t$  cannot, therefore, be distinguished from zero. This finding provides support for hypothesis 2, since district creation does not appear to have a robust, positive effect on perceptions of service provision.

Table 4: District Creation and Perception of Services at time  $t$

	<i>Dependent variable:</i>			
	Services			
	(1)	(2)	(3)	(4)
New District	0.036 (0.052)	0.045 (0.049)	0.050 (0.049)	0.050 (0.049)
Rump District	0.041 (0.051)	0.031 (0.049)	0.029 (0.049)	0.029 (0.049)
Economy Perception		-0.321*** (0.062)	-0.325*** (0.062)	-0.325*** (0.062)
Year Indicator	Yes	Yes	Yes	Yes
County Indicator	Yes	Yes	Yes	Yes
Region Indicator	No	No	Yes	Yes
Ethnicity Indicator	No	No	No	Yes
Intercept	0.571*** (0.206)	0.564*** (0.198)	0.563*** (0.197)	0.563*** (0.197)
Observations	449	449	449	449
R <sup>2</sup>	0.612	0.645	0.651	0.651
Adjusted R <sup>2</sup>	0.392	0.442	0.447	0.447

*Note:*

\* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

Table 5 presents the results from Equation (9), which estimates the correlation between district creation at time  $t$  and perception of services at time  $t+1$ . Across all four specifications of Table 5 there is a strong negative association between prior district creation and perceptions of the government's provision of services at time  $t+1$ . The range of the variable *Services* is from -1.75 to 1.08, which means that the estimated coefficients—which range from -0.182 to -0.186—represent between 6.4 and 6.6 percent of the total range, an estimate that is substantively large. Across all four specifications the coefficient for *New District Lag<sub>t-1</sub>* is statistically significant at the 0.01 level. The Equation (9) results therefore provide strong evidence in support of the second hypothesis:

service provision does not appear to improve after district creation; on the contrary, perceptions of the government's handling of service provision diminish in the subsequent period.

Table 5: District Creation and Perception of Services at time  $t+1$

	<i>Dependent variable:</i>			
	Services			
	(1)	(2)	(3)	(4)
New District $Lag_{t-1}$	-0.186*** (0.064)	-0.183*** (0.061)	-0.182*** (0.061)	-0.182*** (0.061)
Rump District	0.027 (0.049)	0.016 (0.047)	0.014 (0.047)	0.014 (0.047)
Economy Perception		-0.317*** (0.061)	-0.319*** (0.061)	-0.319*** (0.061)
Year Indicator	Yes	Yes	Yes	Yes
County Indicator	Yes	Yes	Yes	Yes
Region Indicator	No	No	Yes	Yes
Ethnicity Indicator	No	No	No	Yes
Intercept	0.636*** (0.201)	0.634*** (0.193)	0.636*** (0.192)	0.636*** (0.192)
Observations	449	449	449	449
R <sup>2</sup>	0.623	0.655	0.660	0.660
Adjusted R <sup>2</sup>	0.409	0.457	0.462	0.462

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

However, it may be the case that it takes time for services to improve in new districts; as Table 6 demonstrates, perceptions of government handling of services dramatically increase at time  $t+2$ : in all specifications, the association between district creation at time  $t-2$  and perceptions of service provision at time  $t$  are strong and positively correlated. The coefficients for *New District Lag<sub>t-2</sub>* range from 0.376 to 0.395, which constitutes between 13.3 and 14.0 percent of the total range of the *Services* variable. In addition to being large in magnitude, these coefficients are statistically significant at the 0.01 level. Contrary to the predictions of hypothesis 2, it appears that perceptions of service provision increased two periods following district creation. The results reported in Tables 4 through 5 therefore support a nuanced alternative to Hypothesis 2: district creation has a negative association with perceptions of services in the near-term, but is associated

with increased perceptions of services thereafter.

Table 6: District Creation and Perception of Services at time t+2

	<i>Dependent variable:</i>			
	Services			
	(1)	(2)	(3)	(4)
New District $Lag_{t-2}$	0.395*** (0.108)	0.382*** (0.105)	0.376*** (0.106)	0.376*** (0.106)
Rump District	0.114 (0.074)	0.122* (0.072)	0.127* (0.073)	0.127* (0.073)
Economy Perception		-0.274*** (0.079)	-0.276*** (0.079)	-0.276*** (0.079)
Year Indicator	Yes	Yes	Yes	Yes
County Indicator	Yes	Yes	Yes	Yes
Region Indicator	No	No	Yes	Yes
Ethnicity Indicator	No	No	No	Yes
Intercept	0.291 (0.258)	0.201 (0.251)	0.203 (0.249)	0.203 (0.249)
Observations	311	311	311	311
R <sup>2</sup>	0.642	0.669	0.678	0.678
Adjusted R <sup>2</sup>	0.255	0.306	0.315	0.315

