The London School of Economics and Political Science

Essays in Governance and Public Finance

Michael Mbate

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Declaration

I certify that the thesis I have presented for examination for the MPhil/PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

I warrant that this authorisation does not, to the best of my belief, infringe the rights of any third party.

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Abstract

This thesis constitutes three distinct by related papers that examine how electoral and legislative institutions shape public spending behaviour in Kenya. The first paper examines how power sharing - the inclusion of opposition ministers into the cabinet - affects political corruption and accountability through direct audits of misappropriation of public funds and the associated likelihood of facing parliamentary sanctions. Exploiting a difference-in-difference design to address the endogenous allocation of ministerial portfolios, I find that opposition ministers misappropriated more resources than incumbent ministers for political gain, given their constrains in engaging in alternative strategies of electoral manipulation. Further analysis suggests that power sharing undermined political accountability by inducing bias in sanctioning corrupt politicians. I find that co-partisanship between ministers and the head of the Public Accounts Committee significantly lowered disciplinary sanctions.

The second paper examines how political alignment between local and central government politicians affect the provision of local public goods and services. Using a regression discontinuity design on close elections, I find that aligned constituencies experienced a differential increase in the proportion and value of projects abandoned midway through their construction cycle (stalled) and non-existing (ghost) projects. Stalled and ghost projects increased disproportionately at the end of the electoral year, suggesting that accumulated rents were more likely to be diverted for electoral gain. Consistent with alignment weakening political accountability, aligned constituencies received fewer legislative sanctions relative to unaligned constituencies.

The third paper tests for public spending spillovers across local governments. Using an expenditure reform that led to a significant increase in public spending among several geographically proximate counties, I examine how counties sharing a geographical boundary reacted to the policy. Employing a spatial difference-in-difference design, I find evidence of free riding in border counties, relative to observationally similar counties located further away. Disaggregated data reveals that spillovers enhanced clientelistic political exchanges. Border counties shifted spending towards targeted goods, and these effects were stronger before elections and for hegemonic incumbents. Further results from micro-level surveys suggest that free riding was welfare reducing.

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I dedicate this thesis to my family

Contents

List of Tables

List of Figures

Chapter 1

Introduction

An extensive body of literature in both economics and political science argues that the quality of institutions matters for economic growth and development (Rodrik 2000; Acemoglu and Robinson, 2012; p. 390). But which are these institutions? And through what channels do they affect social-economic and political outcomes? This thesis presents an attempt to unpack this complex question. Although institutions vary in terms of their type, size and scope, the role played by executive, legislative and electoral institutions has received renewed attention in recent years. There is significant empirical literature showing that these institutions can explain differences in these outcomes across and within countries (Fosu, 2013; Besley and Persson, 2019). As such, their importance cannot be under-estimated.

This thesis builds on this premise. The three chapters presented herein, while divergent in terms of their theoretical underpinnings, have the overarching theme of assessing how executive, legislative and electoral institutions can explain differences in institutional performance in Kenya. The first chapter combines theories of cabinet and legislative politics to explain variations in institutional outcomes related to political corruption and parliamentary sanctions in the context of power sharing agreements. The second chapter combines theories of redistributive and legislative politics to examine how partisan networks between politicians at different levels of a government shape the incentives to provide local public services. The third chapter is grounded on theories of fiscal decentralization and attempts to examine sub-national variations in public spending and welfare outcomes due to electoral institutions.

From an empirical perspective, the three chapters aim at providing robust evidence through their emphasis on causal inference. The research design in each of the chapters combines highly disaggregated data with a quasi-experimental technique with the aim of (1) analysing how variations in politician's behaviour can be attributed to either of these three forms of institutions, (2) understanding the mechanisms through which such effects occur, and (3) assessing their welfare implications. While these issues may at first seem very simplistic, this thesis documents their important implications for both theoretical and empirical approaches to understanding variations in institutional performance.

The rest of the chapter is organized as follows. Section 1.1 provides a short overview of the broad theoretical issues that underpin the three chapters while section 1.2 discuses some of the main cross-cutting themes. Section 1.3 highlights some of the main methodological challenges that constrain the study of institutional performance and how each of the chapters addresss them while section 1.4 concludes by highlighting how each of the chapters ties to the overarching conceptual framework.

1.1 Theoretical Framework

This thesis is broadly situated in the theories of corruption, distributive politics and democratic representation. This section provides a brief discussion of the motivating theoretical concepts that are common across the three chapters. It is not intended to be comprehensive, given the distinct nature of the research questions investigated in each chapter; rather, it aims to reconcile the different approaches undertaken and then show how they are inter-linked at the theoretical level. It adopts a theoretical framework proposed by Golden and Min (2013) and examines political behaviour through the lenses of democratic accountability and responsiveness. This approach has the advantage of providing a systematic analysis of the political factors driving allocative decisions as well as identifying their redistributive consequences. It is also well suited to adjudicating competing theories.

Consistent with the theories of political agency, this thesis begins with the assumption that politicians are self-interested and motivated to retain political power. As such, political behaviour is analysed in terms of: (1) who benefits from public resources, (2) when do such benefits occur, and (3) what are the resulting welfare or accountability implications. The question of who benefits from public resources has been the underlying motivation behind the literature on corruption, rent seeking and political favoritism (Rose-Ackerman, 1983; Stokes, 2011; Hodler and Raschky, 2014; Luca et al. 2018). This line of enquiry seeks to identify the prevalence of political corruption and whether misappropriated resources are allocated disproportionately to different sub-groups of the population. Although an extensive body of empirical evidence has shown evidence in support of bias in the allocation of public resources, these allocative decisions have been found to differ depending on the prevailing nature of the institutions and politician's strategies (Jablonski 2014; Burgess et al. 2015; Ejdemyr et al. 2018; Harris and Posner, 2019). This thesis expands this literature in the following ways. The first chapter builds on a typology by Schedler (2002) and Cheeseman and Klass (2018) and examines how differences in the extent to which politicians can manipulate future electoral outcomes shape their incentives to engage in corruptive behaviour while in office. The chapter argues that politicians and political parties are more likely to be the beneficiaries of the misappropriated funds as a strategy to accumulate public resources to lengthen their political careers by financing electoral campaigns. The second chapter argues that alignment with the central government can provide incentives to divert public resources in favour of clientelistic and patronage spending through the non-completion of development projects while the third paper examines the spending behaviour of local politicians and shows evidence of political favoritism in the allocation of public spending at the local level, with a bias towards clientelistic spending.

The second overarching theoretical proposition relates to the literature on political business cycles that aims at shedding light on how redistributive decisions are influenced by electoral incentives (Nordhaus, 1975). The main question in this line of work is whether the timing of allocations is associated with the electoral cycle. If the intention of politicians is to improve their odds of re-election and retain power, then these theories posit that the allocation of public spending is likely to be high prior to elections as a strategic behaviour to influence electoral outcomes. Although a wide range of empirical studies have tested this prediction, the evidence remains largely inconclusive and varies depending on the unit of analysis (cross-country or subnational analysis) as well as the types of spending examined (Drazen and Eslava, 2005; Cole, 2009; Repetto, 2017). This thesis speaks to this literature in the following ways. The first chapter exploits the variation in the levels of corruption at the ministerial level and reveals that corruption increases in the run up to elections. The second chapter examines how the timing of elections affects the completion rates of local development projects. The analysis shows significant variations across the electoral cycle, with the number of stalled and ghost projects spiking towards the end of the electoral period. The third chapter uses quarterly data to show how proximity to elections influences the provision of public goods and services across local governments. Overall, the results provide substantial evidence that the timing of elections - which is pre-determined - does influence redistributive patterns.

Third, with respect to redistributive politics as a response to voter preferences, this thesis attempts to shed light on the welfare consequences of allocative decisions that are highly motivated by political factors (Golden and Min, 2013). It does so by investigating whether allocative decisions are welfare enhancing or reducing. From a theoretical perspective, if spending decisions are not consistent with welfare maximization, then they are assumed to be captured by special interest groups, and thus not reflective of the preferences of the median voter (Przeworski et al. 1999). The responsiveness approach has however received less empirical attention due to lack of data on welfare outcomes. In addition, estimating the link between redistributive decisions and welfare outcomes requires imposing assumptions about voters' welfare in the absence of such allocations (Golden and Min, 2013). This thesis extends this body of literature in the following ways. The first chapter provides evidence suggesting that ministerial resources earmarked for public goods provision are diverted to fund targeted goods during electoral campaigns, an aspect that is inconsistent with improving overall welfare. The second chapter argues that political networks might be costly and reduce the quality of locally provided public services, that are vital for citizen's welfare. In addition, these chapters argue partisan networks between legislative institutions and politicians are welfare reducing, as sanction outcomes are aligned with the strategic interest of politicians rather than citizens. The third chapter relies on a micro-level survey and shows that reduction in spending negatively affects household's welfare. Overall, all three chapters provide evidence of the distortionary effects of politically-motivated allocations on different indicators of welfare.

1.2 Cross-cutting conceptual issues

In addition to the above theoretical underpinnings, there are several conceptual themes that are common across the three chapters. First, the analytical framework adopted is grounded on the notion that there is significant variation in institutional performance within a country that is driven by political factors. The existing literature on political institutions has focused largely on explaining differences in institutional performance across countries, with recent studies on redistributive politics beginning to focus on within country analysis, especially at the ministerial-level (Williams, 2017; Rasul and Rogger, 2018). While useful, studies based on cross-country analysis typically assume that political variables that vary across countries do not vary within a country. As such, this strand of the literature is unable to provide any compelling theoretical or empirical insights on why, and under what conditions, some institutions or politicians perform better than others. Collectively, the chapters begin by documenting significant within-country differences in institutional performance across different levels of governance. This approach emphasis the importance of conducting a one-country small-N analysis to uncover interesting dynamics that are difficult to capture in cross-country settings.

The second conceptual issue that emanates from the first and second chapters is the role of legislative inefficiencies in explaining differences in institutional performance at both the national and sub-national levels. These inefficiencies seem to arise due to the lack of separation of powers between institutions of accountability and other organs of the government. As such, political connections reduce the likelihood of imposing disciplinary sanctions against co-partisans and generate incentives for politicians to either misappropriate public funds or under provide public services. Grounded on theories of horizontal accountability (O'Donnell 1998; Schillemans, 2008; Lindberg, 2010) and the literature on legislative oversight (Ström et al. 2010; Martin and Vanberg, 2004; Thies, 2001; Bäck et al. 2019), these chapters advance the premise that the organizational form of parliamentary committees can have significant implications for the extent to which they can effectively enhance checks and balances across different government institutions. Taken together, these chapters argue that partisan links between politicians and the chairperson of parliamentary committees can impinge on the principles of separation of powers that are crucial for the effective functioning of institutions of accountability.

The third conceptual issue that underlies the three chapters is the role of clientelism in shaping incumbents' behaviour while in public office. Prominent theories of clientelism and patronage (for instance, Stokes, 2011) highlight the prevalence of such strategies across developing countries as channels through which politicians attempt to gain and retain political power. Although the effectiveness of such strategies is highly contested and it is argued that they depend on several factors such as the nature of the electoral institution and voter sophistication (Baldwin, 2013), there are some studies that document significant electoral returns, especially in the Kenyan context (Kramon, 2016). The three chapters suggest that variations in institutional performance can also be attributed to the extent to which politicians make allocative decisions in return for electoral support. Each chapter uses highly disaggregated data on different elements of public spending to quantify the magnitude of resources that are diverted from public goods provision to targeted spending. Consistent with the literature on political clientelism (Wantchekon, 2003; Bardhan and Mookherjee, 2018), the three chapters argue that in contexts where patronage and targeted spending are crucial for political survival, politicians have incentives to use their discretionary powers to either misappropriate public funds for political gain or engage in clientelistic spending for political survival.

1.3 Methodological Issues

A novelty of this thesis also lies in its attempt to address several methodological challenges that have constrained the empirical analysis on the effects of political institutions on accountability. These include the endogeneity of political institutions, the lack of (disaggregated) data, and difficulties in identifying plausible exogeneous variation within political institutions.

1.3.1 Endogeneity of institutions

One of the most important challenges in evaluating institutional performance relates to the endogeneity of political institutions. The establishment and working procedures of such institutions are often complex and driven by a combination of historical, political and social economic factors, most of which are likely to determine their efficiency and outcomes (Aghion et al. 2004; Eicher and Leukert, 2009). As such, it is often difficult to clearly tease out any causal mechanisms, as unobserved factors - that determine the type of institutions to be adopted in a country and affect political outcomes - are likely to differ between different political units. While the ideal experiment requires a clear assignment mechanism (or randomization) where different government institutions are randomly allocated to different political agents, this is often not possible in the political arena (Dunning, 2012, p.7). This thesis acknowledges the effects of such confounding factors and relies on innovative institutional rules to generate plausible exogeneous variation under relatively weak and testable assumptions. The first chapter takes advantage of the 2008 power sharing agreement to implement a difference-in-difference design that addresses selection bias in the allocation of ministerial portfolios across political parties. The second chapter exploits plausible variations in close elections in a regression discontinuity framework to address constituency or politician specific factors that are correlated with both alignment and project outcomes. The third chapter accounts for the endogeneity of spending reforms by relying on an expenditure reform to estimate its spillover effects across border counties compared to those located far away using a spatial difference-in-difference technique.

1.3.2 Lack of appropriate data

A second methodological challenge relates to the absence or limited availability of data on institutional outcomes, especially on indicators of governance. This is often a severe problem in the African context, where such data is not systematically available or is difficult to access. As a result, most of the empirical studies examining the performance of institutions have either relied on survey data - to understand citizens' trust in parliamentary institutions - or qualitative analysis using focus group surveys (Holmberg et al. 2017). While such approaches are evidently important and useful, they are designed neither to quantify the magnitude of the effects under examination nor to assess the channels through which different facets of institutions alter the behaviour of political agents. In addition, the results emanating from such survey-based studies often encounter inferential challenges such as social desirability bias, recall bias or limitations in sample coverage and representation (Olken, 2007).

The lack of data on institutional outcomes has a profound effect on understanding the role of legislative institutions in promoting political accountability. For instance, empirical studies in the context of developing countries have relied on a limited number of legislative outcomes such as the number of votes of no-confidence passed in parliament or the number of questions directed at politicians from members of a different political party (Martin and Whitaker, 2019). Relatedly, analysing the performance of power sharing institutions is often challenging as it necessitates examining differences in outcomes across government institutions, before and after they have been split across different political parties. The lack of appropriate data also poses challenges in analysing outcomes related to public goods provision. A common approach in the literature hinges on relying on examining budgetary indicators such as the share of public spending on public goods and services (Remmer, 2007; Litschig and Morrison, 2013). While intuitive as an indicator of political choice in the allocation of resources, an emerging body of literature points to a significant pitfall of such approaches, especially due to evidence of huge discrepancies between public spending and outcomes (Reinikka and Svensson, 2004; Olken, 2007). Such studies argue that spending does not uniformly map onto public service provision. In addition, such spending choices are often analysed independent of their effects on indicators of households' welfare.

The empirical analysis in this thesis offers an opportunity to circumvent some of these pitfalls by using innovative micro level data. The first chapter follows an approach by Ferraz and Finan (2008, 2011) and proxies institutional performance using corruption data derived from independent audit reports. The second chapter uses highly disaggregated data on the completion status of local development projects to capture the quality of public services while the third chapter combines spending data with household-level surveys to examine the link between spending patterns and direct measures of household living standards. In addition, this chapter introduces novel measures of accessibility costs using spatial econometric techniques to examine how geographical factors shape spending decisions.

1.3.3 Lack of institutional variation

The third empirical challenge in uncovering causal effects is the lack of exogenous variation among institutions within the same country. In most countries, institutional rules are imposed uniformly across all political units, an aspect that complicates the empirical analysis due to the lack of well-defined treated and control units. For instance, legislative committees are often under the control of one party during an entire electoral term, which creates difficulties in comparing differences in disciplinary outcomes within the same committee and electoral period. The first and second chapters provide an innovative approach to circumvent this problem. By exploiting a constitutional clause that led to a switch in the control of an influential legislative committee mid-way through the electoral term, these chapters provide a systematic analysis of differences in institutional outcomes that can be directly attributed to political links, while holding constant multiple nationwide factors that might confound the comparison.

1.4 The three chapters on within-country variations in institutional performance

The three chapters presented in this thesis attempt to address the above theoretical and empirical challenges by examining variations in political performance, using Kenya as a case study. The methodology adopted in this thesis follows the one-country small-N approach, an analytical framework that combines a qualitative analysis of Kenya's historical, economic and institutional attributes with a rigorous quantitative analysis. Such an approach is useful in controlling for unobserved confounding factors such as differences in cultural settings, colonial legacy, political entrepreneurship and external shocks that are either difficult to quantify or to control for quantitatively. The empirical analysis in each of the chapters is derived from original datasets that are hand-coded from official sources, and a wide range of robustness checks are applied to address potential confounding factors.

Each chapter provides a detailed description of the specificities of the Kenyan context. The existence of these specificities should therefore be taken into account when attempting to generalize the findings and arguments presented. While this thesis does not claim to address all the factors that shape differences in institutional outcomes, it aims to use an inter disciplinary approach - combining elements of political science, African politics and econometrics - to provide a set of theoretical and empirical tools that can form a basis to shed light on the role of legislative and electoral institutions in influencing the patterns of public spending and public goods provision in the context of developing countries, and African countries in particular.

Each chapter attempts to;

(1) Provide a descriptive analysis of the within-country variation in institutional performance;
(2) Use econometric techniques to shed light on the underlying channels that can explain such variations;
(3) Derive policy implications.

The first chapter, 'Power Sharing and Elite Capture: Evidence from Kenya' exploits variations in the performance of cabinet-level institutions by using data on misappropriated funds across incumbent and opposition governed ministries. Over the last decades, power sharing agreements have become a prominent tool for conflict resolution in sub-Saharan Africa, and while empirical studies have provided evidence of their effect on achieving peace, their effect on democratization remains largely unexplored (Drnovsky and Mochtak, 2018). In addition, although classical theories provide a useful theoretical framework to evaluate political transitions in the context of coalition governments (Lijphart, 1977), there is a significant variation in terms of their efficacy, and it remains unclear whether such institutions can even be considered democratic (Cole, 2013). In contrast to previous studies, this chapter attempts to examine the relationship between power sharing and governance outcomes. The empirical results document significant variations across ministries in the level of corruption depending on the strategies that incumbent politicians can use to manipulate future electoral outcomes (Schedler, 2002). This variation is substantial, and it does not seem to be driven by specific characteristics of the ministries or political parties. Further analysis conducted by matching each act of misappropriated funds with its disciplinary outcomes from the legislature documents that power sharing among parliamentary committees has the potential to align disciplinary outcomes with the strategic interests of political parties. Overall, the results point to the negative effects of power sharing on governance by enhancing corruption and political impunity.

In relation to the conceptual issues discussed above, this chapter aims to

- Document a significant variation in institutional performance by focusing on government ministries;

- Highlight the role of legislative inefficiencies by showing differences in the sanction outcomes based on party affiliation between ministers and the chairperson of the PAC;
- Provide evidence of the underlying mechanism by documenting that re-election concerns generate incentives to misappropriate public funds for political campaigns;
- Address the endogeneity in the allocation of ministerial positions by exploiting the plausible exogenous variation induced by the power sharing agreement;
- Address the lack of variation in the governing of legislative institutions by relying on a constitutional clause that led to a switch in the chairperson of the PAC between the incumbent and opposition parties midway through the power sharing period;
- Circumvent the lack of data on institutional performance by using audit reports to measure corruption. To the best of my knowledge, this represents one of the first attempts to quantify corruption using audits at the ministerial level.

The second chapter, 'The Cost of Political Alignment on the Quality of Public Services: Evidence from Kenya' adopts a different but complementary approach. Relying on an original database of around 39,000 projects implemented by local Members of Parliament (MP), it sets out to examine how political alignment between local and central government politicians affects the completion rate of development projects. From a theoretical perspective, political alignment has been considered beneficial, as it eases local politicians' budgetary constraints, providing an opportunity for higher programmatic spending (Stokes et al. 2013; Callen et al. 2018). As such, voters electing politicians from the central government are assumed to be better off (Brollo and Nannicini, 2012; Burgess et al. 2015). However, by relying on a quasi-experimental design based on a regression discontinuity design, the empirical results show a higher share of non-completed projects in aligned constituencies, despite them having similar (un)observable characteristics with unaligned constituencies. I document that one key channel through which alignment affects project non-completion is by reducing the likelihood of facing legislative sanctions. This finding is consistent with several studies that provide evidence on the role of partisanship in constraining the effectiveness of institutions of accountability (Lindberg, 2010). An analysis of the annual distribution of project non-completion suggests that the resources diverted from public service provision by local politicians are most likely to be channelled to clientelistic spending, especially in periods prior to elections.

This chapter complements the first one in two main ways. First, whereas the first chapter relies on institutional outcomes related to corruption, the second chapter focuses on outcomes related to public service delivery - the share of stalled and ghost projects - an objective measure of the quality of public services that is relevant to welfare. Second, while the first chapter focuses on the institutional outcomes at the cabinet level, this chapter is designed to assess outcomes at the constituency level. In both cases, the analysis shows that politicians at both the national and sub-national levels portray the same set of incentives in engaging in different forms of corruption and rent seeking for political gain.

In relation to the cross-cutting themes, this chapter aims to

- Provide evidence of a significant variation in institutional performance across constituencies that can be attributed to political factors such as partisan alignment between local and central government politicians;

- Highlight the role of legislative inefficiencies by documenting differentials in sanction outcomes based on political affiliation between politicians and the chairperson of the PAC;

- Consider the endogeneity in partisan alignment by exploiting the plausible exogenous variation inherent in close elections;

- Provide an innovative way of generating variation in legislative institutions by comparing the differences in sanction outcomes for the disclosed misuse of the public funds for constituencies that are just aligned and unaligned with the chairperson of the PAC;

- Circumvent the lack of data on institutional performance by using project-level data to study the completion rate of development projects.

The third chapter, 'Public Spending and Political Clientelism: Spillover Effects from an Expenditure Reform in Kenya' takes a step away from legislative institutions and focuses on how electoral incentives shape public spending patterns across local counties. In theory, expenditure reforms have been vital in pooling public spending across different local governments as a means of addressing common development needs. These reforms also increase allocative efficiency by capitalizing on economies of scale to finance costly public goods that individual local governments cannot provide due to limited resources and positive externalities. However, most of the empirical studies have focused on evaluating their direct effects, and to the extent that they can generate benefits or costs to neighbouring areas, such reforms have the potential to affect public spending over a large geographical area (Neumart and Simpson, 2015). The analysis documents strategic behaviour in the allocation of public spending, where local politicians' own spending decisions are informed by those of their neighbours. This chapter also shows that politicians can substitute public goods provision for targeted spending, and these politically-induced spending patterns turn out to have a negative effect on households' welfare.

This chapter complements the first two chapters in several ways. First, by focusing on electoral institutions, it points to the broader effects of different types of institutions on political behaviour. Second, it reinforces the notion that politicians can strategically coordinate along partisan lines to further their political careers. Third, it documents that variations in institutional performance can also portray a spatial dimension.

In relation to the cross-cutting themes, this chapter

- Provides evidence of significant variations in public spending across local counties due to political factors such as the spatial distribution of political power;
- Highlights the role of electoral institutions in providing incentives for local politicians to substitute public goods provision with clientelistic goods.
- Addresses the endogeneity of spending policies by relying on an expenditure reform;
- Provides an innovative way of generating treatment and control counties by comparing the effects of the reform on border counties to similar counties located further away using a spatial difference-in-difference design;
- Provides a link between public spending and welfare outcomes by examining the effects of public spending on various indicators of households' access and quality of public goods and services.

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Chapter 2

Power Sharing and Elite Capture: Evidence from Kenya

Abstract

This paper examines how power sharing - the inclusion of opposition ministers in the cabinet - affects political corruption through direct audits of the misappropriation of public funds and the associated likelihood of facing parliamentary sanctions. It relies on a unique power sharing agreement in Kenya that split cabinet positions between the incumbent and main opposition parties between 2008 and 2012. Exploiting a quasi-experimental design to address the endogenous allocation of ministerial positions, I find that opposition cabinet ministers misappropriated more resources than incumbent ministers, and this was a strategy to accumulate public resources for the subsequent elections. I further document that power sharing reduced political accountability. Using data that matches acts of misappropriation with sanction outcomes, I find that co-partisanship between ministers and parliamentary institutions significantly lowered their willingness to sanction corruptive behaviour. Overall, these results suggest that power sharing might undermine political accountability, which is central to democratic transition.

Keywords: power sharing, political corruption, legislative sanctions, audits.
JEL Classification: D72, D73, H11, H83, P16.

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2.1 Introduction

Power sharing agreements between parties are gaining increasing popularity across the world as a tool for consolidating political power. Yet, evidence on how the splitting of ministerial and legislative institutions between parties affects institutional outcomes such as political corruption and accountability remains scarce. One line of argument is that opposition parties have strong incentives to misappropriate public funds for political gain, as they have less leverage on alternative strategies that they can rely on to manipulate future electoral outcomes while in public office (Schedler, 2002; Scheiner, 2005; Cheeseman and Klaas, 2018). An alternative argument is that the opposition has less incentive to be corrupt due to the need to signal competence to voters, as well as inadequate experience and a lack of networks necessary to misappropriate ministerial resources (Bratton and Logan, 2015; Plescia and Kritzinger, 2017). On the empirical front, there has been limited progress in reconciling this debate due to the challenges in detecting and measuring corruption (Treisman, 2000; Sequeira, 2012; Zitzewitz, 2012) as well as the endogenous allocation of cabinet positions between political parties (Shvetsova, 2003; Humphreys, 2008; Goodhart, 2013). This paper attempts to fill this gap. I first estimate the effect of power sharing on political corruption through direct audits of the misappropriation of ministerial funds and the associated likelihood of facing legislative sanctions. I then provide suggestive evidence on how re-election concerns can generate incentives for politicians to misappropriate public resources to finance future electoral campaigns.

In theory, power sharing should improve governance outcomes through the distribution of power across diverse actors (Kapstein 2009; Bormann et al. 2019). A growing consensus in the cabinet politics literature is that power sharing interacts with existing institutions through three distinct but inter-related channels. First, by broadening representation, it enhances majority-based decisions that reflect national rather than special interests (Oyugi, 2006; Francois et al. 2015). Second, power sharing should improve political accountability by providing a platform where political parties exercise greater scrutiny over each other's behaviour and policy outcomes (Martin and Vanberg, 2004; Huber and Martinez-Gallardo, 2008; Thies, 2001). Third, differences in political ideology between political parties should enhance accountability through the establishment of oversight institutions (Ström et al, 2010; Lipsmeyer and Pierce, 2011). Yet, the democratic implications of such institutions, especially in terms of governance outcomes, is not self-evident.

This paper examines the institutional effect of power sharing in the Kenyan context. The source of variation in the allocation of ministerial positions is the result of a formal power sharing agreement between two political parties. This agreement - which was brokered by the United Nations - was aimed at ending the post-electoral crisis in 2008 and outlined how cabinet institutions would be shared between the incumbent and the main opposition parties for the period 2008-2012. This agreement had three key features that are crucial for the identification strategy. First, it entailed an equal split of the 40 ministerial positions between the two parties. It is thus likely that this differential in the governance structure of ministries created an opportunity for politicians facing different political incentives to misappropriate public resources. Second, the agreement led to a balanced division of the ministerial portfolios in terms of key budgetary indicators that are associated with the likelihood of engaging in corruption. Third, the agreement was upheld by both parties, suggesting that opportunities for corruption might have remained constant across ministries over this period.

I conduct the analysis in four steps. First, to overcome the problem of detecting corruption, I use independent audit reports from the Office of the Auditor General (OAG) to quantify the total amount of misappropriated funds in each ministry. Consistent with the literature, I also differentiate between acts of active corruption, where politicians are likely to be the direct beneficiaries, and passive corruption, which is associated with incompetency but does not involve an actual loss of public funds from government accounts (Bandiera et al. 2009). During the power sharing period, I find that approximately Ksh, 159 billion (USD, 1.5 billion) was misappropriated, a substantial amount equivalent to 12 percent of the total budgetary resources, and 24 percent of the ministerial budget for development programmes.

Second, I examine the effect of power sharing on political corruption by comparing misappropriated funds in opposition and incumbent governed ministries before and after 2008. Empirically, estimating this relationship is challenging as the allocation of ministerial positions is not random but rather occurs through political negotiations and bargaining (Bassi, 2013; Goodhart, 2013). In the absence of a plausible source of exogenous variation, unobserved party or ministry-level characteristics could drive any correlation between the allocation process and corruption. To address this concern, I rely on a difference-in-difference design. Several ministries did not experience a change in the political party that had governed them since 2002, making them a plausible control for those that changed in 2008 and were governed by the opposition. I find that during the power sharing period, corruption was approximately 28 percent higher in opposition ministries compared to incumbent-governed ministries. I interpret this result in the context of a simple model of power sharing where corruption becomes a salient strategy for politicians who are constrained from engaging in other forms of electoral manipulation.

Third, I examine the underlying mechanism. Theoretically, there are three potential reasons why the opposition would misappropriate public funds. First, the process of forming the power sharing government might have led to a difference in which types of politicians became ministers, especially if corrupt politicians from the opposition self-selected into the pool of candidates to be nominated for ministerial positions (Fehrler et al. 2018). Second, corruption might have occurred due to the need to divert public resources for political gain. Given that entry into the cabinet provides an opportunity to control significant public resources, then corruption would be higher for politicians with re-election concerns. Third, corruption could have been driven by differences in bureaucratic quality across ministries (Borges et al. 2017). Assessing these mechanisms, I find consistent evidence of diversion of resources to finance electoral activities. The estimates show that first-term ministers - who are argued to have a higher re-election incentives were associated with around 53 percent of the total misappropriated funds, and 20 percent of all forms of active corruption. Further evidence obtained from leaked audio conversations suggest that these resources were diverted to finance campaign activities, and politicians as well as political parties were more likely to be the beneficiaries of the funds (Githongo, 2005; Mwangi, 2008).

Finally, I take advantage of the distinct institutional setting in Kenya to assess how power sharing among legislative institutions affects the likelihood of holding politicians accountable. In theory, the associated costs of corruption, such as legislative or electoral institutions, should constrain politicians from engaging in corruption (Ferraz and Finan, 2008; Berliner and Wehner, 2019). I focus on the Public Accounts Committee (PAC), the only institution in Kenya that is mandated to sanction corrupt ministers based on the audits. I exploit a switch in the governing of the PAC from the incumbent to the opposition party that occurred midway through the power sharing period, aimed at sharing the governing of the committee across both parties. Between 2008 and 2010, the chairperson of the PAC was affiliated with the incumbent party and the switch in 2010 led to a turnover to an opposition-affiliated chairperson. The results show that power sharing enhanced systematic bias in sanctioning. The estimates show that the PAC was significantly less likely to sanction politicians from its own party.

Overall, this paper highlights the detrimental effects of power sharing institutions through two key channels: increasing corruption and weakening the oversight mandate of legislative institutions. In many contexts, parties included in such arrangements have the incentives to lengthen their political careers, but significantly differ in term of the strategies they can employ. This may in turn increase the salience of engaging in corruption, given the constrained faced in relying on alternative means of electoral manipulation that requires co-opting state and electoral institutions. In addition, given that power sharing agreements are restricted to a small group of political elites, this can also generate incentives to design such arrangements in a manner than corrupt politicians can circumvent disciplinary sanctions. This may in turn undermine the principle of inclusive power sharing, which is central to political stability and democratic transition.

The validity of the identification strategy relies on four key assumptions. First, when comparing corruption across ministries, I provide evidence in support of the parallel trend assumption by showing that the allocation of ministerial portfolios in 2008 was exogenous to the prevailing levels of corruption. Second, when measuring corruption using government-led audits, I argue that the auditors do not have incentives to punish the opposition. A text analysis of the audits shows no systematic differences in reporting across ministries, while the audit findings do not differ along important political characteristics, such as whether they were conducted during the electoral year or whether ministers were co-ethnic with the Auditor General. Third, I address concerns that incumbent politicians are better at hiding corruption due to previous experiences with auditors. Finally, I contend that the opportunities to engage in corruption do not differ across ministries by showing that misappropriated funds in opposition ministries are uncorrelated with several budgetary indicators such as public expenditure or budget size.

This paper makes four contributions. First, the results relate to the literature on the institutional effects of power sharing arrangements. Recent studies have examined how such institutions are established (Oyugi, 2006; Francois et al. 2015), their duration (Bowler et al. 2016) and the distribution of positions among political parties (Laver and Benoit, 2015; Bäck et al. 2016). By contrast, I examine how power sharing affects institutional outcomes. By exploiting within the party variation in the governance of ministerial and legislative institutions, I provide the most direct evidence on the cost of power sharing by documenting how the inclusion of political elites in the government through informal bargaining undermines political accountability. In addition, contrary to studies that examine the overall performance of power sharing institutions (Debus et al. 2014; Bäck et al. 2019), I present a conceptual framework that disentangles individual party performance within a coalition to show how differences in the capacity of politicians to engage in different forms of electoral manipulation strategies can explain their behaviour while in office (Schedler, 2002; Cheeseman and Klass, 2018).

Second, the paper contributes to an established literature on whether power sharing improves or worsens the quality of governance (Bäck et al. 2017; Bäck et al. 2019). Existing studies suggest that power sharing can enhance political accountability through several oversight mechanisms such as the appointment of junior ministers (Greene and Jensen, 2016; Lipsmeyer and Pierce, 2011), the establishment of coalition agreements (Bowler et al. 2016: Klüver and Bäck, 2019), legislative sub-committees (Ström et al, 2010) as well as forums for parliamentary questioning (Höhmann and Sieberer, 2019; Martin and Whitaker, 2019). By directly matching each act of corruption in the audits with its associated sanction by the PAC, I examine the entire chain of public sector accountability to document how the splitting of legislative institutions among political parties reduces the likelihood of facing disciplinary sanctions for misappropriating public resources. By focusing on the organizational structure of legislative committees, I show that in the absence of adequate institutional checks that monitor the behaviour of coalition partners, partisan links between ministers and parliamentary committee members can reduce the likelihood of being sanctioned for misappropriating public resources.

Third, the paper contributes to the growing body of empirical studies that attempt to measure political corruption using independent audit reports (Ferraz and Finan, 2008, 2011; Larreguy et al. 2014). The detailed nature of the audit reports I rely on permits the construction of direct measures of corruption based on the actual amounts of unaccounted funds. Decomposing these measures also allows for an assessment of different forms and patterns of corruption over time. By focusing on the cabinet, I highlight the distinct nature of political corruption, which the sub-national studies that have dominated the corruption literature do not capture. In addition, relying on such measures improves on the traditional approach of deriving corruption indicators from perceptions or media reports, which are likely to be biased by subjectivity and measurement errors (Olken, 2009; Markwardt and Lessmann, 2010). In contrast to using cross-country approaches (Bagashka, 2014; Haass and Ottmann, 2017), I adopt a one-country small-N methodology to control for unobserved confounding factors that might affect both corruption and the formation of a power sharing agreement.

Fourth, I contribute to the literature on the institutionalization of politics in Africa, which to date has only considered determinants of parliamentary responsiveness such as term limits, parliamentary proceedings and the availability of adequate skills and resources (Wehner, 2003; Mehler, 2009). By focusing on the deliberations of an influential legislative committee, I demonstrate that, beyond formal institutional rules, the selection of committee members can significantly affect disciplinary outcomes. This finding adds to the literature documenting how the lack of separation of powers between the legislature and the executive hinders political accountability (Lindberg 2010; Pelizzo and Kinyondo, 2014; Golooba-Mutebi, 2016).

While the empirics focus on a unique agreement in Kenya, the findings might be relevant for a wider set of countries. Evidence of wasteful spending has been observed across power sharing institutions such as in Zimbabwe, Cote d'Ivoire and Burundi (Van de Walle, 2001). Similarly, power sharing has been argued to subvert institutional reforms that enhance political accountability in several countries such as Benin and Malawi (Cheeseman et al. 2018; Cheeseman and Tendi, 2010). However, these issues have been analysed separately and it is difficult to disentangle whether such outcomes are the result of including previously excluded parties in the government. This paper addresses this question in a more systematic manner.

