

The Distribution of Power: Decentralization and Favoritism in Energy Infrastructure

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October 2024

Motivation: Electrification

- ▶ Electrification is a key decarbonization tool

Replacing cookstoves, kerosene lamps, internal combustion engine vehicles, natural gas furnaces; hydrogen, green steel

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Min 2019; Briggs 2021; Mahadevan 2024

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Min 2019; Briggs 2021; Mahadevan 2024
- ▶ By biasing public investment away from the optimum, political favoritism may harm economic development and electrification efforts

Africa – Easterly and Levine 1997; Herbst 2000; Michalopoulos and Papaioannou 2016; **U.S.** – Alesina, Baqir, Easterly 1999; Dixit and Londregan 1996; Snyder 1990; Ferejohn 1974

Decentralization: a possible constraint on favoritism?

- ▶ **Definition:** Moving political power from the executive to democratic regional governments, e.g.:
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Tiebout 1956; Barkan and Chegge 1989; Fisman and Gatti 2002; Brancati 2008; Opalo 2014; Savage and Lumbasi 2016; Hassan 2020
 - ▶ Successes in agriculture, health, education, etc.

Decentralization has been a global driver of democratization



COMMENTARY S SADA

Jordan's Quest for Decentralization

Amid low enthusiasm for local elections intended to decentralize governance in Jordan, Islamists and their tribal allies have gained political ground.

Opinion | Let's celebrate a rare democratic success story in Southeast Asia

Next year's election will also mark the first time Indonesians vote for a president, national parliament and, later the same year, governors and assemblies for all 38 provinces. Under Suharto's self-proclaimed "New Order" regime, provincial leaders were appointed from Jakarta.

Decentralization — allowing provinces to [elect their own leaders](#), set their own fiscal policy and keep more of their revenue from natural resources — was one of the key demands fueling earlier drives for separatism.

Decentralization has been a global driver of democratization

The screenshot shows a news article from Foreign Policy. At the top left is a blue circular profile picture. To its right are two small blue buttons: one labeled 'COMMENTARY' and another with a 'S' icon labeled 'SADA'. The main title 'Jordan's Quest for Decentralization' is in large black font. Below it is a subtitle: 'Amid low enthusiasm for local elections intended to decentralize governance in Jordan, Islamists and their tribal allies have gained political ground.' The background of the article area is white.

The screenshot shows an article from the World Economic Forum. At the top right are two buttons: 'Join us' and 'Sign In'. The WEF logo is at the top center. Below it is the subtitle 'GEO-ECONOMICS AND POLITICS'. The main title 'Is decentralization a panacea for development?' is in large bold black font. The background is white.

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The screenshot shows a news article from the Council of Europe Office in Ukraine. At the top left is the COE logo with '75' in the center. To its right is the text 'Council of Europe Office in Ukraine'. Below it is a teal navigation bar with the text 'You are here: Council of Europe Office in Ukraine > News & Events > News & Announcements > Decentralisation not the most successful reform of Ukraine – video message by Daniel Popescu'. The main title 'News & Events' is in large black font. Below it is a paragraph: 'Decentralisation was one of the most, if not the most successful reform of Ukraine'.

Kenyan democratization and decentralization reforms

- ▶ 2003 Constituency Development Fund (CDF) Act:
 - ▶ Equitable allocation of public funds (CDF funds) across constituencies using a pre-agreed formula (75% equal, 25% poverty index)
 - ▶ Funds are managed by locally-elected Members of Parliament
 - ▶ Transparent: allocations are public

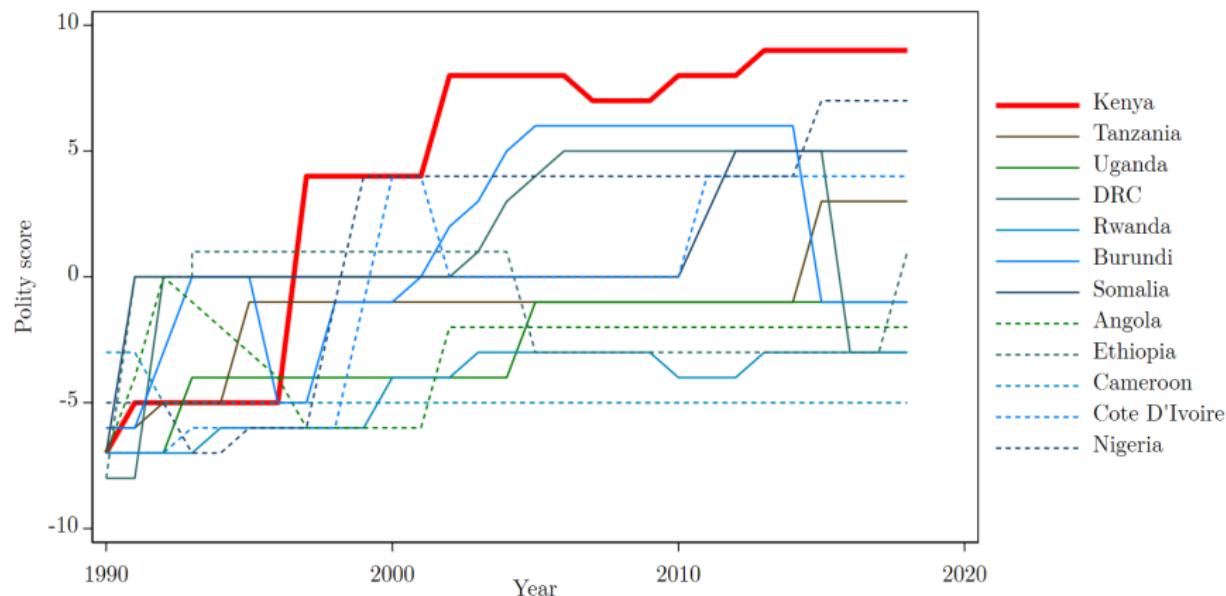
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 - ▶ 2010 Constitution:
 - ▶ Creation of 47 counties with popularly elected county governments
 - ▶ *“the promotion of the core democratic principles of transparency, public participation in governance, and accountability have been further emphasized in the CDF context as part of the revised Constitution of Kenya (2010)”* (UN & GOPAC, 2022)

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 - ▶ “Arguably Africa’s strongest parliament” (Opalo, 2014)
 - ▶ Kenya’s “biggest political transformation since independence” (Cheeseman, Lynch, and Willis, 2016)

Kenyan democratization and decentralization reforms



Kenya decarbonization efforts

- ▶ 90% of power generation is renewable (hydropower, geothermal, wind)
- ▶ *Badilisha Bulb*: campaign launched 2013, exchanged 1mn+ incandescents for CFLs
- ▶ *Pika na Power*: campaign launched 2017 to expand electric cooking (fairs, videos on cooking)
- ▶ *e-cooking tariff*: lower electricity tariffs enacted in 2023

Introduction
oooooooo●oooooooo

Background
oooooooooooooooooooo

Data
oooooooooooooooooooo

Nationwide allocation
oooooooooooo

Decentralization
oooooooooooo

Discussion
ooooooo

This paper: The allocation of **electricity grid expansion**

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- 2) Kenya's Last Mile Connectivity Project (LMCP):
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Expansion of electricity featured prominently in winning coalition's **2013** and **2017** national election campaigns

Estimating favoritism in electrification (2008–2020)

- ▶ **We leverage a unique institutional feature:**

Allocation of electricity projects was to follow the Constituency Development Fund (CDF) formula:

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- ▶ **Non-partisan:** Agreed upon by opposing political parties in 2003

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Last Mile Connectivity Program Q & A

Q: What criteria was used to choose transformers?

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Research Question 1: Did the allocation of electrification projects deviate from the CDF allocation in any particular direction?