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

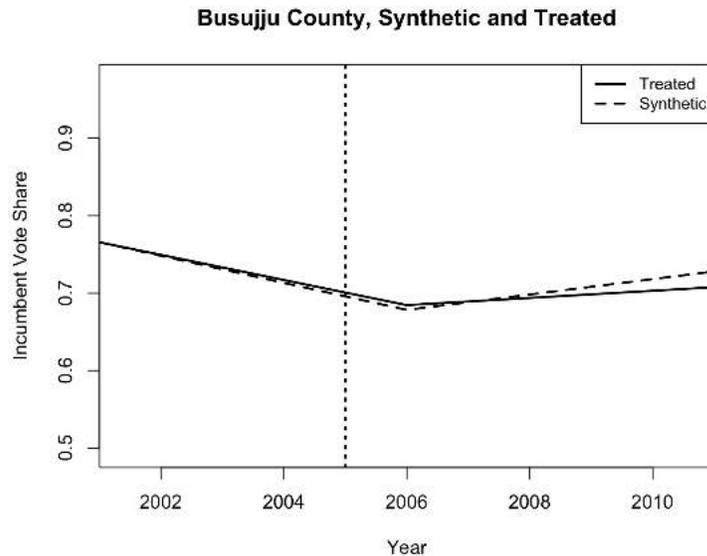
## 7 Discussion

The previous section describes the results from panel data models that empirically assess the two hypotheses. There is weak evidence for district creation having a positive effect on incumbent vote share in the first subsequent election. More importantly—since the focus of the article is on downstream electoral effects—there is no evidence at the aggregate level that district creation in Uganda prior to an election at time  $t$  has a positive effect on Museveni’s vote share in elections at times  $t+1$  and  $t+2$ , lending support to the second part of the first hypothesis. There is mixed support for the second hypothesis, with no evidence that public perceptions of the government’s handling of public services improve in the first or second period after district creation, although these perceptions do appear to increase in the third subsequent period.

The partial support for both hypotheses—that district creation is not, on average, associated with improved perceptions of services or increased downstream incumbent vote share—begs the question of whether *Services* mediate the effect of district creation on incumbent vote share. As seen in table 6, district creation is correlated with improved perceptions of service provision at time  $t+2$ ; it could be the case that perceptions of service provision improve in some counties but not in others. This discussion section investigates whether there are heterogeneous effects of district creation that appear to be mediated by *Services*.

In order to further investigate the relationship between district creation, service provision, and incumbent vote share, I utilize the synthetic control method to examine behavior at the county level. For any treatment  $D_{it}$ —in this case, district creation—the synthetic control method builds a synthetic counterfactual for each treated unit by weighting the observations from untreated control units, matching treated and untreated units along a vector of identified variables, and minimizing the pre-treatment difference between the observed and synthetic units (Abadie and Gardeazabal 2003; Abadie, Diamond, and Hainmueller 2010). This method minimizes potential confounding by matching the most similar treated and untreated units and allows for causal interpretation of the estimates. In order to observe the downstream effects of district creation on incumbent vote share and *Services*, which is only defined between 2001 and 2011, ‘treated’ units are defined as counties that received a new district in the period between 2001 and 2006 and for which electoral data is available in 2006 and 2011. Moreover, the synthetic control method requires that there is

Figure 7: Busujju County, Synthetic Control—District Creation and Incumbent Vote share



no missing data for any of the matching variables—in this case: vote share for Museveni in 1996, *Economy, Services* when incumbent vote share is the dependent variable, and ethnicity. Under these stipulations, there are 13 treated units and 63 potential control units that can be matched and weighted to form the synthetic control.

The synthetic control method is used for each of the 13 treated units. As an example, the observed (treated) and synthetic (untreated) trends for incumbent vote share in Busujju County are seen in Figure 7 and the differences between the treated and untreated synthetic—the treatment effect—at each time period can be seen in Figure 8. Figures 9 and 10 show the same except with *Services* as the variable along the vertical axis. The dashed vertical line in all four panels is the year in which administrative unit proliferation took place. As anticipated by the first hypothesis, support for the incumbent in the first subsequent election is slightly greater and in the second subsequent election markedly lower than would be expected in the synthetic untreated counterfactual. Slightly in contrast to the second hypothesis, perceptions of public services initially increase before dropping off relative to the synthetic control. The synthetic control results for the remaining 12 treated units are included in the appendix.

In the first post-district creation period (2006), 10 of the 13 treated districts exhibit a higher vote share for Museveni than what would be expected in their untreated synthetic counterfactual.

Figure 8: Busujju County, Treatment Effect of District Creation on Incumbent Vote share

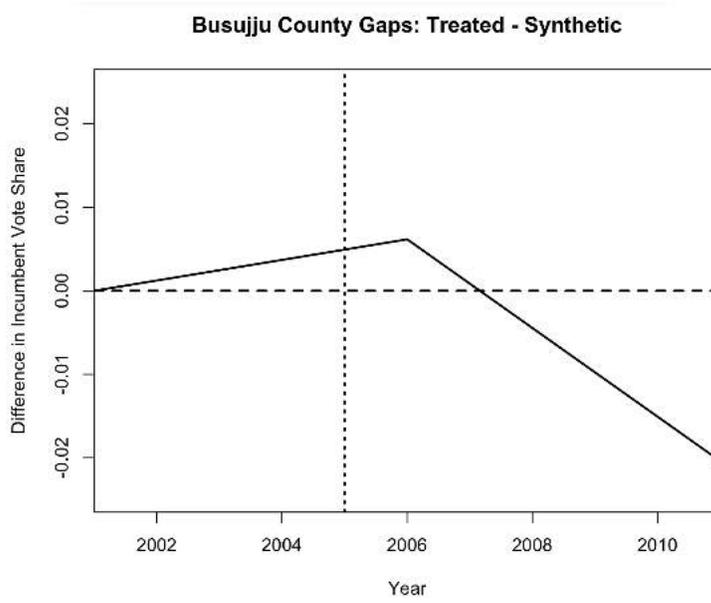


Figure 9: Busujju County, Synthetic Control—District Creation and Perceived Quality of Services