The rest of the paper is organized as follows. Section 2 lays down the conceptual framework and an institutional overview of the power sharing agreement in Kenya. Section 3 presents data on the indicators of corruption and the research design. Section 4 discusses the empirical results while section 5 presents the robustness checks. Section 6 concludes.

2.2 Conceptual Framework

2.2.1 A Simple Model of Political Corruption in Power Sharing Institutions

In this paper, I employ a simple model of a consensual power sharing[2] agreement where positions in cabinet institutions are split across top representatives of political parties to examine

[2] While the definition of power sharing is highly contested and varies across political contexts (Binningsbø, 2013), this paper follows Drnovsky and Mochtak's (2018, p.2) definition of post-electoral pacts that include political opponents in a joint executive coalition government with a view to restoring peace and promoting democracy.

differences in the incentives to engage in political corruption (Lijphart, 2007). I consider an agreement between an incumbent party (defined as having been re-elected for a second term) and the main opposition party (defined as the runner-up party). Following a post-electoral crisis, the incumbent party has incentives to share power with the opposition to reduce the risk of civil or ethnic conflict. On the other hand, the opposition party's incentives to join the government arise from the gains of being in power, especially in terms of access to public resources. The incumbent party has a fixed term in office - due to direct elections - while the opposition's term is contingent on several factors, including the willingness of the incumbent party to commit to the agreement. Consistent with standard models of political agency, both parties have strong incentives to maximize the gains of being in office but differ in terms of the strategies that they can employ to lengthen their political careers (Schedler, 2002; Cheeseman and Klaas, 2018).

Theoretical and empirical evidence suggests that politicians have incentives to undermine the electoral process in order to retain power. To rig elections, politicians can engage in different strategies such as gerrymandering, repression, ballot stuffing, vote buying and election hacking (Cheeseman and Klaas, 2018). However, for these strategies to be effective, politicians often require co-opting bureaucrats and other state agencies that are involved in the electoral process, an aspect that varies significantly across incumbent and opposition parties within a power sharing agreement (Scheiner, 2005). In this section, I provide a conceptual framework that can account for differences in the levels of misappropriated funds between the incumbent and opposition party. I discuss and show empirical evidence in support of three key strategies that the incumbent party can capitalize on to give itself a significant head start even prior to elections. As such, this might reduce the incentives to engage in political corruption as a means of accumulating rent for political campaigns, and thus explain the salience of such strategy for the opposition party.

First, the incumbent party has the advantage of engaging in informal disenfranchisement (Schedler, 2002). Incumbent parties have long been associated with considerable influence in the selection and nomination of bureaucrats to key electoral institutions. In some contexts, the appointment and career concerns of bureaucrats depend on the central government, an aspect that aligns their incentives with those of the ruling party (Brierley, 2019). In the context of fragile democracies, the ruling party, which has special interest in the outcome of elections has the incentives to interfere with the Electoral Commission in order to instigate electoral fraud to gain political advantage over its competitors. Such fraud can take various forms, manifest in any stage of the electoral process and typically includes the manipulation of voter registry, the distribution of polling stations, the printing of ballot papers, or the suppression of voter registration (Cheeseman and Klaas, 2018). These options may not be readily available to the opposition, especially if they do not possess the constitutional mandate to appoint bureaucrats to state institutions (Mesfin, 2008). As in other contexts, elections in Kenya are administered by the Electoral Commission of Kenya (ECK). The ECK is chaired by 22 Commissioners, who are appointed by the president as per the constitution. There is evidence that these appointments are politically motivated. For instance, in the run-off to the 2007 elections, the president appointed 19 Commissionaires a year before the elections, and in direct violation of the Inter-Parliamentary Parties Group Agreement established in 1997, which calls for consultation with the opposition party (CRS, 2008: p.3). This evidence is also consistent the assertion that the Electoral Commission was 'long ago captured by the leadership of Kenya's ethnically driven political party oligarchs' and thus unable to hold any free and fair elections (Nyamwamu 2008: p.4).

Second, the incumbent party can resort to coercion and keep certain segments of the voters from engaging in the electoral process (Branch and Cheeseman, 2009; Carter and Hassan, 2019). The incumbent party, through direct or indirect means, can influence the behaviour of local government administrators or security agencies, including the military, that have both administrative responsibilities and coercive capacities to enhance its political goals. In fragile democracies, the military has 'been deeply involved in politics, sometimes preying on society rather than protecting it' (Kohn 2001:76). This reliance on the state apparatus such as the police or regional executives provides a strategic channel to suppress political rivals while reducing the likelihood of being detected at the national level. For instance, Hassan (2017) illustrates how the ruling party in Kenya strategically allocates police officers to different regions based on their electoral importance. By relying on local status apparatus, the incumbent party can influence electoral outcomes by harassing opposition supporters or denying political rivals campaign permits, or engage in electoral-day fraud such as voter intimidation (Rauschenbach and Paula, 2019).

Third, the incumbent party can engage in strategies to prevent voters from acquiring information and knowledge about the political process and prevent the opposition from disseminating campaign messages (Schedler, 2002). This is most likely to be the case when there are a limited number of media outlets, heavy control and regulation by government agencies or if the media is state-owned. This can generate electoral advantages to the incumbent party by constraining the opposition from the public sphere. Empirical evidence from Kenya demonstrates that the ruling party can indeed influence the public coverage of campaign and electoral activities. For instance, in the 2007 elections, there was evidence of coercion of radio stations to disproportionally focus on the incumbent party, where the incumbent party received a 76 percent share of news coverage compared to 13 percent for the opposition party (CRS, 2008, p. 2).

Conditional on misappropriating public funds, politicians may behave strategically to avoid being sanctioned. In most power sharing institutions, ministers are nominated by the president, an aspect that makes them circumvent electoral accountability (Cranenburgh, 2009). This in turn creates incentives to manipulate institutions of horizontal accountability to circumvent disciplinary sanctions. Theories of legislative behaviour provide insights on how power sharing can reduce the incentives to engage in corruption or by-pass accountability mechanisms (Ström et al. 2010; Martin and Vanberg, 2004). For instance, the establishment of junior ministers - who belong to another party than that of the cabinet minister - have been argued to be an effective means of monitoring whether cabinet ministers deviate from the collective preference of the coalition (Finke and Herbel, 2015). Second, legislative questions and interpellations that comprise regular forums where ministers are summoned to respond to queries from legislators can provide an opportunity to extract information regarding ministerial performance, and act as a deterrent tool against diverting from the coalition's collective interests (Ström et al. 2010; Rozenberg and Martin, 2011).

A third and important institutional feature that enhances legislative scrutiny consists of parliamentary committees, where the parliament can leverage on the skills and knowledge of legislators to collect and analyse ministerial performance, including technical issues and report to the parliament any evidence of foul play (Shaw, 1998; Ström et al. 2010). Although previous research has shown that parliamentary committees can enhance parliamentary oversight, their efficacy can vary significantly across different political and institutional contexts (Lipsmeyer and Pierce, 2011). For instance, Weingast and Marshall (1988) argue that parliamentary committees are only effective if committees are more powerful than the parties they are scrutinizing. Pukelis (2016) and Kim and Loewenberg (2005) argue that the mode of appointing the chairperson of a legislative committee is a key determinant of its effectiveness while Martin and Vanberg (2004) points out the importance of ideological differences between ministers and committee members in enhancing political accountability. These findings suggest the importance of understanding the conditions under which a parliamentary committee can be effective in keeping tabs on coalition members (Lipsmeyer and Pierce, 2011). From an empirical perspective, lack of sufficient data on the legislative process has constrained the analysis of parliamentary oversight, with most studies relying on a limited set of outcome indicators such as the number of hearings concluded, parliamentary summons issued, the number of questions targeted at ministers of a different party or the number of votes of no-confidence passed in the legislature (Dandoy, 2011; Martin and Whitaker, 2019). While the findings remain inconclusive, there is evidence that parliamentary committees can be captured by politicians (Krehbiel, 1991).

2.2.2 Empirical Setting: The Power Sharing Agreement

The empirical analysis focuses on the Kenya National Accord and Reconciliation Act 2008 to investigate how the inclusion of the opposition in the government affected political corruption and accountability. In December 2007, Kenya conducted a general election that was marked with electoral irregularities and discontent regarding the re-election of the incumbent party - the Party of National Unity (PNU) - for a second term. This triggered widespread post-electoral violence, ethnic tension and the destruction of property.[3] The international community, led by

[3] The estimated number of fatalities were 1200 people, with over 350,000 people being displaced, including 80,000 children under five years of age (Endoh and Mbao, 2016).

the United Nations, negotiated a power sharing deal in February 2008 between the PNU and the Orange Democratic Movement (ODM) - the main opposition party that claimed it had rightfully won the elections.[4] The agreement was aimed not only at ending the violence and addressing structural problems such as constitutional, legal and institutional reforms, but also at enhancing transparency and accountability and ending the culture of political impunity (Carvalho, 2013). Prior to 2008, the PNU had governed all 20 ministries, and the inclusion of the ODM led to the expansion of the cabinet to 40 ministries. This was partly aimed at ensuring a fair distribution of the ministerial portfolio depending on the relative parliamentary strength of each party.[5]

To account for the increase in the number of ministries in the difference in difference analysis, I first identify whether each of the 40 ministries (1) existing prior to 2008, (2) was newly created, or (3) was created from splitting an existing ministry. Of the 40 ministries, 14 ministries existed prior to 2008, 12 ministries were split from 6 existing ministries and 14 ministries were newly formed. Thus, in the empirical set-up, I present two sets of estimates. The first estimates focus only on the 14 ministries that existed prior to and during the power sharing period (restricted sample). Among these, 8 were governed by the opposition (treatment group) while 6 were retained by the incumbent (control group). The second set of estimates (full sample) is based on a set of 26 ministries (the 14 ministries that existed prior to 2008 and the 12 ministries that were created by split old ministries). In the full sample, each party governed half of the ministries.[6] Figure A1 in the appendix provides a description of the ministerial allocations.

An important feature of the agreement is that it provided quasi-random variation in the allocation of ministerial positions across both parties.[7] Several qualitative and quantitative aspects provide evidence in support of this assumption. First, there was a lengthy negotiation and consultation process between the parties, of around six weeks.[8] Second, the number of ministries was split equally between the two parties, to reflect each party's support across the country. Official statistics show that while the PNU had received a higher share of presidential votes, the ODM had the majority of the seats in parliament. The PNU presidential candidate received 46.4 percent of the total votes (4, 578, 034 votes) compared to 44.1 percent (4,352,860 votes) for the ODM candidate. However, the PNU legislators comprised 37 percent of the parliament compared to 48 percent for the ODM. Third, the agreement was legally binding and would only be dissolved if both parties agreed in writing or if one partly withdrew from the coalition (GoK, 2008, p.8). Fourth, the opposition publicly applauded the agreement, stating that, 'We have opened a new chapter in our history, from the era of confrontation to the

[4] Schreiber (2016) provides an event based analysis of the negotiation process.
[5] Three key positions were also created; the prime minister as the head of official government business (and allocated to the ODM) and two deputy prime minister positions (one for each party).
[6] For instance, the Ministry of Livestock and Fisheries was split into two: the Ministry of Livestock and the Ministry of Fisheries.
[7] This differs from other settings, such as in Zimbabwe, where the incumbent ZANU-PF party retained the most influential cabinet positions (Aeby, 2018).
[8] In January 2008, there was an unsuccessful attempt by the African Union to spearhead the negotiation process as it was perceived to be unable to broker a genuine deal (Carvalho, 2013).

beginning of cooperation' (The Independent, 2008).[9]

To provide quantitative evidence in support of the equitable allocation of ministerial positions, I first assess differences in ministry-level characteristics for PNU and ODM governed ministries. The results are reported in Table 2.1. Column (1) presents the mean for opposition ministries while column (2) presents the mean for incumbent ministries. The results of the difference in the means for a small sample are reported in column (3) while in parenthesis are the associated p-values.

Panel A of Table 2.1 presents ministry-level characteristics measured in 2008 and the results show that, on average, the two sets of ministries were similar with respect to their size (proxied by the number of public employees) and influence/status (proxied by budgetary indicators such as allocated revenue and total public expenditure). Second, the individual level data on politicians' characteristics is balanced across both sets of ministries. In panel B, the results show that there are insignificant differences across ministries based on ministers' age, years of education and gender, indicators that are also highly correlated with political ability and competence (Brollo et al. 2013; Bo et al. 2017). Third, using data on the 2007 general elections, there is no evidence of imbalances in electoral outcomes at either the individual or party level. The results in panel C show that electoral characteristics such as incumbency rates, and ministers' margin of victory are not significantly different at the 5 percent level. Overall, the results present evidence of a balance in important political and economic indicators and alleviates endogeneity concerns regarding selection effects in the allocation of ministerial portfolios across political parties.

Finally, and crucially for the identification strategy, the allocation of the ministerial positions was not driven by the level of corruption in ministries prior to the power sharing agreement. Figure 2.1 plots the trends in the overall level of corruption between incumbent and opposition governed ministries prior to 2008, using annual observations for 2004 to 2007 for both the restricted and full samples. The results suggest that the opposition was not allocated ministries that were more likely to be corrupt.

2.2.3 Ministerial Organization

Each ministry in Kenya is headed by a minister who is legally mandated to take charge of the overall management of all funds under the ministry's jurisdiction. Ministers are also members of parliament and do not face term limits, enjoying varying levels of incumbency advantage (Opalo, 2017). Their roles and responsibilities are outlined in the Public Officer Ethics Act 2003. Although the constitution empowers them to designate Accounting Officers - often Permanent Secretaries - for the daily management of funds, the separation of financial responsibility is often not clear in practice. As a result, both ministers and Permanent Secretaries are held accountable, and often get summoned by parliamentary committees (Akech, 2011).

[9] https://www.independent.co.uk/news/world/africa/kenya-rivals-sign-power-sharing-deal-788856.html

Ministers have often been associated with corruption, either in the form of personal enrichment or diverting public funds to political parties (Bachelard, 2010). They are often expected to make personal contributions to development projects within their constituencies, as well as using their influence to allocate job opportunities to party supporters. Engaging in corruption often involves collusion with the bureaucracy, or bureaucrats behaving at the discretion of politicians (Brierley, 2019), and there is evidence that ministers in Kenya are not only corrupt but often co-opt junior officials (Akech, 2011).

2.2.4 The Auditing and Sanctioning Process

The audits are conducted by the OAG, an independent institution created under the 2003 Public Audit Act, which draws its constitutional mandate from Articles 229 and 248 of the 2010 Constitution.[10] The OAG is required by law to examine all public accounts on an annual basis and thus plays an important role in establishing whether public funds have been used lawfully and effectively.

The audits are conducted within six months of the end of each financial year in June. The auditor first sends a letter of understanding to the ministry explaining the nature and scope of the audit. This is followed by an entrance meeting with ministerial officials to discuss the contents of the letter and ensure that both parties are clear on the terms of the audit. Once agreed upon, the audit process begins, and the auditors examine all financial transactions and documents, liaising with the officials to respond to any queries that arise. At the end, an exit meeting is held at which the final audit findings are discussed. At this point, the Accounting Officer in the ministry receives a management letter detailing any unresolved issues and a final opportunity is accorded to respond to any pending issues. Once responded to, an assessment is conducted to determine whether to revise the audit report. This leads to the publication of the final audit reports.[11]

2.2.5 The PAC

The PAC derives its mandate from Standing Order 205(2) of the National Assembly, which states that 'The Public Accounts Committee (PAC) shall be responsible for the examination of the accounts showing the appropriation of the sum voted by the House to meet the public expenditure and of such other accounts laid before the House as the Committee may think fit'. In the Kenyan context, the PAC has mostly been chaired by a legislator who does not belong to the ruling party. Although the chairperson of the committee has been the official leader of the official opposition party, this rule was not applicable in the 10^{th} parliament when all members of

[10] Prior to 2003, the OAG existed and conducted audits as the Exchequer and Audit Department.
[11] This interactive process ensures that the auditors do not intentionally or erroneously implicate ministries in corruption without granting them an opportunity to respond to any allegations.

parliament either belonged to the ruling or opposition party (The African Parliamentary Index, 2012: p. 39).

In line with the constitution, these reports are then submitted to the PAC, a standing committee in the National Assembly that scrutinises the findings during sessions that are open to the public and offers recommendations to the Parliament on the necessary actions to be undertaken regarding any cases of misappropriated funds. The focus on the PAC is important for three main reasons. First, it is the sole committee with a legal and constitutional mandate of examining the audits and has significant constitutional powers to subpoena witness, including ministers, and documents, it can initiate independent investigations into any matter of public interest, and its disciplinary outcomes are enforceable by law (Parliamentary Centre, 2011). Second, although other scrutiny mechanisms such as parliamentary questions and vote of no confidence have occasionally been used, they mostly take place following the recommendations of the PAC (Nyamori and Nyamori, 2015). Third, alternative forms of legislative scrutiny such as junior ministers as watchdogs to cabinet ministers do not exist in Kenya, permitting an analysis of the PAC that is not confounded by other institutional features of the parliament.

The PAC is required to make deliberations within three months of receiving the audits. The PAC consists of a maximum of sixteen members drawn from the National Assembly. These members are responsible for electing a chairperson, who initially serves for a period of three calendar years. After their tenure, another election is conducted in which a new chairperson is elected to serve the remaining two years of the five-year parliamentary term.[12] The PAC can recommend different forms of sanctions, such as issuing a warning or prosecuting corrupt officials, or it can declare the audit queries resolved.[13]

Taken together, the Kenyan context provides an ideal setting in which to empirically evaluate several hypotheses. First, access to cabinet institutions generates incentives to engage in corruption, and ODM governed ministries are more likely to misappropriate funds than PNU governed ministries. Second, opposition politicians with re-election incentives will accumulate more resources for electoral campaigns. Third, by strategically allocating key positions to political appointees, co-partisanship between politicians and committee members might affect sanction outcomes. As such, power sharing of legislative institutions among political parties is likely to advance special party interest and significantly lower the likelihood of imposing sanctions for corruptive behaviour.

[12] This committee election is established in the National Assembly Standing Order, which states that: ‘The PAC constituted by the house immediately following the general elections shall last for a period of three calendar years and that constituted thereafter shall serve for the reminder of the parliamentary term’.

[13] It is not straightforward to determine whether the National Assembly ultimately imposes these sanctions due to a lack of data.

2.3 Research Design

2.3.1 Data

Measuring corruption is often complicated by its illegal nature and the fact that it is often not directly observed. I circumvent this challenge by relying on independent audit reports from the OAG in Kenya. While publicly available, these reports are complex and highly technical, receiving little attention from the media and thus limiting public awareness. I begin by constructing the dataset from the reports available in text format (Figure A2). I extract detailed information on the total amount of audited funds as well as a disaggregated description of all the misappropriated funds. I then merge this data with sanction outcomes from the PAC reports (Figure A3-A5) The data on electoral characteristics is drawn from political party reports published by the registrar of political parties in Kenya and the Electoral Commission of Kenya, while the indicators of ministry-level characteristics are taken from the public service commission. The entire dataset is a panel containing the universe of all ministries in Kenya, observed over 8 years (2005-2012), prior to and during the power sharing period. The variables that are included in the analysis, as well as the summary statistics are reported in Appendix Table A1 and A2.

In the Kenyan context, political corruption mainly occurs through the following irregularities: (1) unvouched expenditure, (2) excess expenditure, (3) pending bills, (4) imprests, (5) discrepancies between balances reflected in financial accounts and supporting documents, (6) un-surrendered cash to the Exchequer, and (7) irregularities in procurement. The OAG classifies unvouched expenditure as those transactions that take place during the financial year, where the ministry did not provide sufficient documents to show that the expenditure was authorised, or where the goods and services that the payment was made for were not received. Excess expenditure refers to any spending that surpasses the authorised expenditure threshold set by the parliament. Pending bills, on the other hand, consist of any amount related to goods and services that were received, but where a commitment was made to carry the bills over to the next financial year, thus drawing unnecessary interest charges. Imprests consist of cash advances for travel and meeting purposes that were not re-reimbursed to the ministry as stipulated by the law. Discrepancies in reconciled figures refer to inconsistencies between the amount of money recorded in the ministry's cash book and that appearing in its bank statements. Unsurrendered cash to the Exchequer refers to unused cash at the end of the financial year that is not refunded to the government exchequer, while irregularities in procurement refer to over-pricing of contracts and tenders relative to the stipulated market price.

I therefore define political corruption as the amount of misappropriated funds that is associated with the above forms of irregularities. Following Bandiera et al. (2009), I also compute two additional outcome variables to distinguish misappropriation from financial mismanagement. The first indicator captures active forms of corruption - defined as irregularities that involve the outflow of public funds from the government's accounts. These include unvouched expenditure, pending bills, imprests, and irregularities in procurement. The second outcome variable captures passive forms of corruption that occur due to bureaucratic incompetence and accounting errors. Practically, although it is difficult to establish when incompetency is not purposeful, I categorize discrepancies between balances in the bank statements and supporting documents as well as un-surrendered cash to the exchequer as passive corruption since these are often adjusted for in the subsequent financial statements and do not constitute an outflow of funds from the government's accounts.

2.3.2 Econometric Specification

The first objective of the paper is to test whether the inclusion of the opposition in the cabinet affects political corruption. To provide plausible causal estimates, a credible identification strategy must address endogeneity concerns related to the self-selection of politicians into specific ministries. I therefore compare the before-and-after changes in corruption between opposition ministries (treated group) to the before-and-after changes for those governed by the incumbent party (control group) using a difference-in-difference (DD) approach.

The baseline specification takes the form:

$$y_{i,t} = \beta_1 Post_t + \beta_2 Treat_i + \beta_3 (Post_t * Treat_i) + \beta_4 P_{i,t} + \epsilon_{i,t}$$

Equation (1)

where $y_{i,t}$ is the outcome variable and captures (1) the total misappropriated funds, (2) active forms of corruption and (3) passive forms of corruption in ministry i in year t as a share of the total audited funds, and $Post_i$ is equal to one if year $\geq$ 2008 and zero otherwise. The variable $Treat_t$ is an indicator variable equal to one for opposition ministries, β_3 is the coefficient of interest and compares the change in corruption before and after 2008 in ODM ministries to those in PNU ministries, P_{it} is the number of years a ministers has served as a politician and is included to control for differences in political experience across MPs, and $\epsilon_{i,t}$ is the error term. The standard errors are clustered at the ministry level and are calculated using a wild bootstrap procedure with 1000 replications to account for the relatively small number of ministries (Duflo et al. 2004; Cameron and Trivedi, 2005: p.254).

The DD design aims to account for three sources of bias. First, a direct comparison of ministries governed by the two parties is problematic if unobserved reasons - such as differences in bargaining power - affected the allocation process. Second, simply observing the before and after changes in corruption for opposition ministries will provide biased estimates because many other factors, such as changes in revenue allocation, anti-corruption efforts or economic factors are also likely to influence corruption over time. To account for these potential biases, the DD design first compares the before-and-after changes in corruption for opposition ministries to control for factors that are constant over time, given that the comparison is restricted to the same set of ministries (first difference). This, however, leaves the time invariant factors unaccounted for. To address this, I measure the before-and-after changes in corruption for incumbent ministries, since they were exposed to the same set of conditions as the opposition governed ministries (second difference). By combining the two estimates and subtracting the second difference from the first difference, the DD provides a causal estimate of the effect of the opposition on political corruption.

While the research design accounts for selection effects, a potential concern is that incumbent ministers have more experience in the cabinet compared to opposition ministers. As a result, they might become better at hiding corruption given their past experiences with auditors. This would either lead to over-estimating corruption in opposition ministries or underestimating it in incumbent ministries. To address this potential bias, I first identify opposition ministers who held political positions during the period 1997-2002 and had thus undergone a similar audit process. I then compare corruption between incumbent ministries with a sub-set of opposition ministers with prior audit experience. If political experience is driving the results, then corruption in the two sets of ministries should be significantly different. The results are presented in Table 2.2 suggests that political experience can lead to concealment of irregularities from auditors. To address this bias, I follow Ferraz and Finan (2011) and control for an indicator that sums the number of years that minister has previously been in public office.

2.4 Empirical Results

2.4.1 Summary Statistics

Figure 2.2 provides an illustration of the patterns of corruption across ministries during the power sharing period. The figure shows that the total misappropriated funds increased from Ksh 325 billion in 2007 to Ksh 911 billion in 2012. As a share of the ministerial budget, this corresponds to an increase from 15 percent in 2007 to 38 percent in 2012. Disaggregating corruption by party control reveals that incumbent ministries were on average less corrupt than the opposition. Figure 2.3 assesses the different forms of corruption and shows that imprests, unvouched expenditure, irregularities in procurement and unsurrendered cash to the exchequer accounted for a substantial portion of the misappropriated funds. Figure 2.4 indicates that these forms of corruption did not differ significantly across incumbent and opposition ministries, suggesting no evidence of systematic differences in opportunities to engage in different forms of corruption across ministries.

2.4.2 Main Results

Table 2.3 presents the regression results from estimating different forms of Equation (1), where the outcome variable is the total amount of misappropriated funds as a share of the total audited funds. The results in columns (1) and (2) refer to the restricted sample of 14 ministries while those in columns (4) and (5) refer to the full sample of 26 ministries. Across the specifications, the results suggest differential effects in the levels of corruption based on party control of ministerial portfolios. The point estimate in column (1) suggest that on average, the share of misappropriated funds in opposition ministries was approximately 28 percent higher compared to those governed by the incumbent party. This effect is statistically significant at the 5 percent level. Controlling for the confounding effect of political experience in column (2) lowers the coefficient of interest to 25 percent, although it remains statistically significant at the 5 percent level. When considering the full set of ministries, the results in columns (3) and (4) show a similar pattern. Compared to incumbent governed ministries, corruption was around 28 to 32 percent higher in opposition ministries. This effect is not only statistically significant, but also economically meaningful. Given that Ksh 3 trillion was allocated to these ministries between 2008 and 2012, unaccounted funds in opposition ministries was approximately Ksh 852 to 954 million more than in incumbent governed ministries.

A potential concern is that the estimates might be capturing differences in corruption between opposition and incumbent ministries due to bureaucratic capacity. For instance, if the incumbent party retained ministries with competent bureaucrats, then higher corruption in opposition ministries would simply reflect a lower quality of the bureaucracy. To investigate this possibility, I re-estimate the baseline model and replace the outcome variable with the share of misappropriated funds associated with passive forms of corruption. The results are presented in Table 2.4. As indicated in columns (1) and (2), the point estimates are statistically insignificant, suggesting that the opposition was not significantly more likely to be associated with financial incompetence compared to the incumbent party. This finding also holds when considering the full sample of ministries (columns (3) and (4)).

2.4.3 Mechanisms

The above DD results suggest that on average, opposition governed ministries misappropriated more resources than incumbent ministries. In this section, I conduct a fine-grained analysis and examine whether these effects are driven by specific political dynamics. I provide evidence that corruption was higher for politicians with re-election incentives, and the misappropriated funds were likely to be used for electoral activities. I further support this interpretation with anecdotal and case study evidence on the sources of campaign financing in Kenya. I then discuss and rule out alternative mechanisms such as the negative self-selection of corrupt politicians into ministerial positions and differences in the quality of bureaucrats between ministries.

To provide direct evidence of this channel, the ideal approach would be to rely on an exogeneous variation in re-election incentives, such as term limits or the mandatory age of retirement. However, the Kenyan context does not have these institutional features. As such, I examine whether there are differentials in the levels of corruption between politicians serving in ministerial or public office for the first time and those who have held political office before. By adopting this approach, the key assumption is that misappropriated resources are more valuable for those in their first term, as politicians who have served in previous periods can rely on already misappropriated funds, their reputation or networks to increase their re-election bids. This analysis is conducted for opposition ministers for two reasons. First, given that the results in the previous section document higher levels of corruption in opposition governed ministries, I aim to shed light on whether these resources were targeted for future political activities, consistent with the assumption that first-term ministers have higher re-election incentives. Second, there is no variation across incumbent ministries, as all ministered served in the government prior to the power sharing agreement.

I estimate a simple model that takes the form

$$y_{m,t} = \beta_1 First_{m,t} + \epsilon_{m,t}$$

Equation (2)

where $y_{m,t}$ is either (1) total misappropriated funds, (2) active corruption or (3) passive corruption, all expressed as a share of the audited funds in ministry m in time t, $First_{m,t}$ is a dummy variable that takes the value of one for first term ministers and zero otherwise, and $\epsilon_{m,t}$ is the error term

The corresponding results are reported in Table 2.5 and the results suggest that first-term ministers were more corrupt compared to those that did not, despite similar opportunities to engage in corruption. The point estimate in column (1) is statistically significant at the 5 percent level, implying that first term ministers misappropriated 53.4 percent more resources that those serving in their second or third term in public office. The results in column (2) shows that around 20.2 percent of the misappropriated funds were associated with active forms of corruption while the point estimate in column (3) reveals no significant effect on passive forms of corruption. Overall, these findings reflect a pattern where first term ministers incorporated into the power sharing agreement were more likely to misappropriate public resources.

Although it is not straightforward to pin point how these proceeds were spent - given the corrupt nature of these practices, qualitative evidence from conversation between ministers as well as an examination of the campaign-financing laws in Kenya suggests that at least both politicians and political parties were beneficiaries of the misappropriated funds. For instance, in the late 1990s, the Kenya African National Union party (KANU) was implicated in the Goldenberg scandal, which involved fictitious export compensation for gold and diamond exports valued at approximately 1 million US Dollars (Mwangi, 2008). According to the Report of the Judicial Commission of Inquiry into the Goldenberg Affair Report (2005), the perpetuators of the scandal provided accounts on how the funds were used to buy food and vehicles and pay for advertisements and votes as part of KANU's campaign strategy. For instance, the report quotes:

'None of these payments were explained by the recipients although Mr. [] was categorical that the payments were related to the election campaign' (page, 194); and ' ...This exhibit was a lengthy catalogue of various people to whom he claims to have given Goldenberg monies either directly or in the form of cars. In his testimony before us he stated that these payments were made during the 1992 General Elections (page, 182).

Another recent example is the Anglo-leasing scandal involving irregular procurements of security-related contracts of up to 243 million USD (Mwangi, 2008). According to a resignation letter from the former Permanent Secretary of Governance and Ethics, the scandal was aimed at mobilizing resources for electoral campaigns. Githongo (2005: 15) states :

'....Mr.[..]called on me and shared with me his concern that at the rate 'we were going, we would have another Goldenberg-type scandal before the elections' in 2007 because of the need to fundraise for the elections.....The next day...I expressed to him my disquiet at the contradictions caused by the fact that we were fighting corruption on one side and this fight was in direct contradiction with the supposedly 'resource mobilization' efforts.....In our discussion on political party funding with [...]...., he admitted Anglo Leasing and other such deals were essentially part of 'resource mobilization' carried out...and the president knew about all this.'[14]

Consistent with the conceptual framework, a clear pattern emerging from these examples is that access to cabinet institutions through power sharing agreements can provide lucrative opportunities for corruption. Several institutional features systematically reinforced this mechanism in Kenya. First, the law does not require political parties or candidates to disclose their funding sources. Second, there are no campaign spending limits on parties or candidates. Third, public funding for political parties is negligible, and finally, there are no enforceable legal restrictions on the sources of campaign financing.

2.4.4 Other potential channels

This section rules out negative self selection of corrupt ministers into the power sharing agreement and differences in bureaucratic quality as possible confounders.

Several studies suggest that corruption is an innate form of political behaviour (Zachary and

[14] These allegations were later verified using audio recordings (Bachelard, 2010).

Spaniel, 2018). As such, corrupt politicians from the opposition might have self-selected themselves into ministerial positions. If this were the case, then corruption between incumbent and opposition governed ministries would simply reflect natural or innate opportunistic behaviour by ministers. To examine this possibility, I compare corruption between opposition and incumbent ministers prior to 2008. Given that the opposition was not part of the cabinet, I focus on the sub-national level where politicians had discretion over local constituency development funds. If the opposition had been innately more corrupt, then its constituencies would have had higher levels of corruption compared to those governed by other parties.

Table 2.6 presents the results that compare constituency-level corruption for the two political parties prior to 2008. The results in columns (1) and (2) are based on the restricted sample while those in columns (3) and (4) focus on the full sample. In the first two columns, the point estimates are not only small in magnitude, but also statistically insignificant. This suggests that opposition governed constituencies were not disproportionately more corrupt than those governed by the incumbent party. In columns (2) and (4), I compare corruption in constituencies that were governed by ministers from the incumbent party, to those governed by opposition politicians who were subsequently included in the power sharing agreement. The results show that individual politicians from the opposition were not more corrupt than those from the incumbent party. Overall, these results suggest that differences in the amounts of misappropriated funds are not driven by politician's innate behaviour.

A second potential channel is differences in the quality of bureaucrats between ministries with and without incumbent ministers contesting for the subsequent 2013 elections. To rule out this possibility, I examine differentials in passive corruption between these two sets of ministries. The results are reported in Table 2.7 and are largely inconsistent with this possibility.

2.4.5 Power sharing and bias in sanctioning

In this final section, I provide evidence that power sharing reduced political by showing that co-partisanship between ministers and the chairperson of the PAC reduced the likelihood of facing disciplinary sanctions.

During the first three years of the power sharing agreement (2008-2010), the chairperson of the PAC was affiliated with the incumbent party (PNU) by having served as a cabinet minister under the party affiliation between 2002 and 2007. During the remaining two years of the electoral term (2010-2012), the PAC experienced a leadership turnover to an opposition-affiliated chairperson, an incumbent politician who had been elected on the ODM party platform. Using this switch that occurred in 2010 - midway through the power sharing period, I assess how the power sharing of the PAC affected disciplinary sanctions for misappropriating public resources as revealed in the audit reports, and how this differed with the likelihood of contesting for the subsequent elections.[15]

Empirically, assessing this relationship raises endogeneity concerns if higher levels of corruption led to the switch in the leadership of the PAC. In addition, the timing of the switch could have been driven by the need to have greater legislative oversight, inducing reverse causality. These concerns are however mitigated by the fact that the timing of the switch at the end of the third year is an institutional feature of the Kenyan parliament.

I estimate the following model:

$$y_{i,t} = \alpha_i + \alpha_t + \beta_1 Aligned_t + \beta_2 Period_i + \beta_3 (Aligned_t * Period_i) + \beta_4 (X_{i,t}) + \epsilon_{i,t}$$

Equation (3)

where $y_{i,t}$ is a dummy variable that takes the value of one if the PAC recommended that a minister or ministerial official (Accounting Officers) be prosecuted and zero otherwise. I also consider alternative sanctions such as official warnings or whether audit queries were resolved. Aligned is a dummy that takes the value of 1 for incumbent ministries and 0 otherwise, Period is a dummy that equals 1 for the period 2008-2010 where the chairperson was affiliated with the incumbent party, and $X_{i,t}$ includes two control variables, minister's incumbency rate and gender. The main coefficient of interest is β_3 and captures the interaction between PNU ministers and the PAC when governed by a member of its own party.

Table 2.8 presents the regression results from Equation (3) and provides evidence of bias in imposing disciplinary sanctions. The results in columns (1) to (3) refer to the first three years of the power sharing agreement. The point estimate in column (1) is negative and statistically significant, suggesting that the PAC was less likely to prosecute ministers from its own party. In column (2), I find that incumbent ministers were also less likely to receive official warnings while the results in column (3) suggest that ministers were more likely to have their audit queries resolved without further deliberations. The results in columns (4) to (6) are obtained from re-estimating Equation (3) where I re-define the variable Aligned as a dummy equal to 1 for opposition ministries and the dummy variable Period to capture the period 2010-2012 when the PAC chairperson was from the opposition. I find analogous results. Overall, the results suggest that the power sharing of the PAC undermined political accountability by generating incentives for each party to impose fewer sanctions on its co-partisan ministers.

[15] The chairperson of the PAC exerts considerable powers with respect to influencing the agenda, deliberations and working procedures of the committee (Nyamori and Nyamori, 2015).