This paper's research questions

Research Question 1: Did the allocation of electrification projects deviate from the CDF allocation in any particular direction?

Research Question 2: If it deviated in a way that is consistent with favoritism, why did favoritism persist despite decentralization efforts?

Detailed data allow careful analysis and precise estimates

- Universe of 7+ million geo-tagged electricity meters and 40,000+ electrical substations
(GPS, meter activation dates)

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- ▶ Annual CDF allocations for each constituency

Preview of results: Nationwide allocation

1. Relative to their CDF shares, constituencies that voted pro-government in the preceding election received:
 - ▶ 46% more LMCP sites than opposition constituencies
 - ▶ 35% more household connections than opposition constituencies

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3. **Timing:** prior to 2017 presidential election (rather than reward after)
4. **Targeting:** core areas (rather than swing voters)

How did favoritism persist despite decentralization?

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2. Did the central executive continue to hold power and exert favoritism?

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 - ▶ No favoritism by MPs towards wards that voted for them (const FE)
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2. Did the central executive continue to hold power and exert favoritism?

- ▶ Favoritism driven by phases of the program that were centrally-controlled: transformer construction and LMCP site selection

Limitations of decentralization in energy sector:

Benefits of centralized management:

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Decentralization may be more effective in different sectors: agriculture, education, health care

Introduction
oooooooooooooo

Background
●oooooooooooooo

Data
oooooooooooooo

Nationwide allocation
oooooooooooo

Decentralization
oooooooooo

Discussion
ooooooo

This talk

Introduction

Background

Data

Results: Allocation by national officials

Results: Decentralization and favoritism

Discussion

Political Context: Parastatal under presidential control

- ▶ 1978–2002: President Arap Moi
- ▶ 2002–2013: President Mwai Kibaki (Kikuyu)
 - ▶ 2003: MPs pass CDF act to constrain favoritism
 - ▶ 75% of funds allocated equally across all constituencies
 - ▶ 25% of funds allocated according to poverty index

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- ▶ 2013–2022: President Uhuru Kenyatta (Kikuyu)
 - ▶ 2011–2018: Partnership with Kalenjin running mate William Ruto
 - ▶ 2013 and 2017: Appoints new Kenya Power MDs (both Kalenjin)
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 - ▶ **August 2017:** Re-elected
- ▶ Raila Odinga (Luo): opposition leader in 2007, 2013, 2017 elections

Electrification was a widely advertised, politicized program

In March 2017 (5 months before the August 2017 election) incumbent President Kenyatta states:

"To begin the walk towards industrialisation, we needed to drastically improve and expand our infrastructure, and to increase access to electricity and diversify our energy sources... In 2013, we promised to provide access to electricity for 70% of all households by the end of 2017. Today, we have connected an additional 3.7 million new homes to electricity. We have more than doubled the total number of connections made since independence."

Electrification was a widely advertised, politicized program



Electrification in Kenya

1. Mass construction of **electrical transformers** in rural villages

- ▶ Goal: Connect all schools, health facilities, markets, etc. to the national grid
- ▶ Part of Rural Electrification Authority (REA) Strategic Plan (2008)

Introduction
oooooooooooooo

Background
ooooo●oooooooo

Data
oooooooooooo

Nationwide allocation
oooooooooooo

Decentralization
oooooooooooo

Discussion
ooooooo

Electrical transformers in rural villages



Introduction
oooooooooooo

Background
oooooo●oooooooo

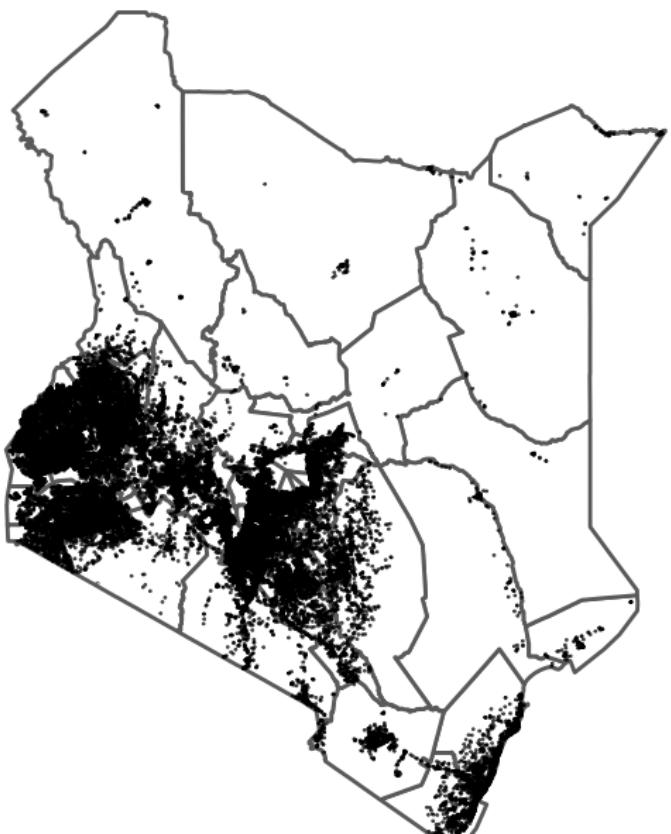
Data
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Nationwide allocation
oooooooooooo

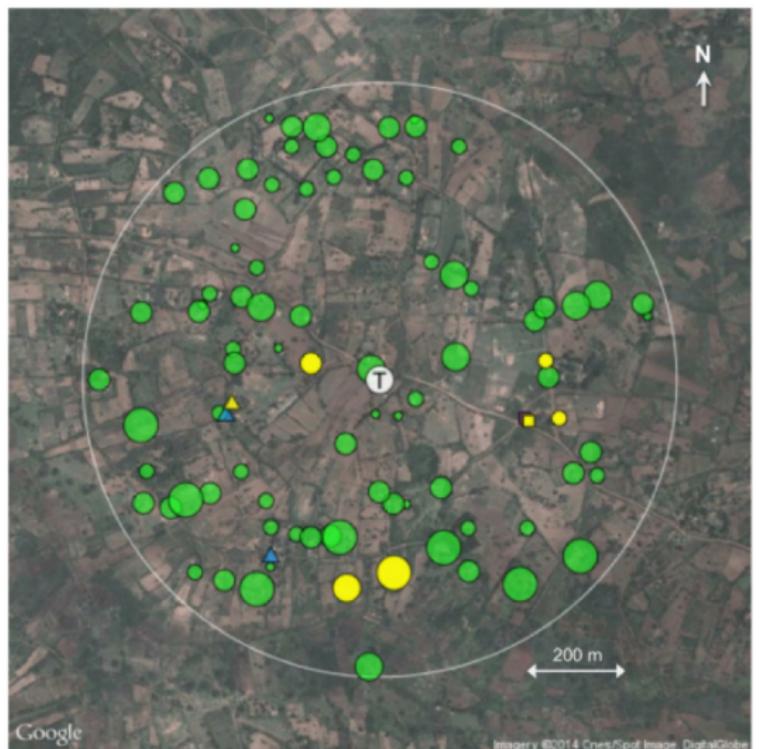
Decentralization
oooooooooooo

Discussion
ooooooo

Nationwide distribution of transformers in 2016 (~60K)



2013: millions unconnected HH's <600m of a transformer



Legend

- Transformer (T)
- Surveyed households (Green circle)
- Surveyed electrified households (Yellow circle)

Source: Lee et al. (2015)

