# The Politics of Social Fund Distribution: Evidence from Kenya

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- Are social policies defined by electoral motives?
- If they do, what are the forces at work?
- Theory and evidence to address voter manipulation in a developing country context.

# Roadmap

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### Theory:

Dodlova Politics of Social Fund Distribution in Kenya

- **Core voters**: regions that strongly support the incumbent (Cox vs McCubbins, 1986; Diaz and Cayeros, 2008)
- Swing voters: regions with miscellaneous voting preferences (Dixit and Londregan, 1996; Lindbeck and Weibull, 1987)

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Social projects and electoral results in Kenya for 2002-2010, 2013-2014.

We consider **political incentives** that bias the distribution of social funds.

We find **some empirical support** that electoral incentives matter for social fund allocation.

- Brender (2003): voters in Israel reward high expenditures in development projects in the year previous to an election.
- Khemani (2004): Indian states spend more on public investment before scheduled elections than in other times.
- Kneebone and McKenzie (2001): evidence of a political cycle for Canadian provinces in "visible expenditures" like construction of roads and structures
- Gonzalez (2002): investment expenditure expands prior to elections
- Persson and Tabellini (2003): pre-election expansion in welfare state spending before elections in democracies with proportional electoral regimes

- Voters reward the politicians for higher government spending and improved public service delivery (Brender, 2003)
- Politicians may use social policy and change government spending to gain voters in the next elections (e.g. Manacorda et al. 2011; Drazen and Eslava 2010; Khemani, 2004; etc.)
- Politicians target and reward the citizens, who vote for them, or the politicians reward the citizens on ethnic, relative or other bases (e.g. Habyarimana et al, 2007)

- How does the way the members of parliament (MPs) allocate the CDF influence their reelection chances in 2007 (Romero, 2013)
- Under what conditions the politicians reward their supporters relying on the 2002 parliamentary elections (Harris and Posner, 2015).
  - politicians reward their supporters (the voters providing them high margin)
  - politicians allocate more to swing ethnically homogenous areas with low segregation

## Our contribution

- All election rounds 2002, 2007, 2013
- Social fund allocation before and after the change of constituencies' boundaries
- Gerrymandering

- Social policy implemented follow political cycles
- In constituencies that have been splitted the budget of social projects is higher (to increase the chances of reelection)
- Gerrymandering: whether the decision about splitting constituencies is based on previous votes

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Presidential elections (5-year term):

- Uhuru Kenyatta (The National Alliance) since 9 April 2013
- Mwai Kibaki (Party of National Unity) from December 2002 to April 2013
- Daniel arap Moi (Kenya African National Union) from 1978 to 2002

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Parliamentary elections:

- National Assembly: 349 members from which 210 members elected for a 5-year term in single-seat constituencies
- Senate: 67 members from which 47 elected senators from each of Kenya's 47 Counties and 20 nominated senators

# CDF: background

The Kenyan Constituency Development Fund (CDF) introduced in 2003 during the Kibaki presidency.

It is aimed to:

- support constituency-level, grass-root development projects
- achieve equitable distribution of development resources across regions
- to control imbalances in regional development
- to combat poverty at the grassroots

In particular, the CDF programs have facilitated the putting up of new water, health and education facilities in all parts of the country, including remote areas that were usually overlooked during funds allocation in national budgets.

However, CDF programs are also used for political manipulation and play a key role in electoral campaigns.

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  - information about the investment type, budget (real and expected), implementation status
- about 60000 social projects by sectors: Administration, Agriculture, Bursary, Education, Electricity, Emergency, Environment, Health, Monitoring and Evaluation, Other, Roads/Bridges, Sanitation, Security, Water, Youth/Sports.

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  - education
  - income and poverty
  - health
  - water sanitation
  - agriculture holding and output
  - transfers

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- **Dependent variable**: budget of social projects for every year across districts and constituencies
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- Explanatory variables:
  - vote shares in the last elections (and instrumented by previous vote shares)
  - change in turnout
  - coethnicity
  - poverty rank
  - total population
  - population density
  - area

# Political Cycle

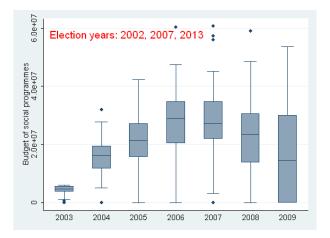
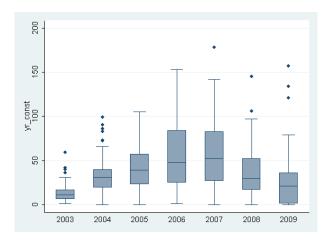