2.5 Robustness Checks

This section addresses potential biases that might arise from relying on government led audits to measure corruption. It shows that audit results are not driven by (1) political and ethnic considerations, (2) systematic differences in auditing and reporting across ministries, (3) bureaucratic incapacities of the OAG, or (4) political interference and manipulation by politicians.

2.5.1 Assessing if auditors are corrupt

A natural concern with relying on audits is that auditors may be corrupt. This raises the possibility that the comparison of corruption across ministries could be biased if auditors under or over estimate the amount of misappropriated funds across ministries. If this is the case, then a plausible hypothesis is that politicians contesting for the 2013 local elections were more likely to bribe auditors to receive favourable reports, especially during the electoral year (Ferraz and Finan, 2011). Column (1) of Table 2.9 reports estimates obtained from regressing the amounts of misappropriated funds with an interaction term of a dummy variable for the electoral year and a dummy variable for ministers who contested the 2013 elections. The results show that there is no significant difference in corruption between these ministers and those who did not contest depending on the timing of the elections. Second, and in line with the ethnic identity literature (Johl et al. 2012), I examine whether ethnic affiliation with the Auditor General is associated with lower corruption. As reported in column (3), there are insignificant differences, suggesting that ethnic affiliation did not influence the auditor's reports.

2.5.2 Systematic differences in auditing and reporting

Another concern is systematic differences in auditing and reporting across ministries. For instance, if auditors purposely select which budgetary items to audit, then this might lead to the auditing of transactions that are associated with less spending or corruption, making it difficult to compare the audits across ministries and over time. However, this is less likely as auditors are required to adhere to a standardised auditing procedure that verifies all spending in each ministry. Even with similar auditing procedures, there could be differences in reporting across ministries. As such, the effects of attributing differences in corruption to the power sharing agreement could simply reflect differentials in reporting standards. To examine this possibility, I identify a comprehensive list of key terms used to report corruption in the public sector literature.[16] I then conduct a text analysis on a random sample of the audit reports and examine differences in the frequency and distribution of these terms across incumbent and opposition governed ministries. The results are presented in Figure 2.5 and indicate that there are no systematic differences in reporting based on party control.

[16] This includes terms such as: unverified, unexplained, misappropriated, irregular, missing or justified.

2.5.3 Bureaucratic capacity of the OAG

A final concern is that the capacity of the OAG to detect and monitor corruption within government institutions might be low (Sequeira, 2012). This is however unlikely for several reasons. First, the OAG receives adequate financial resources, as reflected in its end-of year budgetary statements (Figure 2.6). Second, the OAG has over 700 auditors who are recruited by the independent Public Service Commission on academic and professional merit.[17] The career advancement of auditors follows a standard government policy, and ministerial officials do not have any powers to promote or dismiss any auditor. Third, the Auditor General enjoys security of tenure and is thus shielded from political intimidations.[18]

2.6 Conclusions

Power sharing arrangements are increasingly being advocated as an institutional tool to address indecisive elections. While their form differs across political contexts, they are mostly characterized by the incorporation of warring political factions into the government to restore peace and promote democracy. In this paper, I examine the democratic implications of sharing cabinet and legislative positions across political parties in the context of coalition governments. Using a new dataset of corruption by ministers in Kenya and exploiting the variation in the allocation of ministerial portfolios across parties, I show that political elites who are included in the government through informal bargaining and negotiations are associated with significantly higher corruption. I interpret this finding in the context of the strategies that politicians have to manipulate future electoral outcomes and argue that the opposition faces a constrained set of options, enhancing their reliance on misappropriated funds to further their political careers. These findings highlight the importance of disentangling individual party performance within a coalition and incorporating differences in the strategies that parties can leverage on to explain the performance of coalition governments.

I provide a better assessment of the underlying mechanisms by relying on both quantitative and qualitative analysis and argue that the misappropriated funds were linked to campaign financing. Exploiting variations in the re-election incentives, I find that a significant share of misappropriated funds occurred in ministries governed by first-term ministers. This finding contrasts with the literature on the effects of term limits, which has mostly focused on the behaviour of local politicians and argues that first termed politicians face less incentives to misappropriate public funds (Ferraz and Finan, 2008, 2011). Why do re-election incentives generate incentives to engage in corruption? In the broader political economy literature, this could be attributed

[17] Results from a random sample of 302 auditors suggest that the OAG consists of professionally hired auditors, audit findings are not politically motivated and the OAG exercises full constitutional powers in executing its mandate (Charles and Oluoch, 2017). In addition, independent actors such as the United Nations have applauded the quality of the OAG's audits (UNICEF, 2015).

[18] Since its establishment, none of the auditors has been fired by the government.

to several factors such as voter ignorance (Somin, 1998) or information asymmetry regarding politicians' behaviour (Alesina and Cukierman, 1990). While these factors are not mutually exclusive, re-election concerns might increase corruption if the pay-offs are large. In contexts where politicians can circumvent institutions of accountability and corruption can increase the likelihood of re-election through patronage and clientelistic spending, the expected future utility of engaging in corruption is high, and this can dampen the corruption reducing effects of re-election incentives (Pereira et al. 2009).

These results have important implications for the study of democratic representation and legislative accountability. First, the study highlights the potential pitfalls associated with power sharing institutions. In theory, elections are the key democratic processes through which citizens select politicians (Besley, 2005). By granting power and authority to citizens, elections change the incentives that politicians face, and thus their behaviour while in office. However, in a power sharing context, politicians are not elected by citizens but rather selected by political parties through informal means. Thus, their accountability for their performance is likely to be towards the central government, which has power over their political careers, generating strong incentives to align their behaviour with the preferences and interest of political parties rather than local citizens. In addition, there is potential for power sharing agreements to undermine electoral accountability by creating incentives for incumbents to hold on to power illegitimately by expanding the cabinet (Arriola, 2009) or for electoral losers to negotiate their way into political power (LeVan, 2011; Cole, 2013). Indeed, this is not to undermine the importance of such arrangements. Power sharing has been advocated as a conflict resolution mechanism, especially in the context of post electoral violence (Hartzell and Hoddie, 2003; Gates et al. 2016). While the analysis does not discount any benefits such as the restoration of peace and order, empirical studies show that the formation of such an arrangement has short-term benefits and is not associated with long-term stability or democratic survival (Graham et al. 2017). The important implication is to highlight the trade-offs inherent in such agreements, whereby political legitimacy may come at the cost of accountability.

From a policy perspective, the findings suggest that securing the quality and integrity of elections in the first instance could play an important role in mitigating post-electoral violence. In this regard, strategies to combat electoral fraud as well as those that strengthen electoral and judicial institutions could play a key role in ensuring that electoral outcomes are respected. If power sharing agreements emerge as the last resort to address indecisive elections, then such arrangements could be designed in such a manner that they are short-lived and transitionary in nature, with the aim of restoring political order rather than acting as a pathway for politicians to grab political power even in the wake of electoral defeat (Cole, 2013).

Second, the relationship observed between the power sharing of the PAC and the systematic bias in the sanctioning of corrupt politicians suggests that the organizational form of legislative institutions matters for their effective functioning. Thus, the results are in line with some studies that highlight how political incentives, and the lack of separation of powers between different organs of a government can undermine political accountability and render parliamentary committees ineffective oversight mechanisms (Lindberg 2010; Ström et al. 2010).

Nevertheless, given the importance of legislative scrutiny in coalition governments, a potential policy implication relates to identifying mechanisms to insulate legislative committees from partisan interests in order to enhance checks and balances across government institutions. One possibility relates to the rules of identifying and selecting the chairperson of the PAC - as well as other parliamentary committees. The chairperson should be politically independent and nominated from a political party that is not part of the coalition. Indeed, empirical evidence underscores the importance of ideological differences between coalition parties in enhancing the monitoring of politicians (Martin and Vanberg, 2004). This has often been the case in most countries, and during periods of power sharing where all parties are part of the coalition, provisions should be made to nominate the chair from outside the political arena. A second possibility is to reduce the significant powers that are vested into the chairperson's position, and diffuse them across committee members, since the incentives of other committee members might differ from that of the chair (Pukelis, 2016). A third possibility is to make the proceeding of committee's deliberations public, so that different actors, such as the media, donors or citizens can have the opportunity to scrutinize them and hold committees and politicians accountable. This is consistent with some empirical evidence that shows that opening up PAC hearings increases political accountability (Wang and Rakner, 2005; Betley et al. 2012).

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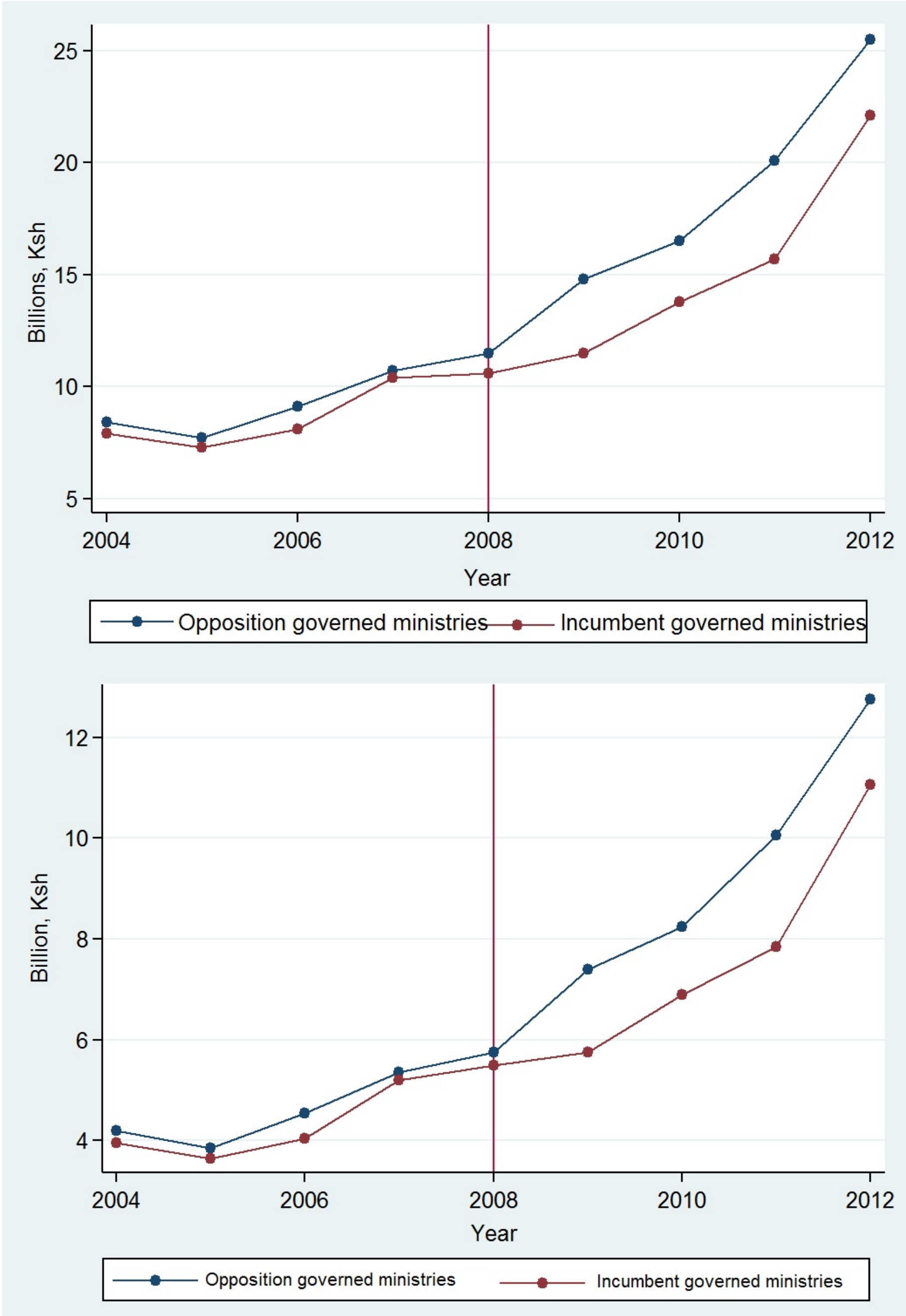
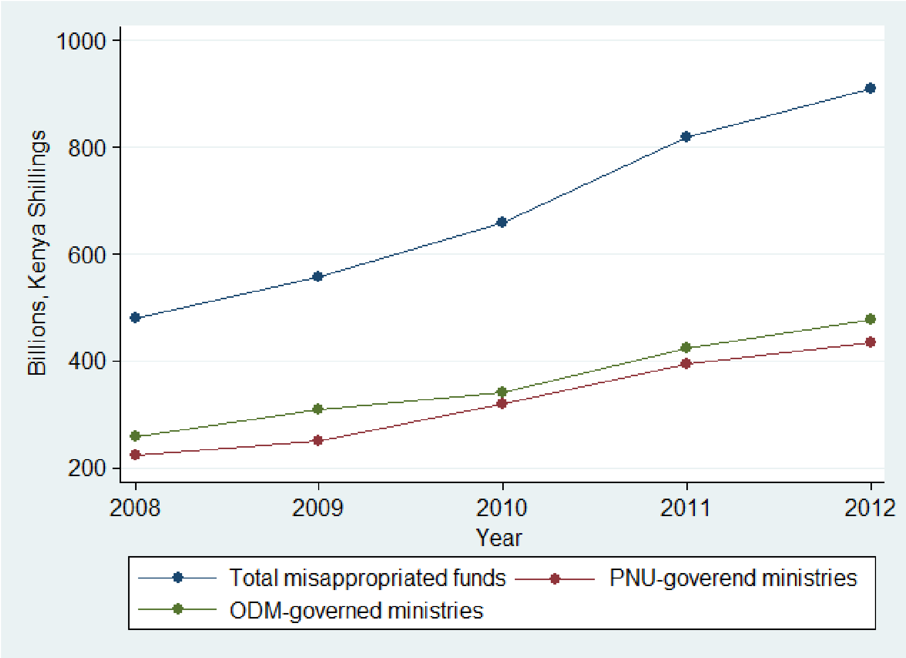
Figures

Figure 2.1: Parallel Trend Assumption



Notes
This figure displays trends in the overall levels of corruption prior to, and during the power sharing agreement. The data is obtained from the OAG. The top panel refers to the full sample while the lower panel refers to the restricted sample.

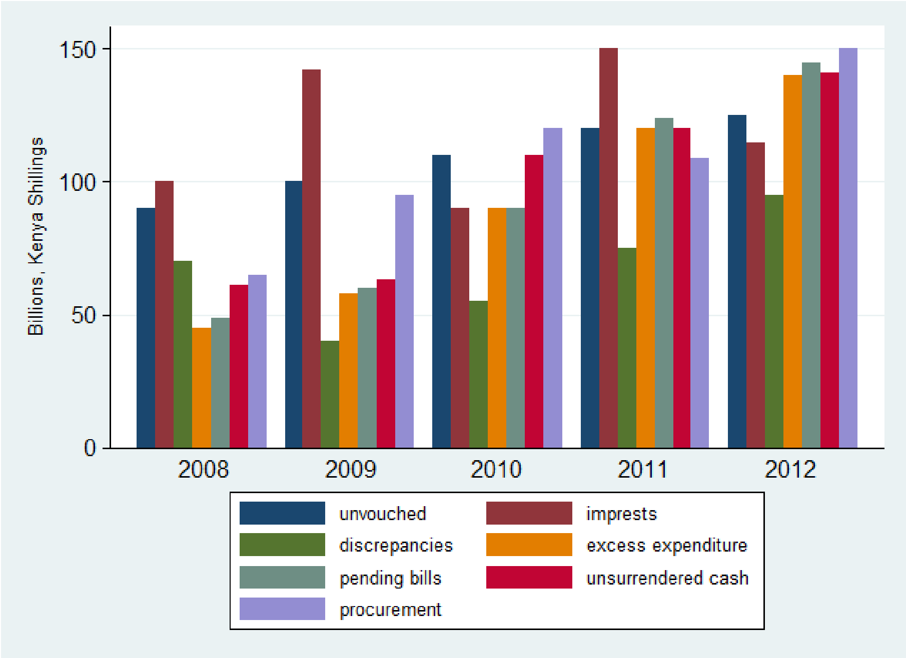
Figure 2.2: Patterns of Corruption in Kenya



Notes

This figure displays the total amount of misappropriated funds during the power sharing period. The figure is calculated for the entire sample of 40 ministries, and disaggregated by party control. The data is obtained from the OAG.

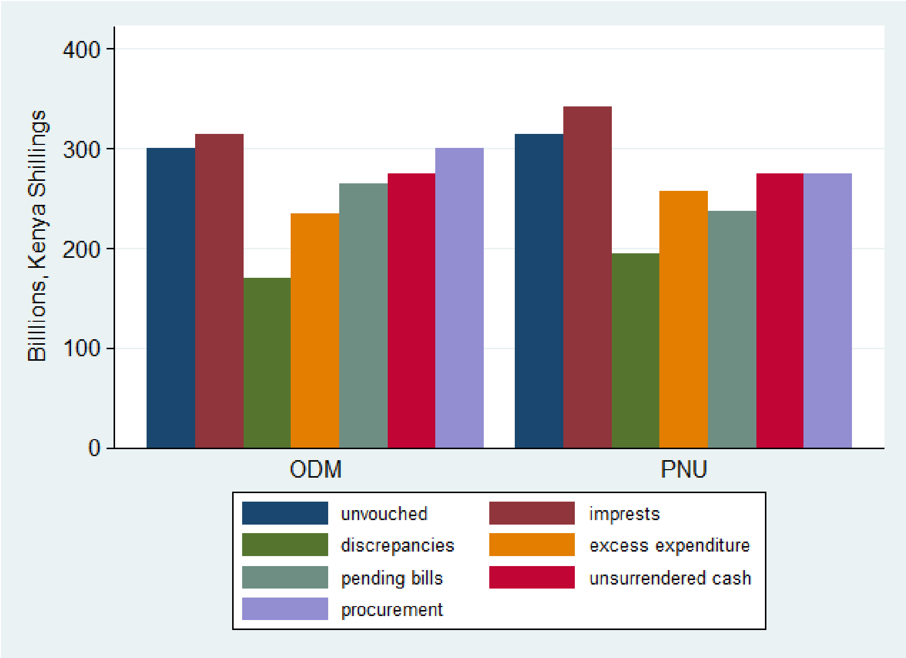
Figure 2.3: Forms of Corruption in Kenya



Notes

This figure displays the various forms of corruption for the entire sample of 40 ministries for the period 2008-2012. The data is obtained from the OAG.

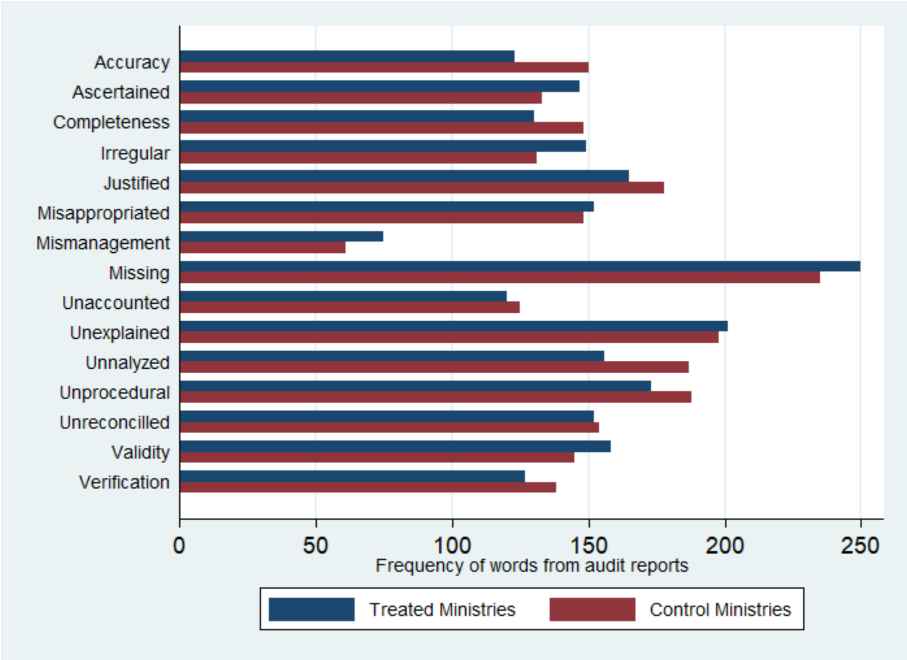
Figure 2.4: Forms of Corruption, disaggregated by Party Control



Notes

This figure disaggregates the various forms of corruption disaggregated by party control. The data is from the OAG.

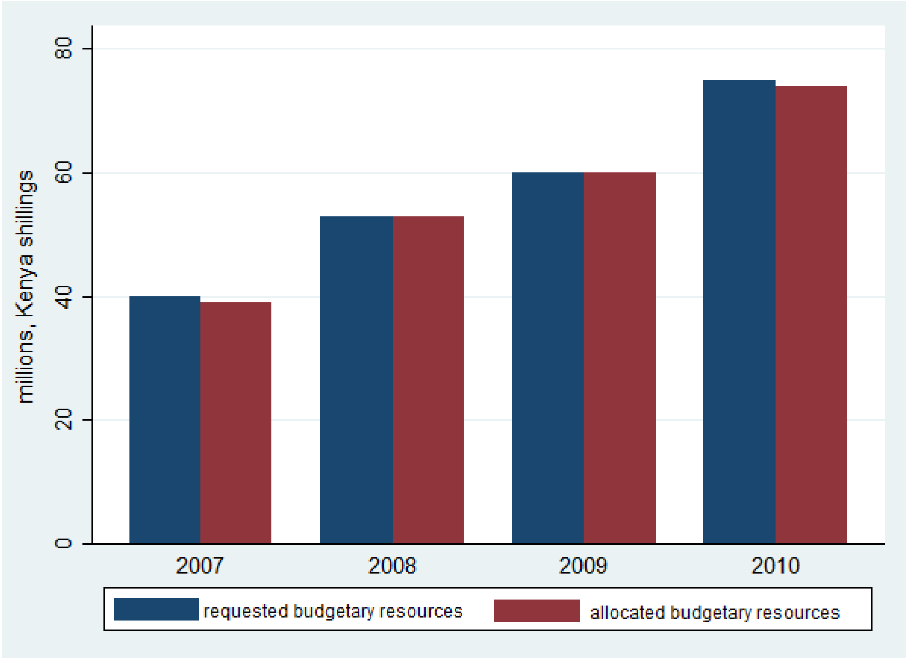
Figure 2.5: Text Analysis of Audit Reports



Notes

This figure examines systematic differences in reporting across ministries based on party control. Treated ministries are governed by the ODM while control ministries are governed by the PNU. The figure is calculated based on a random sample of 100 audit reports published by the OAG.

Figure 2.6: Resource Allocation to the OAG



Notes
This figure displays the amount of financial resources requested by the OAG and the allocated resources by the central government. The data is obtained from the OAG's end of year financial statements.

Tables

Table 2.1: Covariate Balance test for Treated and Control Ministries

	Treated Ministries (1)	Control Ministries (2)	Difference in means (p-value) (3)
Panel A: Ministry-level characteristics			
Budget size	38.19	40.21	0.72
	(2.49)	(1.54)	(0.23)
Public expenditure	0.295	0.25	-1.52
	(0.03)	(0.01)	(0.93)
Employment size	220.00	217.00	0.33
	(3.33)	(2.06)	(0.79)
Panel B: Politician-level characteristics			
Age	48.00	49.50	-1.51
	(3.43)	(2.05)	(0.51)
Years of education	14.50	15.00	-0.53
	(3.43)	(2.05)	(0.51)
Gender	0.81	0.70	0.11
	(3.43)	(2.05)	(0.51)
Panel C: Electoral characteristics			
Minister's incumbency rates	0.53	0.45	0.08
	(0.47)	(0.63)	(0.13)
Party margin of victory (2007)	0.83	0.78	0.05
	(2.93)	(2.23)	(0.38)
Minister's margin of victory (2007)	0.56	0.58	-0.02
	(2.93)	(2.23)	(0.38)

Notes
Covariate balance test for treated (opposition governed) and control (incumbent governed) ministries for the restricted sample. The p-values refer to a two sample t-test. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 2.2: Political Experience and Corruption

	Total misappropriated funds/audited funds	Active corruption/audited funds	Passive corruption/audited funds
	(1)	(2)	(3)
Incumbent ministers vs opposition ministers with prior audit experience	0.204 (0.477)	0.301 (0.528)	0.211 (0.208)
Controls	Yes	Yes	Yes
Ministry fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	126	126	126
Mean of dependent variable	0.852	0.562	0.614
R-squared	0.56	0.65	0.77

Notes
This table examines whether political experience affects the level and type of corruption by comparing corruption in incumbent ministries, and opposition ministries in which ministers held a political office prior to 2008. The standard errors in parenthesis are based on a wild bootstrap procedure with 1000 replications. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 2.3: Difference in Difference Estimates: Power Sharing and Political Corruption

Dependent variable: Total misappropriated funds as a share of audited funds				
	Restricted Sample		Full Sample	
	(1)	(2)	(3)	(4)
Post x Treat	0.281***	0.251**	0.318***	0.284***
	(0.091)	(0.100)	(0.064)	(0.072)
Controls	No	Yes	No	Yes
Observations	98	98	182	182
No. of ministries	14	14	26	26
R-squared	0.0695	0.0740	0.0959	0.100
Wald value	8.65	9.59	25.23	27.80
Mean of dependent variable	0.680	0.680	0.655	0.655

Notes
The interaction term (Post x Treat) is the standard difference in difference parameter. Post is a dummy indicator for the years 2008-2012 while Treat is a dummy variable equals 1 if a ministry was treated (governed by the opposition). Political experience, measured as the number of years served by a minister, is included as the only control variable. The standard errors in parenthesis are based on a wild bootstrap procedure with 1000 replications. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 2.4: Bureaucratic Capacity and Corruption

Dependent variable: Passive corruption as a share of total audited funds				
	Restricted Sample		Full Sample	
	(1)	(2)	(3)	(4)
Post x Treat	0.034	0.018	0.014	0.081
	(0.052)	(0.153)	(0.194)	(0.142)
Controls	No	Yes	No	Yes
Ministry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	98	98	182	182
Mean of dependent variable	0.523	0.320	0.529	0.305
R-squared	0.38	0.64	0.45	0.58

Notes
This table examines differences in passive corruption across incumbent and opposition governed ministries. The interaction term (Post x Treat) is the standard difference in difference parameter. Post is a dummy indicator for the years 2008-2012 while Treat is a dummy variable equals 1 if a ministry was treated (governed by the opposition party). The standard errors in parenthesis are based on a wild bootstrap procedure with 1000 replications. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 2.5: Mechanism: Political Corruption and Re-election incentives

	Total misappropriated funds	Active forms of corruption	Passive forms of corruption
	1	2	3
First-term ministers	0.5348**	0.2075**	-0.118
	(0.2478)	(0.089)	(0.133)
Observations	70	70	70
R-squared	0.0418	0.0632	0.0161
Mean of dependent variable	0.999	0.6847	1.2877

Notes
This table compares corruption in opposition ministries governed by first-term ministers to opposition ministries governed by ministers in their second or third term in public office. The standard errors in parenthesis are based on a wild bootstrap procedure with 1000 replications. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 2.6: Self-Selection of Corrupt Opposition Ministers into the Cabinet

Dependent variable: Total misappropriated funds as a share of audited funds				
	Restricted Sample		Full Sample	
	All constituencies	Constituencies where ministers joined the coalition	All constituencies	Constituencies where ministers joined the coalition
	(1)	(2)	(3)	(4)
Opposition vs incumbent	0.004	0.018	0.451	0.656
	(0.101)	(0.058)	(0.501)	(0.610)
Controls	Yes	Yes	Yes	Yes
Ministry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	80	65	80	65
Mean of dependent variable	0.852	0.562	0.614	0.524
R-squared	0.56	0.65	0.77	0.51

Notes
This table examines whether opposition politicians incorporated into the power sharing agreement were more corrupt than incumbent ministers prior to 2008. The standard errors in parenthesis are based on a wild bootstrap procedure with 1000 replications.
Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 2.7: Bureaucratic Quality and Corruption

Dependent variable: Passive corruption as a share of total audited funds

	Did not contest (1)	Retired (2)
Opposition ministers contesting in 2013	0.017	0.075
	(0.118)	(0.201)
Controls	Yes	Yes
Ministry fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Observations	150	150

Notes

This table compares passive corruption in ministries where opposition ministers contested for the 2013 elections to ministries without an incumbent candidate. The standard errors in parenthesis are based on a wild bootstrap procedure with 1000 replications. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 2.8: Power Sharing and Legislative Sanctions

	2008-2010			2010-2012		
	Prosecuted (1)	Warned (2)	Resolved (3)	Prosecuted (4)	Warned (5)	Resolved (6)
Incumbent ministers x Aligned	-0.84**	-0.850**	0.95***			
	(0.42)	(0.40)	(0.36)			
Opposition ministers x Aligned				-0.79**	-0.83**	0.92**
				(0.34)	(0.35)	(0.38)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Ministry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	235	235	235	235	235	235
R-squared	0.69	0.68	0.71	0.72	0.73	0.73

Notes

This table examines whether partisan alignment between ministers and the chairperson of the PAC affects the likelihood of being sanctioned for misappropriating public funds. Aligned is a dummy variable that takes the value of one if a minister is co-partisan with the chairperson of the PAC. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 2.9: Reliability and Credibility of Audits

Dependent variable: Misappropriated funds/total audited funds		
	(1)	(2)
Contesting minister	0.25**	0.27**
	(0.13)	(0.13)
Election year	0.113	
	(0.352)	
Contesting minister x election year	0.089	
	(0.096)	
Co-ethnic with Auditor General (AG)		0.021
		(0.087)
Contesting minister x co-ethnic with AG		0.143
		(0.194)
Controls	Yes	Yes
Ministry fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Observations	182	182
R-squared	0.23	0.07
Mean of dependent variable	0.542	0.741
R-squared	0.23	0.07

Notes

This table examines whether there is a differential effect in corruption levels for opposition ministers constesting in 2013 depending on whether they were audited during the electoral year or if co-ethnic with the Auditor General. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Appendix

Figure A1: Ministerial Allocation based on Partisanship

Ministerial Portfolio	Party
Vice President and Minister of Home Affairs	ODM
Deputy Prime Minister and Minister of Trade	PNU
Deputy Prime Minister and Minister of Local Government	ODM
PO: Minister of State for Provincial Administration and Internal Security	PNU
PO: Minister of State for Defence	PNU
PMO: Minister of State for Planning, National Development and Vision 2030	ODM
PMO: Minister of State for Public Service	ODM
VPO: Minister of State for Immigration and Registration of Persons	ODM
VPO: Minister of State for National Heritage & Culture	ODM
Minister of East African Community	ODM
Minister of Foreign Affairs	PNU
Minister of Finance	PNU
Minister of Justice, National Cohesion and Constitutional Affairs	PNU
Minister of Nairobi Metropolitan Development	ODM
Minister of Roads	ODM
Minister of Public Works	ODM
Minister of Transport	PNU
Minister of Water and Irrigation	ODM
Minister of Regional Development Authorities	ODM
Minister of Information & Communications	ODM
Minister of Energy	PNU
Minister of Lands	ODM
Minister of Environment and Mineral Resources	PNU
Minister of Forestry and Wildlife	PNU
Minister of Tourism	ODM
Minister of Agriculture	ODM
Minister of Livestock Development	PNU
Minister of Fisheries Development	ODM
Minister of Development of Northern Kenya and other Arid Lands	ODM
Minister of Cooperatives Development	ODM
Minister of Industrialization	ODM
Minister of Housing	PNU
Minister of Special Programmes	PNU
Minister of Gender and Children Affairs	PNU
Minister of Public Health and Sanitation	PNU
Minister of Medical Services	ODM
Minister of Labour	PNU
Minister of Youth and Sports	PNU
Minister of Education	PNU
Minister of Higher Education, Science and Technology	ODM

This figure shows the distribution of ministries as outlined in the power sharing agreement.

Figure A2: Sample of Audit Report

Unvouched Expenditure

Statement of receipts and payments reflects total receipts of Kshs.1,232,600,516.08 which includes receipts totaling Kshs.988,012,349.20 indicated as direct payments (Loan) and direct payment (Grants) for which payment vouchers and other related documentation were not provided for audit review to confirm that the expenditure is substantiated by sufficient and acceptable documentation. Consequently, the propriety of the expenditure of Kshs.988,012,349.20 could not be ascertained.

Excess Expenditure.

The Appropriation Account further reflects under Sub-Vote 041, Head 422 – Windhoek expenditure amounting to Kshs.63,324,986.00, incurred by Windhoek Mission on refurbishment of buildings during the year. However, and according to the Printed Estimates for 2008/2009, only a provision of Kshs.50,000,000.00 had been made for the refurbishment. Consequently, the excess expenditure of Kshs.13,324,906.90 over and above the approved provision constituted an unauthorized expenditure.

Pending Bills

Examination of records held at the Ministry's Headquarters indicated that bills totalling Kshs.49,674,593.16 relating to both the Ministry and Missions abroad, and chargeable to the Recurrent Vote were not settled during the year 2008/2009 but were instead carried forward to 2009/2010. 80 393. Had the bills been settled and the expenditure charged to the accounts for 2008/2009, the Appropriation Account for Vote R.04 for the year would have reflected a reduced Net Surplus to be Surrendered to the Exchequer of Kshs.287,090,142.89 instead of Kshs.336,764,736.05 now shown

Imprests

Examination of other Imprests records also maintained at Headquarters indicated that Standing Imprests totalling Kshs.1,023,874.15 which ought to have been surrendered or otherwise accounted for, on or before 30 June 2009 were still outstanding as at that date. Out of the total, imprests amounting to Kshs.804,387.60 were owing from officers who are deceased, Kshs.2,359.00 from officers no longer in the Service, while the balance of Kshs.217,127.55 was due from others.

Discrepancy between balances

The Statement in addition shows General Account of Vote (GAV) credit balances totalling Kshs.903,241,410.05, which include an amount of Kshs.854,362,064.10 relating to 2005/2006 and earlier years. No reason has been provided for failure to clear the latter balance. Further, the GAV balance for 2007/2008 brought forward to 2008/2009 has been shown as Kshs.1,619,016.55 instead of the correct figure of Kshs.2,819,016.55. The discrepancy of Kshs.1,200,000.00 has not been reconciled or explained.

Unsurrendered Cash to the Exchequer

The Statement also reflects cash balances totalling Kshs.12,113,428,853.02 in respect of nine (9) Statements of Revenue including Customs and Excise, Income Tax, Loan Interest Receipts, Value Added Tax, Traffic Revenue and Investment Revenue amongst others, which had not been surrendered to the Exchequer as at 30 June 2009. Failure to remit to the Exchequer the substantial balance has not been explained.

Irregularities in Procurement

During the year under review, the Ministry procured various goods including portable radios, self supporting masts, automatic antennas, webbing and communication equipment, VX120 main pack and desktop computers all at a cost of Kshs.176,091,204.00. However, tender documents including the contract agreements between the Government and the suppliers of the goods were not made available for audit verification. Consequently, it has not been possible to ascertain that proper procedures were followed during the transactions and that the Government obtained reasonable value for money from the procurement. For the same reason, it has also not been possible to ascertain that the goods in question were delivered and properly accounted for.

This figure illustrates the different forms of corruption across ministries in Kenya.

Figure A3: Sanction Outcomes by the PAC

Sanction: Resolved

Inaccurate Appropriation Account Summary

211. The main summary of the Appropriation Account for Vote R.01 presented for audit shows the applied Appropriations-In-Aid as Kshs.655,811,915.00 instead of Kshs.639,528,471.00 reflected in the Approved Estimates. As a result, the Net Total Expenditure of Kshs.44,821,055,101.00 and the Net Surplus to be surrendered to the Exchequer of Kshs.3,687,832,349.00 reflected in the Summary have each been understated and overstated, by an amount of Kshs.16,283,444.00 respectively.

The Committee heard from the Auditor General that this matter had since been resolved as the Accounting Officer had corrected the accounting anomaly.