Electrification in Kenya

1. 2008: Rural Electrification Authority (REA) Strategic Plan

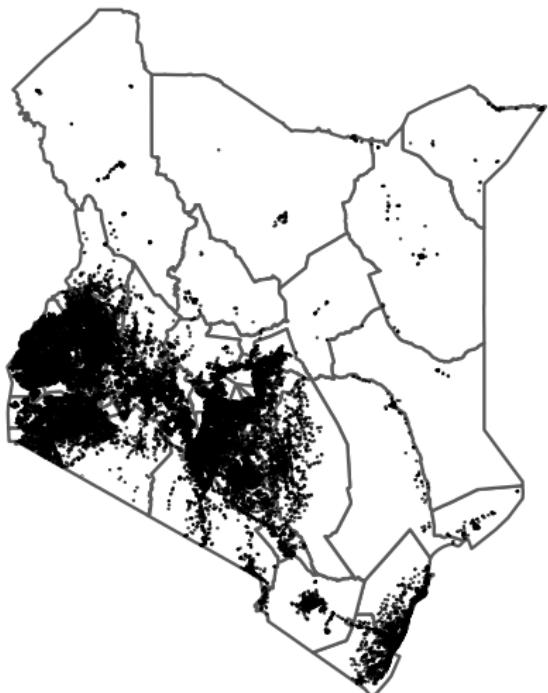
- ▶ Goal: Connect all schools, health facilities, markets, etc. to the national grid
- ▶ Mass construction of **electrical transformers** in rural villages

2. 2016: Launch of Last Mile Connectivity Project (LMCP)

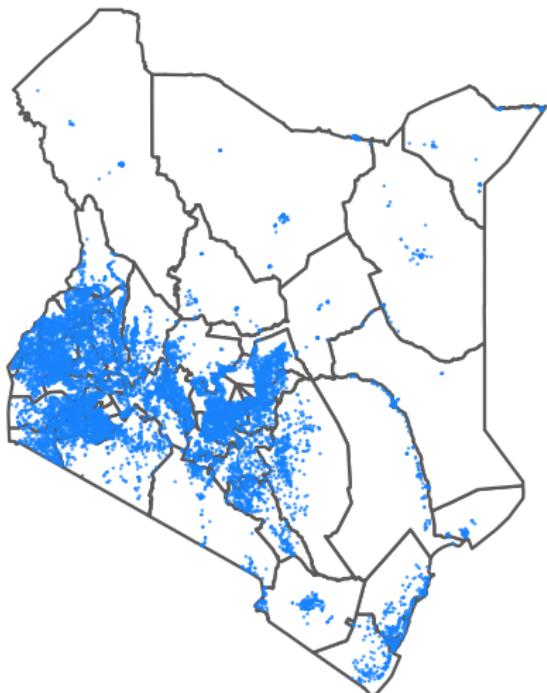
- ▶ >7,000 transformers nationwide selected for “maximization”: mass electrification of all households within 600m of existing transformer
- ▶ Increase in electricity access from 25% in 2009 to 70% in 2019

LMCP transformers distributed nationwide

All transformers (~60,000)



LMCP transformers (~7,000)



Introduction
oooooooooooooo

Background
oooooooooooo●oooo

Data
oooooooooooo

Nationwide allocation
oooooooooooo

Decentralization
oooooooo

Discussion
ooooooo

Electrification is a very visible and popular activity



Hon. Temporary Deputy Speaker,

I want to talk about fair distribution of power. As a country, we do not have enough power. However, there are some areas that are more equal than others. It is important that Kenya Power does not have political patronage so that it can distribute power without fear or favour. We will definitely move on to the next level if that happens. We have talked about developing this economy and that can only happen if those things are put in place.

Robert Mbui, Opposition Member of Parliament
Kenyan parliamentary debates
Nairobi, July 10 2013

How was transformer construction allocated (2008-2015)?

Evans Bulimo Akula, Opposition Member of Parliament:

“Mr. Speaker, Sir, how many projects is the Ministry supposed to do in every constituency per year? For the last eight years, they have done only 11 projects.”

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"Mr. Speaker, Sir, how many projects is the Ministry supposed to do in every constituency per year? For the last eight years, they have done only 11 projects."

Charles Keter, Assistant Minister for Energy and Petroleum:

"Currently, **we are using the CDF formula**. The hon. Member will realise that in this financial year, he will get over Kshs15 million and we are doing about five projects. In the last financial year, he also got the same amount of money, that is, Kshs15 million which did three projects. Right now, the Ministry of Energy allocates funds using the CDF formula."

How were transformers selected for LMCP (2015-2000)?

The screenshot shows the header of a website. At the top left are back and forward navigation icons. Next to them is a lock icon and the URL "kplc.co.ke/content/item/1694/last-mile-connectivity-program-q---a". Below the URL is a yellow square containing a house icon. To the right of the icon are four menu items: "Kenya Power", "Customer Service", "Investor Relations", and "Public Information".

Home > Media Center > Press Releases > Last Mile Connectivity Program Q & A

Last Mile Connectivity Program Q & A

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Kenya Power political capture criticized by opposition MPs

MP Kagiri, Laikipia County (2023):

“KPLC handles a very high budget burden. This is caused by... investment in **political pet projects** like the Last Mile Connectivity”

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Senator Olekina, Narok County (2022):

"The Last Mile was only brought to some villages... If you go to Narok County, there are certain **areas which are pre-dominated by one ethnic group** where even a simple grass-thatched house has electricity. However, on the other part which is pre-dominantly by the people who are the indigenous of that area, there is no electricity. We are calling for proper management of debt."

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Senator Ogolla, Homa Bay County (2023):

"The story of the Last Mile Project could be **one of the worst rip-offs** we have had among the major projects in this country... It only leaves us with the conclusion that this was a scandal."

Introduction
oooooooooooooo

Background
ooooooooooooooo

Data
●oooooooooooo

Nationwide allocation
oooooooooooo

Decentralization
oooooooooooo

Discussion
ooooooo

This talk

Introduction

Background

Data

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Results: Decentralization and favoritism

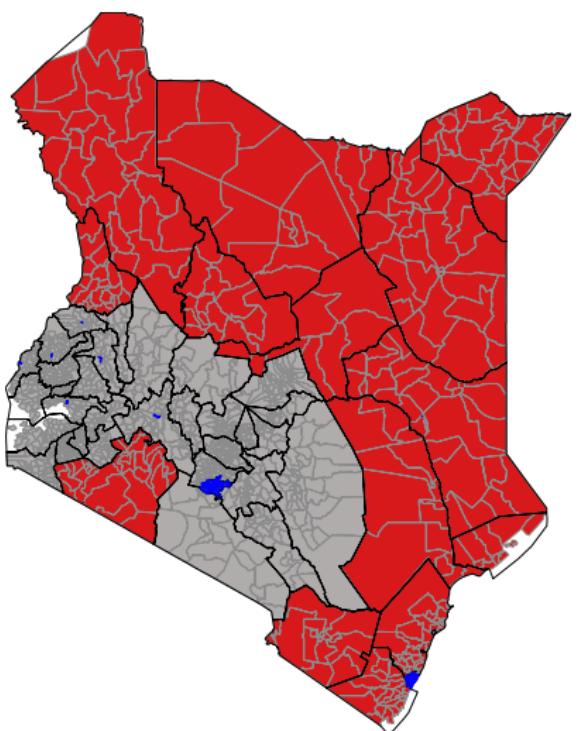
Discussion

Three key sources of data

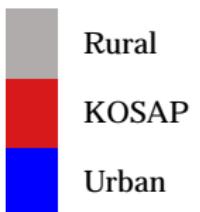
1. Electricity network data (*source: Kenya Power*)

- ▶ Universe of 7.4 million nationwide **electricity meters**, geo-tagged
- ▶ Universe of 62,271 nationwide **transformers**, geo-tagged
- ▶ List of 11,934 LMCP transformers
- ▶ Construction progress data for 6,524 LMCP transformers spanning 975 wards and 118 weeks

