

Course: Political Economy

Sabyasachi Das

Indian Statistical Institute, Delhi

January 4, 2016

“Man is by nature a political animal.” - Aristotle

- All social organisms require to make decisions about the whole “society” for maintenance of order and group survival and growth.
- Political Economy as an academic discipline is concerned with decision-making for “society” at large.
- We restrict attention to human societies.
- The only fundamentals are the set of alternative decisions and individual preferences over them.

Course Details

Scope:

- Decision-making in established democracies.
- Doesn't cover autocracies, weak states, conflict etc.
- Doesn't address media, macro policy-making, historical institutions and contemporary outcome (attend Institutional Economics).

Objective:

- Introduce a theoretical framework for analyzing any political problem.
- Study how to test theoretical predictions using data and rigorous empirical methods.
- Emphasize methodological tools used to arrive at the answer.

Course Bureaucracy

Evaluation:

- No exams.
- Writing assignments *every week* for the first half (30%).
- Mandatory class participation (10%).
- Two referee reports due in the second half (30%).
- End term presentation (30%).

Off-classroom meeting:

- Office hours: Every Wednesdays 5:30 pm - 6:30 pm.
- Email otherwise.

Motivating Democracy

Value of Democracy:

1. Better policy-making,
2. Procedural fairness,
3. Disaster avoidance.

The Value of Democracy: Evidence from Road Building in Kenya

Robin Burgess

Remi Jedwab

Edward Miguel

Ameet Morjaria

Gerard Padro i Miquel

NBER Working Paper 2013

Research Question:

- To what extent ethnic favoritism in provision of public goods is reduced during democratic regimes relative to non-democratic ones in a typical African country?

Why Important?

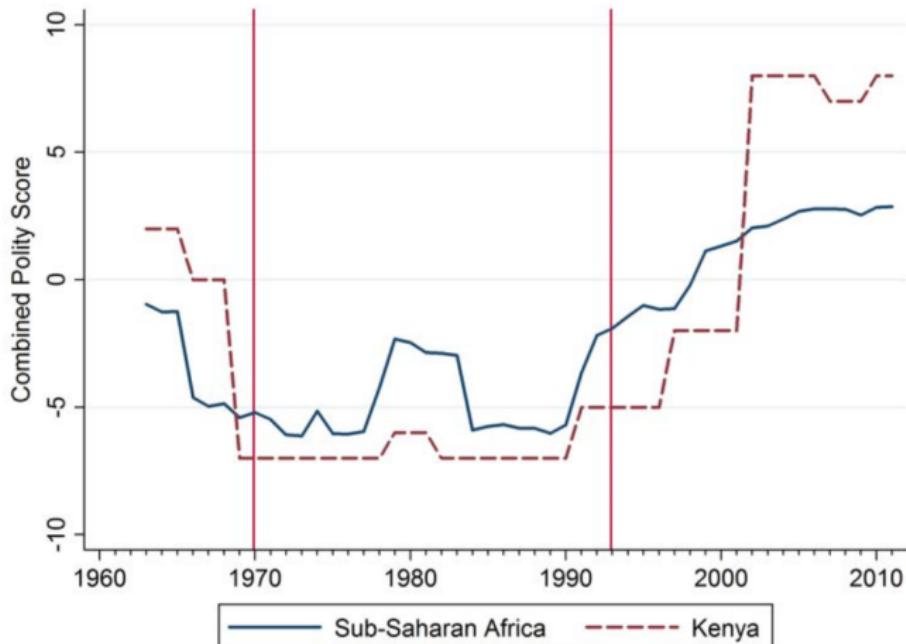
- Ethnic favoritism in provision of public goods is a reflection of weak political institutions that are unable to constrain governments from discrimination among citizens.
- The phenomenon has hampered economic performance in many countries, especially in Africa.
- May show how democracy, even very imperfect ones, can improve policy by constraining the executive.

Research Finding:

- In the period 1963-2011, Kenyan districts that share President's ethnicity receive twice as much expenditure on roads.
- While in periods of autocracy, coethnic districts receive three times the average expenditure, the bias disappears during periods of democracy.