Source: Report of the Public Accounts Committee on the Government of Kenya Accounts for the Year 2010/2011 for the Ministry of State for Provincial Administration and Internal Security (page 83).

Figure A4: Sanction Outcomes by the PAC

Sanction: Prosecution

585. A physical verification revealed that the projects allegedly undertaken, were either nonexistent or there was no verifiable evidence of the specific work carried out. A thorough scrutiny of the supporting payment schedules revealed that the names of the participants were repeatedly used in different schedules and the names of casuals hired in various construction works also appeared in the list of leaders' meetings and education stakeholders' forums. Signatures of same individuals with same identity card numbers also differed from one schedule to the other. In the absence of any other evidence to the contrary, the propriety of Kshs.11,210,000.00 could not be ascertained.

The Committee heard from the Accounting Officer as follows:-

(i) **The CDFC treasurer took imprest that was used in various sub-projects. The imprest was taken on behalf of the CDFC who were implementing the projects. The projects were labour based and the CDFC resolved to undertake them instead of PMC. He presented documents in support of the expenditure;**

(ii) **The Board has intensified training and capacity building for the PMC as well as developing a PMC manual to harmonize and guide project implementation. The allocation for capacity building has also been enhanced from 2% to 3% to address the issue of lack of capacity by both CDFCs and PMCs.**

The Committee was not satisfied with the propriety of the expenditure of Kshs.11,210,000.00 and recommends as follows:-

(i) **The Director of Public Prosecutions (DPP) should prosecute suspects with a view to recovering the Kshs.11,210,000.00. In this regard, he should present to the National Assembly an action taken report not later than 31st December, 2014;**

(ii) **The Accounting Officer should ensure thatprojects are at all times implemented through Project Management Committees in consultation with the relevant Government Department as required by Section 30 of the CDF Act.**

Source: Report of the Public Accounts Committee on the Government of Kenya Accounts for the Year 2010/2011 for the Ministry of State for Planning, National Development and Vision 2030 (page 141).

Figure A5: Sanction Outcomes by the PAC

Sanction: Warning:

UNACCOUNTED FOR COST SHARING REVENUE AT THE KITUI GENERAL HOSPITAL

782. Examination of cost sharing revenue records maintained at the Kitui General Hospital disclosed that out of the revenue totalling Kshs.37,062,758.45 collected during the year ended 30 June 2011, Kshs.31,450,908.00 was accounted for, leaving a balance of Kshs.5,751,940.00 unaccounted for. Indications are that the un-surrendered revenue amounting to Kshs.5,751,940.00 may have been misappropriated.

The Committee was satisfied with the Accounting Officer's response but faulted him for failing to provide it to the Auditor General upon receiving the management letter leading to the audit query.

The Committee noted that had the Accounting Officer ensured timely action on the Auditor General's management letter, this matter would not have been an audit query.

The Committee recommends that the Accounting Officer should institute measures to ensure that Ministry accountants always act promptly on the Auditor General's management letters to forestall audit queries.

Source: Report of the Public Accounts Committee on the Government of Kenya Accounts for the Year 2010/2011 for the Ministry of Medical Services (page 192)

Table A1: Variable definition and sources

Variables	Definition	Source
Unvouched expenditures	Transactions that take place during the financial year, where the ministry did not provide sufficient documents to show that the expenditure was authorised, or where the goods and services that the payment was made for were not received	OAG
Excess expenditure	Spending that surpasses the authorised expenditure threshold set by the parliament	OAG
Pending bills	Amount related to goods and services that were received, but where a commitment was made to carry the bills over, to the next financial year thus drawing unnecessary interest charges	OAG
Imprests	Cash advances for travel and meeting purposes that were not re-reimbursed	OAG
Discrepancy in balances	Inconsistencies between the amount of money recorded in the ministry's cash book and that appearing in its bank statements	OAG
Unsurrendered cash	Unused cash at the end of the financial year that is not refunded to the Exchequer	OAG
Irregularities in procurement	Over-pricing of contracts and tenders relative to the stipulated market price	OAG
First-term minister	Dummy variable for politicians serving their first term as ministers	National Assembly of Kenya
Budget size	Total amount of financial resources allocated by the central government to each ministry	Controller of Budget
Public Expenditure	Proportion of ministry's budget that is spend on both development and recurrent items	Controller of Budget
Employment Size	Number of civil servants in a ministry, based in the headquarters only, as employed by the Public Service Commission of Kenya	Controller of Budget
Age	Age, in years, of ministers	National Assembly of Kenya
Years of Education	Total number of school education	National Assembly of Kenya
Gender	Gender of minister	National Assembly of Kenya
Incumbency rates	Number of times a minister has been re-elected in public office	ECK
Party margin of victory (2007)	Difference in the voter share between the incumbent and opposition party	ECK
Minister's margin of victory	Difference in the vote share between elected (ministers) and the runner-up at the constituency level	ECK

Notes
OAG refers to the Office of the Auditor General and ECK refers to the Electoral Commission of Kenya.

Table A2: Summary Statistics

Variable	Mean	Standard deviation	Minimum	Maximum
Annual Budget size (Ksh)	10866719789021.00	47840104441808.30	499778217.00	224811000000000.00
Public Expenditure (Ksh)	28664588010.85	38986952533.93	127803971107.00	75000000.00
Employment Size	215.0	14.0	201.00	229.00
Years of Education	17.0	5.0	12.0	22.0
Gender (dummy variable)	0.82	0.17	0	1

Notes
This table provides summary statistics that are used for the covariate balance test.

Chapter 3

The Cost of Political Alignment on the Quality of Public Services: Evidence from Kenya

Abstract

To what extent, and under what conditions, does political alignment between local and central government politicians affect the quality of public services? To answer this question, I use a regression discontinuity design on close elections to examine the completion rates of local development projects in Kenya. First, I find that aligned constituencies experienced a differential increase in the proportion and value of projects abandoned midway through their construction cycle (stalled) and non-existing (ghost) projects. Second, the magnitude of this effect was contingent on political factors. Stalled and ghost projects increased disproportionately at the end of the electoral year, suggesting that these projects were commissioned for electoral gain. Consistent with alignment weakening political accountability, aligned constituencies received fewer legislative sanctions for misallocating public resources relative to unaligned constituencies.

Keywords: Political alignment, stalled and ghost projects, legislative sanctions, regression discontinuity.

JEL Classification: D72, H50, H76.

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3.1 Introduction

The effect of political alignment between local and central government politicians on public goods provision remains a puzzle in the literature on distributive politics. One line of argument is that political alignment is beneficial, and voters electing local politicians affiliated with the central government receive a higher quantity of public services (Brollo and Nannicini, 2012; Baldwin, 2013; Burgess et al. 2015; Kramon and Posner, 2016). A competing argument is that political alignment is costly and, despite the larger quantity, there is no corresponding increase in quality or welfare outcomes (Callen et al. 2018; Lehne et al. 2018). Reconciling this debate remains challenging due to several issues such as the endogeneity of political alignment (Brollo et al. 2013), the over-reliance on transfers to proxy public service provision (Remmer, 2007; Litschig and Morrison, 2013) and the difficulties in understanding the mechanisms through which the central government influences the behaviour of local politicians (Gottlieb and Kosec, 2019). This paper attempts to fill this gap. I investigate the effect of political alignment on the completion rates of development projects initiated by local politicians in Kenya. Using data that directly matches project outcomes with disciplinary sanctions by the parliament, I provide suggestive evidence on how alignment lead to project non-completion and generates opportunities to accumulate rents for political gain.

In theory, political alignment should improve the quality of public services through two main channels. First, alignment can ease local politicians' budgetary constraints, given the availability of resources at the central government level that can be disproportionately diverted to their constituencies (Stokes et al. 2013; Callen et al. 2018). As such, alignment should lead to more programmatic spending and ultimately improve welfare. Second, alignment with the central government should further constrain the behaviour of local politicians, as the central government has stronger incentives to preserve its credibility by ensuring that local politicians' behaviour is aligned with the national interest (Caillaud and Tirole, 2002).Yet, little is known about the empirical validity of these propositions.

The empirical analysis relies on a unique dataset of 39,000 projects implemented between 2003 and 2007 by Members of Parliament (MPs) in Kenya. These projects were funded by the Constituency Development Fund (CDF), an annual transfer from the central government to 210 constituencies, aimed at financing small development projects such as clinics, schools, roads and boreholes. This setting is ideal for several reasons. First, MPs have substantial resources to provide public services on which the majority of the (poor) population depend (Awiti et al. 2013). Second, MPs have full discretion over spending decisions. Third, there is within-party variation in the alignment of MPs with the chairperson of the Public Accounts Committee (PAC), an oversight institution in the Kenyan parliament with the constitutional mandate of holding MPs accountable for spending the CDF. In contrast to previous studies, I introduce an objective measure of under-provision of public services that is also welfare-relevant: the share of stalled and ghost projects. Stalled projects refer to those where payments were made but which were abandoned midway through their construction cycle, while ghost projects refer to projects paid for but whose existence cannot be verified by independent auditors.

A key empirical challenge in identifying the causal effect of political alignment on the quality of public goods and services is that there may be constituency or politician specific factors that are correlated with both alignment and project outcomes. For instance, voters in constituencies with public services of poor quality might vote for aligned politicians in anticipation of central government support, or unobserved characteristics such as politicians' effort or ability might affect both alignment and project outcomes. To address these inferential challenges, I adopt a regression discontinuity (RD) design where identification comes from comparing differentials in project outcomes in constituencies where aligned politicians were narrowly elected to constituencies where they narrowly lost. In such contexts, aligned and unaligned constituencies are assumed to be similar in terms of observable characteristics that might be correlated with project outcomes (Dunning, 2012: p.63). While the RD design controls for constituency level confounders, it does not adequately account for politician-level characteristics that could affect projects' success (Brollo and Nannicini, 2012). I address this concern by showing that aligned and unaligned MPs in close elections are similar along observable characteristics such as education levels, political experience and incumbency rates, variables that are highly correlated with ability and competency (Brollo et al. 2013; Bo et al. 2017).

Using an RD design on close elections, I find that political alignment reduces the quality of public services. Constituencies that are aligned with the central government are more likely to have a higher proportion of stalled and ghost projects at the end of the electoral term, by 2.9 to 3.5 percentage points. This magnitude is economically significant, and corresponds to an additional loss of Ksh. 103,494 (USD 1034) to 139,795 (USD 1397) per constituency per year. Disaggregated analysis shows that these effects are not being driven by specific types of projects. I then examine the variation in alignment along an important dimension that the existing literature has not explored; aligned MPs who are top politicians within ministries. I find a disproportional increase in non-completion rates relative to their co-partisans, and this does not appear to indicate that they are substituting constituency responsibilities for ministerial work.

There are three potential alternative explanations to the above findings. First, differences in project outcomes across constituencies could have been driven by the types of projects implemented. For instance, if aligned MPs commissioned more sophisticated or complex projects, then this would increase the likelihood of non-completion. To rule out this concern, I restrict the sample to projects with similar observable characteristics and find insignificant differences in non-completion rates based on alignment. Second, differences in the quality of bureaucrats charged with project selection and oversight could affect completion rates. I mitigate this concern by showing that the number and value of projects that were approved but never started due to logistical and bureaucratic challenges do not differ across aligned and unaligned constituencies. Third, project outcomes could be independently influenced by politicians' experience and competency. For instance, if aligned politicians have less experience in managing public projects, then the estimates might be capturing the effect of experience rather than alignment. However, comparing first and second term MPs, I find that the non-completion rates are not significantly lower for second-term MPs who have more experience in managing the CDF.

To shed light on the underlying mechanisms, I focus on institutions of accountability within the central government. Building on theories of horizontal accountability (O'Donnell, 1998; Hidalgo et al. 2016; Lindberg et al. 2019), I examine the effect of political alignment between MPs and the chairperson of the PAC on disciplinary sanctions for the stalled and ghost projects. Between 2003 and 2005, the chairperson of the PAC was the official leader of the opposition, and in the remaining two years of the electoral term (2006-2007), a constitutional clause led to a switch in the chairperson of the PAC to an MP aligned with the central government. Using data that matches legislative sanctions with project outcomes, I compare the differences in sanction outcomes for the disclosed misuse of the CDF for constituencies just above and below the alignment threshold. The results show that alignment with the central government reduces sanction outcomes. Between 2006 and 2007, MPs and top constituency bureaucrats aligned with the central government were significantly less likely to be investigated, prosecuted or fired, and a significant portion of alleged cases were resolved without further enquiries. There is no indication that this finding is being driven by differences in party ideology or the composition of the PAC across both periods.

I interpret this result in the context of legislative politics where aligned MPs have strong incentives to advance their political careers by been nominated to influential and powerful positions such as ministerial and tendering boards by the president (Wehner, 2013). Such positions are politically valuable as they provide access to resources that can be used for political purposes (Martin, 2014). As such, once in the PAC, aligned MPs are less likely to sanction co-partisans as a signal of loyalty to the central government. This sanctioning bias does not appear during the first three years, as opposition MPs never get appointed to ministerial positions.

Overall, these findings highlight the role of legislative inefficiencies in the provision of local public services. In many countries, considerable parliamentary time and effort is dedicated to scrutinizing the spending behaviour of local politicians. However, this scrutiny is undertaken by politicians who are part of the central government. As such, political alignment, and more broadly, the lack of separation of powers, implies that legislative scrutiny might be shaped by multiple factors besides the need to improve the effectiveness of public service delivery. This in turn provides an opportunity for aligned MPs to engage in rent seeking behaviour, employing tactical strategies to divert public resources for targeted spending.

This paper contributes to the literature on democratic accountability by highlighting a new mechanism through which legislative institutions can disincentivize local politicians from providing public services. While existing studies have demonstrated how administrative, political and bureaucratic factors hinder legislative oversight (Wehner, 2007; Lindberg, 2010; Pelizzo and Kiyondo, 2014), the literature has often analysed them independent of their effect on welfare outcomes. I integrate these insights for the first time by studying the link between legislative politics and public service delivery. In doing so, I combine two strands of the literature that have been analysed separately. These are the legislative performance literature that examines the effectiveness of parliamentary institutions in enhancing political accountability (Barkan, 2008; Opalo, 2019) and the literature on the political economy of project completion (Williams, 2017; Rasul and Rogger, 2018; Fergusson et al. 2019). By directly matching project outcomes at the constituency level with their associated legislative sanctions from the central government, I provide systematic evidence of how alignment undermines the incentives for local politicians to provide public services by reducing the likelihood of being held accountable for misusing public funds.

Second, the findings contribute to the theoretical and empirical debate on how electoral incentives affect politicians' performance. While some studies find positive effects on public goods provision (Rosenzweig, 2015; Harding, 2018), others find evidence of a diversion of public resources for political gain through targeted transfers (Keefer, 2007; Labonne, 2016). By exploiting the yearly variation in the distribution of stalled and ghost projects, I provide one explanation for the mixed findings by showing that electoral incentives may simultaneously generate both effects. On the one hand, they may encourage politicians to commission more projects to signal better future performance to the electorate. Irrespective of alignment, the analysis shows that on average, MPs in Kenya exceed by twofold the maximum number of projects allowed by the CDF guidelines during the electoral year, suggesting that they do respond to electoral incentives. On the other hand, these projects remain stalled, especially for aligned politicians. This finding suggests that the ruling party might prefer engaging in non-programmatic spending if the returns are higher than programmatic spending (Callen et al. 2018).

Third, from a methodological perspective, the project-level data that I employ represents an advance over prior work that relies on government transfers as a proxy for public goods provision (Remmer, 2007). By focusing on the number and cost value of stalled and ghost projects, I mitigate potential bias that might arise from assuming that transfers result in the successful completion of projects. This is consistent with recent work showing significant discrepancies between allocated funds and the existence or quality of development projects (Reinikka and Svensson, 2004; Olken, 2007).

Finally, the paper relates to the literature on the costs of political connections (Fisman and Wang, 2015; Querubin et al. 2017; Bertrand et al. 2018) and the performance of legislative institutions in Africa (Pelizzo, 2011; Pelizzo and Stapenhurst, 2014; Opalo, 2019). By focusing on *de jure* rather than *de facto* practices, the findings shed light on a policy relevant aspect of accountability that has significant implications for welfare outcomes.

The rest of the paper is organized as follows. Section 3.2 provides the conceptual framework while section 3.3 presents a brief overview of the institutional setting in Kenya. The Data is described in Section 3.4 while Section 3.5 presents the empirical strategy. The main results are presented in Section 3.6 while Section 3.7 discusses the mechanisms. Section 3.8 presents the robustness checks and Section 3.9 concludes.

3.2 Conceptual Framework

This section combines theories of redistributive, rent seeking and legislative politics to provide an analytical framework that assesses how political alignment between local and central government politicians can affect the incentives to provide local public services.

From a redistributive perspective, political alignment has been argued to enhance the provision of public services (Fumey and Egwaikhide, 2018; Brollo and Nannicini, 2012). According to this strand of the literature, aligned politicians have the added advantage of having access to central government resources, and are capable of diverting these resources to their local constituencies. As such, voters from constituencies that are affiliated with the central government are perceived to be better-off compared to those from unaligned constituencies. Several studies provide empirical support for this proposition. For instance, Burgess et al. (2015) show that districts in Kenya that are aligned with the president receive twice as much expenditure on roads than unaligned districts, while Jablonski (2014) shows that there is a disproportional allocation of donor projects in Kenya along partisan lines. In fact, such benefits are not only channelled to voters, but also extend to politically salient groups such as business entities and rural farmers (Goldman et al. 2009; Cole, 2009; Wu et al. 2012).

However, aligned and unaligned politicians differ in two key dimensions that can ultimately shape their redistributive decisions. First, from a theoretical perspective, access to the central government's resources is expected to ease the budgetary constraints of politicians in aligned constituencies. There is an established body of literature that argues that politicians, driven by electoral incentives, often employ a mix of programmatic and non-programmatic policies (Stokes et al. 2013; Callen et al. 2018). However, due to limited budgetary resources, they face a trade-off between financing public services that have collective benefits and targeted goods that appeal to specific segments of the electorate (Lizzeri and Persico, 2001). In contexts where non-programmatic spending has the potential to increase re-election prospects, then alignment can generate a means of solving this trade-off and create more scope for politicians to engage in non-programmatic spending. However, the ability to engage in non-programmatic spending is also contingent on local politicians' access to resources in the central government. In most contexts, these resources are often distributed through ministerial portfolios (Parliamentary

Centre, 2010). Thus, aligned politicians who serve at the ministerial level may have higher leverage over these resources compared to co-partisans not serving in ministerial positions.

A common non-programmatic strategy that politicians employ to divert resources earmarked for public goods provision is to commission non-existent projects or begin and abandon them midway through their construction cycle. From a political perspective, engaging in such strategies is tactical for several reasons. First, stalled projects provide an illusion that politicians care about the welfare concerns of voters. For instance, when politicians commission projects such as clinics, schools and roads that are visible to voters, and voters can attribute them to local politicians, then voters are able to infer their types and vote for them, oblivious of the fact that the projects will never be completed. This is likely to be strategic if the projects are commissioned during the electoral year when voters make electoral decisions (Alok and Ayyagari, 2019). Second, stalled projects provide a means to target public resources towards a subset of beneficiaries, for instance through the allocation of public tenders. Third, such projects provide a channel through which politicians and bureaucrats can siphon public resources for personal or political gain while simultaneously providing some minimum level of public services (Fergusson et al. 2019).

To increase the effectiveness of non-programmatic strategies, evidence shows that an incumbent's timing of their spending policies is significantly influenced by the electoral cycle (Wantchekon, 2003; Khemani, 2004). In fact, according to theories of political budget cycles, election year policies differ from other years as politicians attempt to signal their competence or preferences for public service provision (Shi and Svensson, 2006). This rests on the assumption that politicians have control over spending decisions, and voters can observe the public services being provided (Bostashvili and Ujhelyi, 2019). This allows voters to update their expectations about politicians' future performance based on current spending patterns. As such, the commissioning of projects is likely to follow the electoral cycle (Marx, 2018).

Second, aligned politicians differ from those that are unaligned in terms of their career concerns. In some contexts, influential positions in government ministries and parastatals as well as lucrative seats on procurement and tender boards are often allocated by the president to party members (Lindberg, 2010). This implies that aligned politicians, especially those nominated to serve in legislative committees, have strong incentives to portray their loyalty to the president in order to signal their competence to take on high level responsibility in the party. For instance, Gallagher et al. (2011: 68) notes that '[legislators] who aspire to executive office must behave themselves in the legislature. If they do not, they will displease those with the power to promote them'. There is also evidence that central government politicians have considerable influence over the appointment and career concerns of local politicians and bureaucrats (Brierley, 2009; Iyer and Mani, 2012). As such, aligned politicians in the legislature - who are mandated to sanction politicians for misappropriating public resources - may be motivated by other concerns unrelated to enhancing accountability due to the potential for the central government to allocate ‘mega-seats’ to their co-partisans (Golooba-Mutebi, 2016; Mills, 2017).

3.3 Study context: Kenya

Kenya is an ideal setting to empirically test these theoretical propositions because the level of electoral competition as well as frequency in political turnover suggests that MPs have strong incentives to manipulate public resources for re-election (Opalo, 2017). In addition, the long history of political impunity suggests casts doubt on the capacity of institutions of accountability in to enhancing checks and balances across different organs of the government (Akech, 2011). Similar to many other countries, Kenya established constituencies in 1988 mainly for electing members of the National Assembly. There are 210 constituencies and the local and presidential elections take place on the same day. Each constituency is governed by an MP who is directly elected for a five-year term. There are no term limits for MPs in Kenya. Constituency-level elections follow a plurality system where each registered voter can vote for only one candidate, and the candidate with the most votes is declared the winner. During the December 2002 elections, which correspond to the electoral term 2003-2007, each constituency had 5 candidates contesting for the MP and presidential seat. The presidential winner, Mwai Kibaki of the National Rainbow Coalition (NRC), received 62 percent of the total votes while the runner up, Uhuru Kenyatta of the Kenya African National Union (KANU) Party, had 30 percent of the total votes.

Members of parliament have significant resources to finance local development projects. In 2003, the government of Kenya, through an Act of Parliament, established the CDF with the objective of devolving public service provision from the central government to all constituencies. The CDF was aimed at providing MPs with public resources to enhance citizens’ welfare though the provision of local public goods and services (Awiti et al. 2013). The CDF is disbursed annually according to a pre-determined formula based on the 1999 census. The CDF Act stipulates that at least 2.5 % of the annual central government’s revenues are to be allocated to the fund. Of these, 75 % are distributed equally, while the remaining 25 % are distributed based on constituencies’ poverty index. Figure 3.1 shows that these resources are substantial, having increased from Ksh. 1.26 billion in 2003 (12 million USD) to Ksh. 10.1 billion in 2007 (118 million USD). The CDF is largely under the discretion of the MPs. The CDF Act empowers each MP to appoint members of the CDF committee who are responsible for the overall management of the fund. This committee is chaired by the MP. The MP is also responsible for appointing a Fund Manager (accounting officer) who is responsible for maintaining and updating all financial records. These constitutional provisions thus make the MP the most influential person in the management of the fund (Gikonyo, 2008).

Despite these substantial resources, most Kenyans do not perceive MPs as delivering development projects to their constituencies. For instance, results from the Afro-barometer (2008) survey suggest that 40 percent of Kenya disapprove the way MPs have performed their jobs over the previous twelve months, compared to an average of 41 percent across a sample of 20 sub-Saharan Africa. In addition, an overwhelming 85 percent of Kenyans reported that they considered most of the MPs as corrupt while 47 percent of Kenyans reported that they do not trust the parliament in executing its roles. These poor indicators may be as a result of expectations that MPs preferences are strongly aligned with voter's preferences.

Several studies suggest that politicians, especially in the African context have long engaged in some level of clientelism and patronage spending (Fatton 1986; Gadjanova, 2017). Evidence of such spending has also been demonstrated in the Kenyan context and argued to be vital for accumulating rents for political gain. For instance, evidence from Kramon (2016) shows that voter buying is high and effective, as 23 percent of survey respondents responded that their electoral decisions were influenced through material gains by politicians. Leight et al. (2018) find that voters are highly responsive to payments by politicians, and interestingly, while those receiving such payments are less likely to sanction politicians, non-beneficiaries are willing to punish politicians. Thus, there are political incentives to divert CDF resources to the provision of targeted and patronage goods for politicians seeking re-election.

Incumbent MPs associated with stalled and ghost projects often go unpunished. Each year, the Office of the Auditor General conducts an annual audit of all CDF projects and the audit findings are submitted to the PAC in order to sanction corrupt MPs and constituency level bureaucrats. The PAC is a standing committee in the National Assembly that derives its mandate from Article 229 of the constitution. It has powers to examine audit reports produced by the Office of the Auditor General (OAG) and make recommendations to the National Assembly regarding any cases of resource misappropriation. It can sanction public officials by recommending various disciplinary sanctions such as prosecutions, the firing of incompetent bureaucrats, or recommending further investigation for alleged offences to the National Assembly. In some instances, cases are dismissed without further investigations. Given these constitutional powers, the selection of the committee's chairperson is often politicized (IEA, 2009; Nyamori and Nyamori, 2015).

Article 184(4) of the National Assembly Standing Order states that: 'The PAC constituted by the house immediately following the general elections shall last for a period of three calendar years and that constituted thereafter shall serve for the reminder of the parliamentary term' (PAC, 2003). During the period 2003-2005, the PAC comprised 11 MPs, five from the president's party and six from the opposition, with KANU controlling the chairperson's position. Between 2006-2007, the chairperson was affiliated to the central government by being elected as an MP on the NRC party platform and the PAC comprised 11 MPs, six from the NRC and 5 from the opposition. The analysis considers these shifts to examine disciplinary sanctions imposed on MPs during periods of (un)alignment.

Taken together, the Kenyan context provides an attractive setting in which to empirically test several hypotheses. First, given that alignment eases the budgetary constraints of local politicians, MPs who are affiliated with the central government are more likely to have a higher share of stalled and ghost projects compared to unaligned MPs. Second, given that central government resources are largely under the control of ministries, aligned MPs who serve in top ministerial positions such as ministers or assistant ministers are likely to misallocate local resources compared to aligned MPs who do not have any ministerial capacity. Third, given that MPs care about being re-elected, spending patterns will follow the electoral cycle, and the share of stalled and ghost projects will increase towards the election. Fourth, given career incentives to be nominated to influential positions in the central government, aligned MPs are less likely to impose disciplinary sanctions on their co-partisans to portray party loyalty to the president.

3.4 Data

To study the quality of public services, I rely on a detailed dataset that contains information on the implementation status of all projects commissioned by MPs. The most common types of projects involve the construction of schools, healthcare centres, local roads, bridges, and boreholes. To ensure that constituencies can effectively manage multiple projects, the CDF Act stipulates that each constituency should not exceed 25 projects per year. Regarding the implementation process, the CDF committee, in conjunction with the local community, begins by identifying the prevailing needs and the projects required to address them. The committee then prioritizes the projects, eliminating any duplications and ensuring that they are feasible and constitute value for money. The list of potential projects is then submitted to the CDF board for approval. Finally, the CDF board disburses funds to the CDF committee and the MP establishes a project committee to oversee the project implementation. This committee, which is also chaired by the MP, is tasked with preparing project schedules, monitoring progress to ensure timely completion and undertaking bureaucratic responsibilities such as tendering and procurement (Gikonyo, 2008).

The project data is hand-coded from official documentation from the CDF board. The entire dataset consists of a total of 39,042 projects implemented between 2003 and 2007. This time period is selected due to data availability as well as consistency in the classification of projects across all 210 constituencies. These projects are classified into 13 non-overlapping categories: agriculture, education, security, water, roads and bridges, electricity, health, youth programmes and sports, administrative, emergency fund, environment, monitoring and evaluation, and sanitation (Appendix Table B1). Consistent with the project management literature, I categorize whether conditional on being approved, the projects were: (1) completed, (2) ongoing, (3) approved but not started because of bureaucratic challenges, (4) stalled - defined as projects abandoned before completion, or (5) ghost projects - defined as those that existed in the documentation but were not physically verified by independent government auditors (Appendix Table B2) and the corresponding summary statistics are reported in Appendix Table B3.

3.5 Empirical Strategy

3.5.1 Regression discontinuity (RD) design

The main methodological challenge in estimating the causal effect of political alignment on project outcomes is that alignment is not randomly allocated and constituency level unobservables (such as ideology) or unobserved politicians characteristics (such as effort or ability) might affect both alignment and project outcomes. The ideal experiment would be to compare politicians when they are both aligned and unaligned in the same constituency during the same electoral term. To address this inferential problem, I use a sharp RD design on close elections to provide a plausible exogenous variation in alignment between local and central government politicians.

The underlying assumption is that constituencies where the aligned candidate barely won are similar to constituencies where the aligned candidates barely lost in terms of important social economic and political characteristics that might be correlated with project outcomes. Political alignment is exclusively determined by the margin of victory of the MP, which is centred at zero. In this setup, the margin of victory depends on observable factors (such as campaign financing), unobserved factors (such as campaign strategy or politicians' effort) and random events (such as weather shocks) on election day that affect voter participation and election outcomes (Gelman and King, 1990; Lee, 2008). For close elections, constituencies around the margin of victory threshold are on average assumed to be very similar, varying only in their alignment status (Lee and Lemieux, 2010; Caughey and Sekhon, 2011; Egger et al. 2015).

In each constituency, let V^{winner} represent the number of votes that the winning candidate obtained and $V^{runner-up}$ be the number of votes for the candidate in the second position. The margin of victory in constituency c during election t is defined (V^{winner} - $V^{runner-up}$) as the difference in vote share between the winner and the runner-up during the December 2002 elections.

The baseline specification takes the form

$$y_{c,t} = \beta_0 + \beta_1 D_{c,t} + \beta_2 f(X_{c,t}) + \beta_3 D_{c,t}.f(X_{c,t}) + \epsilon_{c,t}$$

Equation (1)

Where $y_{c,t}$ is project outcomes in constituency c during electoral period t, and is expressed in terms of the number of stalled and ghost projects as a share of the total projects. $D_{c,t}$ is a dummy variable for the alignment status and takes the value of one if an MP shares the same political party as the central government (president's party), the function $f(X_{c,t})$ corresponds to a smooth function of the margin of victory, the interaction term $D_{c,t} \cdot f(X_{c,t})$ estimates the control function separately on each side of the threshold and $\epsilon_{c,t}$ is the error term. The coefficient of interest is denoted by β_1 and captures the local average treatment effect of alignment on the project outcomes when the margin of victory is zero. The standard errors are clustered at the constituency level.

An issue that arises in the estimation is whether to include control variables and unit fixed effects. There are several advantages of accounting for these factors, such as increasing the precision of the estimates as well as mitigating small sample biases when the number of observations close to the threshold is small (Frolich and Huber, 2017). As such, I re-estimate Equation (1) and include three time-varying variables: constituency level poverty rates, population density and literacy rates. The choice of these variables is due to data availability. These variables are summarized in Appendix Table B4 and Table B5. Given the panel nature of the dataset, I also introduce constituency fixed effects in some of the specifications (Imai and Kim, 2019). The motivation is that project outcomes might be correlated with unobservables such as differences in monitoring of projects across constituencies which could lead to them being stalled. Given that the baseline regression is estimated for constituencies with close elections - and hence assumed to similar in terms of observable and unobservable characteristics, then the inclusion of these additional sets of variables should not systematically affect the main results.

A second issue in estimating Equation 1 appertains to imposing assumptions on the functional form of $f(X_{c,t})$ as well as selecting a bandwidth h that determines the range of observations to which the analysis is to be restricted. Smaller values of h on both sides of the treatment threshold restrict the sample to very close elections - consistent with the 'as-if random' assumption required for causal inference. However, this comes at the cost of reducing the sample size. On the other hand, larger values of h tend to increase the number of observations, but include in the sample constituencies that are systematically different from each other. This generates an efficiency-bias trade-off (Lee and Lemieux, 2010).

To address this trade-off, I implement several strategies. First, I estimate local parametric linear control functions following Imbens and Kalyanaraman's (2012) mean square error optimal test. Second, I rely on non-parametric techniques and select the optimal bandwidth using Calonico et al.'s (2014) bias correction test. To address concerns regarding the weighting of observations at the threshold, I estimate several kernel functions such as the triangular kernel technique that assigns more weights to observations that are closer to the threshold relative to observations that are further away and the Epanechnikov approach that minimizes the asymptotic mean integrated squared error (Calonico et al. 2018).

3.5.2 Validity tests: Continuity assumption, sorting and balance

To validate the research design, I present evidence in support of the continuity assumption, absence of sorting of constituencies across the alignment threshold and balance in pre-treatment covariates across constituencies with close elections.

A key identification assumption is that all other factors that might determine project outcomes should be continuously related to the forcing variable at the threshold (Imbens and Lemieux, 2008). In close elections, this implies that politicians should not be able to precisely manipulate elections and sort themselves in terms of alignment; otherwise aligned politicians would have differential advantages in regard to fraudulently winning close elections and differ from those who are unaligned (Hahn et al. 2001).

To address this, I first exclude 13 constituencies where electoral fraud and malpractices were reported, or where a by-election occurred during the electoral period. Second, I conduct a formal conditional density test to examine whether there is any discontinuity at the threshold in the density of the forcing variable (McCrary, 2008). Figure 3.2 shows that there is no evidence of discontinuities in the margin of victory of the aligned candidate around the threshold. Third, I examine non-random sorting of constituencies around the threshold by visually inspecting the distribution of the margin of victory around the threshold using histograms (Erikson and Titiunik, 2015). Panel A of Figure 3.3 presents an histogram where the number of bins is calculated by weighting the number of observations while Panel B splits the histogram into 20 bins and Panel C splits it further into 50 bins. The pattern and shape of the histograms does not provide any evidence of clustering of bins to the right of the threshold, suggesting that there is no evidence of sorting. To circumvent the arbitrary selection of the bins, Panel D provides a kernel density plot of the probability density function of the margin of victory. The results remain unchanged. Finally, Figure 3.4 plots the mean of each of the pre-treatment indicators on the margin of victory and allows for discontinuity at the threshold. The results show that there is no significant discontinuity for several important variables around the threshold.

A second identification concern is that constituencies where the aligned candidate barely won might be systematically different to those where the aligned candidate barely lost. Figure 3.5 displays the difference in means test of several political, economic and social variables as well as the associated t-statistic and p-values. The results show that all variables are balanced across constituencies with close elections, suggesting that constituencies with close elections are similar in important dimensions that might be correlated with project outcomes.

3.6 Results

3.6.1 Sample selection and descriptive statistics

To implement the RD design, I restrict the sample to 70 constituencies that had close elections, as defined by a margin of victory of around 10 percent. This represents 36 percent of all of the races during the period 2003 to 2007.

The project outcomes are the average across the years of each MP and each constituency. The descriptive statistics that correspond to the different types of projects implemented are reported in Table 3.1. Overall, the estimates show a significant variation in the number and cost of projects implemented by MPs. On average, each constituency had a total of 186 projects over the sample period, equivalent to approximately 23 projects per year. Education projects were the most common (55 percent), followed by water (13 percent), health (9 percent) and roads and bridges projects (6 percent). In terms of their cost value, education projects had the highest value (USD 185 million), followed by water (USD 49 million), health (USD 47 million), and roads and bridges projects (USD 24 million).

Table 3.2 reports disaggregated descriptive statistics on the project implementation status. The results in Panel A show that around 23.7 percent of all CDF projects were either stalled or ghost projects. These projects were more common in education (76 percent), health (9 percent), water (7 percent) and roads and bridges (3 percent). The lower panel presents the corresponding cost value. The estimates show that stalled and ghost projects amounted to Ksh 2.3 billion (23 million USD), an amount that is equivalent to 15.7 percent of the CDF disbursed to all constituencies.

3.6.2 Main results

This section provides evidence that aligned constituencies had a significantly higher proportion of stalled and ghost projects compared to unaligned constituencies. It then rules out differences in project complexity, bureaucratic quality and political experience as alternative explanations for this finding.