Figure: Social programs' budget across years

# Political Cycle



#### Figure: Social programs' number across years

#### Allocation of social funds in 2003-2007

	(1)	(2)
	budget before 2007	budget before 2007
lnAreaSqKms	-0.0758*	-0.0905**
	(0.0427)	(0.0421)
InPopDensity2009	-0.0751*	-0.0881**
	(0.0434)	(0.0405)
InConstPop2009	0.0947	0.1089
	(0.1176)	(0.1200)
lnPovRank	0.0365	0.0355
	(0.0701)	(0.0704)
coethnic	-0.2327*	-0.2437**
	(0.1196)	(0.1166)
parl2002_validvotes	0.0003	-0.0092
	(0.0018)	(0.0070)
parl2002_validvotes2		0.0001
		(0.0001)
SplitIn2012	0.0905	0.0925
	(0.1118)	(0.1118)
Constant	17.6000***	17.8689***
	(1.3110)	(1.3365)
Observations	210	210
R-squared	0.0436	0.0460

#### Allocation of social funds in 2007-2010

	(1)	(2)	(3)	(4)
	. ,			
	budget 2007-2010	budget 2007-2010	budget 2007-2010	budget 2007-2010
lnAreaSqKms	-0.1580	-0.1542	-0.1600	-0.1565
	(0.0933)	(0.0924)	(0.0976)	(0.0971)
InPopDensity2009	-0.1808*	-0.1764*	-0.1888*	-0.1845*
	(0.0885)	(0.0874)	(0.0939)	(0.0936)
InConstPop2009	0.3695**	0.3650**	0.3683**	0.3641**
	(0.1406)	(0.1396)	(0.1436)	(0.1427)
InPovRank	0.0666	0.0708	0.0614	0.0655
	(0.0565)	(0.0557)	(0.0509)	(0.0496)
coethnic	-0.1468	-0.1412	-0.1438	-0.1386
	(0.1077)	(0.1076)	(0.0932)	(0.0924)
parl2007_validvotes	0.0004	-0.0003	-0.0119	-0.0124*
	(0.0016)	(0.0021)	(0.0077)	(0.0072)
parl2007_validvotes2			0.0001	0.0001
			(0.0001)	(0.0001)
SplitIn2012	-0.0743	-0.2089	-0.0555	-0.1816
-	(0.0844)	(0.3209)	(0.0860)	(0.3291)
parl2007_validvotes_Split		0.0027		0.0025
		(0.0053)		(0.0053)
Constant	15.2456***	15.2671***	15.6257***	15.6413***
	(0.8340)	(0.8404)	(0.8327)	(0.8309)
Observations	207	207	207	207
R-squared	0.0481	0.0490	0.0528	0.0536

# Allocation of social funds in 2003-2007: rewarding politicians

	(1)	(2)	(3)	(4)
	budget 2003-2007	budget 2003-2007	budget 2003-2007	budget 2003-2007
	pres	pres	parl	parl
lnAreaSqKms	-0.0993**	-0.1019*	-0.0840	-0.0440
	(0.0451)	(0.0508)	(0.0556)	(0.1075)
InPopDensity2009	-0.0990*	-0.1092*	-0.0827	-0.0817
	(0.0519)	(0.0582)	(0.0665)	(0.1057)
InConstPop2009	0.1160	0.1140	0.1008	0.0354
	(0.1366)	(0.1389)	(0.1504)	(0.1955)
InPovRank	0.0388	0.0322	0.0374	-0.0044
	(0.0657)	(0.0577)	(0.0674)	(0.0502)
coethnic	-0.2323*	-0.2283**	-0.2316*	-0.2065**
	(0.1138)	(0.0960)	(0.1159)	(0.0839)
2007_validvotes	0.0023	-0.0137**	0.0008	-0.0932
	(0.0021)	(0.0061)	(0.0049)	(0.0731)
2007_validvotes2		0.0001***		0.0008
		(0.0001)		(0.0006)
SplitIn2012	0.0905	0.1151	0.0889	0.2203
-	(0.1172)	(0.1275)	(0.1130)	(0.1741)
Constant	17.5183***	18.0149***	17.5947***	20.6267***
	(1.3175)	(1.4580)	(1.4126)	(3.5042)
Observations	208	208	208	208
R-squared	0.0472	0.0571	0.0453	0.0455