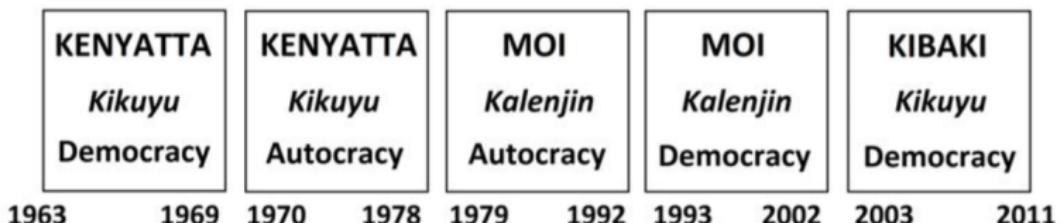


Figure 1: Evolution of Political Regimes in Sub-Saharan Africa, 1963-2011



Notes: This figure plots the revised combined polity score for Sub-Saharan Africa (average) and Kenya. Polity IV defines three regime categories: *autocracies* (-10 to -6), *anocracies* (-5 to +5) and *democracies* (+6 to +10). The vertical lines represent regime changes in Kenya: December 1969 is the transition from democracy to autocracy, while December 1992 is the return of democracy. Source: authors' calculations and *Polity IV Project, Political Regime Characteristics and Transitions, 1800-2011*. See Online Data Appendix for data sources.

Figure 2: History Timeline of Political and Leadership Transitions



Notes: This figure shows the history timeline of political transitions and leadership transitions. Political transitions: December 1969 is the transition from democracy to autocracy, while December 1992 is the return of democracy. Leadership transitions: from Kenyatta (Kikuyu) to Moi (Kalenjin) in August 1978, and from Moi (Kalenjin) to Kibaki (Kikuyu) in December 2002.

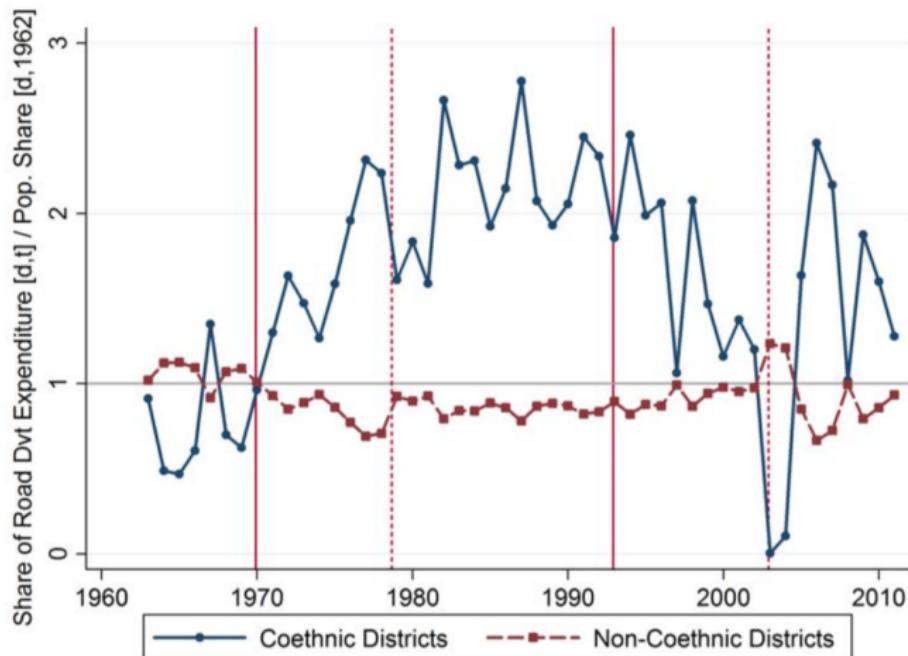
Ethnic Groups in Kenya

- Ethnicities in Kenya are concentrated across districts.
- At independence, 38 of 41 districts had one group consisting of more than 50% population. Remains so still today.
- There are about 40 ethnic groups.
- Kikuyu (18.8%) and Kalenjin (10.8%) are two major ethnicities among others.