Table 3.3 presents the regression results from estimating several variants of Equation 1. The dependent variable is the number of stalled and ghost projects as a share of all projects per constituency. The results in columns (1) to (3) are estimated using linear polynomials while those in columns (4) to (6) are estimated with quadratic polynomials. In terms of weighting, the estimates in columns (1) and (4) rely on Imbens and Kalyanaraman's (2012) approach, while those in columns (2) and (5) rely on triangular kernel approach, and those in columns (3) and (6) are based on the Epanechnikov kernel. The bandwidth is selected using Calonico et al.'s bias correction test (2014).

Across the different specifications, the results reveal that there is a statistically significant effect of political alignment on project outcomes. Aligned constituencies had a significantly higher proportion of stalled and ghost projects compared to unaligned constituencies. The estimates suggest that alignment leads to an additional 2.9 to 3.5 percentage point increase in the share of stalled and ghost projects per constituency during an MP's electoral term. This increase is substantial and is equivalent to 1.8 to 2.6 times the sample mean. This estimate also corresponds to a sizable misallocation of the CDF. Given that the average value of a stalled or ghost projects was Ksh. 249, 383 (2,493 USD), alignment led to an additional loss of Ksh. 103,494 (USD 1034) to 139,795 (USD 1397) per year. These findings are robust to controlling for the margin of victory using different functional forms as well as the choice of the bandwidth. On the lower panel, I re-estimate the baseline model including the three covariates and constituency fixed effects and these does not significantly alter the sign or size of these point estimates.

Figure 3.6 provides a graphical confirmation of the main results by plotting the conditional expectation of the number of stalled and ghost project on the y-axis, against the margin of victory of the aligned politician on the x-axis. Each point represents the average outcome in constituencies within a given range in the margin of victory. The points to the right of zero indicate constituencies where the aligned candidate barely won while the points on the left of zero represent the unaligned constituencies. There is a significant jump in the conditional mean of the outcome variables at zero, corresponding to the RD estimate presented in column (2) of Table 3.3.

The outcome variable in above analysis is generated by aggregating the number of stalled and ghost projects across multiple public services. As such, if non-completion rates differ systematically across different categories of public services, then the results might only be capturing stalled and ghost projects in specific categories, and hence not representative of all types of projects implemented by MPs. To examine this possibility, Table 3.4 presents results from re-estimating Equation (1) but separately for each category of public services. The results in columns (1) and (5) refer to stalled and ghost water projects, those in columns (2) and (6) refer to those in education, columns (3) and (7) on health and columns (4) and (8) on roads and bridges. Across the different specifications, the point estimates remain significant at the conventional levels and reveal that aligned constituencies had a higher share of non-completion across the individual categories of projects. This finding suggests that the main results are not being driven by aggregating project outcomes across multiple types of public services.

3.6.3 Alternative explanations

I examine three alternative factors that could potentially account for the differences in non-completion rates across constituencies. First, the RD estimates could be capturing differences in the complexity of the projects implemented, differences in bureaucratic quality, or differences in politicians' experience and competency.

A first concern with the above interpretation is that the results might be being driven by differences in the types of projects. For instance, aligned constituencies could have implemented more ambitious and complex projects, leading to a mechanical relationship between alignment and non-completion rates. To examine this possibility, I use highly disaggregated data and compare the number of stalled and ghost projects across similar types of sub projects. The analysis is restricted to education projects, due to data availability and given that they comprise the most significant share of stalled and ghost projects (Table 3.1). The results of this comparison are presented in Table 3.5 and show that aligned and unaligned constituencies with close elections do not differ in the share of stalled and ghost projects for similar types of projects such as the construction of classrooms, bursaries, the fencing of school premises and roofing.

A second concern is that differences in the quality of bureaucrats, especially those in the project selection committee, could affect the likelihood of completing the projects. This type of spurious relationship could arise if aligned MP disproportionally allocate bureaucratic positions to individuals with less capabilities relative to unaligned constituencies. While bureaucratic quality is unobservable, I compare differentials in the number of projects that were approved but never started due to bureaucratic and logistical challenges across barely aligned and unaligned constituencies. The point estimates reported in Table 3.6 are not only small in magnitude, but also statistically insignificant, suggesting that bureaucratic quality, proxied by the capacity to vet and award contracts, does not differ systematically across constituencies based on their alignment status.

A third potential concern is the differences in political experience and competency that might drive project outcomes. For instance, MPs with prior experience in overseeing public sector projects may have fewer stalled projects, suggesting that the baseline estimates would be capturing the effect of political experience or competence rather than political alignment. To address this possibility, I first identify MPs who were politicians prior to 2003 and are now serving their second term. I then compare the share of stalled and ghost projects for second-term MPs to those serving their first term, who presumably have less political experience. The results presented in Table 3.7 suggest that political experience cannot fully explain the differences in project outcomes, as MPs with prior public sector experience are not associated with fewer non-completion rates compared to those without such experience.

3.6.4 Heterogeneous Effects

As discussed in the conceptual framework, aligned politicians differ in terms of their ability to divert central government resources to their constituencies. This arises as resources in the central government are mostly controlled by ministries, suggesting that aligned politicians serving as top ministerial officials have more leverage over these resources relative to their co-partisans.

AS such, non-programmatic spending are likely to be higher in constituencies that are governed by aligned politicians who serve in ministerial position as opposed to their counterparts with no ministerial obligations. In Kenya, MPs from the same political party as the president are nominated to serve in ministerial positions. Of the 125 MPs aligned with the NRC, 40 served as either ministers or assistant ministers. I rely on this institutional feature to estimate the marginal effect of serving in top ministerial positions on the completion rate of local projects by re-estimating Equation (1) and including an interaction term (alignment x ministry) where ministry is a dummy variable that takes the value of one for aligned MPs who are either ministers or assistant ministers.

Table 3.8 reports the results from this estimation. Column (1) replicates the baseline results for reference, while columns (2) and (3) interact the alignment and ministry dummies, estimated separately using linear and quadratic polynomials. In column (2), the coefficient of the interaction term is statistically significant at the 5 percent level, suggesting that non-completion rates were higher for aligned MPs serving in top ministerial positions. Compared to the estimate in column (1), being a ministerial official increased the number of stalled and ghost projects by a magnitude of 1.5. In column (3), the point estimate becomes smaller in magnitude, although it remains statistically significant at the 10 percent level.

3.6.5 Temporal dimension of project non-completion

Theoretically, if politicians are channelling public resources for political gain, theories of political budget cycle suggest that this behaviour is likely to be influenced by the timing of the elections. As such, it can be hypothesized that the distribution of stalled and ghost projects will follow the electoral cycle, as the importance of accumulating rent is higher prior to elections. To test this proposition, I examine the distribution of project outcomes during each of the MP's years in office. According to the estimates in Table 3.9, the share of stalled and ghost projects was higher during the last year of the electoral term. The coefficient of the first year dummy is positive and significant at the 5 percent level, while the coefficients of the second, third and fourth year dummies is only significant at the 10 percent level. However the coefficient of the fifth year, which is the electoral year, is large and significant at the one percent level. This finding depicts a pattern in which stalled and ghost projects spiked at the end of the electoral year. I interpret this finding as suggestive evidence that these projects were commissioned for political gain. Table 3.10 further reveals that the number of stalled and ghost projects in 2008, a year after the election, was still higher in aligned constituencies, suggesting that MPs did not re-direct the CDF to better investment during the electoral year, or that the projects were not delayed in 2007 due to electoral activities.

3.7 Mechanism

This section provides suggestive evidence that alignment reduces the quality of local public services by undermining legislative accountability. It then concludes by ruling out differences in party ideology and compositional effects of the PAC as alternative explanations.

3.7.1 Legislative sanctions

The key mechanism advanced here asserts that alignment enhances the incentives to under-provide public services due to the likelihood of circumventing legislative sanctions. As such, I would expect fewer sanctions for MPs who are aligned with the central government compared to unaligned MPs. Qualitatively, legislative institutions in Kenya have been considered a key impediment to transparency and accountability, and there is anecdotal evidence that the PAC shields politicians from being held accountable (Pelizzo and Kinyondo, 2014; Nyamori and Nyamori, 2015).

I provide systematic evidence in support of such accounts by examining sanction outcomes from the PAC. I begin by constructing a database that contains all deliberations on the committee's decisions regarding stalled and ghost projects as documented in the OAG's reports. I then generate indicator variables that capture the various forms of sanctions imposed on MPs, such as prosecutions, recommendations for further investigations, the removal or firing of corrupt and incompetent local officials, or whether alleged cases were dismissed without further investigations. Taking advantage of the switch in the alignment status between MPs and the chairperson of the PAC that occurred at the beginning of 2006, I compare sanction outcomes for NRC MPs during the period 2003-2005 when the chairperson of the PAC was part of the opposition, to 2006-2007, when the chairperson was part of the central government. Table 3.11 presents a descriptive analysis of the committee's sanctions. Two key patterns emerge. First, there is variation in the forms of sanctions imposed by the PAC. Second, there is less evidence that the PAC engages in payback dynamics by imposing more sanctions on MPs from the other party.

Table 3.12 presents the main regression results obtained from comparing the sanction outcomes for aligned and unaligned constituencies. The outcome variable is a binary indicator that captures whether MPs or top constituency bureaucrats were prosecuted (columns 1 and 5), investigated (columns 2 and 6), fired (columns 3 and 7) or had their cases dismissed (columns 4 and 8). The point estimates in columns (1) to (4) are statistically insignificant, suggesting that MPs aligned with the central government were not disproportionally sanctioned by the PAC compared to unaligned MPs. Consistent with the descriptive statistics in Table 3.11, opposition ministers did not disproportionately receive more sanctions during the period 2006-2007, suggesting that MPs bail each other out. However, the point estimates in columns (5) to (8) are statistically significant at the conventional levels. Across columns (5) to (7), the negative and statistically significant signs suggest that MPs aligned with the central government received substantially fewer sanctions compared to unaligned MPs while the results in column (8) show that they were likely to have their cases dismissed without further inquiries. Further results indicate that this sanctioning effect was more pronounced for MPs serving in ministerial positions (Table 3.13).

These results lend support to the interpretation of selective enforcement of sanctions depending on political alignment with the central government. The magnitude of the point estimates during the period 2006-2007 is particularly striking. For instance, column (5) shows that MPs aligned with the central government were 97 percent less likely to be recommended for prosecution while the results in column (6) suggest that such MPs were 80 percent less likely to be subjected to further investigations or 78 percent less likely to have top constituency bureaucrats fired. Consistent with alignment generating perverse incentives to complete local projects, the results in column (8) reveal that 84 percent of the cases were more likely to be dismissed without any sanctions. Taken together, this points to a differential in legislative sanctions conditional on whether MPs are affiliated with the central government.

3.7.2 Alternative mechanisms

Compositional effects

An alternative hypothesis is that differences in the composition of the PAC before and after the switch in 2010 could have driven the disciplinary outcomes. This would lead to a positive association between alignment and sanctions during the period 2006-2007, especially if the NRC affiliated chairperson's decision was also driven by the rest of the committee members. This is consistent with the existing literature that shows the crucial role of both the chairperson and committee members in final deliberation outcomes (Nyamori and Nyamori, 2015). As such, different characteristics of committee members during these two periods might confound the results. This is however unlikely to affect the main results for several reasons. First, in both periods, the Standing Orders were not altered, and most of the committee's powers remained confined to the chairperson. The chairperson has significant powers regarding the setting of the committee's agenda as well as moderating committee sessions. Indeed, it is for this reason that this post is significantly politicized (IEA, 2009). Second, I examine differences in the composition of the PAC across both periods in terms three important dimensions that are likely to affect outcomes. A descriptive analysis shows no significant differences in gender composition of the PAC (with only one female MP in each period), as well as no significant difference in the number of committee members who are co-partisan with the chairperson of the PAC (only six MPs were affiliated to the opposition prior to the switch, compared to 5 MPs after 2006).

Party ideology

Another alternative explanation for the differences in sanctions before and after the switch in 2006 is party ideology with respect to public service delivery. For instance, if the central government were to inherently place less emphasis on public service provision, then this would mechanically explain the fewer sanctions imposed on MPs during the period. This is however unlikely for two reasons. First, an examination of the NRC manifesto suggests that improving public service provision was an important policy objective for the party (NRC, 2002). Second, the results reported in Table 3.14 - which include party fixed effects - yield point estimates that are comparable in both magnitude and size to those in Table 3.12.

3.8 Robustness tests

In this final section, I discuss three potential threats to the identification strategy and the interpretation of the main findings: the possibility that the RD estimates are capturing random factors, the accuracy and reliability of the project data and the generalizability of the results.

3.8.1 Placebo tests

An important concern is that the main results might be capturing other factors that might affect project outcomes besides alignment. To test this possibility, I conduct a series of falsification tests. First, I examine whether there is evidence of jumps in the project outcomes at non-discontinuous points by generating fake treatment thresholds (Imbens and Lemieux, 2008). Table 3.15 reports the results obtained from re-estimating Equation (1) using different false margins of victory on both sides of the alignment threshold. The RD coefficients are however statistically insignificant in all of the specifications. Second, I examine the effect of alignment on the allocation of the CDF. Given that these funds are allocated according to a pre-determined formula, they should not in principle differ along alignment. The results in Table 3.16 are consistent with this proposition.

3.8.2 Reliability of the project data

While commonly used in the literature (William, 2017; Harris and Posner, 2019), relying on self-reported data by politicians raises concerns regarding systematic bias in reporting. This raises the possibility that the data might be biased if aligned and unaligned constituencies differentially report the status of the CDF projects to the central government. I investigate this by examining differences in the reporting of the status of projects along the implementation cycle. The results in Table 3.17 suggest no evidence of systematic differences in the number of completed projects, those categorized as ongoing, projects approved but not started because of bureaucratic challenges and those with missing data on their associated cost value.

3.8.3 External validity

A final aspect of the RD design is that the results might be valid for constituencies that had a close election and may not be generalizable to the rest of the constituencies in Kenya. To examine this possibility, I compare several social economic and political indicators in the sample of constituencies with close elections to the rest of the constituencies. The results from the covariate balance tests are reported in Table 3.18 and show that constituencies with close elections have a higher share of valid votes compared to the rest of the constituencies.

3.9 Conclusions

In this paper, I use project level data to generate insights on how political alignment between local and central government politicians affects the provision of local public services. The empirical set up and the detailed nature of the data permits a fine-grained analysis of how institutions of accountability influence the spending behaviour of local politicians. First, I show that alignment affects the completion rate of development projects. Using a regression discontinuity design, I find that constituencies that are aligned with the central government have significantly higher shares of stalled and ghost projects as opposed to unaligned constituencies. Further analysis shows that this effect is not driven by differences in project complexity, quality of bureaucrats or political experience across aligned and unaligned constituencies.

To shed light on the underlying mechanisms, I examine how alignment affects the disciplinary outcomes imposed by the central government in response to the stalled and ghost projects. I take advantage of a constitutional clause that led to a shift in the alignment status of politicians with the chairperson of the PAC to examine differentials in disciplinary outcomes between aligned and unaligned MPs. I find that alignment with the chairperson is associated with less sanctions, especially when the chairperson is affiliated to the central government. This finding seems to reflect the fact that committee members from the president's party have incentives to be nominated to more influential positions in the government, an aspect that reduces the likelihood of sanctioning co-partisans. These results are consistent with studies highlighting the role of political factors in hindering the effectiveness of legislative institutions in enhancing political accountability (Lindberg, 2010; Mills, 2017; Gottlieb and Kosec, 2019).

While aligned politicians can circumvent legislative accountability, they also face the threat of being voted out for under-providing public services. I provide suggestive evidence to show that MPs might substitute some level of public services with targeted goods. By exploiting the yearly variation in project completion rates, I find that the proportion of stalled and ghost projects is higher prior to elections, suggesting that the rents obtained from such projects might be used by MPs for clientelistic and patronage purposes. This finding is consistent with theories of political budget cycles, which argue that incumbent politicians make clientelistic practices more credible by delivering targeted goods prior to elections (Wantchekon, 2003).

Taken together, these findings have important implications for the study of redistributive and legislative politics. First, they suggest that political alignment can be costly (Cole, 2009; Callen, 2018). While the previous literature has mainly focused on the allocation of funds (Brollo and Nannicini, 2012; Baldwin, 2013), the results show a significant discrepancy between allocations and project outcomes, suggesting that even when alignment leads to higher allocations, these might not automatically translate to higher public service provision. These finding highlights one of the key advantages of using project-level data to understand the politics of public service delivery.

Second, the findings relate to a specific body of literature on redistributive politics that assesses the political economy of project completion. For example, Williams (2017) attributes the prevalence of stalled projects to commitment problems that affect how politicians bargain over development funds while Rasul and Rogger (2018) focus on management and bureaucratic autonomy and Lehne et al. (2018) focus on the allocation of contracts to politically connected firms. In contrast, I show an additional channel that operates through institutions of accountability. These results suggest that the ability of the central government to influence the career concerns of politicians serving in legislative committees might provide incentives to align their behaviour with the strategic goals of the ruling party as opposed to enhancing public accountability (Brierley, 2009; Iyer and Mani, 2012). This finding highlights that future work that attempts to explain variations in institutional performance at the sub-national level should at least incorporate the potential effects of accountability pressures from higher levels of government.

Third, the findings on bias in imposing legislative sanctions contribute to the current debate in the governance literature on the effectiveness of state institutions in enhancing political accountability. Most of the literature on the legislature has focused on bureaucratic selection (Hidalgo et al. 2016) or resource constraints (Asamoah and Ofusu-Menshah, 2018). Given that I observe sanctions imposed directly on local politicians by their co-partisans in the legislature, I provide novel evidence of how the structure and composition of such committees shape disciplinary outcomes. The findings suggest that the institutional design of legislative institutions matters for political accountability. Therefore, enhancing the independence of parliamentary committees might be an important channel to constrain the behaviour of local politicians and improve the quality of local public services. Future work could try to examine how such committees could be re-structured to enhance the separation of powers and ensure that the recommended sanctions are enacted to improve political accountability.

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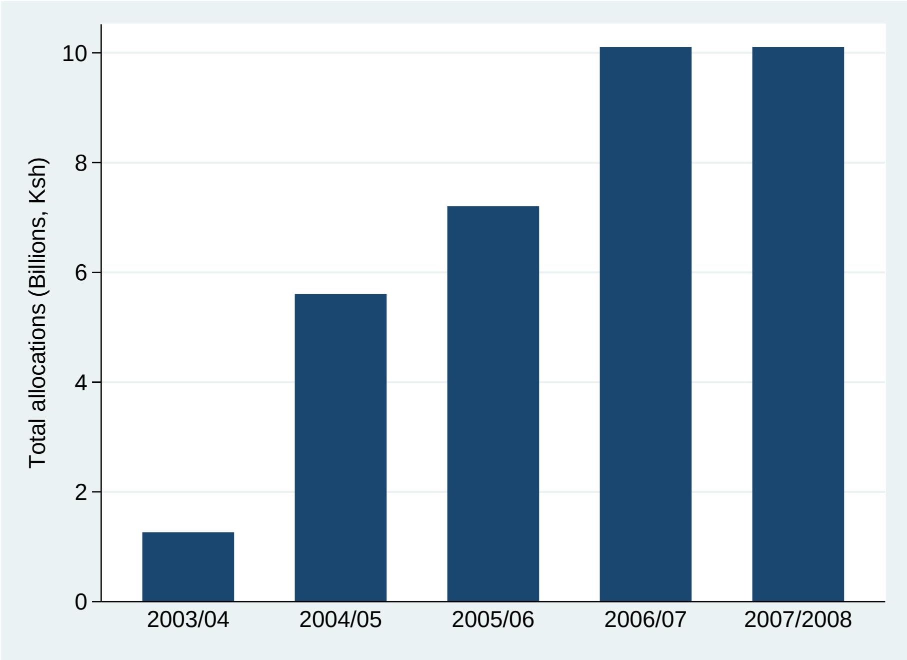
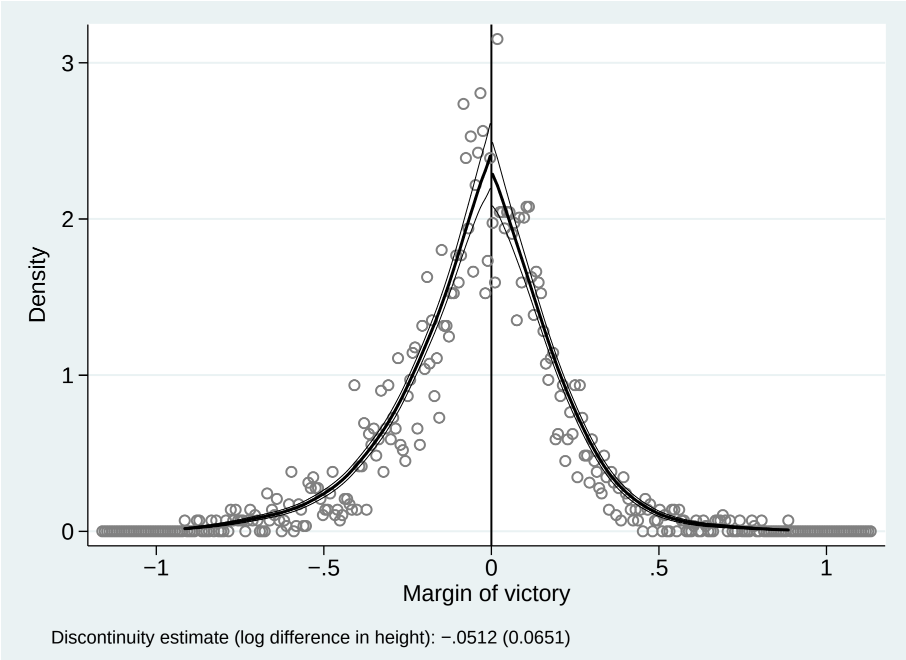
Figures

Figure 3.1: CDF Allocation in Kenya: 2003-2007



Notes
This figure displays the total amount of funds disbursed by the central government to all the 210 constituencies.

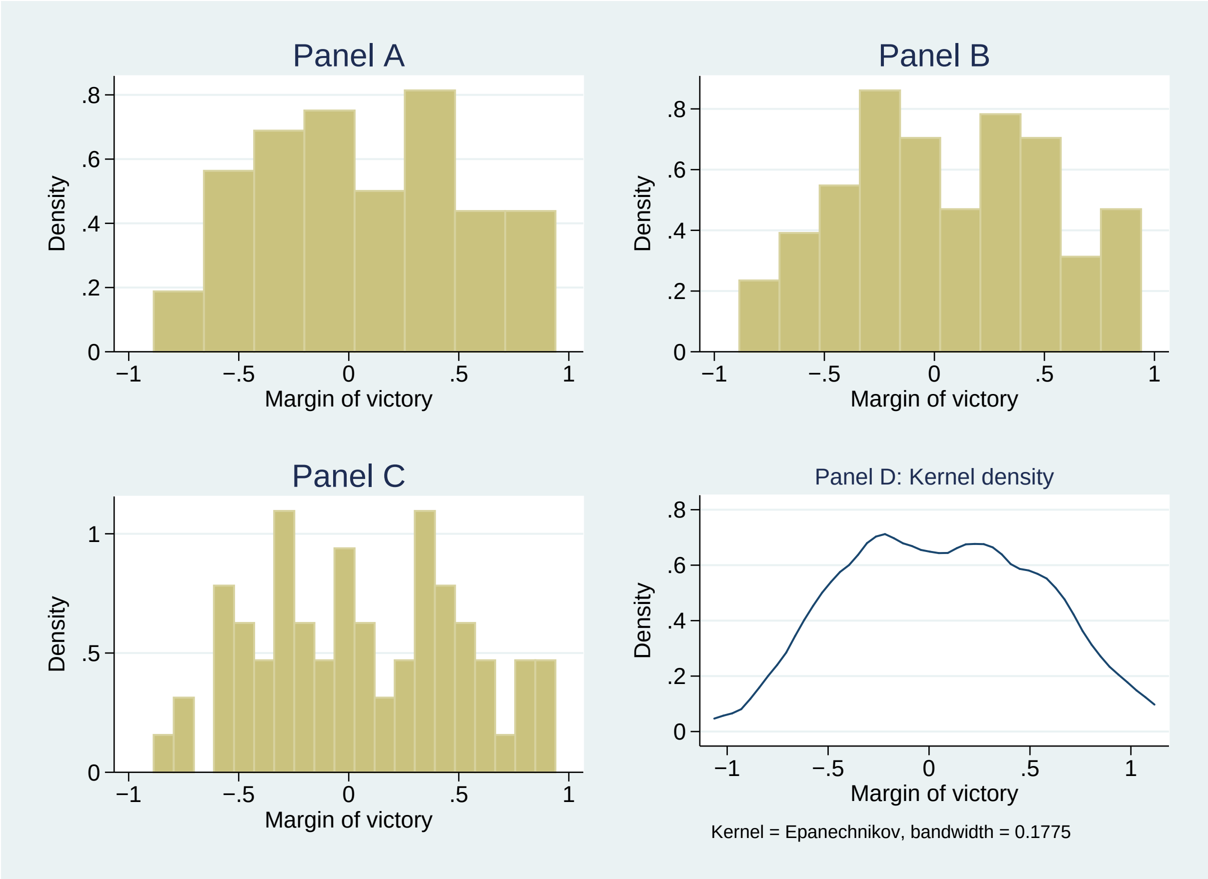
Figure 3.2: Test for Non-random sorting: McCrary density test



Notes

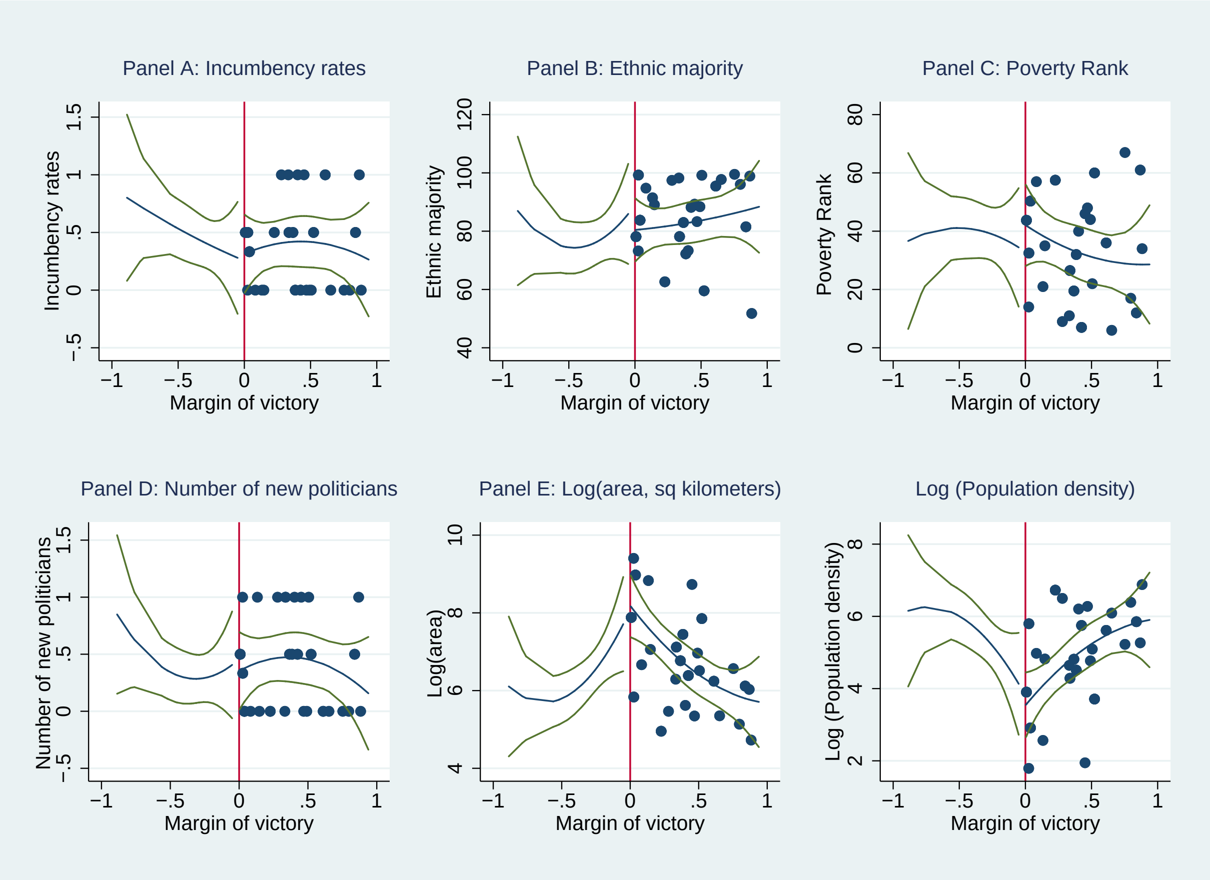
This figure displays the results on the McCracy density test and shows evidence in support of no manipulation of the margin of victory by politicians at the alignment threshold.

Figure 3.3: Test for Non-random sorting: Histograms



Notes
This figure presents a visual illustration of the distribution of constituencies at the alignment threshold. The histogram in Panel A is generated using the optimal number of bins (based on the weighted number of observations), Panel B uses 20 bins, Panel C uses 50 bins and Panel D plots the kernel density function.

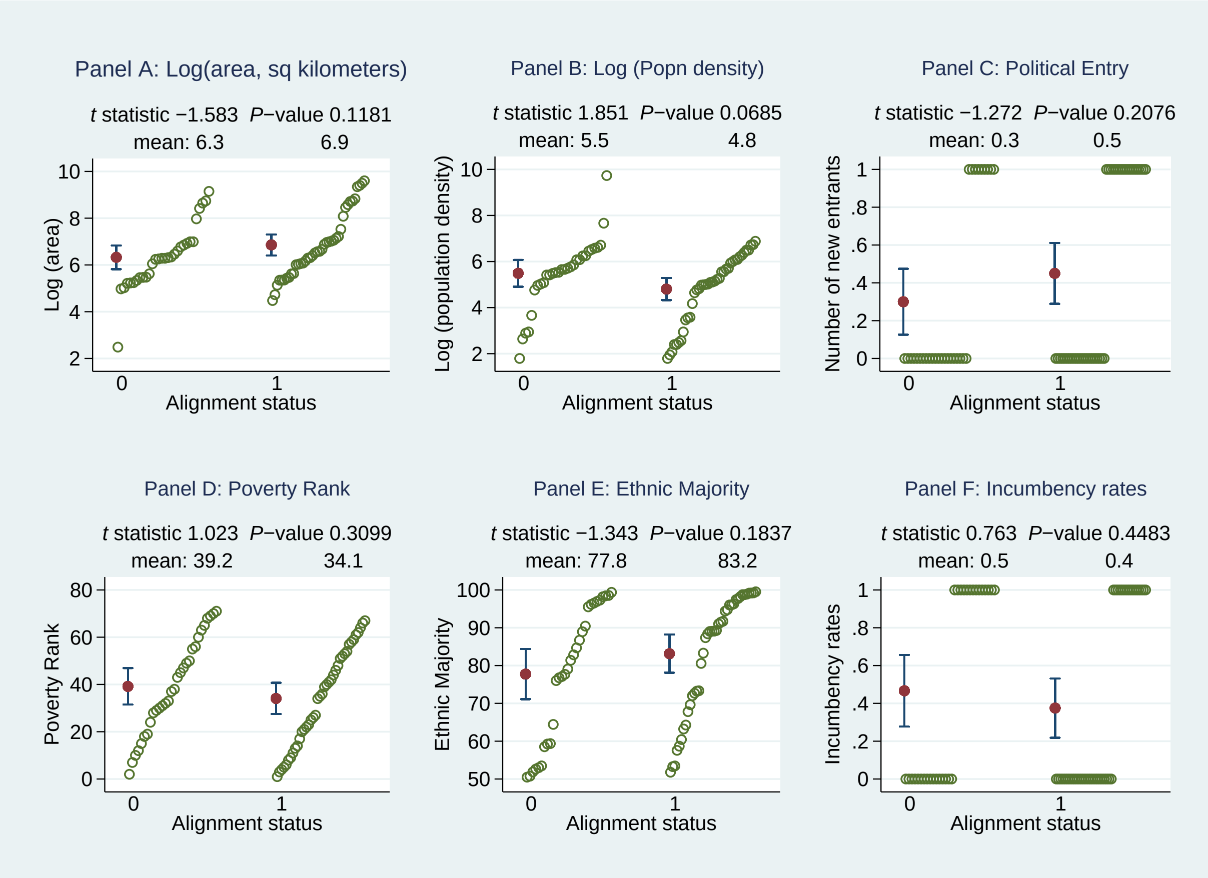
Figure 3.4: Discontinuity tests for covariates



Notes

Discontinuity of pre-treatment indicators at the alignment threshold.

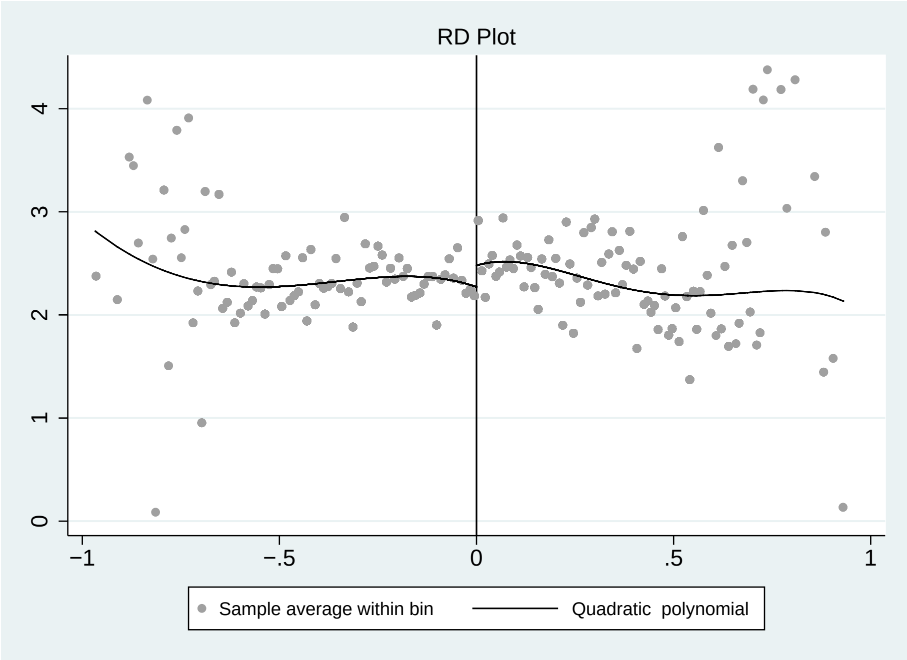
Figure 3.5: Covariate balance test



Notes

Covariate balance test for constituencies with close elections.

Figure 3.6: Main RD results: Graphical illustration



Notes

Discontinuity in the share of stalled and ghost projects at the threshold.

Tables

Table 3.1: Descriptive statistics: CDF projects in Kenya

Type of projects	Allocated funds (USD)	Number of Projects
Agriculture	6,039,204.40	2138
Education	185,893,665.65	21503
Security	12,300,481.94	1570
Water	49,796,191.36	5311
Roads and bridges	24,412,620.67	2485
Electricity	5,656,337.14	631
Health	46,972,921.28	3801
Youth programmes and sports	2,085,783.32	151
Administrative	3,205,599.84	100
Emergency	3,134,488.04	31
Others (evaluation)	14,980,046.59	1030
Sanitation	773,867.19	96
Environment	743,004.11	193
Total number of projects		39040
Average number of projects per constituency		185.9
Average number of projects per year		23.2

Notes
This table displays the number and cost value of all the CDF projects initiated by MPs across the 210 constituencies between 2003 and 2007.