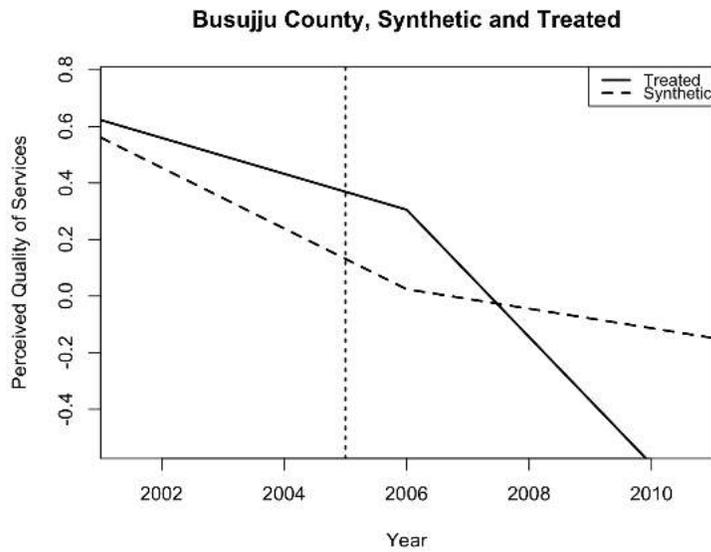
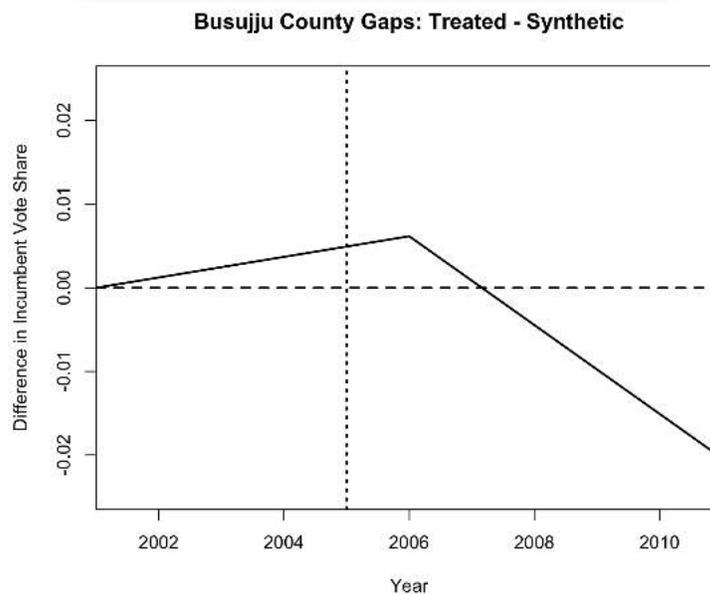


Figure 10: Busujju County, Treatment Effect of District Creation on Perceived Quality of Services



This result does not appear to be conditioned on changes in the perceptions of services provided; indeed, 8 of the 13 treated counties have worse perceptions of services provided following district creation than what would be expected if untreated. These results support both the first part of the first hypothesis and the second hypothesis. Greater treatment effect heterogeneity is seen in the second post-district creation period (2011), in which 6 of the treated units exhibit lower vote shares for the incumbent and the remaining 7 exhibit higher vote shares for Museveni than anticipated in the untreated counterfactual. However, in 2011 the sign of the treatment effect for district creation on vote share is highly correlated with the sign of the treatment effect on services: 9 of the 13 treated counties have the same signs for both effects, suggesting that perceptions of service provision mediate the effect of district creation on incumbent vote share. Of the four counties that did not have the same signs for both effects, each exhibits a higher vote share for the incumbent than anticipated by the synthetic model as well as a much higher initial level of *Services*, with an average of 0.406 compared to an average for the other counties of 0.198.<sup>9</sup> This suggests that the opposite sign for the effect of district creation on *Services* and incumbent vote share among these four counties may be a result of the latent perception of services already being very high in approval.

<sup>9</sup>This difference constitutes 7.3 percent of the range for the *Services* variable.

The results of this synthetic control analysis are suggestive of district creation aiding incumbent vote share uniformly in the first post-split period even if perceptions of the government's ability to provide services do not improve. This evidence supports the first half of the first hypothesis. However, in later periods, some counties do exhibit an increase in their perceptions of service provision while others decrease, in partial contradiction of hypothesis 2. An analysis of the reasons for why some counties do in fact become more satisfied with service provision than others goes beyond the scope of this article; however, the evidence does suggest that the downstream effects of district creation on incumbent vote share may be mediated by perceptions of the government's handling of service provision. In other words, in the medium to long-term, district creation will only improve the incumbent's vote share if district creation is also associated with improving perceptions of service provision. This is a more nuanced result than what is presented by the first hypothesis. It does, however, support previous findings (Posner and Simon 2002, Baldwin 2013) that demonstrate African voters behaving in ways that reflect their own material interests. Combining the panel data models from the previous section with the synthetic control analysis, there is partial support for both hypotheses 1 and 2. There is some evidence that there is an electoral return for the incumbent in the first post-split period regardless of service provision. Moreover, there is evidence that support for the incumbent decreases when perceptions of the government's provision of services do not increase. Finally, there is evidence for perceptions of service provision not improving in the first post-split period, but with some treated counties demonstrating substantial improvements in these perceptions in the second post-split period.