#### Allocation of social funds in 2013-214

	(1)	(2)	(3)	(4)
	Budget 2013-2014	Budget 2013-2014	Budget 2013-2014	Budget 2013-201
lnPovRank	0.183*	0.176*	0.203*	0.206**
	(0.101)	(0.093)	(0.099)	(0.097)
InAreaSqKms	-0.109	-0.114	-0.084	-0.081
	(0.324)	(0.322)	(0.297)	(0.300)
InPopDensity2009	-0.125	-0.139	-0.093	-0.093
	(0.310)	(0.310)	(0.281)	(0.282)
InConstPop2009	0.075	0.083	0.025	0.033
	(0.396)	(0.391)	(0.357)	(0.348)
coethnic	-0.244	-0.238	-0.361*	-0.389*
	(0.192)	(0.180)	(0.179)	(0.210)
SplitIn2012	-0.029	-0.010	-0.017	-0.016
	(0.115)	(0.108)	(0.112)	(0.111)
parl2007_validvotes	-0.002	-0.019		
	(0.002)	(0.016)		
parl2007_validvotes2		0.000		
		(0.000)		
pres2007_validvotes			0.003	0.001
-			(0.002)	(0.004)
pres2007_validvotes2				0.000
				(0.000)
Constant	17.754***	18.207***	17.759***	17.654***
	(1.787)	(1.756)	(1.613)	(1.485)
Observations	266	266	269	269
R-squared	0.090	0.096	0.095	0.095

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#### Politics of Social Fund Distribution in Kenya

## Gerrymandering

- Act of dividing a state/constituency into districts that give unfair advantage to one political party.
- Manipulating the boundaries to promote the goals of political parties, incumbents or racial groups.
- Optimal gerrymandering (Friedman and Holden, 2008; Gul and Pesendorfer, 2010; etc. )
- Gerrymandering in the United States (Cox and Katz, 2002; Engstrom 2006; Chen and Rodden, 2013; etc.)
- Politically neutral redistricting in India (Iyer and Reddy, 2013)
- Partisan effects of redistricting on representation in Mexico (Altman et al. 2014)

# Gerrymandering

	(1)	(2)	(3)	(4)
	SplitIn2012	SplitIn2012	SplitIn2012	SplitIn2012
lnAreaSqKms	0.152**	0.151**	0.133*	0.131*
	(0.070)	(0.069)	(0.066)	(0.067)
InPopDensity2009	0.096	0.103	0.075	0.077
	(0.067)	(0.066)	(0.064)	(0.065)
InConstPop2009	0.492***	0.481***	0.511***	0.483***
	(0.128)	(0.130)	(0.123)	(0.121)
lnPovRank	-0.030	-0.024	-0.037	-0.040
	(0.031)	(0.029)	(0.032)	(0.031)
InNewVoters2002_2007	0.028	0.031	0.038	0.052
	(0.061)	(0.064)	(0.056)	(0.057)
coethnic	-0.055	-0.058	-0.011	0.055
	(0.050)	(0.048)	(0.060)	(0.066)
parl2007_votes	-0.000	0.013**		
	(0.001)	(0.005)		
parl2007_votes2		-0.0001**		
•		(0.000)		
pres2007_votes			-0.001	0.003
1			(0.001)	(0.002)
pres2007_votes2				-0.00005*
1				(0.000)
Constant	-7.193***	-7.449***	-7.231***	-7.070***
	(0.723)	(0.677)	(0.734)	(0.705)
Observations	208	208	210	210
R-squared	0.436	0.448	0.441	0.448

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Politics of Social Fund Distribution in Kenya

# Gerrymandering: TSLS

	(1)	(2)	(3)	(4)
	SplitIn2012	SplitIn2012	SplitIn2012	SplitIn2012
parl2007_votes	-0.003	0.002		
	(0.004)	(0.078)		
parl2007_votes2		-0.00004		
		(0.001)		
pres2007_votes			0.011	0.010
			(0.020)	(0.009)
pres2007_votes2				-0.0001
				(0.000)
lnAreaSqKms	0.175**	0.172*	0.292	0.147
	(0.074)	(0.097)	(0.278)	(0.182)
lnPovRank	-0.033	-0.031	0.026	-0.037
	(0.030)	(0.052)	(0.123)	(0.062)
InPopDensity2009	0.122	0.121	0.263	0.103
	(0.073)	(0.077)	(0.313)	(0.191)
InConstPop2009	0.478***	0.476***	0.292	0.425**
	(0.129)	(0.131)	(0.446)	(0.172)
InNewVoters2002_2007	0.015	0.018	0.041	0.069
	(0.064)	(0.078)	(0.117)	(0.093)
coethnic	-0.049	-0.051	-0.618	0.063
	(0.052)	(0.058)	(1.040)	(0.747)
Constant	-7.056***	-7.159***	-7.356***	-6.894***
	(0.753)	(1.896)	(0.930)	(0.964)
Observations	208	208	210	210
R-squared	0.428	0.436	0.086	0.434

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