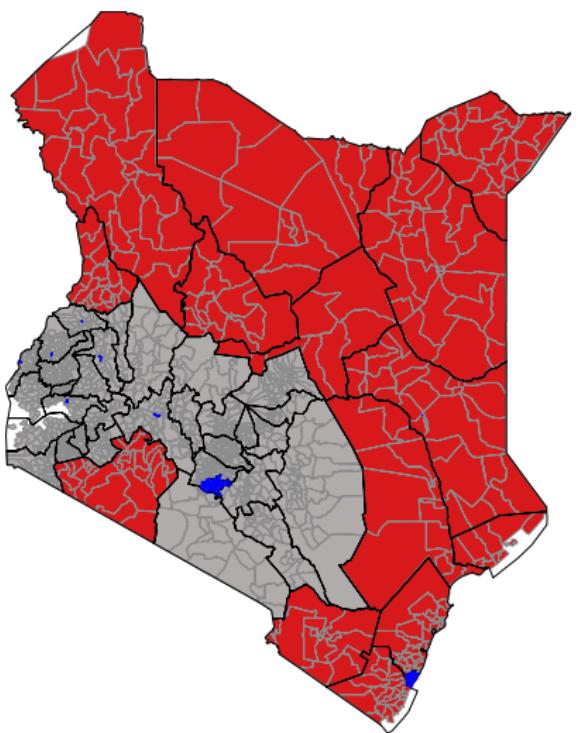
LMCP targeted **rural** Kenya: not urban or sparse areas



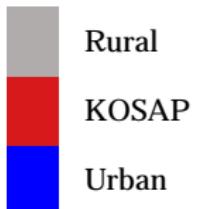
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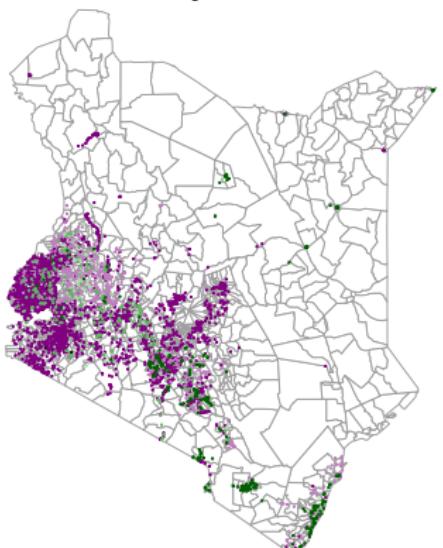
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- ▶ Regressions are not sensitive to sample definition



Nationwide construction progress at LMCP sites

(data source: contractor progress reports)

May 2017



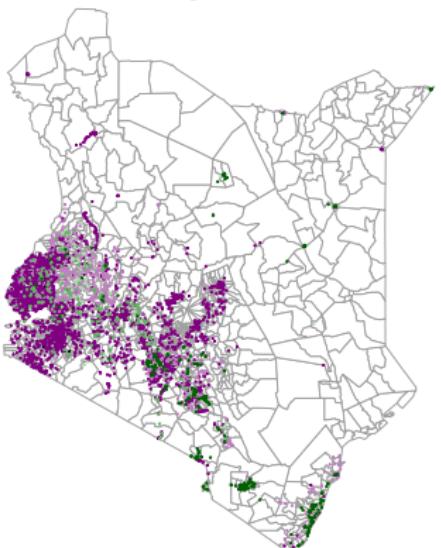
- No Construction
- Designs Approved
- Poles Erected

- Stringing Completed
- Metering in Progress
- Metering Complete

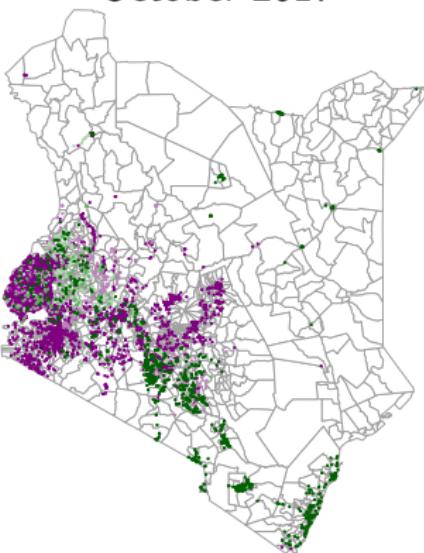
Nationwide construction progress at LMCP sites

(data source: contractor progress reports)

May 2017



October 2017



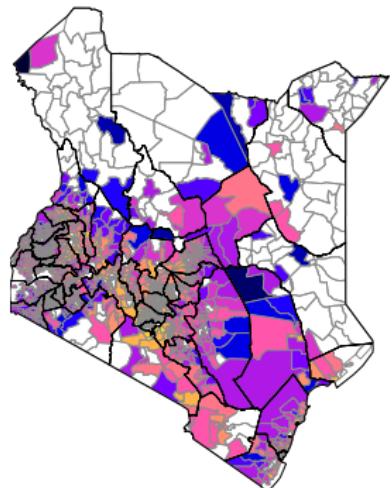
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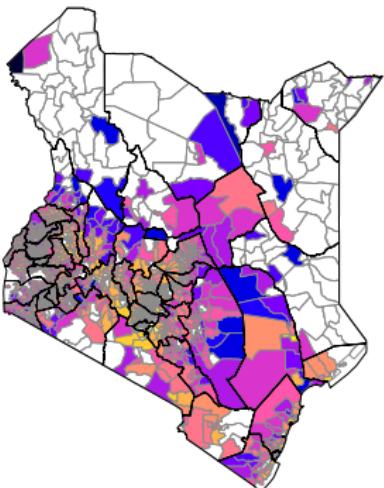
Huge increase in household electricity access

Residential electricity meters per household (*data source: Kenya Power*)

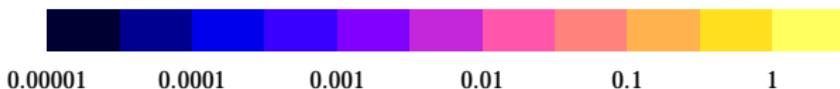
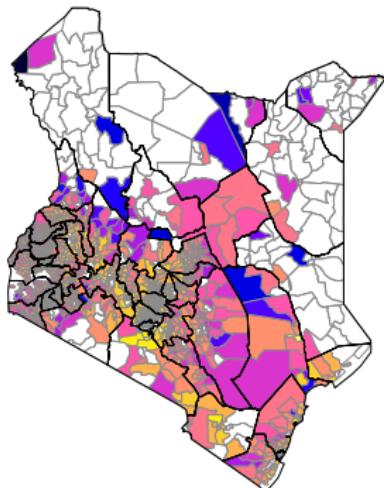
2015