Road Data

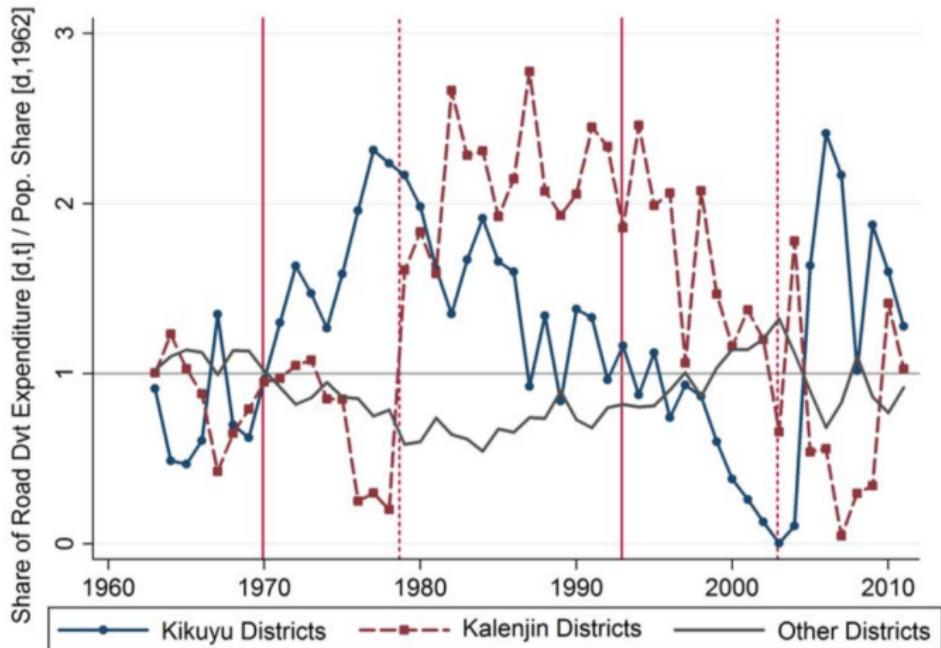
- Road expenditure data comes from Kenya National Development budget reports.
- Compiled by engineers, annual expenditure on individual paved roads with location details.
- It constitutes 15.2% of total central government's development budget.
- Education, health, and water are 5.5%, 5.7%, and 6.5% respectively.

Figure 4: Road Investment in Coethnic and Non-Coethnic Districts, 1963-2011



Notes: This figure plots the ratio of the share of road development expenditure in year t to the share of population in 1962 for coethnic and non-coethnic districts d . A district d is defined as coethnic if more than 50% of its population is from the ethnic group of the president at time t . The two vertical solid lines represent political transitions: December 1969 is the transition from democracy to autocracy, while December 1992 is the return of democracy. The two vertical dotted lines represent leadership transitions: from Kenyatta (Kikuyu) to Moi (Kalenjin) in August 1978, and from Moi (Kalenjin) to Kibaki (Kikuyu) in December 2002. See Appendix Table 2 and Online Data Appendix for data sources.

Figure 5: Road Investment in Kikuyu, Kalenjin and Other Districts, 1963-2011



Notes: This figure plots the ratio of the share of road development expenditure in year t to the share of population in 1962 for coethnic and non-coethnic districts d . Coethnic districts are as defined in figure 3, except they are now disaggregate into the two different leading groups. The president is Kikuyu during 1963-1978, Kalenjin during 1978-2002 and Kikuyu during 2002-2011. A district is defined as Kikuyu (Kalenjin) if more than 50% of its population is Kikuyu (Kalenjin). The vertical lines represent political transitions, while the vertical dotted lines represent leadership transitions (see figure 3). See Appendix Table 2 and Online Data Appendix for data sources.