Table 3.2: Descriptive statistics: Project completion status

Panel A: Number of projects

	Completed	On-going	Approved and never started	Stalled and ghost	data unavailable
Agriculture	1282	508	131	125	92
Education	10526	3064	850	7005	58
Security	600	574	222	92	82
Water	2364	1309	522	677	439
Roads and bridges	1229	546	203	281	226
Electricity	188	186	110	64	83
Health	1554	1123	99	808	218
Youth programmes	52	33	21	37	8
Administrative	30	47	3	7	13
Emergency	9	12	0	1	9
Others (M and E)	416	268	139	114	93
Sanitation	59	18	11	3	5
Environment	98	48	16	23	8
Total number of projects	18407	7736	2327	9237	1334
Stalled projects/total projects	47.15%	19.82%	5.96%	23.66%	3.42%

Panel B: Cost value of projects

	Completed	On-going	Approved and never started	Stalled and ghost	data unavailable
Agriculture	259,772,006	115,148,773	48,294,751	69,991,468	20,125,376
Education	90,997,270	26,488,313	7,348,259	60,558,300	501,411
Security	394,530,566	420,762,405	125,347,786	64,922,639	39,977,569
Water	1,806,491,285	1,216,700,690	326,666,628	648,935,064	233,882,599
Roads and bridges	1,098,063,515	425,712,751	144,443,732	245,427,032	161,425,727
Electricity	128,062,083	168,556,971	89,298,746	52,430,198	42,140,659
Health	1,646,671,404	1,113,991,962	83,101,209	970,543,287	178,390,447
Youth programmes and sports	52,584,821	54,381,094	33,656,712	27,762,181	8,906,774
Administrative	50,152,175	134,683,144	1,450,000	17,745,421	66,405,500
Emergency	53,943,320	122,841,052		9,990,352	79,656,759
Others (M and E)	524,990,934	229,162,114	218,135,225	125,897,721	175,117,966
Sanitation	48,804,019	7,826,647	5,607,440	2,270,390	1,270,215
Environment	22,928,682	22,747,769	5,967,955	7,077,813	4,433,130
Cost value of projects	6,177,992,080	4,059,003,685	1,089,318,443	2,303,551,866	1,012,234,132
Cost value/total value	42.19%	27.72%	7.44%	15.73%	6.91%

Notes

This table displays project implementation status of all the CDF projects initiated by MPs across the 210 constituencies between 2003 and 2007.

Table 3.3: Main Results: Political alignment and project non-completion

Dependent variable: Stalled and ghost projects as a share of total projects						
	Linear polynomials			Quadratic polynomials		
	(1)	(2)	(3)	(4)	(5)	(6)
Alignment	2.875 **	3.243**	3.458**	2.771**	3.482**	3.301**
	(1.402)	(1.637)	(1.654)	(1.312)	(1.508)	(1.651)
Observations	350	350	350	350	350	350
Bandwidth	0.242	0.105	0.095	0.242	0.105	0.095
Kernel	Imbens and Kalyanaraman	Triangular	Epanechnikov	Imbens and Kalyanaraman	Triangular	Epanechnikov

	Linear polynomials			Quadratic polynomials		
	(1)	(2)	(3)	(4)	(5)	(6)
Alignment	2.899**	3.157**	3.207**	2.995**	3.841**	2.772**
	(1.457)	(1.3666)	(1.619)	(1.406)	(1.930)	(1.150)
Observations	350	350	350	350	350	350
Bandwidth	0.242	0.105	0.095	0.242	0.105	0.095
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Imbens and Kalyanaraman	Triangular	Epanechnikov	Imbens and Kalyanaraman	Triangular	Epanechnikov

Notes
Robust standard errors are reported in parenthesis and clustered at constituency level. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1. The results on the lower panel include control variables as described in section 3.1.

Table 3.4: Disaggregated analysis: Effect of political alignment on project outcomes

Dependent variable: Stalled and ghost projects as a share of total projects								
	Linear polynomials				Quadratic polynomials			
	Water	Education	Health	Roads and bridges	Water	Education	Health	Roads and bridges
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Alignment	2.526**	2.871**	3.127**	3.421**	2.482**	2.905**	3.450**	3.174**
	(1.276)	(1.28)	(1.555)	(1.719)	(1.193)	(1.467)	(1.500)	(1.587)
Observations	677	7005	808	281	677	7005	808	281
Bandwidth	0.098	0.113	0.119	0.120	0.098	0.113	0.119	0.120

Notes

Regressions are weighted using a triangular kernel. Optimal bandwidth selected using Calonico et al. (2014) approach. Robust standard errors clustered at the constituency level. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 3.5: Alternative hypothesis: Assessing differences in the complexity of projects

Dependent variable: Stalled and ghost projects as a share of total projects								
	Linear polynomials				Quadratic polynomials			
	Classroom	Bursaries	Fencing	Roofing and bridges	Classroom	Bursaries	Fencing	roofing and bridges
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Alignment	1.586	1.856	1.254	2.014	1.684	1.875	1.845	1.577
	(1.892)	(1.407)	(1.35)	(1.889)	(1.288)	(1.771)	(2.114)	(1.109)
Observations	3516	1598	2004	1800	3516	1598	2004	1800
Bandwidth	0.109	0.125	0.109	0.142	0.128	0.115	0.124	0.082

Notes
Regressions are weighted using a triangular kernel. Optimal bandwidth selected using Calonico et al. (2014) approach. Robust standard errors clustered at the constituency level. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 3.6: Alternative hypothesis: Assessing differences in bureaucratic capacity

Dependent variable: Projects approved but never started as a share of total projects						
	Linear polynomials			Quadratic polynomials		
	(1)	(2)	(3)	(4)	(5)	(6)
Alignment	3.254	2.254	1.958	2.359	3.025	1.989
	(2.901)	(1.525)	(1.985)	(2.113)	(2.86)	(1.575)
Observations	350	350	350	350	350	350
Bandwidth	0.098	0.113	0.119	0.120	0.098	0.113

Notes

Regressions are weighted using a triangular kernel. Optimal bandwidth selected using Calonico et al. (2014) approach. Robust standard errors clustered at the constituency level. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 3.7: Alternative hypothesis: Assessing differences in political experience

Dependent variable: Stalled and ghost projects as a share of total projects		
	Full sample	Close elections
	(1)	(2)
MP in Second term	0.085	0.105
	(0.022)	(0.153)
Observations	154	58
Number of constituencies	210	70

Notes
This table presents estimates that compare the number of stalled and ghost projects for second and first term MPs. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 3.8: Heterogeneous analysis: Ministerial appointment and project outcomes

Dependent variable: Stalled and ghost projects as a share of total projects			
	(1)	(2)	(3)
Alignment	3.243^{**}	2.918^{*}	3.258^{**}
	(1.637)	(1.577)	(1.645)
Ministry		-1.254^{*}	-1.825^{*}
		(0.667)	(0.955)
Alignment x Ministry		4.875^{**}	4.712^{*}
		(2.267)	(2.493)
Observations	125	125	125
Bandwidth	0.105	0.095	0.112
Polynomial	Linear	Linear	Quadratic

Note: Robust standard errors are reported in parenthesis and clustered at the constituency level. Triangular kernel in all regressions. Optimal bandwidth selected using Calonico et al. (2014) approach. Linear polynomial in columns (1) and (2), and quadratic polynomial in column (3), Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1.

Table 3.9: Project completion along the electoral cycle

Dependent variable: Stalled and ghost projects as a share of total projects					
	Year 1	Year 2	Year 3	Year 4	Year 5
	(1)	(2)	(3)	(4)	(5)
Alignment	2.958**	2.234*	2.111*	3.24*	3.854***
	(1.486)	(1.255)	(1.141)	(1.732)	(1.438)
Observations	350	350	350	350	350
Bandwidth	0.112	0.094	0.124	0.128	0.097

Notes
Regressions are weighted using a triangular kernel. Optimal bandwidth selected using Calonico et al. (2014) approach. Robust standard errors clustered at the constituency level. Significance is denoted as: *** p <0.01, ** p <0.05, p <0.1

Table 3.10: Reallocation of the CDF in the electoral year to 2008

Dependent variable: Stalled and ghost projects as a share of total projects						
	Linear polynomials			Quadratic polynomials		
	(1)	(2)	(3)	(4)	(5)	(6)
Alignment	1.585 *	1.353**	1.454**	1.271*	1.514**	1.325**
	(0.890)	(0.679)	(0.719)	(0.743)	(0.76)	(0.627)
Observations	183	183	183	183	183	183
Bandwidth	0.245	0.113	0.892	0.242	0.115	0.095
Kernel	Imbens and Kalyanaraman	Triangular	Epanechnikov	Imbens and Kalyanaraman	Triangular	Epanechnikov

Notes
Robust standard errors are reported in parenthesis and clustered at constituency level. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1. The results on the lower panel include control variables as described in section 3.1

Table 3.11: Descriptive statistics: Political alignment and legislative sanctions

	2003-2005				2006-2007			
	Prosecuted (1)	Investigated (2)	Fired (3)	Dismissed (4)	Prosecuted (5)	Investigated (6)	Fired (7)	Dismissed (8)
Number of cases	153	815	113	742	131	627	135	981
Aligned MPs	68	451	58	334	61	298	70	500
Unaligned MPs	85	364	55	408	67	329	65	481

Notes:This table shows the number of disciplinary sanctions issued by the PAC, disaggregated by political alignment with the committee's chairperson.

Table 3.12: Mechanism: Political alignment and legislative sanctions

	Dependent variable: Binary indicator capturing whether aligned MPs were:							
	2003-2005				2006-2007			
	Prosecuted	Investigated	Fired	Cases dismissed	Prosecuted	Investigated	Fired	Cases dismissed
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Alignment	0.055	0.087	0.839	0.424	-0.974**	-0.817***	-0.782**	0.842***
	(0.027)	(0.043)	(0.409)	(0.392)	(0.491)	(0.298)	(0.347)	(0.296)
Observations	153	815	113	742	131	127	135	981
Bandwidth	0.135	0.124	0.137	0.115	0.120	0.118	0.154	0.115

Notes: Regressions are weighted using a triangular kernel. Optimal bandwidth selected using Calonico et al. (2014) approach. Robust standard errors clustered at the constituency level. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 3.13: Ministerial appointment and legislative sanctions

Dependent variable: Binary indicator capturing whether ministerial officials were:				
	Prosecuted	Investigated	Fired	Cases dismissed
	(1)	(2)	(3)	(4)
Cabinet officials	-0.845**	-0.912*	-0.824**	0.814**
	(0.400)	(0.492)	(0.405)	(0.378)
Observations	205	182	128	381
Constituencies	40	40	40	40

Notes: Regressions are weighted using a triangular kernel. Optimal bandwidth selected using Calonico et al. (2014) approach. Robust standard errors clustered at the constituency level. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 3.14: Alternative Mechanism: The role of party ideology

	Dependent variable: Binary indicator capturing whether aligned MPs were:							
	2003-2005				2006-2007			
	Prosecuted	Investigated	Fired	Cases dismissed	Prosecuted	Investigated	Fired	Cases dismissed
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Alignment	0.034	0.047	0.725	0.621	-0.901**	-0.758***	-0.711**	0.834***
	(0.027)	(0.033)	(0.509)	(0.413)	(0.404)	(0.382)	(0.286)	(0.311)
Observations	153	815	113	742	131	127	135	981
Bandwidth	0.135	0.124	0.137	0.115	0.120	0.118	0.154	0.115

Notes: All specification include party fixed effects. Regressions are weighted using a triangular kernel. Optimal bandwidth selected using Calonico et al. (2014) approach. Robust standard errors clustered at the constituency level. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 3.15: Placebo tests: Fake thresholds

	Aligned constituencies		Unaligned constituencies	
False thresholds	5%	10%	-5%	-10%
Treatment effect	1.75	1.93	-1.63	-0.79
standard error	(1.13)	(1.54)	(-1.06)	(-1.03)
t-value	1.55	1.25	1.54	0.77
Number of observations	350	350	350	350
Number of constituencies	70	70	70	70

Notes: Placebo tests using fake margin of victory thresholds

Table 3.16: Placebo test: Assessing the effect of alignment on CDF allocation

Dependent variable: Annual CDF allocations						
	Linear polynomials			Quadratic polynomials		
	(1)	(2)	(3)	(4)	(5)	(6)
Alignment	0.058	0.085	0.047	0.061	0.081	0.045
	(0.031)	(0.099)	(0.010)	(0.071)	(0.083)	(0.011)
Observations	1050	1050	1050	1050	1050	1050
Constituencies	210	210	210	210	210	210

Notes
Regressions estimates for the full sample of 210 constituencies. Robust standard errors clustered at the constituency level. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 3.17: Assessing differences in reporting of project outcomes

	Aligned constituencies	Unaligned constituencies
	(1)	(2)
Completed projects	9465	8942
Ongoing projects	3541	4195
Approved and not started	1059	1268
Missing data	612	722

Notes
Descriptive statistics on the number of projects reported by MPs, disaggregated by completion status.

Table 3.18: External validity: Covariate balance test

	Close-election constituencies (1)	All constituencies (2)	Difference in means test (3)
Panel A: Social Economic Variables			
Poverty rate	102.70	107.32	0.45
	(5.37)	(6.63)	(0.67)
Population density (log)	4.98	5.17	0.76
	(0.16)	(0.19)	(0.45)
Ethnic majority	82.89	82.45	-0.20
	(1.38)	(1.75)	(0.84)
Area (log, square kilometres)	6.74	6.55	-0.88
	(0.15)	(0.15)	(0.38)
Panel B: Political variables			
Registered voters	18.58	18.45	-0.03
	(3.43)	(2.05)	(0.51)
Valid votes	65.75	56.11	-4.18 **
	(1.45)	(1.81)	(0.00)
Registered votes	49733.02	49818.15	0.0265
	(2021.875)	(2508.63)	(0.9789)

Notes
Covariate balance test for constituencies with close elections and the remaining constituencies in the sample. Significance is denoted as:
*** p <0.01, ** p <0.05, * p <0.1

Appendix B - Tables

Table B1: Examples of CDF projects

Types of projects	Components of projects
Agriculture	Cattle dips, chemicals, fencing, pump machines, purchase of pipes, coolers, organic manure, tree nurseries
Education	construction and renovation of classrooms, labs, roofing, dorms,
	libraries, toilets, roofing and roofing; bursaries, purchase of generators
Security	Building and roofing of police posts, purchase of land, operational costs of police posts
Water	Construction of canal lining, sinking of boreholes, purchase and laying of pipes, survey work,
	rehabilitation of dams; purchase and distribution of tanks
Roads and	Road rehabilitation, murramming, light grading and gravelling, construction of culverts,
Bridges	filling of bridges, drainage systems
Electricity	Installation of electric transformers, wiring and connection of power meters, electricity
	supply, erection of poles, street lights and transformers, purchase of generators and transformers
Health	Construction and renovation of dispensaries, health centres, solar installations, wards; purchase of beds and beddings
Youth programmes and sports	Construction and renovation of youth centre halls, stadiums, library, sport grounds, social halls
Administrative	Office operations, repair and maintenance of office equipment,
	stationary, rent, office administrative expenses, renovations, purchase of furniture
Emergency fund	Disaster management, funding of unforeseen circumstances
Environment	De-silting and expansion of dams, scooping of dams and reservoirs, buying and laying of
	pipes, pump repair, construction of furrows for irrigation, tree planting
Monitoring and evaluation	Supervision and monitoring of projects, capacity building
Sanitation	Construction of toilets, bathrooms, pit latrine, soak pits, septic tanks and sewer lines

Notes
This table provides a description of how the different projects and their sub-components as classified by the CDF-Board.

Table B2: Classification of project completion status

Project status	Description
Completed	This refers to projects that are 100% complete, or categorized as complete and in use, or complete and not yet in use
Ongoing	This refers to projects classified as 'on-going' at the end of the year
Approved but not start	This refers to projects whose funds have been allocated but not yet started due to contractual issues or delays
Stalled	This refers to projects who completion status is indicated as stalled at the end of the year
Ghost	This refers to projects whose existences cannot be verified by the Office of the Auditor General

Notes
This table provides a description of how projects are classified depending on their completion status.

Table B3: Project-level data summary statistics

	Completed	On-going	Approved and never started	Stalled	unavailable	total
Mean	1415.923	595.0769	179	710.5385	102.6154	3003.154
Standard deviation	2724.198	820.7565	236.6682	1834.29	120.5516	5564.622
Maximum	10526	3064	850	7005	439	21503
Minimum	9	12	0	1	5	31

Notes
This table provides summary statistics of the project data, disaggregated by completion status.

Table B4: Variable definition and sources

Variables	Definition	Source
Political alignment	Dummy variable that takes the value of 1 if a local MP share the same party affiliation with the central government (president's party)	Electoral Commission of Kenya
Margin of victory	Difference as the vote share between the winner and runners-up	Electoral Commission of Kenya
Poverty rank	An index between 0 and 100 that captures a constituency's aggregate levels of poverty	Census data, 1999
Ethnic majority	An index between 0 and 100 that captures the diversity of residents in terms of ethnicity	Census data, 1999
Incumbency rates	The number of times an MP has been re-elected	Electoral Commission of Kenya
Number of new politicians	The number of new politicians contesting for the MPs position	Electoral Commission of Kenya
Population density	The number of people per square kilometre of land area	Census data, 1999
Area	A constituency's land area in square kilometres	Census data, 1999
Literacy rates	The number of persons age 15 years and above that have at least completed secondary-level education	Census data, 1999
Poverty rate	The ration of the number of people whose income falls below the national poverty line	Census data, 1999
Registered voters	The number of voters registered per constituency	Electoral Commission of Kenya
Valid votes	Percentage of votes that are cast and not considered void	Electoral Commission of Kenya

Notes

This table provides a summary of the variables that are used in the regression discontinuity design. Their corresponding summary statistics are displayed in Figure 3.5.

Table B5: Summary statistics

Variable	Mean	Standard deviation	Minimum	Maximum
Poverty rank	145.5	83.72	1	210
Population density	1348	5178.12	2	64472
Area	1950.55	4128.86	55	39251.5
Literacy rates	79.21	25.63	17	83.2
Poverty rate	48.66	7.41	65.09	32.75
Registered voters in 2007	62572.6	18452.366	8784	115440

Notes
This table provides summary statistics of the main variables used in the regression discontinuity design and the covariate balance test. The variables correspond to all the 210 constituencies.

Chapter 4

Public Spending and Political Clientelism: Spillover effects from an expenditure reform in Kenya

Abstract

This paper relies on a reform that increased public goods spending among several counties in Kenya to examine its spillover effects to neighbouring counties. Using a spatial difference-in-difference design, I find evidence of free riding in border counties, relative to observationally similar counties located further away. Utilizing the transport connectivity network shows that the incentives to free ride were contingent on accessibility costs, in terms of distance and commuting time. Disaggregated analysis shows that the spillovers enhanced clientelistic political exchanges. I find that border counties shifted their spending patterns from public to targeted goods, and these effects were stronger before elections and for hegemonic incumbents. Further evidence from micro-level surveys shows that residents experienced a substantial decline in public goods accessibility, suggesting that free riding was welfare reducing.

Keywords: free riding, clientelistic spending, welfare, difference in difference.

JEL codes: C54, D62, R12, R28, R58

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4.1 Introduction

An important question in the fiscal decentralization literature is whether spending policies in one local government affect policy outcomes among its neighbours (Oates 1972, 1999; Shah, 1994, p.2; Grazzini and Petretto, 2017). One line of argument is that when a local government increases its spending on public goods, this creates positive spillovers and its neighbours respond by increasing their own spending (Caldeira et al. 2015; Zhang et al. 2018). The theoretical rationale is that voters benchmark the performances of their own politicians with their neighbours (Oates and Schwab, 1988; Wilson, 1996; Buettner and von Schwerin, 2016). A contrasting argument is that an increase in spending in one local government reduces spending among its neighbours due to collective action problems (Akai and Suhara, 2013; Yang and Lee, 2017). From an empirical perspective, reconciling this debate is often complicated by the endogeneity of spending policies (Ham et al. 2011; Partridge et al. 2015), differences in the definition of a local government's neighbours (Gibbons and Overman, 2010) and a lack of disaggregated data on spending patterns. This paper attempts to fill this gap. Using an expenditure reform that increased public spending across several neighbouring counties in Kenya, I assess how counties sharing a geographical boundary adjusted their spending patterns. I then use disaggregated data on county-level expenditure to provide suggestive evidence of a substitution effect from public to clientelistic goods.

The empirical analysis focuses on the Aberdares and Mt Kenya Trade and Investment Block (ATIB) reform. This reform was implemented in 2015 by 11 neighbouring counties and entailed increasing public expenditure on county infrastructure, health, local roads, agriculture, water, and sanitation services to improve local living standards. I empirically test for spillovers by assessing whether border counties, defined as counties sharing a geographical boundary with any of the ATIB counties, responded by either increasing or reducing their own spending. The identification strategy relies on a spatial difference in difference design. In this set-up, I compare changes in public expenditure in border counties with changes in public expenditure in the remaining counties (control counties), as well as in similar counties located further away (as defined using propensity score matching).

Econometrically, this is an attractive setting for several reasons. First, the reform was targeted at well-defined counties, providing a clear delineation of designated and non-designated areas that can be used to generate the treatment and control units. Second, given their close geographic proximity, the border and control counties are likely to share unobserved traits - such as taste and preference for public goods and services - that might be correlated with spending behaviour. Third, the spatial distribution of the counties mitigates potential location specific confounders, such as weather shocks, that may explain differences in spending across counties.

I find significant evidence of free riding among border counties in Kenya. Point estimates from the main specifications suggest that border counties experienced a substantial decline (15 percent) in public expenditure relative to observationally similar counties. This estimate is not only statistically significant but also economically substantial. Given that the average county spends approximately 8 billion Ksh per year (77 million USD), the estimates suggest that free riding reduced public spending by 1.6 million Ksh, an amount that is equivalent to a 15 percent reduction in development expenditure per county.

Second, I examine the effect of spatial proximity on the incentives to free ride and show that local governments incorporate accessibility costs when making allocative decisions. Using the spatial layout of the road connectivity network, I exploit the variation in commuting time and distance between the border and the reform counties. I find that free riding was disproportionately higher in counties where residents faced lower accessibility costs - in terms of geographic proximity and travelling time. This result suggests that geographic factors are not only an important determinant of public goods provision, but they also exert an effect that is independent of other factors such as social-economic and ethnic demographics, which have received greater attention in the literature (Trounstine, 2016; Tajima et al. 2018).

Third, I document that spillovers changed the composition of public spending in border counties. Using disaggregated data on budgetary allocations, I find that border counties shifted a portion of their spending towards salaries, wages and allowances and the purchase of office assets. These areas of spending were higher before elections and more pronounced for incumbents who had been in public office for a long duration. An examination of independent government audits shows that these spending categories were associated with significant irregularities and not reflective of improving the quality of bureaucracy.

Fourth, beyond budgetary indicators, I estimate the effects of spillovers on the welfare outcomes of residents in border counties. I do so by using detailed nationally representative surveys on the access to public goods conducted prior to and after the reform. I extract information on indicators of access at the community rather than the household level to mitigate potential biases arising from households' self-selection into the usage of specific public goods. I find a substantial decline in multiple indicators of quality and accessibility, suggesting that free riding was a sub-optimal strategy from the welfare perspective of residents.

These results are robust along several dimensions. First, I rule out pre-existing trends in public spending, as well as differences in important social-economic and political factors between border and control counties as possible confounders. Second, I do not find support for budget constraints or residential mobility as alternative explanations for the free riding behaviour. Third, using placebo tests, I show that the reduction in households' welfare occurred for locally but not centrally provided public goods and services.

This paper makes several contributions. First, it relates to a body of empirical studies within the fiscal federalism literature that examine the causes and consequences of cross-border spillovers. Some of the prominent theories assume the non-existence of spending spillovers

(Tiebout, 1956) while most of the empirical studies do not take into account the fact that public goods are non-excludable and can generate benefits that extend beyond a particular jurisdiction (Jablonski, 2014; Ejdemyr et al. 2018; Harris and Posner, 2019). I provide a new dimension to this literature by analysing the effects of public spending reforms across bordering counties. By assessing spillovers, rather than direct allocations, I provide a more general and dynamic framework where local governments do not simply act as unitary decision makers but behave strategically such that their allocative decisions are also informed by the spending policies among their neighbours. This result suggests that in addition to generating economic distortions (Huber and Runkel, 2006; Gordon, 2008; Boadway and Shah, 2007, p.7), spillovers can have significant redistributive and political consequences by providing incentives for local governments to engage in free-riding.

Second, the paper sheds light on the welfare cost of free riding. Empirically, disentangling how a reduction in spending affects welfare outcomes is challenging because it requires establishing a benchmark that captures the optimal level of welfare (Nino-Zarazua and Haile, 2018; Kyle et al. 2017). To overcome this challenge, I combine micro-level surveys conducted before and after 2015 with the phasing in of the reform to estimate a difference-in-difference model that tests for differentials in public goods accessibility in border relative to control counties. By doing so, I improve on the conventional approach of estimating social welfare functions, the results of which are often sensitive to the underlying theoretical assumptions (Neyapti and Aslim, 2017; Ozdemir et al, 2016). In addition, compared to studies that focus on a single public good (Kondylis and Manacorda, 2012), the unusually rich data employed permits a fine-grained analysis of the distributional effects of free riding across multiple public goods and services.

Third, the empirical analysis provides a methodological contribution to measuring spillovers. Contrary to studies that assess spillovers across national boundaries (Devereux et al. 2008; Cassette et al. 2012; Farvaque, et al. 2013), I conduct a sub-national analysis to mitigate potential biases arising from unobserved factors such as differences in institutional frameworks across countries.

Finally, the paper relates to the literature on the spillover effects of spatial policies (Miguel and Kremer, 2004; Chaurey, 2017; Lipscomb and Mobarak, 2017; Merfeld, 2019). The findings underpin the importance of incorporating spillovers, as neighbouring units to those implementing a reform can adjust their behaviour, violating the Stable Unit Treatment Value Assumption that is central to identifying causal effects (Rubin, 1980). While the standard norm in the literature is to compare the outcomes of interest across boundaries, taking into account general equilibrium effects by allowing for cross border spillovers can provide a better assessment of the net effect of policies that have a spatial dimension.

The rest of the paper is organized as follows. Section 4.2 presents the theory and institutional context in Kenya while Section 4.3 presents the data and identification strategy. Section 4.4

discusses the main findings. Section 4.5 estimates the welfare effects of spillovers, Section 4.6 presents the robustness checks and Section 4.7 concludes.

4.2 Theory and institutional setting

4.2.1 Conceptual Framework

In theory, when local governments are delegated fiscal autonomy and the mandate to provide public goods and services, it is often common practice to coordinate spending policies through expenditure reforms. This entails collectively increasing spending on public goods and services that are not only costly, but also generate positive externalities and thus tend to be under provided by individual local governments (Oates and Schwab, 1988; Besley and Case, 1995; Boadway and Shah, 2007, p.319). The theoretical argument rests on increasing the allocative efficiency of public resources by capitalizing on economies of scale to address common development needs (Dollery and Johnson, 2005; Alder et al. 2016; Neumark and Simpson, 2015).[2]

Traditional theories of fiscal federalism hypothesize that such coordination generates positive spillovers through a yardstick comparison (Oates, 1972; De Siano and D'Uva, 2017). Due to information asymmetry, which makes it difficult for voters to evaluate the performance of their own politicians, voters evaluate the performance of their own local government by comparing policies across local governments (Bardhan, 2002). This in turn provides incentives for policy mimicking and local governments that neighbour those implementing such policies respond by increasing their own spending (positive spillovers).

The extent to which neighbouring local governments mimic each other's spending patterns may however depend on the spatial distribution of political power (Cerniglia et al. 2003; Revelli, 2005). For instance, differences in partisanship across neighbouring local governments can reduce the scope for a yardstick comparison. If political parties are unable to contest and win outside their stronghold region, then each cluster of local governments under a particular political party acts as a separate political market, constraining mimicking beyond local governments that are under a different political party. This argument is also underpinned by the literature on tournament competition (Xu, 2011). The main premise is that politicians only react to the behaviour of their rivals. For instance, empirical evidence from China suggests that due to the institutional set up where the central government promotes local politicians who govern at the city level, policy mimicking occurs across cities within a province, but not border cities in neighbouring provinces (Yu et al. 2016). This finding is also consistent with Mortari et al. (2014) who show the importance of institutional factors in shaping the nature of spillovers across geographically proximate jurisdictions.

[2] Some of the well-known examples of expenditure reforms/policies include the Riverina Eastern Regional Organization of Councils in Australia, the joint State-Municipal Grorud Valley Initiative in Norway, and the Urban Renewal Programme in South Africa.

The corresponding reduction in spending stemming from free riding frees up budgetary resources and can induce a change in the distribution of resources across groups of voters. In contexts where clientelistic relationships between politicians and the electorate play an important role in increasing the odds of re-elections, politicians have incentives to re-allocate budgetary resources in exchange for votes (Wantechekon, 2003; Green, 2011). Consistent with this idea, an extensive body of literature has documented that politicians often face a trade-off when making allocative decisions (Remmer, 2007). Resources are limited and, when channelled to public goods, there is less available for targeted spending (Koski et al. 2018). The availability of public goods in neighbouring local governments thus generates incentives for politicians to reduce their own spending on public goods provision, especially when residents have access without incurring high costs.

To understand the conditions that may enhance such clientelistic exchanges, I focus on two key variables. First, I argue that the political horizon of incumbent politicians matters for clientelistic spending (Green, 2011). The logic is that politicians who have been in power over a long time horizon have had repeated interactions with voters, an aspect that mitigates agency problems regarding whom to target and the types of benefits required (Dube et al. 2013). Over time, this enhances trust, which is crucial for maintaining clientelistic contracts and consolidating the payoffs of targeted spending (Keefer and Khemani, 2005). An observable implication is that clientelistic spending is likely to be higher for incumbent politicians who have been in power for a long period.

Second, I argue that electoral incentives shape clientelistic spending. Following theories of opportunistic budget cycles, targeted spending is likely to be driven by the timing of elections, as it signals an incumbent's commitment to rewarding political supporters if re-elected (Rogoff, 1990). As such, the shift to clientelistic spending will be higher during pre-election periods as a strategic decision to influence electoral outcomes.

4.2.2 Electoral politics and public spending in Kenya

Kenya is an ideal setting for this study because the nature of its politics and its long history of patronage and clientelistic exchanges imply that politicians can manipulate public resources for political support (Kramon, 2016). In 2013, the country transitioned to a decentralized system of governance that transferred significant fiscal resources to 47 new counties (Figure 4.1). The geographic boundary of each county perfectly coincides with its administrative and political jurisdiction, permitting the assessment of spending behaviour without aggregation outcomes across administrative units.[3] Politically, a locally elected governor heads each county and is the most influential person in terms of budgetary decisions. Governors are elected for a maximum

[3] The use of the pre-existing boundaries helps address concerns about boundaries correlating with county-level characteristics that might affect public spending.

period of two five-year terms and thus have incentives to maximize public resources for political gain during their first term in office.

The constitution grants counties significant autonomy in terms of budgetary decisions and delineates powers and functions between different tiers of the government. Schedule 4 of the 2010 constitution delineates powers between the central and county governments, and counties are mainly responsible for providing agricultural, health, cultural, urban planning, transport and infrastructure, and trade development services. Approximately 90 percent of a county's revenue consists of annual central government transfers allocated using a pre-determined formula, while local taxes constitute a smaller share. To encourage economies of scale in public service provision, Article 189(2) of the constitution allows counties to 'co-operate in the performance of functions and exercise of powers, as well as set up joint committees and joint authorities to coordinate policies and pool resources together for common investments' (GoK, 2010 p. 115).

Patronage and targeted spending have long been recognized as crucial for political survival in most countries (Diaz-Cayeros, 2008; Golden and Min, 2013), and Kenya in particular (Kramon, 2018). There is evidence that since 2013, the devolution of resources to counties has increased corruption and the mismanagement of public resources by governors (Cheeseman et al. 2016). For instance, D'Arcy and Cornell (2016) show that expenditure is targeted at particular public officials, often comprising exorbitant allowances for foreign trips. Chome (2015) focuses on how the creation of county bills supports discretion in the allocation of casual jobs, as well as personal contributions to social events by local politicians. In addition, a recurring caution by the Controller of Budgets in Kenya is that recurrent expenditure is significantly higher than development expenditure, and even the resources allocated to finance development projects are rarely spent in practice (The Nation, 2015).

Incumbent politicians using public funds for political gain in Kenya often go unsanctioned (Kiai, 2008; Githinji and Holmquist, 2012). This is despite the overwhelming evidence of spending irregularities. For instance, between 2014 and 2017, at least 95 percent of all counties were found by the Office of the Auditor General to have at least one form of gross financial mismanagement, but only one county successfully impeached a governor, and no governor was prosecuted by the courts (The Nation, 2015). Thus, the diversion of spending to patronage and clientelistic goods emerges as a viable option for incumbent politicians given the overwhelming impunity embedded in the chain of accountability (Hope, 2017).

4.2.3 The Aberdares and Mt Kenya Trade and Investment Block (ATIB) Reform

The Aberdares and Mt Kenya Trade and Investment Block (ATIB) reform was implemented in 2015 by eleven counties[4] to promote economic and social investment by harmonizing public spending policies (The Nation, 2015; Council of Governors, 2015). The reform counties are depicted in Figure 4.2 and summarized in appendix Table C1. The ATIB is one of the largest spatial targeted reforms in Kenya, covering a geographical area spanning over 81,762 km^2 (14 percent of the country's land area) and directly affecting a population of approximately 8.2 million people (21 percent of the country's total population).

Unlike most reforms targeted at underperforming regions by the central government, the ATIB was established by county governors largely based on partisanship. Ten of the county governors were affiliated to the same party, The National Alliance Party (TNA), while only one county was affiliated to the United Republican Party (URP). Entrenched in their party manifestos, the TNA and URP had contested for the 2013 local elections with the pledge to pool resources across counties to enhance the large-scale provision of public goods and services. The patterns of spending among the ATIB counties are depicted in Figure 4.3. The figure shows a significant spike in expenditure on public goods provision across the 11 counties, from Ksh. 52 billion in 2014 to Ksh. 112 billion in 2015. A disaggregated analysis shows that counties increased their expenditure on health by 75 percent, transport infrastructure by 55 percent, agriculture and extension services by 85 percent, water and sanitation by 25 percent, education by 80 percent and urban planning by 69 percent (Figure 4.4). Given this increase in spending, I assess how counties neighbouring the ATIB reacted by adjusting their spending patterns.

4.3 Identification Strategy

4.3.1 Data

The data is obtained from a variety of sources as summarized in appendix Table C2. First, the indicators of public spending were obtained from the Office of the Controller of Budget in Kenya. The census data that provides information on social-economic and demographic indicators came from the Kenya National Bureau of Statistics while the electoral data was obtained from the Independent Electoral and Boundary Commission. The entire dataset is a balanced panel of 47 counties for the period 2013-2017, with all counties being observed before and after the reform in 2015.

[4] These counties are: Kiambu, Embu, Kirinyaga, Laikipia, Meru, Murang'a, Nakuru, Nyandarua, Nyeri, Tharaka Nithi and Isiolo.

4.3.2 Treatment and Control Counties

Treatment Group

Given that the focus is on evaluating spillover rather than the direct effect of the reform, the treated group is defined as the 13 counties[5] that share a geographical boundary with those that implemented the reform. This raises a key conceptual issue as the interpretation of the results is highly dependent on the assumed spillover structure (Baskaran, 2014). A potential concern is that some counties that are geographically close but not contiguous to the reform counties could have been directly affected by the reform and excluding them from the treatment group could underestimate the true effect of the reform. However, this concern is mitigated by the fact that an extensive body of empirical studies shows that geographical spillovers are strong across neighbouring geographical units and their effects tend to decay with distance (Lychagin et al. 2016). In addition, public expenditure in the reform counties is highly uncorrelated with that of counties that are geographically proximate but do not share any boundary (the correlation coefficient estimate is 0.024).

A second potential concern is that the estimated coefficients are local average treatment effects based on local boundaries (Dube et al. 2010). This implies that the internal validity of the results partly depends on whether the border counties are comparable to the remaining ones in the sample. To assess this, Table C3 in the Appendix compares the border counties with the remaining counties along several social-economic and political indicators such as income, poverty, population density and unemployment, number of registered voters, total valid votes cast, voter turnover and margin of victory of the governor. Overall, the balance tests show that the border counties are not significantly different from the remaining counties.

Control Group

I generate the control group using two different but complementary approaches. First, I use all of the remaining 23 periphery counties as possible controls.[6] Second, I use propensity score matching (PSM) and match border with periphery counties based on the similarity in their propensity score using several indicators such as poverty, unemployment, a multi-dimensional index of poverty and population density. Although this reduces the sample size, it produces a set of control counties that have similar attributes.