2016

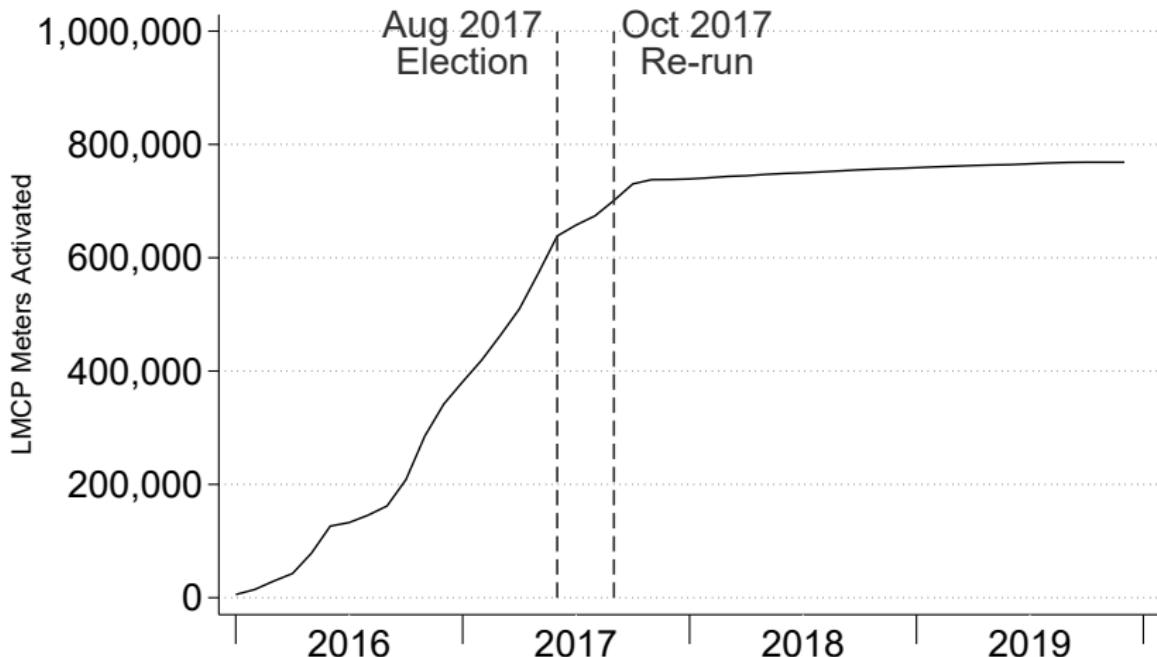


2017



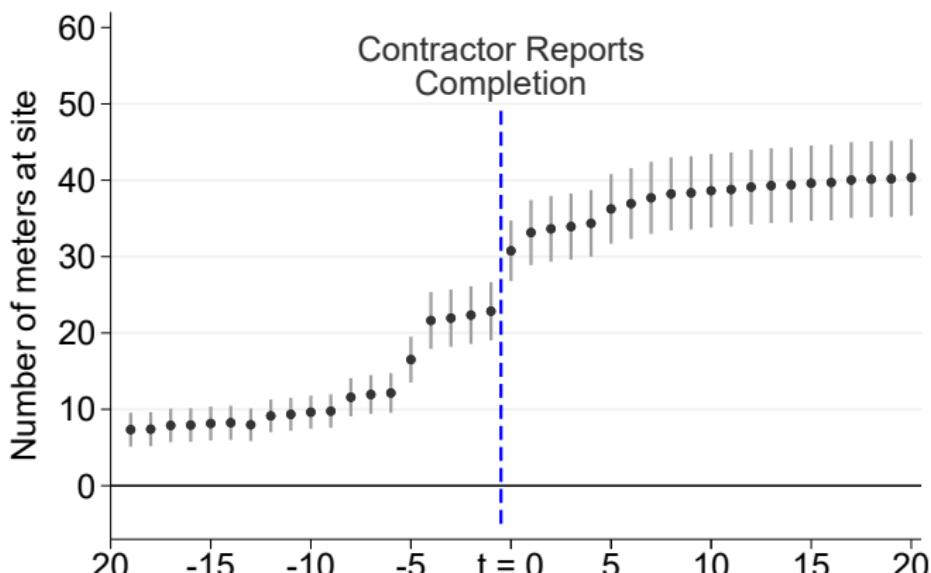
Household electricity meters activated around election

(data source: Kenya Power)



Timing of contractor reports and meter activations (two distinct datasets) line up well

Kenya Power database shows 30-50 new meters in months after contractor reports completion



Studying the 4 stages of rural electrification

Stage	Implementer
1 Expand transformer network	Rural Electrification Authority
2 From network, select LMCP transformers	Kenya Power and MPs
3 Construction among LMCP transformers	Regional contractors
4 Metering at constructed sites	Local Kenya Power officers

Studying the 4 stages of rural electrification

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3 Construction among LMCP transformers	Regional contractors
4 Metering at constructed sites	Local Kenya Power officers

- ▶ Stages 1 and 2 were conducted in Nairobi
- ▶ Stages 2 and 3 were managed regionally/locally

Studying the 4 stages of rural electrification

$$\frac{\# \text{ LMCP household electricity meters}}{100,000 \text{ households}} =$$

$$\left(\frac{\text{Total } \# \text{ transformers}}{100,000 \text{ households}} \right)$$

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- ▶ Marginal
- ▶ Cumulative

Data (2): Electoral data

1. Electricity network data

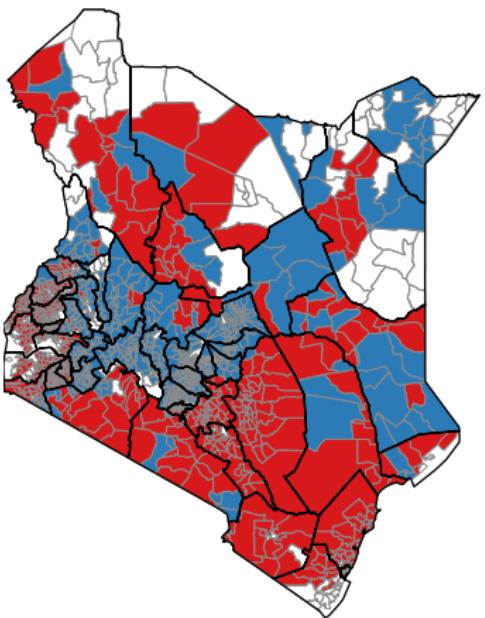
- ▶ Universe of 7.4 million nationwide **electricity meters**, geo-tagged
- ▶ Universe of 62,271 nationwide **transformers**, geo-tagged
- ▶ List of 11,934 LMCP transformers
- ▶ Construction progress data for 6,524 LMCP transformers spanning 975 wards and 118 weeks

2. **Electoral data for 1,296 (out of 1,450) wards**

- ▶ 2013 and 2017 presidential **election data**
- ▶ 2013 parliamentary election data

Ward-level electoral outcomes: 2013 presidential election

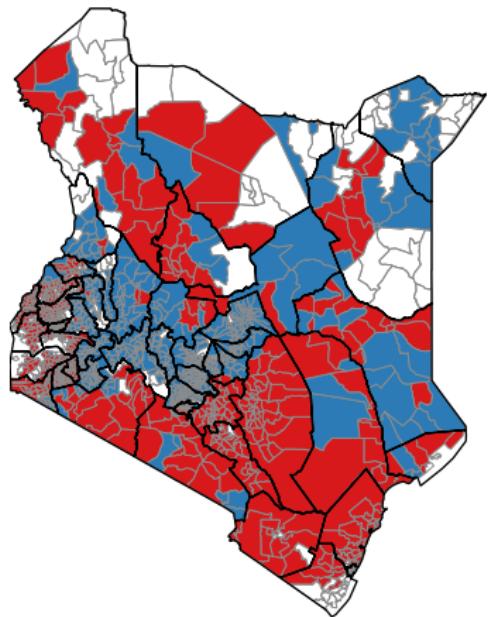
All wards



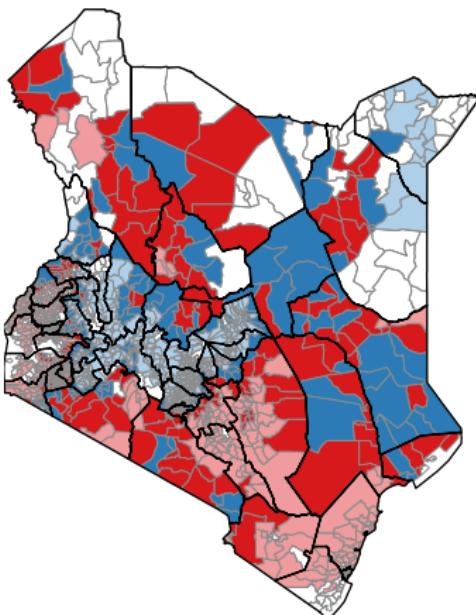
Opposition
Kenyatta

Ward-level electoral outcomes: 2013 presidential election

All wards



Highlighting adjacent wards



Opposition
Kenyatta

Data (3): Administrative data

1. Electricity network data

- ▶ Universe of 7.4 million nationwide **electricity meters**, geo-tagged
- ▶ Universe of 62,271 nationwide **transformers**, geo-tagged
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- ▶ Construction progress data for 6,524 LMCP transformers spanning 975 wards and 118 weeks