Table 1: Road Expenditure, Ethnicity and Democratic Change in Kenya, 1963-2011

Dependent Variable:	Share of road development expenditure [d,t]				
	Population share [d,1962]				
	(1)	(2)	(3)	(4)	(5)
Panel A:					
Coethnic District Indicator [d,t]	0.97*** (0.36)	0.96*** (0.35)	0.96*** (0.35)	1.02*** (0.35)	0.97** (0.38)
Panel B:					
Coethnic District Indicator [d,t]	1.57*** (0.49)	1.62*** (0.49)	1.64*** (0.49)	1.74*** (0.49)	1.56*** (0.51)
Coethnic District Indicator [d,t] x Democracy Indicator [t]	-1.11* (0.61)	-1.24* (0.63)	-1.27** (0.63)	-1.32** (0.63)	-1.08* (0.59)
F-test [<i>p</i> -value]	1.07	0.76	0.73	0.90	1.22
Coethnic + Coethnic x Democracy = 0	[0.31]	[0.39]	[0.40]	[0.35]	[0.28]
Observations	2009	2009	2009	2009	2009
Year and district fixed effects	Y	Y	Y	Y	Y
(Population, area, urbanization rate) x trend	N	Y	Y	Y	N
(Earnings, employment, cash crops) x trend	N	N	Y	Y	N
(Main highway, border, dist.Nairobi) x trend	N	N	N	Y	N
District time trends	N	N	N	N	Y

Notes: OLS regressions using data on 41 districts annually from 1963 to 2011. Standard errors corrected for clustering at the district level are reported in parentheses; *** denotes significance at 1%, ** at 5%, and * at 1%. *Coethnic District Indicator* [d,t] is an indicator variable whose value is one if more than 50% of the population of district *d* is from the ethnic group of the president at time *t*. *Democracy Indicator* [t] is an indicator variable whose value is one if year *t* is a democracy year. The F-test is used to test the null hypothesis of joint equality between a coethnic and a non-coethnic district during democracy. Columns (2)-(4) include controls interacted with a time trend (1963-2011). These controls are: [i] demographic (district population in 1962, district area in sq km, and urbanization rate in 1962). [ii] economic activity (district total earnings in 1966, employment in the formal sector in 1963 and value of cash crop exports in 1965). [iii] economic geography (an indicator variable whose value is one if any part of the district is on the Mombasa-Nairobi-Kampala corridor, an indicator variable whose value is one if the district borders Uganda or Tanzania, and the Euclidean distance in km to Nairobi). See Appendix Table 2 and Online Data Appendix for data sources and construction of variables.

Table 2: Road Building, Ethnicity and Democratic Change in Kenya, 1964-2002

Dependent Variable:	Share of paved road construction [d,t]				
	Population share [d,1962]				
	(1)	(2)	(3)	(4)	(5)
Panel A:					
Coethnic District Indicator [d,t]	1.91** (0.94)	1.94* (0.99)	2.20* (1.09)	3.24* (1.72)	3.96 (2.38)
Panel B:					
Coethnic District Indicator [d,t]	3.00** (1.23)	3.03** (1.26)	3.19** (1.33)	3.90** (1.76)	3.34 (2.38)
Coethnic District Indicator [d,t] x Democracy Indicator [t]	-3.55** (1.38)	-3.61** (1.36)	-3.45** (1.32)	-2.71* (1.46)	-3.22** (1.49)
F-test [<i>p-value</i>]	0.44	0.49	0.10	0.34	0.00
Coethnic + Coethnic x Democracy = 0	[0.51]	[0.49]	[0.75]	[0.56]	[0.97]
Observations	410	410	410	410	410
Year and district fixed effects	Y	Y	Y	Y	Y
(Population, area, urbanization rate) x trend	N	Y	Y	Y	N
(Earnings, employment, cash crops) x trend	N	N	Y	Y	N
(Main highway, border, dist.Nairobi) x trend	N	N	N	Y	N
District time trends	N	N	N	N	Y