From the perspective of external validity, although this article pertains specifically to Uganda, the phenomenon of administrative unit proliferation is widespread across the African region. As Green (2010) argues, there is evidence that incumbent executives in many countries are engaging in similar patterns of unit creation in the lead-up to an election for the purposes of gaining an electoral advantage. The logic informing the theory of downstream electoral effects presented in section 3 is widely applicable to cases outside of Uganda where strategic administrative unit proliferation is taking place: if district creation does not eventually bring with it the promised goods and services, the electorate will eventually decrease their support for the incumbent. However, as alluded to earlier, the degree of true electoral competition in Uganda is debatable; Hassan (2016) notes that the calculus of administrative unit proliferation may be slightly different in semi-competitive

democracies than it is in truly competitive democracies. With this in mind, the external validity of these findings should be limited to other semi-competitive democracies that enact policies of administrative unit proliferation.

## 8 Conclusion

There are four primary contributions of this article to the burgeoning study of the causes and effects of administrative unit proliferation. The first is the explication of the temporal considerations of district creation. As suggested by the theory proposed in section 3 and alluded to by the cyclical proliferation of administrative units in many African contexts, incumbents may simply be using new unit creation as a means of winning elections without having to improve the material conditions of their constituents. However, voters may punish the incumbent in later elections if they do not follow up on their commitment to improve services. The second contribution is the documentation of support for district creation increasing incumbent vote share in the first subsequent election using the synthetic control method. Although Grossman and Lewis (2014) and Green (2010) note this electoral return to incumbents in Uganda, this article is the first to approach the problem in a manner that attempts to address potential confounding variables by using synthetic controls. The third contribution is the partial evidence found in support of both the first and second hypotheses. Between the panel data and synthetic control methodologies, there is some substantiation of the claim that perception of services—at least in the short to medium term—do not improve after district creation and that the electoral return to incumbents of creating districts diminishes in time. This second result, however, may be mediated by perceptions of service delivery. The last contribution is the finding that material concerns matter for African voters: in addition to the potential mediating effect of perceptions of services, the panel data results document a strong effect of constituent perceptions of the economy on incumbent vote share.

Lastly, this research suggests several different avenues for future investigation. As seen in the synthetic control results, perceptions of service delivery increase in some counties but not others. If these perceptions reflect differences in actual service delivery, why do some post-split counties receive improved services but not others? Moreover, for this study perceptions of service delivery were used in place of actual service distribution due to a lack of available data on public goods

and services across space and time in Uganda; however, it is important to investigate whether perceptions of services are strongly associated with the services that are actually provided. Filling in these gaps is a crucial step in furthering the analysis of the interrelationships between administrative unit creation, service provision, and electoral considerations.

## 9 Bibliography

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## Appendix

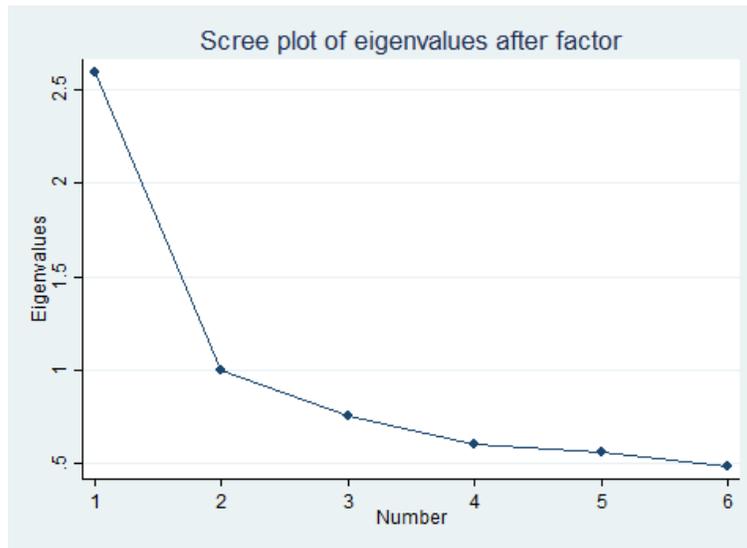
### Contents:

- Afrobarometer Questions for Factor Analysis
- Scree Plot for Factor Analysis
- Summary Statistics for Variables Included in Regression
- Synthetic Control results for remaining 12 treated counties