2. Electoral data for 1,296 out of 1,450 wards

- ▶ 2013 and 2017 presidential **election data**
- ▶ 2013 MP election data

3. **Administrative data**

- ▶ Annual realized CDF allocations for each constituency
- ▶ Socioeconomic controls from 2009 Census
- ▶ Nationwide roll-out of M-PESA agents
- ▶ Geographic controls (e.g land gradient)

Introduction
oooooooooooooo

Background
ooooooooooooooo

Data
oooooooooooooo

Nationwide allocation
●oooooooo

Decentralization
ooooooo

Discussion
oooooo

This talk

Introduction

Background

Data

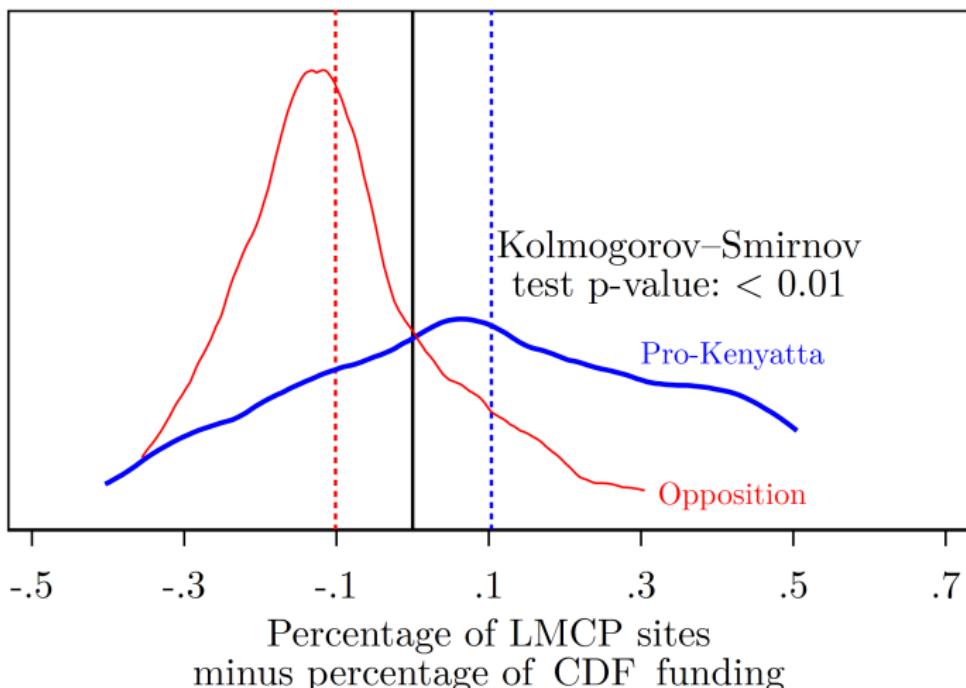
Results: Allocation by national officials

Results: Decentralization and favoritism

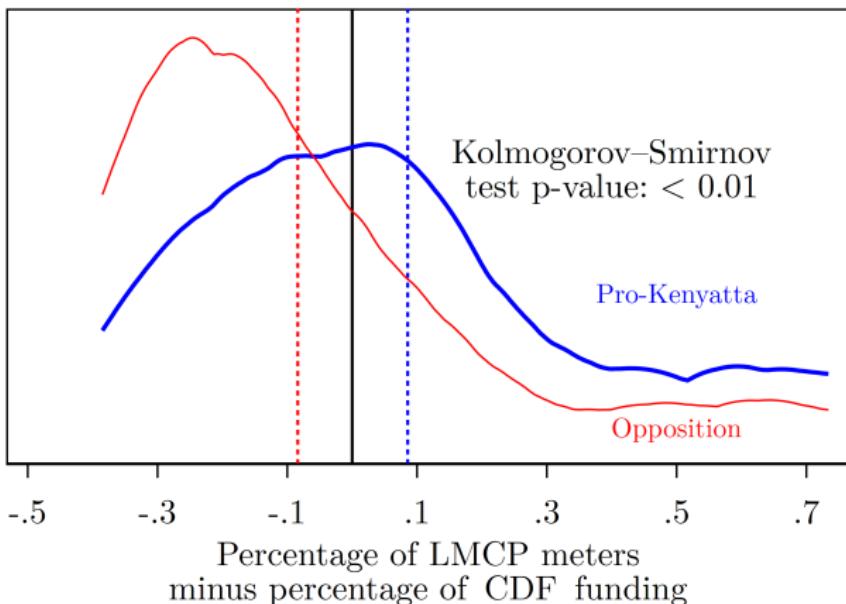
Discussion

Biased allocation in LMCP sites relative to CDF rule

- ▶ For each constituency: [share of LMCP sites] minus [share of CDF funds]
- ▶ Values >0 imply more LMCP sites than CDF share



Biased allocation in LMCP meters relative to CDF rule



Introduction
oooooooooooo

Background
oooooooooooo

Data
oooooooooooo

Nationwide allocation
ooo●oooo

Decentralization
ooooooo

Discussion
oooooo

This paper's research questions

Research Question 1: Did the allocation of electrification projects deviate from the CDF allocation? **Yes**

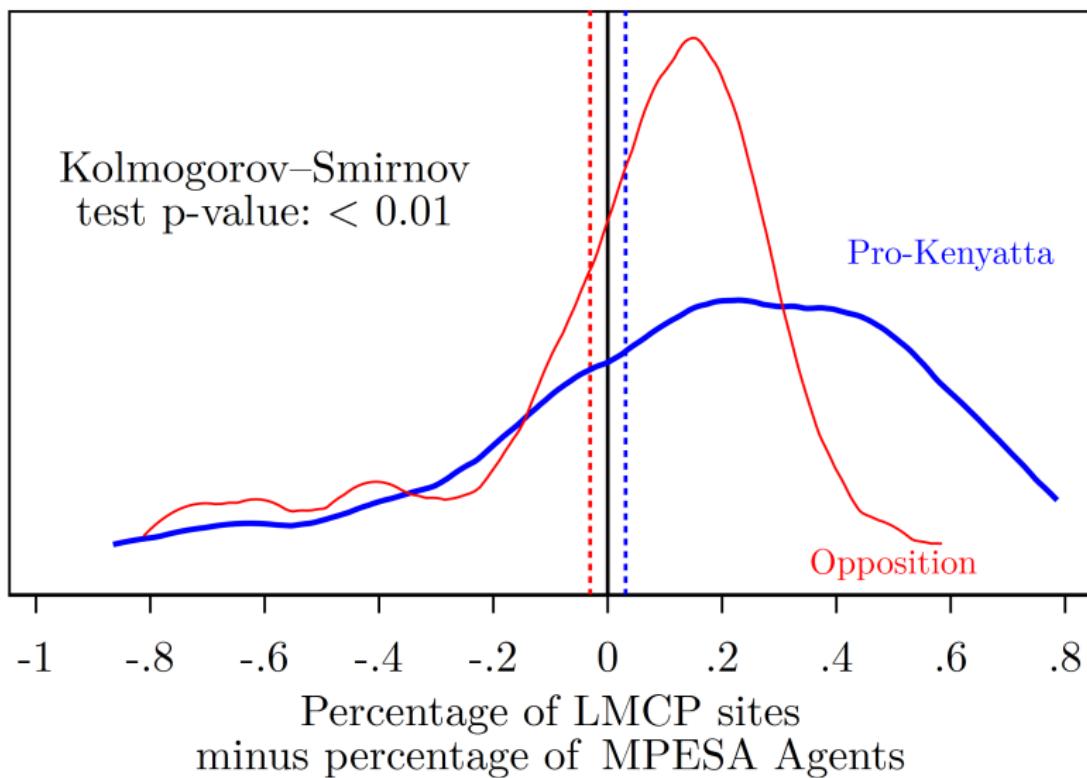
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... In any particular direction? **Yes, favoring the ruling party**

This paper's research questions

Research Question 1: Did the allocation of electrification projects deviate from the CDF allocation? **Yes**
... In any particular direction? **Yes, favoring the ruling party**
... In a way that cannot be explained by other factors?