Notes: OLS regressions using maps on 41 districts from 1964 to 2002. Maps are only available for years = [1964, 1967, 1969, 1972, 1974, 1979, 1981, 1984, 1987, 1992, 2002]. Standard errors corrected for clustering at the district level are reported in parentheses; *** denotes significance at 1%, ** at 5%, and * at 1%. *Coethnic District Indicator [d,t]* is an indicator variable whose value is one if more than 50% of the population of district *d* is from the ethnic group of the president at time *t*. *Democracy Indicator [t]* is an indicator variable whose value is one if year *t* is a democracy year. The F-test is used to test the null hypothesis of joint equality between a coethnic district and a non-coethnic district during democracy. Columns (2)-(4) include the same controls as in Table 1 interacted with a time trend (1964-2002). See the footnote of Table 1 for a description of these controls. See Appendix Table 2 and Online Data Appendix for data sources and construction of variables.

Table 5: Role of the Vice-President and Effects on Cabinet Composition, 1963-2011

Dependent Variable:	Share of road dvt expenditure [d,t]	Ethnic share of cabinet [e,t]		
	Pop. share [d,1962]	Pop. share [e,1962]		
	(1)	(2)	(3)	(4)
Coethnic District [d,t]/Group [e,t] Indicator	1.74*** [0.49]	2.62*** [0.71]	0.64*** [0.13]	1.08*** [0.31]
Coethnic District [d,t]/Group [e,t] Indicator x Democracy Indicator [t]	-1.32** [0.63]	-1.63** [0.69]	0.02 [0.28]	0.03 [0.29]
VP-Coethnic District [d,t] / Group [e,t] Indicator		1.46** [0.56]		0.94** [0.34]
VP-Coethnic District [d,t] / Group [e,t] Indicator x Democracy Indicator [t]		-1.42** [0.61]		-0.64 [0.38]
F-test, Coethnic [p-value]	0.90	2.64	5.87** [0.03]	216.4*** [0.00]
Coethnic + Coethnic x Democracy = 0	[0.35]	[0.11]		4.00** [0.05]
F-test, VP-Coethnic [p-value]		0.00		
VP-Coethnic + VP-Coethnic x Democracy = 0		[0.95]		
Observations	2009	2009	169	169
Year and district/ethnic group fixed effects	Y	Y	Y	Y
Controls	Y	Y	N	N

Notes: Columns (1)-(2): OLS regressions using expenditure data on 41 districts annually from 1963 to 2011. Columns (3)-(4): OLS regressions using data on all elections from 1963 to 2011, for 13 ethnic groups. The dependent variable is the ratio of the cabinet share of ethnic group e to its population share. Standard errors corrected for clustering at the district/group level are reported in parentheses; *** denotes significance at 1%, ** at 5%, and * at 10%. *Coethnic District Indicator* [d,t] is an indicator variable whose value is one if more than 50% of the population of district d is from the ethnic group of the president at time t . *Coethnic Group Indicator* [e,t] is an indicator variable whose value is one if the president at time t belongs to ethnic group e . *Democracy Indicator* [t] is an indicator variable whose value is one if year t is a multi-party year. *VP-Coethnic District Indicator* [d,t] is an indicator variable whose value is one if more than 50% of the population of district d is from the ethnic group of the vice-president at time t . *VP-Group Indicator* [e,t] is an indicator variable whose value is one if the vice-president at time t belongs to ethnic group e . The F-tests are used to test the null hypothesis of joint equality between a coethnic district/group and a non-coethnic district/group for the president and the vice-president during a multi-party year. Columns (1)-(2) include the standard controls interacted with a time trend. Columns (3)-(4) include ethnic group time trends. See Appendix Table 2 and Online Data Appendix for data sources and construction of variables.

Institutions and Behavior: Experimental Evidence on the Effects of Democracy

Pedro Dal Bó
Andrew Foster
Louis Puttermann

American Economic Review, 2010

Research Question:

- Does procedure of choosing a cooperation enhancing policy (democratic vs autocratic) has any effect on the level of cooperation? What is the mechanism of this effect?