The validity of the PSM approach rests on the assumption of no unobserved differences between the treated and control counties that are correlated with potential outcomes (Rosenbaum, 2007; Gertler et al. 2011). I validate this assumption using several tests. First, I examine the

[5] The border counties include Marsabit, Wajir, Samburu, Baringo, Garissa, Kericho, Tana River, Bomet, Kitui, Narok, Nairobi, Machakos and Kajiado.

[6] There are 47 counties in the sample. The 11 ATIB counties are dropped from the analysis. This leaves a total of 36 counties (13 border counties and 23 periphery counties).

distribution of the estimated propensity score. Figure C1 shows significant evidence of common support, as indicated by the significant overlap of the scores in the treated and control counties. Second, I examine whether the treated and control counties exhibit the same distribution of the pre-treatment covariates. The p-values reported in column (6) of Table C4 in the appendix indicate insignificant differences between the two sets of counties along several variables that are correlated with spending decisions.

To compare the two sets of control counties, I conduct a bias reduction test. In the lower panel of Table C4, I report the distribution of bias between the treated and control groups before and after matching. The results show that the bias in relying on periphery counties is significantly higher than the control group generated using the propensity score in each of the covariates. As expected, the matched sample has a mean bias of 12.4, which is significantly lower than that of the unmatched sample (45.8), suggesting that the PSM provides a better set of counterfactuals to the border counties.

4.3.3 Testing for spillover

I test the free riding hypothesis by examining whether there was a differential effect in spending on public goods and services in the border counties compared to those located further away as a result of the reform. The identification strategy relies on a difference in difference (DD) approach.

The specification takes the form;

$$y_{i,t} = \alpha_i + \alpha_t + \beta_1 Post_t + \beta_2 Treat_i + \beta_3 (Post_t * Treat_i) + \beta_4 X_{i,t} + \epsilon_{i,t}$$

Equation (1)

where $y_{i,t}$ is expenditure on public goods and services as a share of the total budget for county i in year t, $Post_i$ is equal to one if year ≥ 2015 and zero otherwise. $Treat_t$ is an dummy variable that takes the value of one if county i was treated (it shared a boundary with at least one of the ATIB counties), $(Post_t * Treat_i)$ captures the interaction effect of being treated after the reform, $X_{i,t}$ is population density[7] and $\epsilon_{i,t}$ is the error term. Given that the econometric analysis is performed using a panel dataset, county effects α_i are included to control for characteristics of counties that remain constant over time (for example, alignment with the central government that can be correlated with public expenditure) and year effects α_t capture yearly trends (such as differences in budgetary allocations across counties). The DD parameter of interest is β_3 and it compares the changes in public expenditure before and after 2015 in the treated counties to changes in the control group. Due to the short time span, population density is the only

[7] Population density is included as the only control variable, as it is the only time-varying variable within the sample period.

time-varying covariate. Standard errors are clustered at the county level to account for the within county correlation and are calculated using a bootstrap procedure of 1000 replications to account for the small number of counties in the sample (Duflo et al. 2004).

4.4 Empirical Results

4.4.1 Descriptive Statistics

The summary statistics are reported in Appendix Table C5. Figure 4.5 presents a descriptive analysis of the evolution of public spending between the border and periphery counties for the entire sample period. Two key findings emerge. First, the spillovers are large in magnitude. Second, there is a divergence in spending two years after the reform.

4.4.2 Main results

Table 4.1 reports the main regression estimates obtained from Equation 1. The outcome variable is expenditure on public goods and services as a share of the total budget. The results in columns (1) and (2) are derived from using periphery counties as the control group, while those in columns (3) and (4) are estimated using propensity score matching. For inference, the standard errors in columns (1) and (3) are based on the normal approximation, while those in columns (2) and (4) are estimated using the wild bootstrap procedure. Both approaches, however, yield standard errors that are similar in magnitude. In all of the specifications, the inclusion of county fixed effects accounts for any potential geographical or historical differences between counties while year fixed effects account for the time-invariant differences between counties. This ensures that the coefficients are not biased by any omitted time-invariant characteristics, such as culture or behavioural aspects, that might be correlated with public spending.

Across the different specifications, the DD estimate is negative and statistically significant at standard confidence levels. The point estimate in column (1) suggests that the border counties were associated with a substantial decline (15.7 percent) in the share of expenditure on public goods and services. This finding is robust to accounting for the potential small sample bias in column (2). Using an alternative set of control counties based on the PSM, the results in columns (3) and (4) show a similar finding, despite a reduction in the sample size due to matching. Relative to observationally similar counties located further away, the point estimates show that the border counties reduced their spending by around 16 percent. Not only is this coefficient statistically significant at the 5 percent level, but the economic magnitude of this estimate is also substantial. Given that the border counties received a total of 96 billion Ksh in budgetary allocation between 2015 and 2017, the findings suggest that, everything else being equal, free riding decreased expenditure on public goods provision by Ksh. 14.4 billion.

4.4.3 Accessibility costs: Spatial distance and time

According to theories of externality, if residents can travel across counties to access public goods, then shorter distances may reflect lower transportation costs and time (Saraiva and Costa, 2012; Akai and Suhara, 2013). Under the assumption that accessibility costs increase linearly with distance, differences in commuting distance and time should affect the degree of free riding. To directly test for this, I exploit two sources of spatial variation to assess how differences in accessibility between the border and reform counties affected the reduction in public spending.

The first source of variation is derived from differences in the length of a county's boundary. I construct a variable that captures the length of the shared boundary (in kilometres) between each border county and its contiguous county in the reform and then normalize this measure using the total length of the county's boundary.[8] While simple in nature, the assumption here is that border counties that share a longer boundary with the reform counties should have higher accessibility given the porous nature of local boundaries.[9]

The second source of variation relies on the transport connectivity between counties. In Kenya, roads are the dominant mode of transport. Using a shape file of the road connectivity network (Figure C2), I construct two variables. The first one captures the distance between the most densely populated areas in the border counties and the nearest main town in the reform counties. The second variable incorporates a time dimension and captures the quickest way of travelling between each border county and the nearest reform county using public transport. To do so, I combine geo-referenced road network data that contains detailed information on both the physical and visual conditions of the road (such as road class, width, number of lanes, surface type, and condition) with data on official speed limits from the Kenya Road Board. I generate a time distance variable that captures the time (in minutes) that it takes category A, B and C vehicles (mainly public buses, vans, and private cars) to travel from the most densely populated area in the border counties to the nearest main town in the reform counties.[10]

I then estimate the following specification;

$$y_{i,t} = \beta_0 + \beta_1 Post_t + \beta_2 Distance_{i,j} + \beta_3 (Post_t * Distance_{i,j}) + \epsilon_{i,t}$$

Equation (2)

where $y_{i,t}$ denotes the expenditure on public goods and services as a share of the total budget for each border county i in year t, and $Post_t$ is an indicator variable equal to 1 if year is $\geq$

[8] Several studies argue that boundaries are endogenous to local political or economic factors (Mccauley and Posner, 2015). However, while this might be the case, the county boundaries in Kenya were drawn in 2010, under a different government, based on the existing 210 constituencies, and thus it is plausible to assume that they are uncorrelated with the 2015 reform.

[9] Using Geographic Information System (GIS), I overlay the road network and county administrative border shape files, and then use the Network Analyst Extension package to estimate the length of the roads connecting the major town in each border county to the nearest town in the reform county.

[10] I assume that the public goods and services provided by the reform are geo-located in the main town in each of the reform counties (Banerjee et al. 2007).

2015. The variable Distance is a measure of spatial variation and is proxied by three different indicators. The first one is a binary variable that equals 1 if county's i shared boundary with the contiguous reform county j is lower than the median distance, and zero otherwise. The second one is a continuous measure of the road distance in kilometres between the main town in each border county with the closest town in the nearest reform county, and the third one is a time indicator variable that captures the shortest travelling time by public transport between each border county and the nearest reform county. The parameter of interest is denoted by β_3 and captures the effect of spatial proximity on spending patterns in the border counties.

Table 4.2 reports the main estimates obtained from estimating equation (2). The interaction term compares changes in the share of expenditure on public goods and services between border counties that have higher spatial proximity to the reform counties to those with lower proximity. Across the different specifications, this coefficient is negative and statistically significant, revealing the important role of spatial characteristics in explaining the variation in allocative decisions of local politicians. In column (1), I find that each additional kilometre of distance reduces spending by 0.22 percentage points, while the result in column (2) shows a higher reduction for counties with a shorter road distance to the reform counties. In column (3), I document that the reduction in spending was higher in border counties with a lower travelling time. This result is depicted in Figure 4.6 where the reduction in spending is a function of commuting time. Overall, these findings suggest that spatial proximity shapes allocative decisions through accessibility costs.

4.4.4 Mechanism: Clientelistic political exchanges

This section provides suggestive evidence that politicians engaging in free riding shifted their spending towards clientelistic goods. I support this interpretation by showing that clientelistic spending was higher prior to elections and in counties where governors had already established clientelistic networks.

To explore how spillovers affected the composition of public spending among border counties, I begin by disaggregating public expenditure into two main components. The first category captures spending on public goods and services (such as roads, health, education, agriculture, water and sanitation). This category of expenditure corresponds to those that experienced a substantial increase by the neighbouring reform counties. I interpret these spending categories as non-targeted expenditure since they finance public goods and services that benefit all residents. The second category of expenditure comprises spending that can be targeted at a specific group of voters. This consists of expenditure such as travel and meeting allowances, salaries and wages, the purchase of office equipment, and the acquisition of assets.

I then estimate the following specification;

$$y_{i,t} = \alpha_i + \alpha_t + \beta_1 Post_t + \beta_2 Treat_i + \beta_3(Post_t * Treat_i) + \epsilon_{i,t}$$

Equation (3)

where $y_{i,t}$ is either public expenditure on public goods and services, or expenditure on clientelistic goods, both of which are expressed as a share of total expenditure for county i in year t, $Post_i$ is equal to one if year $\geq$ 2015 and zero otherwise. $Treat_t$ is a dummy variable that takes the value of one for border counties, $(Post_t * Treat_i)$ is an interaction term that captures the effect of the reform and $\epsilon_{i,t}$ is the error term. As with the previous specifications, county effects α_i are included to capture differences across counties that are constant over time, while year effects α_t absorb differences over time that are common to all counties. The parameter of interest is β_3 and it compares the change in clientelistic spending before and after 2015 in the border counties to changes in periphery counties as well as control counties obtained using the PSM as controls. Standard errors are clustered at the county level and calculated using the bootstrap procedure.

The estimates obtained from Equation (3) are reported in Table 4.3. The results reveal a significant effect of the reform on the composition of expenditure in border counties compared to those located further away. I find a decrease in the share of expenditure on public goods and, concurrent with this reduction, there is a significant increase in the share of expenditure on targeted goods. On the top panel of the table, the point estimates in columns (1) to (4) are negative and statistically significant at conventional levels, suggesting that politicians substantially reduced their share of expenditure on public goods. On the other hand, the lower panel presents contrasting results. The coefficients reported in columns (5) to (8) are positive and statistically significant, suggesting a shift in spending patterns towards targeted goods. Overall, these findings are consistent with the notion that proximity to the reform counties incentivised officials to reduce spending on public goods and reallocate their funds towards clientelistic goods.

To provide further evidence in support of clientelistic spending, I first examine the effect of a politician's duration in power, consistent with the notion that incumbent governors who had held local power prior to 2013 were more likely to have established clientelistic and patronage networks. I thus estimate a model where I regress the share of targeted spending as a share of the total expenditure on a dummy variable that takes the value of one if the incumbent governor held a local political office prior to 2013. Table 4.4 presents the results, which are estimated for border counties. In column (1), I find that a long duration in office is associated with higher spending on targeted goods. Decomposing targeted spending into its individual components, the results in columns (2) to (4) suggest that targeting was higher through travel and meeting allowances as well as the acquisition of assets by local politicians.

Second, I examine the temporal dimension of clientelistic spending with respect to the timing of the elections. Using quarterly data, I test for opportunistic cycles in spending while treating elections as exogenous.[11] I estimate a model where I regress targeted spending as a share of total expenditure on an indicator that takes the value of 1 if the budget cycle is t quarters away from the 2017 elections, including quarterly fixed effects to account for seasonality trends.

The results are presented in Table 4.5 and show that expenditure on targeted goods experienced the first significant spike of around 11.8 percent three quarters before the elections. In columns (2) to (4), I examine the effect of the elections on budget composition. The results show that the acquisition of equipment reached 23 percent higher than its level in the last quarter before the elections while the share of travel and meeting allowances rose by around 9 percent. There appears to be no significant increase in these spending categories after the election. Taken together, these findings suggest that the timing of these spending were likely to have been shaped by electoral incentives.

4.4.5 Alternative hypothesis

Using data on targeted spending as a proxy for clientelism presents some inferential challenges. A potential concern is that border counties could have had a systematically lower quality of bureaucracy, and thus an increase in wages, salaries or allowances could reflect an investment in improving the bureaucratic capacity.

However, I argue that most of this spending - especially in Kenya - is more likely to reflect clientelistic spending. First, the annual reports from the Office of the Auditor General document significant evidence of irregularities in spending among border counties after 2015. For instance, the audit reports for the financial year 2015 for Kericho county (one of the border counties) show illegal payments for the acquisition of county assets amounting to Ksh. 1,631,784,000 (USD 16 million). In another county - Taita Taveta - the audit reveals an unaccounted amount of Ksh 75, 000, 000 (USD 750, 000) related to scholarship awards, illegal payments to road contractors of Ksh, 3, 345, 393 (USD 33,000), for water projects of Ksh. 17, 654, 390 (USD, 17,000) and for county level projects of Ksh, 162,969,292 (USD 1.6 million). Second, empirical evidence given by D'Arcy and Cornell (2016, p.264) shows that governors in Kenya divert public funds for political gain, and they argue that these spending 'benefits primarily go to [political] individuals, they are unearned, and disproportionately high and above legitimate levels'.

4.5 Estimating the Welfare Cost of Free Riding

This final section presents suggestive evidence that free riding led to a decline in households' welfare. Placebo tests confirm that this finding is not driven by unobserved characteristics of the counties.

[11] In line with the constitution, elections in Kenya are conducted after every 5 years, alleviating concerns that the timing of the election is driven by factors such as an economic boom that might increase targeted spending.

Several studies suggest that variations in public spending are highly correlated with changes in welfare outcomes, an association that also portrays a spatial dimension (Ashiabi et al. 2016; Verschoor et al. 2005).[12] In theory, reducing spending could be sub-optimal if it lowers either the provision or accessibility of public goods for local residents. However, identifying how changes in spending affect welfare outcomes poses several methodological concerns. First, many other factors - unrelated to spending behaviour - could influence both the provision and accessibility of public goods. Second, estimating changes in welfare requires the comparison of welfare indicators for the same population of interest before and after exposure to the reform.

To address these challenges, I rely on two nationwide surveys: the Kenya integrated household budget surveys, which contain information on households' access to public goods and services.[13] A novelty of these surveys is that they ask respondents questions regarding public goods at the community, rather than the household level, and thus mitigate potential bias arising from households' self-selection into the usage of specific public goods. The first survey was conducted in 2005/2006 and provides the baseline information, while the second survey was conducted in 2015/2016.[14] I construct indicators of accessibility based on households' responses regarding the accessibility of locally provided public goods and services (health, agriculture, education, water and sanitation and roads) as well as those provided by the central government (security and electricity). I then combine these outcome indicators with the phasing in of the reform in 2015 to compare the before and after changes for the residents of the treated counties with those in the control group using a difference in difference design.

The econometric specification takes the form;

$$y_{j,t} = \beta_0 + \beta_1 Post_t + \beta_2 Treat_j + \beta_3 (Post_t * Treat_j) + \beta_4 X_{j,t} + \epsilon_{j,t}$$

Equation (4)

where j indexes counties and t indexes years, $y_{j,t}$ is a binary indicator that captures households' access to public goods and services (such as community infrastructure, water, agricultural services, paved roads, health, electricity and security), $Post_t$ is equal to one if year $\geq$ 2015 and zero otherwise and $Treat_t$ is a dummy variable equal to one for the border counties. The variable $X_{j,t}$ includes population density and a poverty index. The standard errors are clustered at the county level. The coefficient of interest is denoted by β_3. A negative sign would suggest that free riding counties experienced worse outcomes while a positive sign would imply an im-

[12] For instance, Kondylis and Manacorda (2012) found that a longer geographical distance to schools lowers students' attendance in Tanzania, while Fortney et al. (2002) found that a longer travel distance negatively affects the probability of utilization of health services in the United States.

[13] The questions and coding of the responses in both surveys is summarized in Table C6.

[14] A potential concern is the time lapse between the 2005/2006 survey and the implementation of the ATIB reform in 2015. The key assumption is that any factors that might affect access to, or the quality of public goods and services equally affected all counties. By measuring outcomes a year after the reform, this approach has the added advantage of providing estimates that are not confounded by nationwide policies (such as trends in economic growth) that might affect living standards.

provement. On the other hand, a statistically insignificant coefficient would suggest a null effect of the reform.

Table 4.6 reports the coefficients obtained from estimating equation 4. The outcome variables are restricted to public goods and services provided by the county government. Two key findings emerge. First, the reduction in public spending was welfare reducing. Across all the specifications, the coefficients of interest are negative and statistically significant at standard levels. Second, the results shed light on the distributional effects of free riding. Comparing the magnitudes of the coefficients across the different specifications suggests that the percentage of households receiving water from the main government system declined by 11.7 percent (column 2), while column (3) shows that 23.4 percent of households reported a decline in the quality of public sanitation. The results in column (4) show that 21 percent of households reported reduced access to the nearest agricultural extension agent, while column (5) shows that households reported the poor condition of local roads and longer distances to access health services (column (6)).

As a specification check, I conduct a placebo treatment effect using outcome indicators that are a priori expected to be unaffected by the reform. This is to ensure that unobserved county characteristics that determine the association between spending and accessibility are not confounding the results. I consider the provision of electricity and security since these are provided by the central government. The results are reported in Table 4.7. The estimated coefficients for access to electricity and security services are not only small in magnitude, but also statistically insignificant, providing reassuring evidence that the decline in welfare outcomes in border counties can be attributed to the reform.

4.6 Robustness Checks

In this section, I provide reassuring evidence that the observed free riding can be attributed to the reform by ruling out systematic differences in spending patterns between border and control counties, reduced revenue in border counties, residential mobility and anticipatory effects of the reform as possible confounders.

4.6.1 Parallel trend assumption

The primary assumption underlying the difference-in-difference estimates obtained from equation 1 is that public spending would have exhibited similar trends in both border and control counties in the absence of the reform. To empirically test for this, I compare the pre-trends in public spending for the years 2013 and 2014. The results are reported in Table 4.8. The estimates in column (1) compare spending between the border and the control counties generated using the PSM while those in column (2) compare spending between the border and periphery counties. In both specifications, the coefficients corresponding to the interaction terms are statistically insignificant. This provides suggestive evidence that the patterns of public expenditure were in tandem prior to 2015 and would have remained the same in the absence of the reform.

4.6.2 Displacement effects

A potential concern is that the reform could have led to a reduction in public spending by displacing mobile factors of production from the border to the reform counties. For instance, if businesses or labour relocated to take advantage of the benefits of the reform, then the resulting lower taxes could mechanically explain the reduction in spending. To rule out this possibility, I re-estimate equation 1, replacing the dependent variable with local tax revenues. As reported in Table 4.9, the corresponding DD estimates are not only statistically insignificant, but their magnitude is also small. This finding alleviates concerns that the reform displaced economic factors by encouraging cross border migration.

4.6.3 Residential mobility

Another potential explanation is that lower spending occurred due to a reduction in demand for local public goods due to residential sorting across counties. For instance, individuals who value high quality public goods could have permanently relocated to the reform counties. However, there are two main reasons why this interpretation is less plausible. First, I assess the short term effect of the reform, which mitigates concerns that residents relocated in less than two years. Second, several studies on internal migration in Kenya show that residential mobility is limited due to the nature of the land markets, significant relocation costs and ethnic tensions (Platteau, 2000). Third, even if residential sorting occurred, it is likely to have resulted in individuals moving from rural to urban counties, an aspect that is inconsistent with the results estimated after excluding urban counties from the sample.

4.6.4 Cosmopolitan counties

A potential concern in the estimation of spillovers is the influence of cosmopolitan or urban counties, given that due to high rates of urbanization, they may differ in terms of unobservables such as taste and preference for public goods, and thus affect spending patterns. To examine whether the results are being driven by these counties, I re-estimate the baseline equation (1) and exclude all urban counties.[15] The results are reported in Table 4.10 and are quantitatively similar to the baseline estimates.

[15] These counties include: Mombasa, Kisumu, Nairobi and Nakuru.

4.6.5 Anticipatory effects

A final concern relates to anticipatory effects of the reform. In theory, information on the reform, rather than the reform itself, could have incentivized border counties to strategically reduce their spending. To directly test this possibility, I re-estimate equation 1 and redefine the treatment year as 2014, one year before the actual implementation of the ATIB reform. The results are reported in Table 4.11. In both columns (1) and (2), the difference-in-difference estimate is statistically insignificant at standard levels, providing reassuring evidence that anticipatory effects are unlikely to explain the reduction in public spending in border counties.

4.7 Conclusion

In this paper, I use a new dataset on budgetary allocations to analyse the effects of public spending reforms across bordering counties in Kenya. The empirical analysis estimates the spillover effects arising from an expenditure reform - *the Aberdares and Mt. Kenya Trade and Investment Block (ATIB) reform* - which led to an increase in public spending across several geographically proximate counties. To help identify the causal effect of the reform, I use a spatial difference-in-difference design that exploits variations in counties' geographic proximity to the ATIB counties, providing an examination of differentials in spending and welfare outcomes between border counties and those located further away. By combining spending data and indicators of living standards from household survey data, this approach presents a unique opportunity to understand the redistributive consequences of spillovers.

The empirical results document that expenditure policies can lead to inefficient outcomes. This effect primarily occurs through free riding. The baseline estimates suggest that counties neighbouring those that implemented the reform experienced a significant reduction in public spending, estimated at around 15 percent, compared to similar counties located further away. To put the size of the effect into perspective, this represents a total reduction of around 8 billion Ksh per year (77 million USD), a significant proportion of local counties' budgetary allocation. This finding suggests that future studies on distributive politics should aim to examine how allocative decisions are influenced by spending policies among neighbouring jurisdictions, rather than assuming that distributive strategies are driven only by social-economic or political factors within a particular jurisdiction. Further analysis shows that free-riding was lower in border counties where residents would incur less accessibility costs - in terms of commuting time and distance - suggesting that geographical factors, which have received less attention in the literature, have the potential to shape public spending policies.

To shed light on the underlying mechanism, I examine changes in the composition of public spending among border counties, focusing on the allocations between public and targeted goods. I find evidence of clientelistic political exchanges. The results indicate that the reform induced border counties to shift some of their spending away from the provision of public goods to targeted goods such as salaries, wages, allowances and the purchase of office assets. These categories of spending were higher prior to elections and for incumbent politicians who had been in power for a long duration. In addition, independent audit reports reveal significant misappropriation associated with these spending categories. This finding suggest that although politicians do value public goods - by taking into account accessibility costs - they also engage in targeted spending to enhance their re-election prospects. Future studies could tease out the relative weights attached to these spending categories as well as whether there are any electoral returns to such tactical redistributive strategies.

Finally, the analysis documents the adverse effects of free-riding. Evidence from households' surveys shows a substantial reduction in the access and quality of public goods in border counties, suggesting that free-riding is welfare-reducing. While previous observational work has hinted at similar findings (Haile and Nino-Zarazua, 2017), this is the first study to estimate such effects on direct measures of welfare using a rigorous quasi-experimental design.

There are several important implications of this analysis for the study of fiscal federalism and redistributive politics. First, the finding is intriguing in that it sheds light on how politicians choose to spend their budgetary resources in the presence of an increase in spending among their neighbours. In the context of expenditure reforms that are established across partisan lines, the results suggest that the anticipated positive spillovers emanating from a yardstick comparison may not be realized, as each cluster of counties under a particular political party is viewed as a separate political market. This finding is consistent with other studies showing the importance of institutional features over geographical proximity in shaping the nature of spillovers across local governments (Mortari et al. 2014). This approach presents new insights on the study of redistributive politics by placing an emphasis on the spatial distribution of political power across local governments as a key determinant of a yardstick comparison.

Second, the findings have implications for the literature that evaluates the effects of expenditure reforms on public service provision (Keele and Titiunik, 2014). The conventional approach has relied on comparing outcomes of interest between targeted and non-targeted localities. However, this approach assumes that neighbouring localities do not adjust their behaviour, and as such can be used as potential control units. By finding sizeable spillovers across neighbouring localities, the findings pinpoint the importance of incorporating the indirect effects of a reform, especially when assessing its net effect.

Finally, the findings provide new empirical evidence on a critical policy debate. Despite their mixed results, expenditure policies remain a widely advocated development strategy and different countries such as India and South Africa are ambitiously implementing them (Chaurey, 2017; Todes and Turok, 2018). However, despite the anecdotal claim about their effectiveness, the findings in this paper highlight a key trade-off. On the one hand, such reforms may play an important role in addressing inefficiencies in public service delivery by encouraging policy coordination among local governments. On the other hand, they might encourage neighbouring localities to free-ride due to positive externalities, an aspect that can be welfare-reducing. Therefore, in the design of such reforms, attention should also be placed on the incentive structures of politicians who ultimately make allocative decisions. By documenting the adverse consequences of cross-border spillovers, the analysis suggests that political factors should be integrated into studies evaluating the effect of expenditure reforms, and those assessing spillovers in the context of fiscal federalism.

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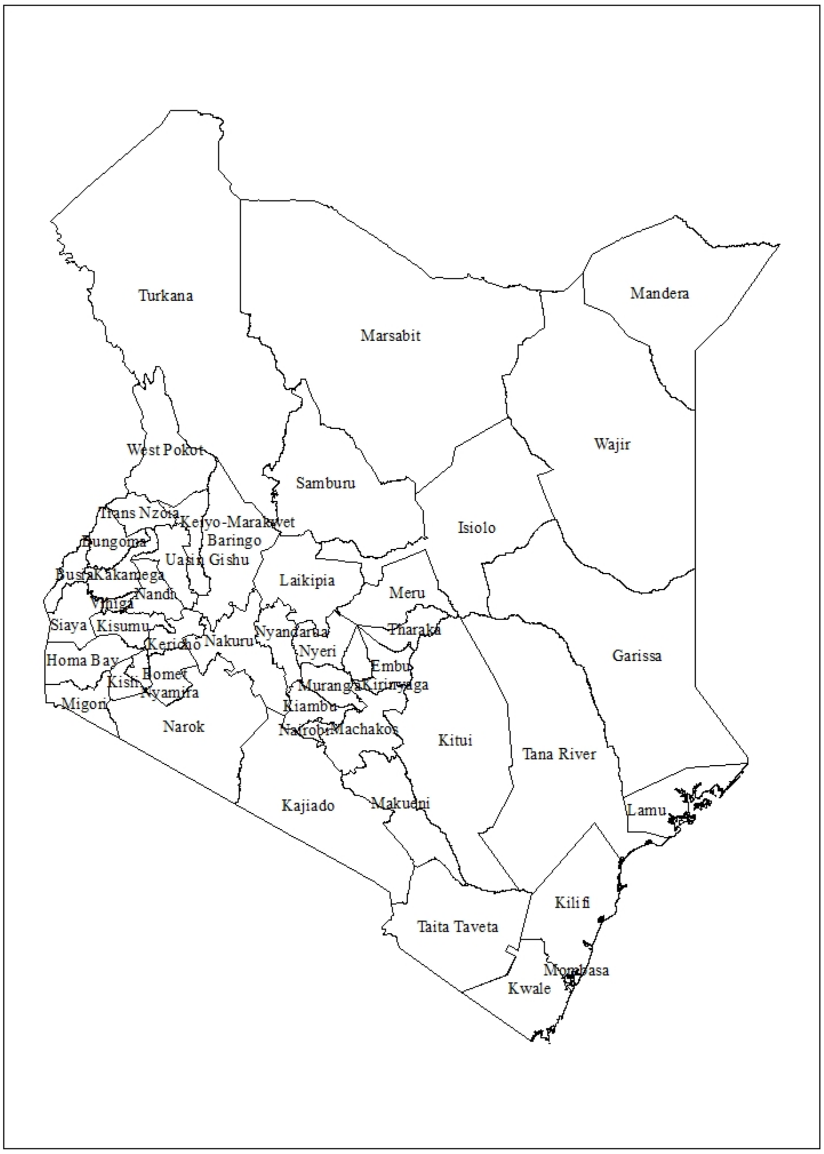
Figures

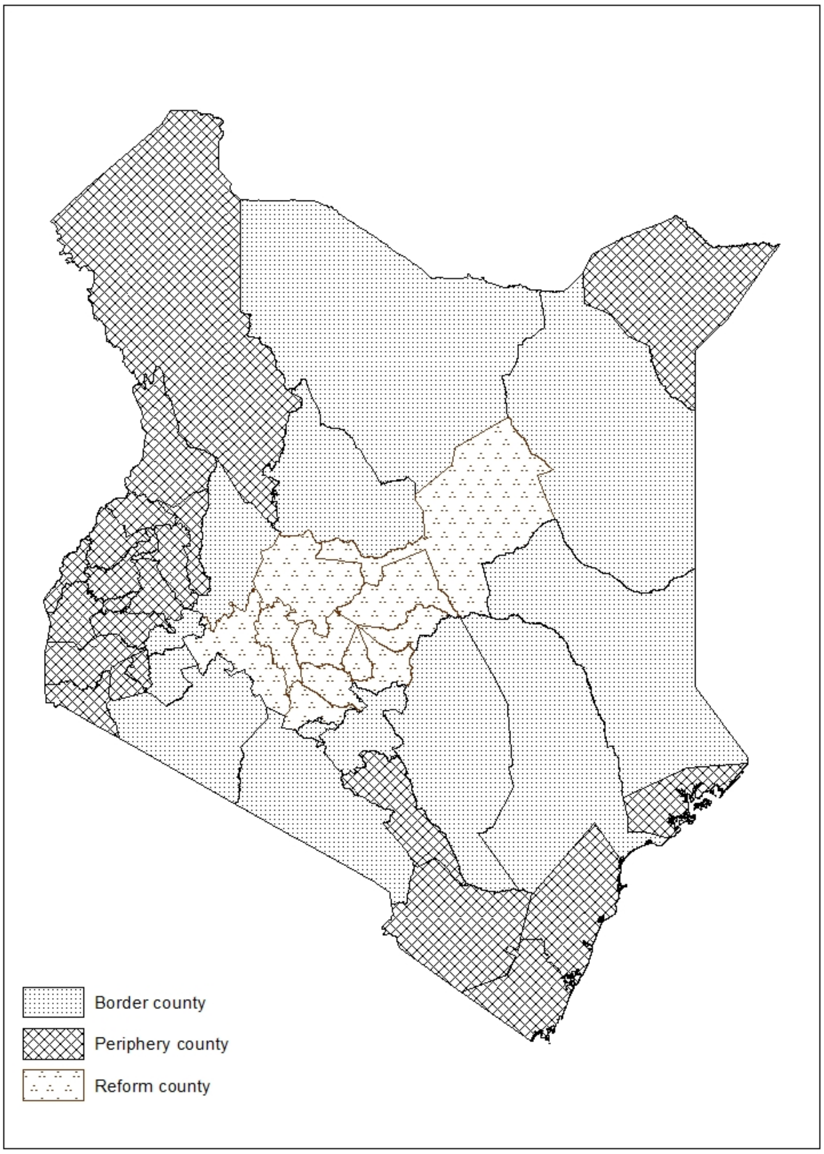
Figure 4.1: Administrative Map of Kenyan Counties



Notes

This figure displays the 47 counties in Kenya.

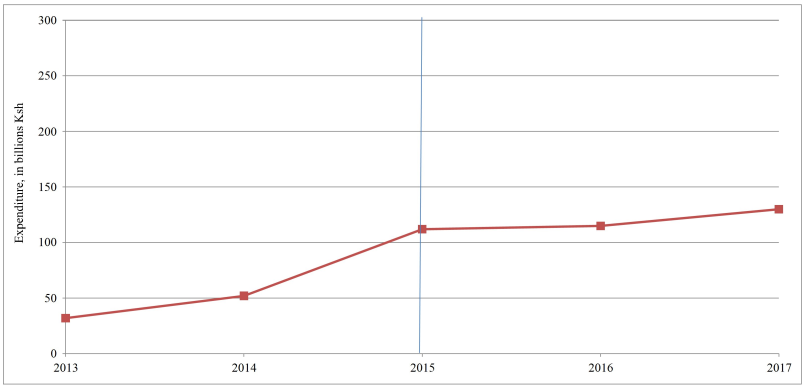
Figure 4.2: Classification of counties in the sample



Notes

This map displays the 3 categories of counties that forms the basis for the identification strategy. Reform counties refers to the 11 counties that implemented the ATIB reform while border counties refer to the 13 counties that share a geographical boundary with at least one of the reform counties. Periphery counties refers to the 23 counties that are neither part of the reform or border counties.

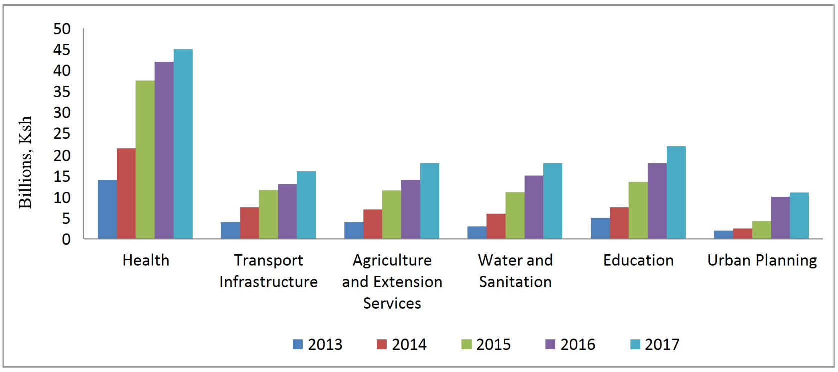
Figure 4.3: Public Spending among the Reform Counties



Notes

This figure shows the increase in public expenditure in 2015 due to the reform.

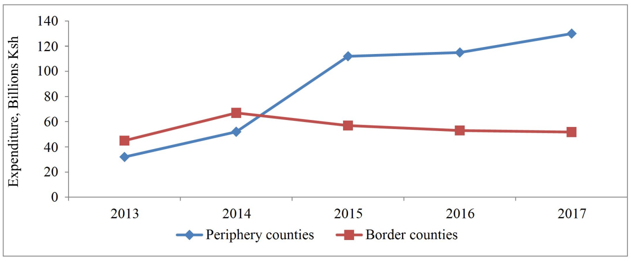
Figure 4.4: Public Expenditure Patterns among the Reform Counties



Notes

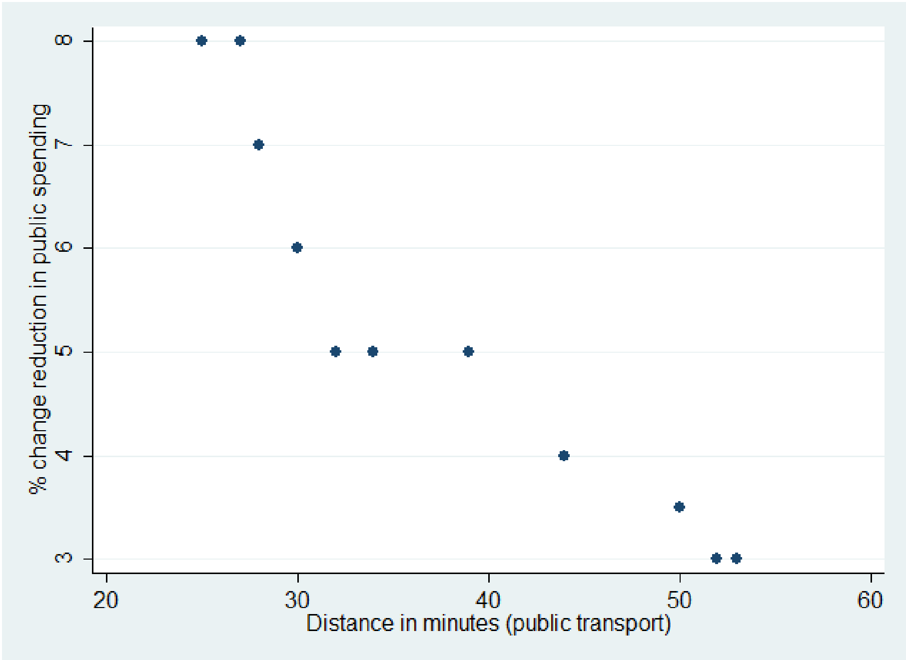
This figure shows the allocation of public expenditure across various public goods and services among the reform counties.