Result 2: Favoritism relative to economic activity



More LMCP sites in pro-government areas

Even when using LASSO to control flexibly for a host of variables, wards that voted pro-Kenyatta in the 2013 election saw:

- ▶ 42-46% more LMCP sites

	In absolute terms			Relative to CDF Allocation		
	(1)	(2)	(3)	(4)	(5)	(6)
Voted pro-govt in 2013	50.6*** (10.6)	62.6*** (11.2)	58.7*** (8.13)	69.4*** (18.4)	63.7*** (19.4)	63.4*** (12.1)
Observations	911	911	911	196	196	196
Opposition Mean	149	149	149	151	151	151
Effect Size (%)	34	42	39	46	42	42
Controls	None	SES	LASSO	None	SES	LASSO
Sample	Wards	Wards	Wards	Consts	Consts	Consts

More household connections in pro-government areas

Even when using LASSO to control flexibly for a host of variables, wards that voted pro-Kenyatta in the 2013 election saw:

- ▶ 42-46% more LMCP sites
- ▶ 31-35% more electricity meters per 100,000 households

	In absolute terms			Relative to CDF Allocation		
	(1)	(2)	(3)	(4)	(5)	(6)
Voted pro-govt in 2013	3188*** (1008)	3092*** (1159)	3613*** (805)	5639** (2062)	5285** (2364)	5045*** (1609)
Observations	911	911	911	196	196	196
Opposition Mean	14444	14444	14444	16299	16299	16299
Effect Size (%)	22	21	25	35	32	31
Controls	None	SES	LASSO	None	SES	LASSO
Sample	Wards	Wards	Wards	Consts	Consts	Consts

Summary of findings: Favoritism in the LMCP

- ▶ The allocation of LMCP sites and household connections deviated from the CDF allocation
- ▶ This deviation follows political alignment
- ▶ The bias cannot be explained by population, economic growth, or other observables

Summary of findings: Favoritism in the LMCP

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- ▶ **Timing:** Construction ramped up before the 2017 presidential election

Summary of findings: Favoritism in the LMCP

- ▶ The allocation of LMCP sites and household connections deviated from the CDF allocation
- ▶ This deviation follows political alignment
- ▶ The bias cannot be explained by population, economic growth, or other observables
- ▶ **Timing:** Construction ramped up before the 2017 presidential election
- ▶ **Targeting:** Less construction in core opposition areas

No swing targeting: mostly avoiding opposition core

- ▶ Core: >75% of voteshare (approx. 45%)
- ▶ Swing: 50-75% of voteshare (approx. 5%)
- ▶ Omitted category: Opposition Core wards

No swing targeting: mostly avoiding opposition core

- ▶ Core: >75% of voteshare (approx. 45%)
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- ▶ Omitted category: Opposition Core wards

	(1)	(2)	(3)
Pro-Government Core (δ_1)	3609*** (1098)	4013*** (1235)	4543*** (928)
Pro-Government Swing (δ_2)	4315** (1963)	2845 (2272)	2928* (1613)
Pro-Opposition Swing (δ_3)	2686* (1530)	2889** (1401)	2538** (1258)
Observations	911	911	911
Pro-Opposition Core Mean	14095	14095	14095
$p\text{-val } \delta_1 = \delta_2$.72	.62	.34
Controls	None	SES	LASSO
Sample	Wards	Wards	Wards

Introduction
oooooooooooooo

Background
ooooooooooooooo

Data
ooooooooooooo

Nationwide allocation
oooooooooooo

Decentralization
●oooooooo

Discussion
oooooo

This talk

Introduction

Background

Data

Results: Allocation by national officials

Results: Decentralization and favoritism

Discussion

How did favoritism persist despite Kenya's major constitutional reforms in 2003 and 2010?

Two key possibilities:

- ▶ Decentralization delegated power to local governments and politicians, who continued pro-government favoritism
- ▶ Decentralization did not empower local politicians in practice: power and resources remained concentrated with national leaders

MPs do not exert favoritism within their constituencies

- ▶ MPs are elected by constituency: approx. 5 wards per constituency
- ▶ Regressions include constituency fixed effects

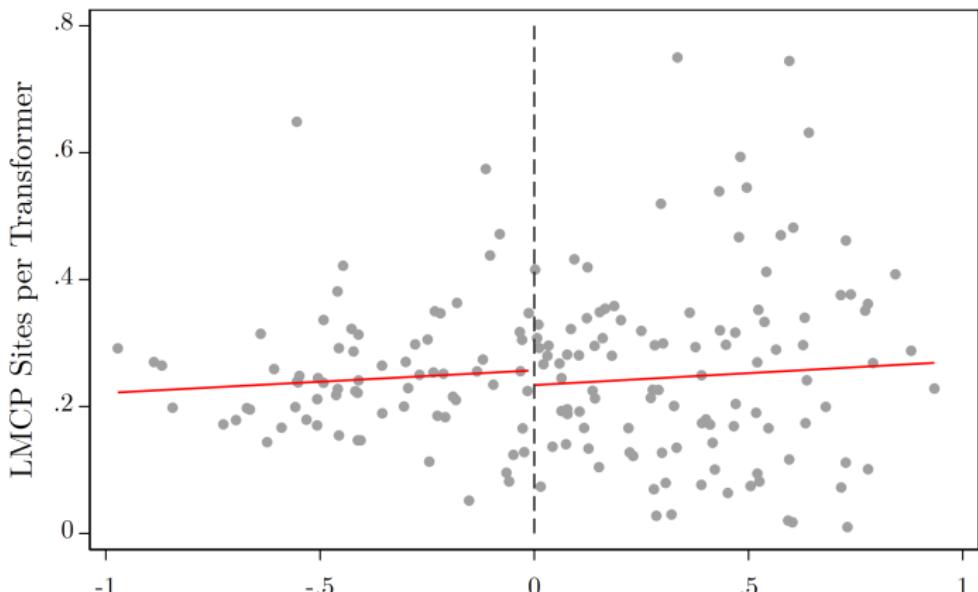
MPs do not exert favoritism within their constituencies

- ▶ MPs are elected by constituency: approx. 5 wards per constituency
- ▶ Regressions include constituency fixed effects
- ▶ Ward-level alignment with MP has no measurable impact

Pre-existing Transformers	LMCP						
	Site Selection		Construction		Meters		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Voted pro-govt in 2013	143 (111)	-.022 (.0376)	13.5 (26.6)	-.0908 (.0633)	-17.5 (17)	-17.8 (27.6)	1205 (1700)
Voted pro-MP in 2013	-42.3 (31.3)	.0237* (.0142)	1.43 (8.78)	.00613 (.0326)	.49 (8.63)	-6.39 (10.2)	-150 (777)
Observations	731	730	731	478	478	706	731
Opposition Mean	644.3	0.3	148.7	0.5	83.1	125.1	14443.6
Treatment Effect (%)	22.2	-8.7	9.0	-16.9	-21.1	-14.2	8.3
MP Effect (%)	-6.6	9.3	1.0	1.1	0.6	-5.1	-1.0
Analysis		Marg.	Cumul.	Marg.	Cumul.	Marg.	Cumul.