TABLE 1—STAGE GAME PAYOFFS (*in points*)

Initial/unmodified payoffs			Modified payoffs		
Other's action		Own action	Other's action		D
Own action	C		D	C	
C	50	10	C	50	10
D	60	40	D	48	40

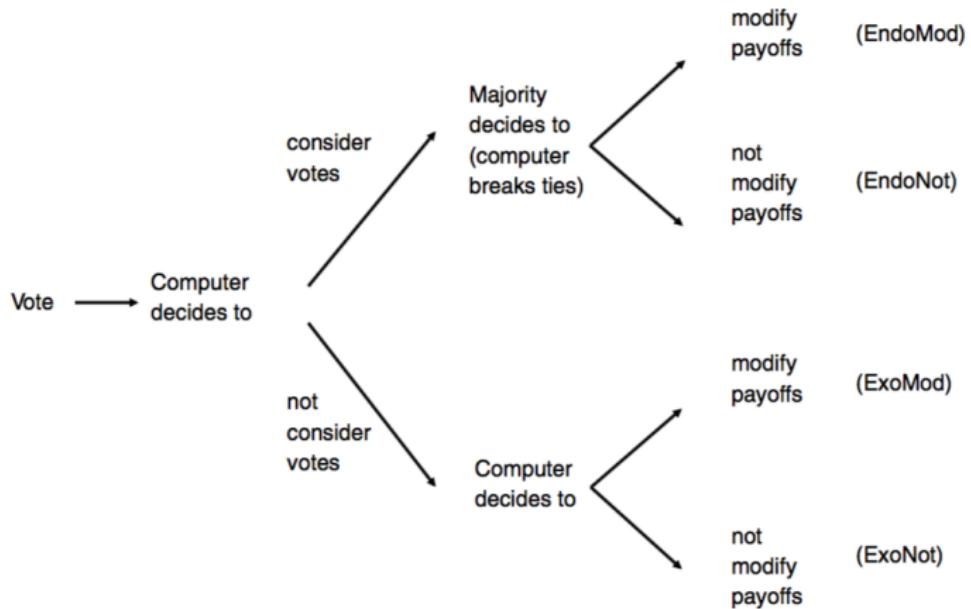


FIGURE 1. VOTING STAGE

TABLE 3—DETERMINANTS OF VOTING
Dependent variable: voting for modification (Votemod)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Own part 1 cooperation	0.47 [0.161]***								0.655 [0.170]***
Partners' part 1 cooperation		-0.419 [0.211]**							-0.765 [0.221]***
Class			-0.029 [0.027]						-0.02 [0.028]
Guess number				-0.003 [0.002]**					-0.004 [0.002]**
SAT verbal					0.001 [0.001]**				0.001 [0.001]
SAT math						0.001 [0.000]***			0.002 [0.001]***
Econ							0.077 [0.090]		0.008 [0.091]
Political								0.003 [0.041]	0.033 [0.040]
Constant	0.448 [0.042]***	0.608 [0.048]***	0.59 [0.063]***	0.657 [0.065]***	-0.308 [0.369]	-0.3 [0.324]	0.523 [0.032]***	0.517 [0.091]***	-0.904 [0.466]*
Observations	276	276	276	276	264	265	276	254	245
R ²	0.03	0.01	0	0.02	0.02	0.03	0	0	0.15

Notes: All results are from OLS regressions. The dependent variable is Votemod, which is an indicator variable for whether the subject voted to modify payoffs. Standard errors in brackets.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

TABLE 4—THE EFFECT OF DEMOCRACY—INDIVIDUAL LEVEL DATA

Vote for modify	Consider votes		Not consider votes		Total
	Modify (EndoMod)	Not modify (EndoNot)	Modify (ExoMod)	Not modify (ExoNot)	
<i>Panel A. Number of observations by vote stage outcome and individual vote</i>					
No	17	55	31	26	129
Yes	55	25	33	34	147
Total	72	80	64	60	
<i>Panel B. Cooperation percentage in round 10</i>					
No	5.88	3.64	9.68	11.54	
Yes	5.45	4.00	9.09	8.82	
Total	5.56	3.75	9.38	10.00	
<i>Panel C. Cooperation percentage in round 11</i>					
No	41.18	14.55	41.94	3.85	
Yes	81.82	24.00	57.58	23.53	
Total	72.22	17.50	50.00	15.00	