## Afrobarometer Questions for Factor Analysis

- Label: Handling Jobs
  - Question: How well would you say the current government is handling the following problems? A. Creating Jobs
  - Responses: 1= Very Badly, 2= Fairly Badly, 3=Fairly Well, 4= Very Well, 9= Don't know, 98= Refused, 99= Missing Data
- Label: Handling Prices
  - Question: How well would you say the current government is handling the following problems? B. Keeping prices low
  - Responses: 1= Very Badly, 2= Fairly Badly, 3=Fairly Well, 4= Very Well, 9= Don't know, 98= Refused, 99= Missing Data
- Label: Handling Jobs (Question 22A)
  - Question: How well would you say the current government is handling the following problems? C. Narrowing income gaps between rich and poor
  - Responses: 1= Very Badly, 2= Fairly Badly, 3=Fairly Well, 4= Very Well, 9= Don't know, 98= Refused, 99= Missing Data
- Label: Handling Jobs (Question 22A)
  - Question: How well would you say the current government is handling the following problems? D. Reducing crime
  - Responses: 1= Very Badly, 2= Fairly Badly, 3=Fairly Well, 4= Very Well, 9= Don't know, 98= Refused, 99= Missing Data
- Label: Handling Jobs (Question 22A)
  - Question: How well would you say the current government is handling the following problems? E. Addressing educational needs
  - Responses: 1= Very Badly, 2= Fairly Badly, 3=Fairly Well, 4= Very Well, 9= Don't know, 98= Refused, 99= Missing Data
- Label: Handling Jobs (Question 22A)
  - Question: How well would you say the current government is handling the following problems? F. Improving basic health services
  - Responses: 1= Very Badly, 2= Fairly Badly, 3=Fairly Well, 4= Very Well, 9= Don't know, 98= Refused, 99= Missing Data

Figure 11: Scree Plot for Number of Underlying Common Factors

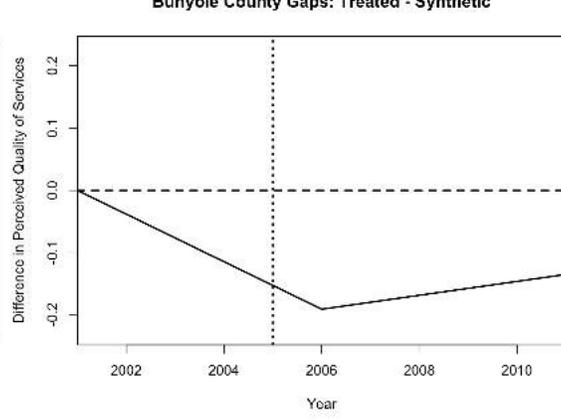
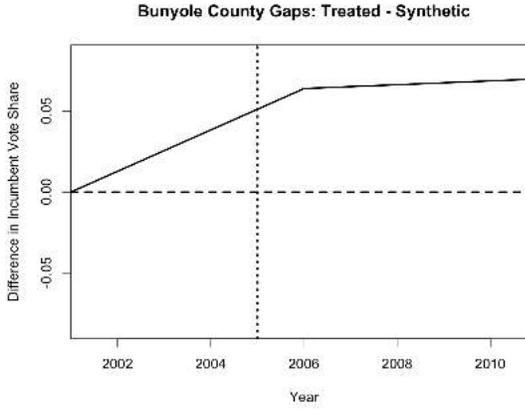
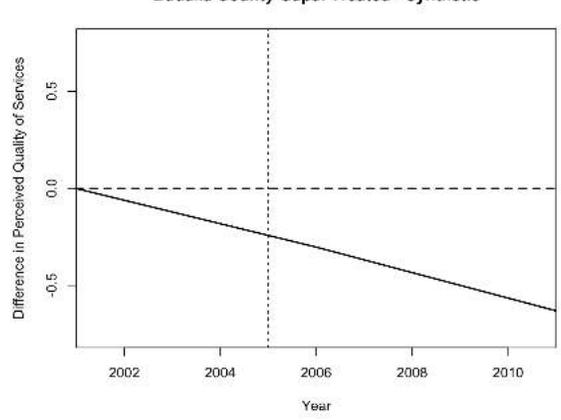
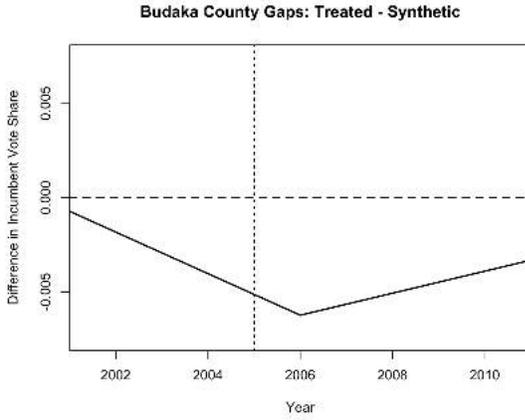
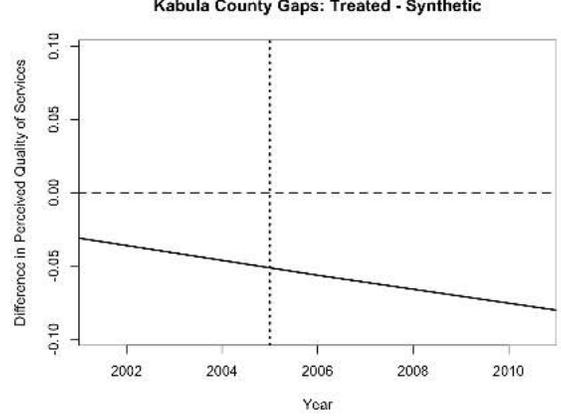
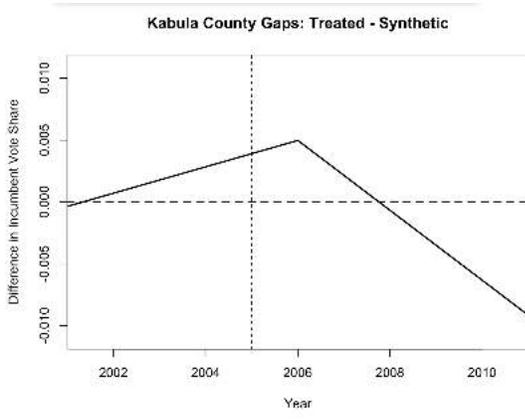
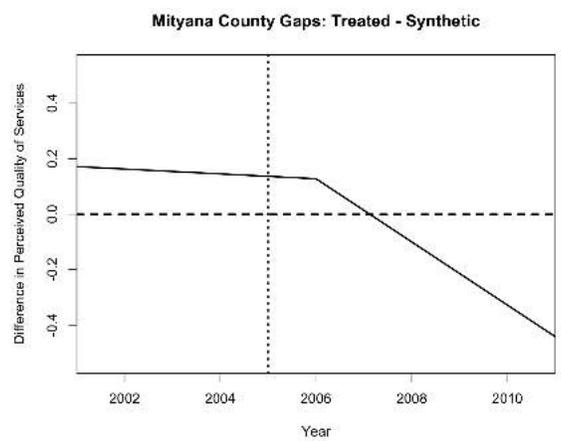
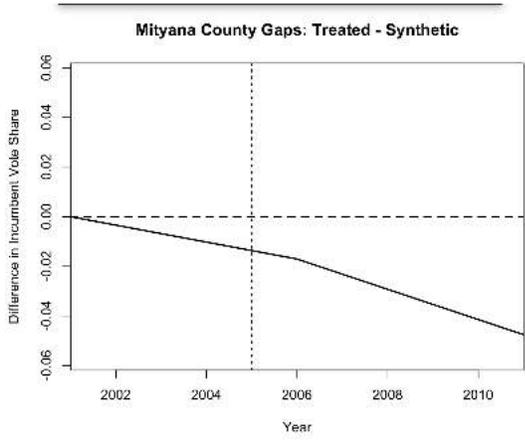