Constituencies with pro-government MPs do not benefit disproportionately

- ▶ Close-election Regression Discontinuity (RD) design
- ▶ Constituencies with government-aligned MPs do not benefit disproportionately



Decomposing the stages of construction

$$\frac{\# \text{ LMCP household electricity meters}}{100,000 \text{ households}} =$$

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- ▶ Marginal
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Decomposing the stages of construction

- ▶ **Marginal** and **cumulative** effects at each stage
- ▶ Rich controls (estimates similar when using no controls, 'double LASSO' selected covariates, no weighting, adjacent wards only)

LMCP								
	Pre-existing Transformers	Site Selection	Construction	Meters				
Voted pro-govt in 2013	108*** (41.3)	.0539*** (.0178)	62.6*** (11.2)	-.0428 (.0415)	27.1*** (10.2)	-5.34 (11.1)	3092*** (1159)	
Observations	911	910	911	587	587	882	911	
Opposition Mean	644.3	0.3	148.7	0.5	83.1	125.1	14443.6	
Treatment Effect (%)	16.8	21.2	42.1	-8.0	32.6	-4.3	21.4	
Analysis		Marg.	Cumul.	Marg.	Cumul.	Marg.	Cumul.	

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- ▶ **Transformer placement and site selection:** assigned **centrally** (in Nairobi) with heavy government involvement
- ▶ **Construction and meter activation:** **managed locally**

The limitations of decentralization in the energy sector

- ▶ **Lack of MP expertise:** High turnover of MPs in Kenyan elections often inhibits the development of specialized expertise; in practice the legislature often defers to the executive branch on technical matters (Opalo, 2022)
- ▶ **Lack of country government expertise:** Widespread agreement that “a lack of skills, knowledge and experience of the county governments, their staff and possibly also the MPs... is the main challenge for a devolved electrification governance” (Volkert and Klagge, 2022)

The limitations of decentralization in the energy sector

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- ▶ **Government mandate:** Legal mechanisms allow the national government to claim functions that fall under a local government’s mandate (Hassan, 2020)
- ▶ **Continued political capture:** Kibaki and Kenyatta appointed co-ethnics as Kenya Power MDs

The benefits of centralization in the energy sector

- ▶ Renewables generation is often geographically constrained: benefits from nationwide optimization (Kenya: 10% increase in generation from wind farm in far northern Lake Turkana)
- ▶ Larger independent system operator (ISO) can minimize costs (Martinot, 2016; Cicala, 2022)

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- ▶ Pool technical expertise
- ▶ More efficient management: crucial for financially constrained utilities facing pressures (Burgess et al., 2020; Blimpo and Cosgrove-Davies, 2019; Kojima and Trimble, 2016; Fried and Lagakos, 2023)

Introduction
oooooooooooooo

Background
ooooooooooooooo

Data
ooooooooooooo

Nationwide allocation
oooooooooooo

Decentralization
oooooooo

Discussion
●ooooo

This talk

Introduction

Background

Data

Results: Allocation by national officials

Results: Decentralization and favoritism

Discussion

Conclusion

We quantify favoritism relative to a simple and transparent allocation rule that had been agreed upon by opposing political parties

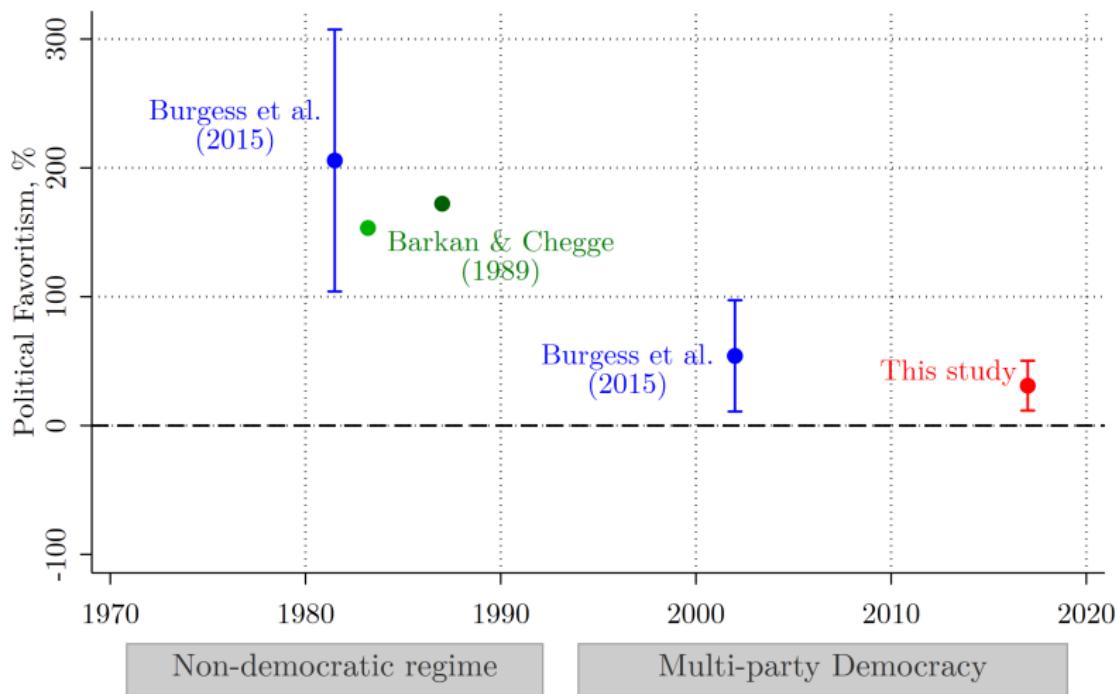
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- ▶ These magnitudes are smaller than historical levels of ethnic favoritism

Kenya has seen significant reductions in political favoritism



Conclusion

We quantify favoritism relative to a simple and transparent allocation rule that had been agreed upon by opposing political parties

- ▶ Context: Nationwide Kenyan infrastructure project (electrification)
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Why did favoritism persist despite decentralization reforms in '03-'10?

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- ▶ No favoritism in locally managed parts of LMCP
- ▶ LMCP favoritism driven by phases of the program controlled centrally

Decentralization can improve outcomes in certain sectors

*"The National Treasury should rationalize the national Government budgets for devolved functions such as **health, agriculture (crop, livestock, and fisheries development), water, irrigation, sanitation, and regional development**, and the funds transferred to the county governments. It is an irony that the Ministries continue getting huge allocations when those functions have already been devolved to the counties. We request that should be reversed and money due to counties be given to them."*

Charles Reubenson Kibiru, Independent Member of Parliament
Kenyan parliamentary debates
Nairobi, 21 December 2021

Central tensions in the decentralization of the energy sector

Decentralization is more difficult to implement:

- ▶ National leaders may want to retain control due to electoral incentives or financially motivated corruption

Central tensions in the decentralization of the energy sector

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There may be welfare gains from operating centralized parastatals:

- ▶ MPs and county governments lack technological expertise
- ▶ Natural monopoly, networks efficiency
- ▶ Cost minimization

Central tensions in the decentralization of the energy sector

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Persistent centralized management creates vulnerability

- ▶ Scope for political capture by central government (recall Kenya Power MDs still appointed by the president!)