Figure 4.5: Public Spending Patterns in Border and Periphery Counties



Notes
This figure shows the trends in public expenditure in both border and periphery prior and after the reform.

Figure 4.6: Accessibility Costs and Free Riding in Border Counties



Notes: This figure shows the relationship between accessibility to the reform counties (in terms of commuting time via public transport) and public spending among border counties.

Tables

Table 4.1: DiD Estimates: Evidence of Free-riding in Public Spending

Dependent variable: Public expenditure as a share of total budget				
	Periphery Counties		Matched Counties	
	(1)	(2)	(3)	(4)
Post x Treat	-0.157**	-0.157**	-0.158***	-0.161***
	(0.055)	(0.068)	(0.043)	(0.029)
Controls	Yes	Yes	Yes	Yes
County fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	180	180	150	150
Mean of dependent variable	0.739	0.739	0.765	0.739

Notes

This table reports the spillover effects of the expenditure reform on public spending in border counties. Columns (1) and (2) present results where the control counties are obtained all 23 periphery counties as potential controls while columns (3) and (4) uses controls counties obtained from the PSM approach. The interaction term (post x treat) is the standard difference in difference estimate. Post is a dummy indicator for the years 2015-2017 while Treat is a dummy variable equals 1 if a county was treated (shared a boundary with any of the ATIB counties). The standard errors in columns (1) and (3) are based on the normal approximation while those in columns (2) and (4) are based on a wild bootstrap procedure with 1000 replications. Robust standard errors in parentheses. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 4.2: Heterogeneous Effects: Spatial Variation and Free riding

Dependent variable: Public expenditure as a share of total budget			
	(1)	(2)	(3)
Treat x Distance	-0.215**	-0.20**	-0.212**
	(0.101)	(0.29)	(0.106)
Controls	Yes	Yes	Yes
County fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	65	65	65
Mean of dependent variable	0.523	0.554	0.765

Notes

This table reports the effects of spatial proximity on public spending in border counties. Column (1) presents the results where the variable Distance is a binary variable equal to 1 if the shared length of the boundary between border and ATIB counties is lower than the median distance (150 kilometres). In column (2), the variable Distance is a continuous measure of the road distance between the main town in each border county and the nearest main town in the ATIB county. In column (3), the variable Distance is a continuous measure of the average time (in minutes) between the main town in each border county and the nearest ATIB county. The standard errors are based on a wild bootstrap procedure with 1000 replications. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 4.3: DiD Estimates: Compositional Effects

Dependent variable: Expenditure on public goods and services as a share of total expenditure				
	Matched Counties		Periphery Counties	
	(1)	(2)	(3)	(4)
Post x Treat	-0.325**	-0.374**	-0.352**	-0.310**
	(0.150)	(0.181)	(0.141)	(0.153)
Controls	No	Yes	No	Yes
County fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	150	50	180	180

Dependent variable: Expenditure on clientelistic goods as a share of total expenditure				
	Matched Counties		Periphery Counties	
	(5)	(6)	(7)	(8)
Post x Treat	0.200**	0.181**	0.232**	0.221**
	(0.08)	(0.09)	(0.16)	(0.07)
Controls	No	Yes	No	Yes
County fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	150	150	180	180

Notes

This table reports the effects of the reform on the composition of public spending in border counties. On the top panel, expenditure on public goods and services consists of roads, health, education, irrigation and sanitation) while on the lower pane, clientelistic goods refer to travel and meeting allowances, salaries and wages, purchase of office equipment and acquisition of assets. The interaction term (post x treat) is the standard difference in difference estimate. Post is a dummy indicator for the years 2015-2017 while Treat is a dummy variable equals 1 if a county was treated (shared a boundary with any of the ATIB counties). The standard errors in parenthesis are based on a wild bootstrap procedure with 1000 replications. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 4.4: Clientlistic Spending and Political Duration in Office

Dependent variable expressed as a share of total expenditure				
	clientelistic spending	Acquisition of equipment	Salaries and wages	Travel and meeting allowances
	(1)	(2)	(3)	(4)
Incumbent in power before 2013	0.107**	0.179***	0.009*	0.021**
	(0.005)	(0.066)	(0.005)	(0.009)
Controls	Yes	Yes	Yes	Yes
Observations	65	65	65	65

Notes

This table reports the effect political duration on targeted spending by comparing whether incumbents in power prior to 2013 have differential levels of targeted spending compared to new political entrants. The estimation is restricted to border counties only. The standard errors in parenthesis are based on a wild bootstrap procedure with 1000 replications. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 4.5: Electoral Cycles in Clientelistic Spending

Dependent variable expressed as a share of total expenditure				
	Clientelistic spending	Acquisition of equipment	Salaries and wages	Travel and meeting allowances
	(1)	(2)	(3)	(4)
Quarter -3	0.118**	0.036	0.011	0.007
	(0.004)	(0.025)	(0.031)	(0.004)
Quarter -2	0.001	0.004	0.001	0.000
	(0.000)	(0.005)	(0.000)	(0.000)
Quarter -1	0.004	0.232***	0.000	0.091**
	(0.003)	(0.106)	(0.005)	(0.039)
Election Month	0.008	0.000	0.001	0.004
	(0.006)	(0.010)	(0.000)	(0.002)
Quarter +1	0.001	0.000	0.001	0.000
	(0.000)	(0.000)	(0.001)	(0.000)
Quarter +2	0.003**	0.017	-0.000	0.002
	(0.004)	(0.002)	(0.005)	(0.000)
Quarter +3	0.120	0.001	-.007	0.000
	(0.000)	(0.001)	(0.000)	(0.000)
Controls	Yes	Yes	Yes	Yes
Observations	65	65	65	65

Notes

This table reports the effect of electoral cycle on targeted spending. The estimation is restricted to border counties only. The standard errors in parenthesis are based on a wild bootstrap procedure with 1000 replications. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 4.6: DiD Estimates: Estimating the Welfare Effects of Free Riding

Dependent variable: Change in percentage of households with access to:						
	Community infrastructure (1)	Piped water (2)	Public sanitation (3)	Agricultural extension (4)	Paved roads (5)	Local clinic (6)
Post x Treat	-0.432**	-0.117**	-0.234***	-0.208**	-0.284**	-0.205**
	(0.199)	(0.059)	(0.058)	(0.097)	(0.118)	(0.088)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	54731	54731	54731	54731	54731	54731

Notes

This table reports the effect of the reform on households' welfare indicators in border counties compared to control counties as defined by propensity score matching. Significance is denoted as: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 4.7: Placebo Tests

Dependent variable: Change in percentage of households with access to:		
	Electricity	Security
	(1)	(2)
Post x Treat	0.102	0.075
	(0.121)	(0.043)
Controls	Yes	Yes
Observations	54731	54731

Notes

This table reports falsification tests that examine the effect of the reform on the public goods provided by the central government. It compares household's responses in the border counties and those in control counties as defined by propensity score matching. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 4.8: Assessing the Parallel Trend Assumption

Dependent variable: Public expenditure as a share of total budget		
	Matched Counties	Periphery Counties
	(1)	(2)
Post x Treat 2013	0.057	-0.014
	(0.046)	(0.071)
Post x Treat 2014	0.085	0.089
	(0.951)	(0.074)
Controls	Yes	Yes
County fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Observations	150	180

Notes

This table reports estimates that assess differential in public spending before the reform between border and control counties. The standard errors are based on a wild bootstrap procedure with 1000 replications. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 4.9: DiD Estimates: Testing for Displacement Effects

Dependent variable: Local tax revenues as a share of total revenues				
	Periphery Counties		Matched Counties	
	(1)	(2)	(3)	(4)
Post x Treat	0.089	0.089	0.023	0.054
	(0.212)	(0.203)	(0.085)	(0.011)
Controls	Yes	Yes	Yes	Yes
County fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	180	180	150	150
Mean of dependent variable	0.523	0.554	0.765	0.739

Notes

This table reports the effect of the reform on local taxes in border counties. The interaction term (post x treat) is the standard difference in difference estimate. Post is a dummy indicator for the years 2015-2017 while Treat is a dummy variable equals 1 if a county was treated (shared a boundary with any of the ATIB counties). The standard errors in columns (1) and (3) are based on the standard normal approximation while those in columns (2) and (4) are based on a wild bootstrap procedure with 1000 replications. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 4.10: DiD Estimates: Excluding Cosmopolitan/Urban Counties

Dependent variable: Public expenditure as a share of total budget		
	(1)	(2)
Post x Treat	-0.157**	-0.157*
	(0.057)	(0.068)
Controls	Yes	Yes
County fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Observations	111	165
Mean of dependent variable	0.739	0.739

Notes

This table reports the spillover effect of the expenditure reform in border counties after excluding all urban counties from the sample.The interaction term (post x treat) is the standard difference in difference estimate. Post is a dummy indicator for the year 2015 while Treat is a dummy variable equals 1 if a county was treated. The control counties are generated using propensity score matching. Standard errors in all specifications are calculated using a wild bootstrap procedure with 1000 replications. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table 4.11: DiD Estimates: Anticipatory Effects

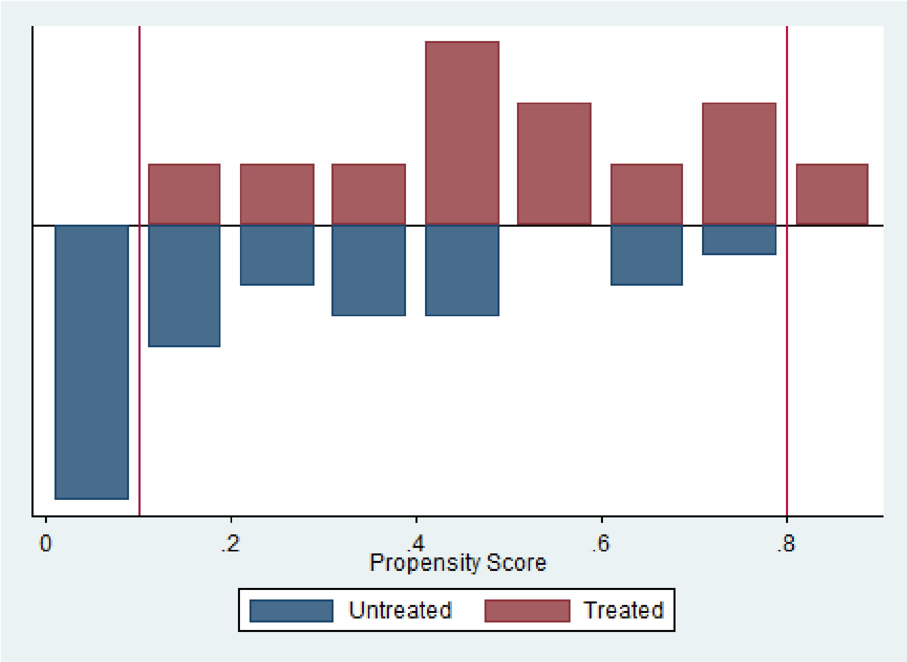
Dependent variable: Public expenditure as a share of total budget		
	(1)	(2)
Post x Treat	0.014	0.016
	(0.071)	(0.073)
Controls	Yes	Yes
County fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Observations	150	150
Mean of dependent variable	0.687	0.7244
R-squared	0.02	0.013

Notes

This table reports tests for anticipatory effects of the reform on public spending in border counties relative to counties generated using the propensity score matching approach. The interaction term (post x treat) is the standard difference in difference estimate. Post is a dummy indicator for the year 2015 while Treat is a dummy variable equals 1 if a county was treated. The standard errors in column (1) are obtained using the standard approximation while those in column (2) are based on a wild bootstrap procedure with 1000 replications. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

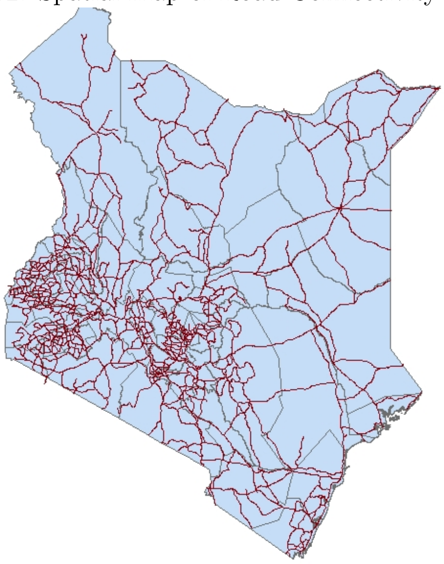
Appendix - Figures

Figure C1: Propensity scores for Treated and Untreated Counties in the Sample



Notes
This figure shows a significant overlap of the propensity score for treated counties and non-treated counties in the sample.

Figure C2: Spatial Map of Road Connectivity Network



Notes
This map displays the transport connectivity network of all major highways and roads across Kenyan counties.

Appendix C - Tables

Table C1: Classification of counties in the sample

ATIB Counties	Border Counties	Periphery Counties
Kiambu	Marsabit	Kwale
Embu	Wajir	Kilifi
Kirinyaga	Samburu	Lamu
Laikipia	Baringo	Taita Taveta
Meru	Garissa	Mandera
Murang'a	Kericho	Makueni
Nakuru	Tana River	Turkana
Nyandarua	Bomet	West Pokot
Nyeri	Kitui	Trans Nzoia
Tharaka Nithi	Narok	Uasin Gishu
Isiolo	Nairobi	Elgeyo Marakwet
	Machakos	Nandi
	Kajiado	Kericho
		Kakamega
		Vihiga
		Bungoma
		Busia
		Siaya
		Kisumu
		Homa Bay
		Migori
		Kisii
		Nyamira

Notes
This table provides a description of how counties are categorization in the empirical analysis.

Table C2: Variable definition and sources

Variables	Definition	Sources
Poverty rate	The ration of the number of people whose income falls below the national poverty line	Census data 2009
Unemployment rate	The percentage of unemployed workers in the total labour force	Census data 2009
Multi-dimensional index of poverty	The Multidimensional Poverty (MPI) Index identifies overlapping deprivations at the household level across the same three dimensions as the Human Development Index (living standards, health, and education)	Census data 2009
Population density	The number of people per square kilometre	Census data 2009
Income	Monthly household income, measured in local currency	Census data 2009
Number of registered voters	The number of people registered as voters per county	IEBC, 2013
Total valid votes casts	The total number of votes that were cast in 2013 and deemed to be valid	IEBC, 2013
Voter turnover	The percentage of eligible voters who cast a ballot in the 2013 county level election	IEBC, 2013
Margin of Victory	The difference is the total number of voters between the incumbent governor and the runners-up	IEBC, 2013
Tax revenue	Revenues that are collected by local counties, largely consisting of property taxes and market rates	Controller of Budgets Annual Reports
Salary and wages	The amount of county-level resources that are spent on workers salaries and wages	Controller of Budgets Annual Reports
Acquisition of equipment	The amount of county-level resources that are spent on the purchase of office equipment	Controller of Budgets Annual Reports

Notes
Source: Census data refers to the 2009 census data collected by the Kenya National Bureau of Statistics while IEBC refers to the Independent Electoral and Boundaries Commission.

Table C3: Covariate balance test for border and matched counties

	Treated Counties (1)	Control Counties (2)	Difference in means test p-value (3)
Panel A: Social Economic Variables			
Income Gini Coefficient	38.19	40.21	0.72
	(2.49)	(1.54)	(0.23)
Multi-dimensional poverty index	0.295	0.25	-1.52
	(0.03)	(0.01)	(0.93)
Poverty rate	20.58	17.46	-0.83
	(3.33)	(2.06)	(0.79)
Population density	15.67	18.53	0.79
	(2.83)	(2.19)	(0.21)
Unemployment rates	11.91	8.17	-1.58
	(2.86)	(0.89)	(0.93)
Area (square kilometres)	17.83	18.83	0.26
	(2.83)	(2.26)	(0.39)
Panel B: Political variables			
Registered voters	18.58	18.45	-0.03
	(3.43)	(2.05)	(0.51)
Number of constituencies	5.5	6.58	1.14
	(0.47)	(0.63)	(0.13)
Total valid votes	17.75	18.88	0.29
	(2.93)	(2.23)	(0.38)

Notes
Covariate balance test for border and matched counties. The variables are obtained from the 2009 census while those in panel B are from the 2013 county-level elections. Excluding population density, all variables do not vary within the sample period and are measured at 2013. The p-values refer to a two sample t-test. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table C4: Summary of the distribution of bias in the sample

	Mean					
	(Treated) (counties)	(Control) (counties)	(percent) (bias)	(reduction) (in bias)	(t-test)	(p-value)
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A						
Multi-dimensional poverty index						
Unmatched	0.295	0.249	51.6		2.68	0.009
Matched	0.295	0.290	0.9	98.2	0.03	0.973
Population Density						
Unmatched	57.08	20.1	20.1		1.02	0.308
Matched	57.08	23.5	23.1	16.9	0.93	0.354
Unemployment rates						
Unmatched	11.92	42.6	42.6		2.3	0.024
Matched	11.92	23.4	23.4	45	0.91	0.366
Panel B						

	Mean Bias	p-value
Unmatched sample	45.8	0
Matched sample	12.4	0.623

Notes

The mean bias is calculated using propensity score matching and pre-treatment covariates. The p-values refer to a two sample t-test. Significance is denoted as: *** p <0.01, ** p <0.05, * p <0.1

Table C5: Summary statistics

Variable	No. of counties	Mean	Standard Deviation	Minimum	Maximum
Poverty rate*	47	0.507	0.1789	0.121	0.929
Population*	47	821491.43	502349.98	101239	3138369
Area (Square kilometres)*	47	12368.30	17201.69	219	70961
Population density*	47	408.38	873.98	4.0	4515
Unemployment rate*	47	8.617	6.21	2 .0	37.0
Index of poverty*	47	0.24	0.085	0.02	0.52
No. of registered voters in 2013**	47	305316	265163.15	52346	1728801
Valid votes casts in 2013 (%)**	47	56.16	15.69	97.88	18.67
Public expenditure % of budget***	47	0.6949	0.1567	0.9829	0.1716
Office equipment as % of budget***	47	4.03	3.23	23.95	0.0271

Notes

* indicates variables measured in 2009 using census data, ** indicates variables measured in 2013 using electoral data and *** are averages of the sample period.

Table C6: Survey Questions and Coding of Households' Responses

Public Good or Service	Questions	Response	Coding
Security	How safe do people feel in their own houses?	1. Very safe 2. Fairly safe	1. Very safe or fairly safe 2. Unsafe
Agricultural Extension Services	What is the distance to the office / residence of the agricultural extension agent?	Open question (in kilometres)	Continuous variable
Health Services	What is the distance to the nearest health facility?	Open question (distance in metres) variable	Continuous
Community infrastructure	Level of maintenance of community infrastructure (roads, wells, buildings etc)?	1.Much worse 2. About the same 3. Better 4. Much Better 5. Not applicable	1.Better or much better or about the same 2. Much worse
Water services	What is the quality of this drinking water?	1. Good 2. Average 3. Poor	1. Good or average 2. Poor
Road	What is the most common type of road surface in this community?	1. Tarmack road 2. Graded graveled 3. Earth road 4. Murram road	1. Tarmack or Graded road 2. Earth or Murram road
Sanitation	Use of improved sanitation facilities?	1. Much worse 2. About the same 3. Better 4. Much Better 5. Not applicable	1. Better or much better or about the same 2. Much worse
Electricity	What is the [MAIN] source of lighting?	1. Electricity from the main system 2. Generator 3. Solar Energy 4. Paraffin lantern 5. Paraffin Pressure lamp 6. Fuel wood, 7. Gas lamp 8. Battery lamp/torch 9. Candles, 10. Biogas, 11. Other	1. Main Electricity 2. Generator, solar energy, paraffin lantern, paraffin Pressure lamp, fuel wood, gas lamp, battery lamp/torch, candle, biogas, other

Notes
Source: Kenya Integrated Household Budget Survey (2016).

Chapter 5

Conclusion

5.1 Overview

This thesis began with the observation that institutions are relevant for social-economic and political outcomes. It then highlighted the importance of understanding the channels through which institutions of accountability affect politicians' behaviour, especially in terms of public spending and the provision of local public services. At a more general level, each chapter aimed to:

(1) Document the existence of a significant within-country variation in institutional performance;
(2) Identify the underlying mechanisms driving this variation, with an explicit focus on institutions of accountability;
(3) Derive policy implications.

Although this thesis does not claim to provide a comprehensive discussion for all of the factors that explain the differences in institutional outcomes within a particular country, each of the chapters provided evidence of a set of novel mechanisms by relying on: (1) different sets of institutions of accountability (legislative and electoral), (2) politicians at different levels of government (ministers, members of parliament, parliamentary committee members, and local governors), (3) a variety of institutional outcomes (corruption, public spending, disciplinary sanctions, and completion rates of development projects), and (4) empirical strategies that place an emphasis on causal inference (difference-in-difference, spatial difference-in-difference and regression discontinuity designs).

The first chapter aimed to shed light on the performance of power sharing institutions by disentangling individual party performance. It relied on the National Accord and Reconciliation Act of 2008 in Kenya to investigate how the inclusion of opposition politicians in the government affected institutional performance related to corruption and accountability. There were three key motivations underlying this line of research. First, while a major objective of the power sharing agreement was to enhance transparency and accountability across government institutions, this achieved only moderate success (Carvalho, 2013). During the period 2008-2013, several scandals rocked the government, up to the point where the coalition was perceived to be 'on the verge of collapse' (Telegraph, 2009). As such, this raised a key conceptual question: Do power sharing agreements improve or worsen the quality of governance? The importance of this question was also grounded on the conflicting theories and empirical evidence on the effects of power sharing agreements on governance outcomes (Lijphart, 2007; Cranenburgh, 2009; Cammett and Malesky, 2012; Signe and Korha, 2016; Hidalgo et al. 2016). Second, although the Kenyan government made significant efforts to enhance accountability by holding politicians accountable for misappropriating public funds, the extent of such efforts varied significantly across partisan lines (Akech, 2011). This raised a second conceptual question: Does the sharing of institutions of accountability between political partners lead to differentials in the imposition of disciplinary sanctions? This question was framed in the context of legislative politics, with the aim of shedding light on how political factors such as partisanship affect disciplinary outcomes.

Motivated by these questions, the first chapter combined various themes from the cabinet politics and rent seeking literature to document the cost of such institutional arrangements for governance outcomes by generating incentives to misappropriate public resources for political gain. Using the 'menu of manipulation' typology by Schedler (2002) and 'how to rig election' typology by Cheeseman and Klass (2018), the chapter documented how differences in the capacity to engage engage in other forms of electoral malpractices generates incentives for the opposition party to rely on corruption as a means of retaining political power. In addition, the chapter argued that power sharing among legislative institutions undermines political accountability by reducing the likelihood of politicians facing disciplinary sanctions, and by doing so, highlighted how the presence of legislative inefficiencies in power sharing institutions.

In terms of the operationalization of these research questions, two approaches were undertaken. The first approach was to use the level of corruption as a proxy for institutional performance. While there is no doubt that the quality of governance is a difficult concept to define and measure (World Bank, 2005), the reliance on direct indicators of misappropriated funds afforded an opportunity to develop new insights on differences in ministerial performance within the same coalition government. This contrasts with the available explanations for the success or failure of ministerial performance as suggested by the literature on organizational behaviour that focuses on bureaucratic factors (Luca, 2016; Rasul and Rogger, 2018). In addition, besides these indicators being available for all ministries and for the entire power sharing period, they also afforded the opportunity to compare all ministries in a dimension that has direct links to development outcomes.

The second step was to operationalize the concept of political accountability. This was captured by using indicators of legislative sanctions. In the Kenyan context, the legislature is the key institution that has the constitutional mandate of holding ministerial officials accountable for misappropriating public funds. By having access to audit reports, it is often assumed that such institutions, as compared to voters, do not face information asymmetry regarding the performance of politicians while in office (Ström et al. 2010; Martin and Whitaker, 2019). As such, they are well-positioned to scrutinize politicians' behaviour and impose appropriate sanctions. Overall, the results documented that partisan links between committee members and ministers can significantly reduce the likelihood of facing disciplinary sanctions.

The second paper was aimed at providing an understanding of how institutions of accountability at the central government level explain the variation in the quality of public services at the sub-national level. The analysis relied on the Kenyan Constituency Development Fund to examine variations in the completion rates of local development projects by members of parliament depending on their political alignment with the central government. This chapter was motivated by several factors. First, it is becoming increasingly common for most developing countries to transfer fiscal resources to local politicians for public service provision (Faguet, 2014). As such, it is important to understand the extent to which these funds are used to provide public services on which the majority of the population, especially in rural areas, depend (Awiti et al. 2013). Second, the chapter was motivated by conflicting evidence on whether political alignment between local and central government politicians is associated with higher welfare outcomes (Burgess et al. 2015; Callen et al. 2018). The third motivation was to understand how the central government can influence the behaviour of local politicians (World Bank, 2005; Lührmann et al. 2017).

In terms of operationalizing the main theoretical propositions, the chapter relied on the proportion of stalled and ghost projects in each constituency as a measure of the quality of public services. This approach turned out to be useful in several ways. First, such indicators provided an objective measure of the under-provision of public services, since these public services are either non-existent or they cannot be fully used due to their incomplete status. Second, given the over reliance of public goods and services by citizens in rural areas, project non-completion has significant welfare implications. Third, the proportion of stalled and ghost projects can be conceptualized as capturing politician' performance in terms of delivering public services. To operationalize the concept of political accountability, a similar approach to the previous chapter was employed, whereby legislative sanctions were used as proxies for political accountability.

The chapter's main finding was that partisan alignment between local and central government politicians can significantly explain differences in institutional outcomes related to the quality of public services. The chapter showed that one of the key mechanisms through which alignment undermines public service provision is by reducing the likelihood of facing disciplinary sanctions from the central government. This finding is consistent with theories of legislative politics where MPs serving in the parliamentary committees have lower incentives to discipline co-partisans as a means of portraying loyalty to the central government in order to be nominated to more powerful political positions. Further analysis that exploited the inter-temporal distribution of project outcomes revealed that funds that are diverted from public projects are more likely to be channelled to targeted spending, given the importance of clientelism and patronage in securing electoral advantage in Kenya (Kramon, 2016).

The third chapter was motivated by theories of fiscal decentralization and attempted to explain variations in public spending and welfare outcomes across local counties. Although the analysis was conducted at county level, the findings were broadly consistent with the previous two chapters. The conceptual framework adopted relied on an expenditure reform - *the Aberdares and Mt. Kenya Trade and Investment Block reform* - to estimate how local governments react to an increase in public spending in their neighbouring counties. In addition, the framework incorporated spatial characteristics, such as commuting time and distance between local counties, to examine how geographical factors affect public goods provision.

This chapter was motivated by several factors. First, theories of fiscal federalism have either ignored the presence of spillovers (Tiebout, 1956) or focused on examining the economic implications of expenditure reforms (Boadway and Shah, 2007), with less systematic analysis of their distributive implications. As such, this chapter aimed to extend this literature by focusing on the political implications of such reforms, in particular the redistributive patterns and welfare consequences. Second, most of the empirical literature on expenditure reforms has focused on evaluating their direct effects (Busso et al., 2013; Ehrlich and Seidel, 2018), with only a small number of studies focusing on spillover effects (Miguel and Kremer, 2004; Lipscomb and Mobarak, 2017). Understanding the role of spillovers is important due to their potential to alter the net effects of a reform. The chapter argued that expenditure reforms can generate incentives for politicians to reduce their spending on public goods and services, due to collective action problems that induce free-riding behaviour. This finding was interpreted in the context of the design on the expenditure reform, showing that such reforms that are based on partisan alignment have the potential to reduce the scope for yardstick comparison. It further argued that resources that are freed up due to free-riding can generate opportunities to engage in clientelistic spending, especially in proximity to elections. Finally, the chapter combined budgetary data with household-level surveys to show that free-riding can be welfare-reducing.

5.2 Discussions and contributions

The first major contribution of the thesis was to add to the literature on redistributive politics and democratic accountability. The first chapter challenged the notion that power sharing institutions can automatically enhance governance outcomes through majority-based decisions that reflect national interests (Oyugi, 2006; Francois et al. 2015) or generate incentives for greater oversight and scrutiny across different political parties in power (Huber and Martinez-Gallardo, 2008). From a theoretical perspective, it demonstrated that the inclusion of political elites in the government through informal bargaining and negotiations can undermine political accountability by increasing corruption as well as undermining the oversight mandate of legislative institutions. It argued that misappropriated resources are targeted to fund electoral campaigns, a political strategy that is salient for politicians who are constrained from relying on alternative strategies to rig elections, such as those described by Schedler (2002) and Cheeseman and Klass (2018). The second chapter challenged the argument that welfare outcomes are higher for voters who elect politicians from the central government by documenting that partisan alignment between local and central government politicians can generate incentives to under-provide local public services due to the likelihood of circumventing parliamentary sanctions. Consistent with theories of clientelism, the chapter also argued that alignment can generate incentives to divert public resources for political gain. The third chapter was grounded on theories of fiscal federalism and extended the discussion on spillovers from an economic perspective to highlight their redistributive consequences. By showing evidence of targeted spending, in relation to the timing of local elections, the chapter also provided evidence in favour of political budget cycles at lower levels of governance.

The second major contribution of the thesis was to document the use of innovative data in measuring institutional outcomes. The first chapter demonstrated that while measuring corruption is difficult due to its illegal nature, this can be circumvented by independent audit reports Such an approach has the benefit of capturing the actual amounts of misappropriated funds, and is an improvement from relying on perception based indices that are subject to biases. The chapter also provided a set of novel tests to examine the accuracy of such data through text analysis techniques, as well as examining whether audit results vary along important political characteristics that might affect their accuracy. The second chapter demonstrated the importance of using project-level data to analyse public service provision. The analysis showed that focusing on the completion status of projects can help reconcile discrepancies between allocated funds and the quality of public services. The third chapter highlighted the importance of combining public spending data with household indicators of living standards to assess the welfare implications of redistributive politics. In addition, the use of spatial econometric techniques highlighted how exploiting variations in geographical factors can shed light on how accessibility costs shape public spending patterns.

The third major contribution of the thesis was to implement research designs that are aimed at addressing the endogeneity of political institutions. In most evaluations of how political institutions affect politicians' behaviour, the lack of exogenous variation makes it difficult to uncover the underlying causal relationships among the variables of interest due to the difficulties in generating counterfactuals (Aghion et al. 2004). The first chapter relied on a difference-in-difference design to disentangle individual party performance within a power sharing government.

By relying on the plausible exogeneous variation induced by the signing of the power deal, it addressed self-selection concerns that might bias the allocation of ministerial portfolios, due to differences in the bargaining capacities across political parties. The second paper addressed the endogeneity of partisan alignment by implementing a regression discontinuity design based on close elections. This approach turned out to be useful in addressing confounding factors, such as politicians' effort or ability, that might simultaneously affect alignment and project outcomes. Finally, the third chapter relied on a combination of a spatial difference-in-difference design and propensity score matching to generate treatment and control units that could in turn be used to estimate the spillover effects.

5.3 Policy implications

Although each chapter discusses the policy implications that emanate directly from the findings, several issues are worth reiterating.

The first policy implication that is derived from the above discussion on democratic representation is the extent to which power sharing agreements between political elites can be considered as a legitimate process of establishing accountable governments for their citizens. For instance, Article 23(4 and 5) of the African Charter on Democracy, Elections and Governance does not recognize unconstitutional changes of governments that comprise 'Any refusal by an incumbent government to relinquish power to the winning party or candidate after free, fair and regular elections' or 'Any amendment or revision of the constitution or legal instruments, which is an infringement on the principles of democratic change of government' (African Union, 2007: p.9 and 10). However, most regional and donor organizations have prioritized peace and stability on the African continent at the top of their agendas. As such, the first policy response following post-electoral violence has involved the prioritization of peace and the restoration of social order, often generating a trade-off between political legitimacy and accountability.

While it is complex to resolve this trade-off, for instance, whether to place more value on protecting human lives or allowing politicians to misappropriate public funds in the face of impunity, the findings suggest that a concerted effort should be made to ensure the integrity of elections. Therefore, policies that reduce electoral fraud and malpractices, such as strengthening the electoral commission, may also play an important role in reducing the opportunities for indecisive elections to occur. Second, ensuring that post-electoral violence is an ineffective tool to strategically destabilize the social order could also assist in reducing the incentive to view power sharing institutions as the first and best solution to establishing legitimate governments (Cole, 2013). As such, it may be useful to consider ways in which the independence and capacity of judicial institutions such as the national or regional courts could be strengthened in order to allow for democratic processes that could adjudicate political stalemates, and whose resolutions would be respected and implemented. While this may seem a daunting task, especially on the African continent, the nullification of the 2017 presidential election by the Supreme Court in Kenya provides a glimpse of the feasibility of such options.

The second policy implication that follows from the theories of legislative politics is the need to re-consider the organizational structure of institutions of horizontal accountability, especially parliamentary committees. The findings suggest that understanding the motivation behind the selection and composition of committee members may play an important role in shedding light on the extent to which such institutions can operate free of political interference and enhance political accountability. For instance, most constitutions across the world underscore the importance of the doctrine of the separation of powers between different organs of the government - such as the judiciary, the executive and the legislature - as a means of enhancing meaningful checks and balances. However, the fact that parliamentary committees often comprise politicians casts doubt on the extent to which they can effectively sanction co-partisans even with evidence on malfeasance.

Several policies have been proposed to address these legislative inefficiencies. For instance, in the context of power sharing institutions, the academic and policy literature has advocated the appointment of junior ministers (Rozenberg and Martin, 2011; Bäck et al. 2016). In such instances, these watchdog minsters would be assigned to cabinet ministers from a different party in order to scrutinize ministerial performance from a partisan perspective and either raise queries with the minister or seek party redress. Second, the literature has also advocated for the establishment of forums where politicians are summoned to respond to parliamentary questions (Ström et al. 2010; Pukelis, 2016). Such forums have been found to be effective in extracting information from politicians, probing any inconsistencies, and forming the basis for the establishment of further accountability mechanisms such as committees of inquiry or motions of no-confidence. Third, the establishment of committees and sub-committees has also been advocated as a mechanism to scrutinize whether politicians are adhering to the law. However, one key challenge is that evidence on the efficiency of these institutions emanates mostly from parliamentary systems in developed countries, and thus their extrapolation to other settings might be limited (Parliamentary Centre, 2011).

5.4 Future research

The goal of this thesis was to rely on an interdisciplinary approach to examine differences in institutional outcomes within a single country. One possible exciting area for future research would be to examine whether there are differentials in the imposition of legislative sanctions across politicians. A long-standing body of literature in American politics (Nagel, 1961; Posner, 2008) points to the role of factors such as political attitudes or the party affiliation of judges in enforcing different forms of sanction outcomes. Follow-up studies would benefit from examining the entire chain of political accountability to shed light on the extent to which legislative sanctions are imposed in practice, and by doing so, assist in understanding the reverse link in regard to how the threat of sanctions affects perceived returns to engaging in corruption or under-providing public services. A second area for future research would be to understand institutional performance from a spatial dimension. With the increasing availability of geo-coded data, there is great potential to exploit spatial variation and geographical discontinuities to provide a more fine-grained analysis of the differences in institutional outcomes at the sub-national level.

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