*Note:* Scree plot shows two underlying factors as evidenced by eigenvalues being greater than 1 after both one and two factors.

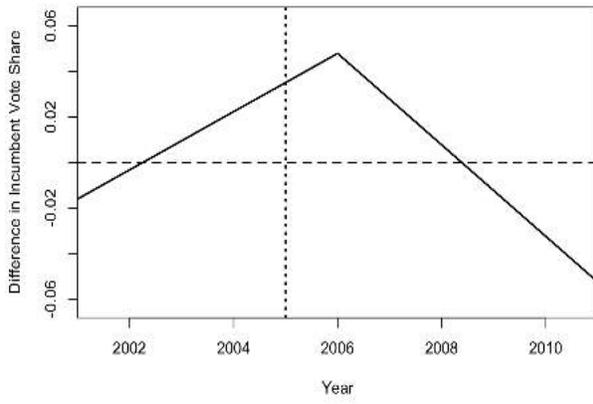
Table 7: Summary Statistics for Variables Included in Regression

Statistic	N	Mean	St. Dev.	Min	Max
Museveni Vote share	644	0.673	0.253	0.025	0.999
New District	652	0.141	0.348	0	1
New District $Lag_{t-1}$	489	0.119	0.324	0	1
New District $Lag_{t-2}$	326	0.092	0.290	0	1
Perceptions of Economy	449	0.009	0.461	-1.220	1.492
Perceptions of Services	449	-0.001	0.449	-1.753	1.075

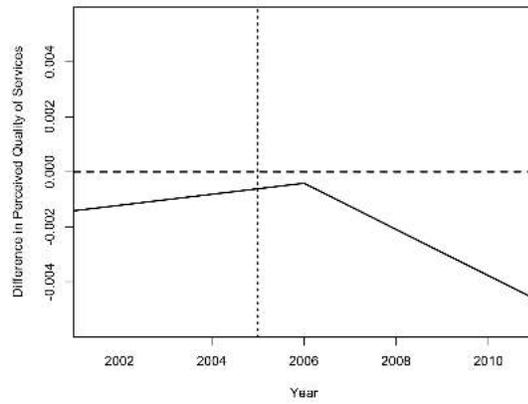
*Note:* Factor variables (such as region, ethnicity, wave) not included.



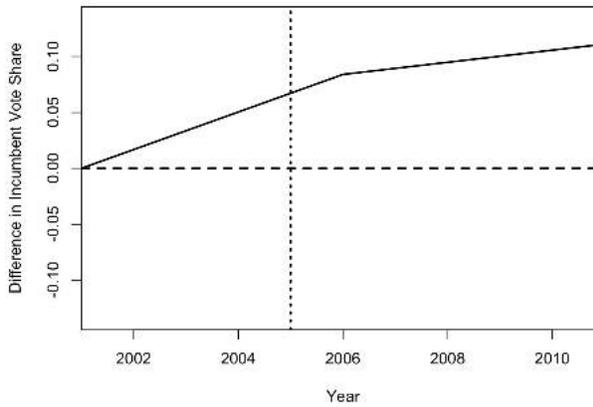
**Koboko County Gaps: Treated - Synthetic**



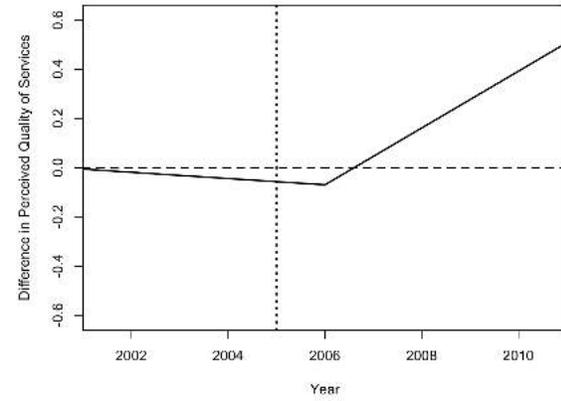
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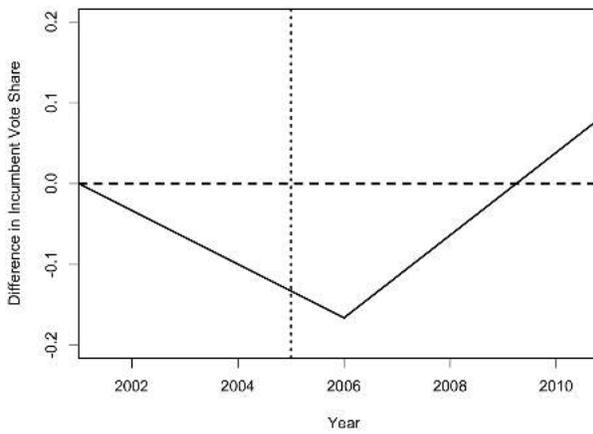
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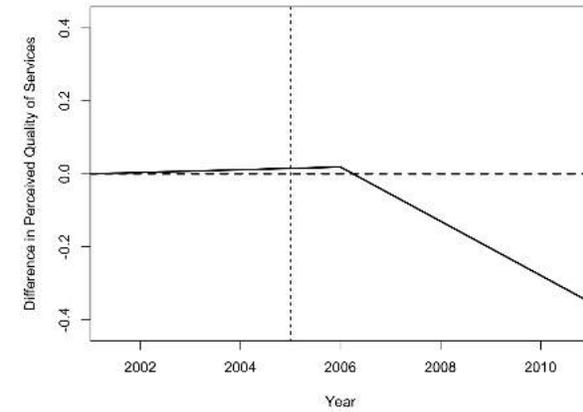
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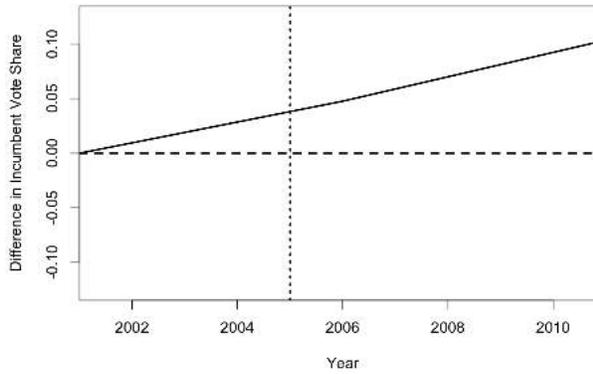
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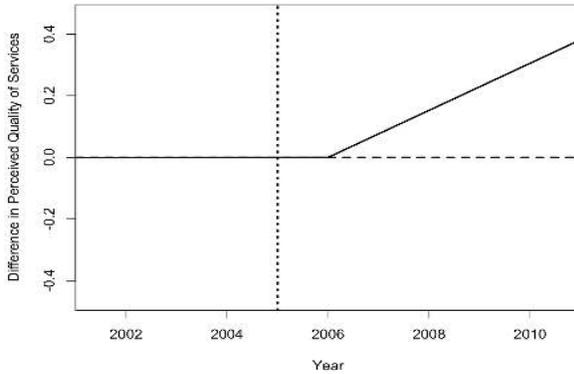
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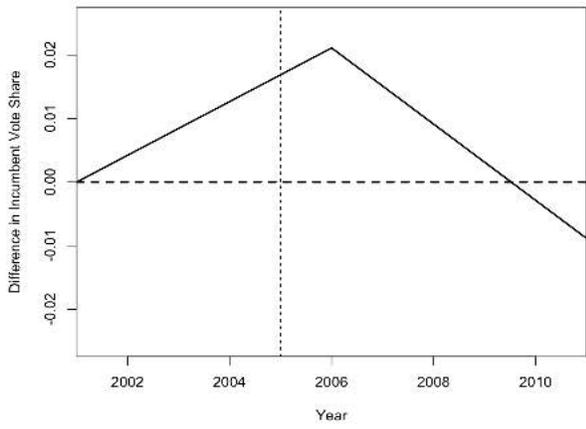
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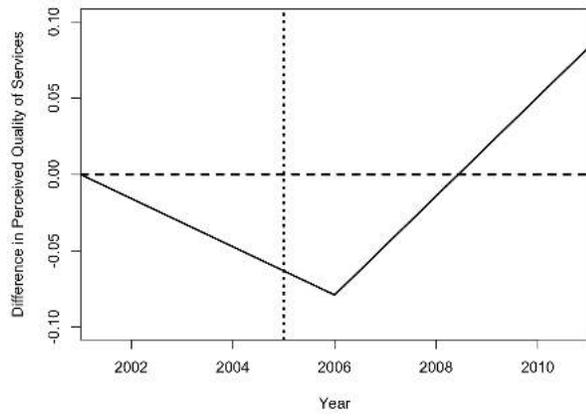
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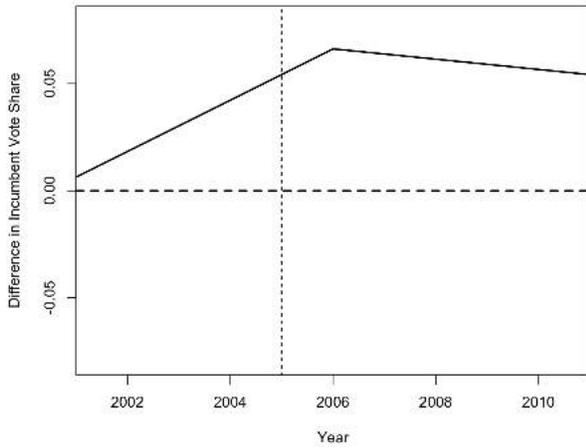
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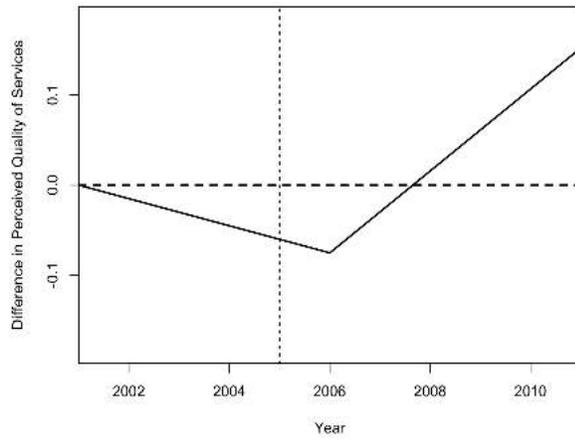
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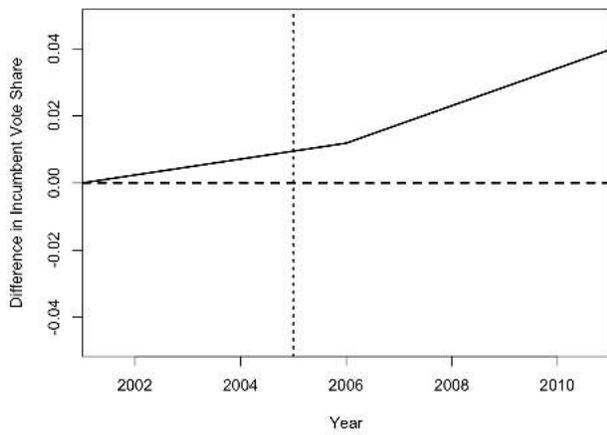
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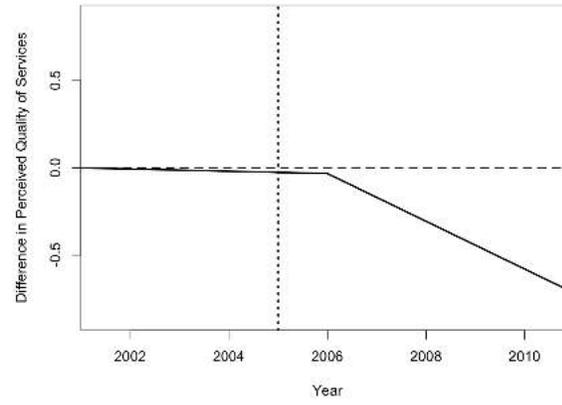
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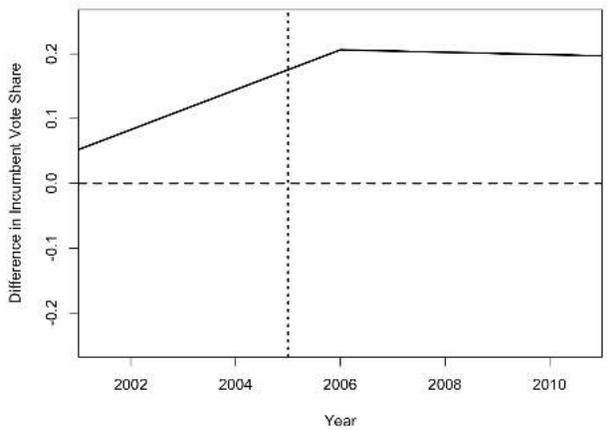
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**Kioga County Gaps: Treated - Synthetic**



**Nyabushozi County Gaps: Treated - Synthetic**



**Nyabushozi County Gaps: Treated - Synthetic**