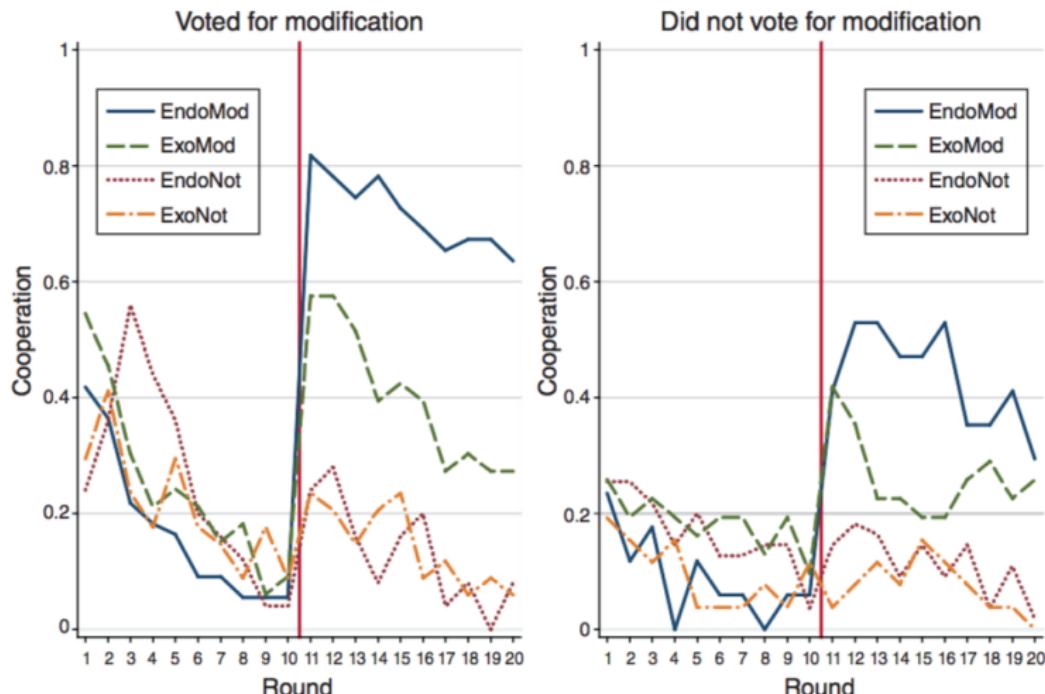


FIGURE 3. COOPERATION BY ROUND, VOTE STAGE RESULTS AND INDIVIDUAL VOTE

TABLE 9—COOPERATION PERCENTAGE IN ROUND 11 BY “SOPHISTICATION”—YES VOTERS

Math SAT	EndoMod	ExoMod	Difference
<i>Panel A. Math SAT as “sophistication”</i>			
High	76.92	76.47	0.45
Low	86.21	37.50	48.71
<i>Panel B. Beauty contest number as “sophistication”</i>			
High	75.00	53.33	21.67
Low	85.71	61.11	24.60

Notes: High and Low correspond to the division of the sample at the median value of the corresponding measure of “sophistication” (740 for Math SAT and 33 for the Beauty Contest Number). EndoMod: endogenous modification, ExoMod: exogenous modification.

TABLE 11—THE EFFECT OF DEMOCRACY CONTROLLING FOR INFORMATION—MODIFIED PAYOFFS

	Original sessions		Additional sessions	
	Consider votes	Not consider votes	Vote share	
Vote for modify	Yes (EndoMod)	No (ExoMod)	≥ 2 (ExoModH)	≤ 2 (ExoModL)
<i>Panel A. Number of observations</i>				
No	17	31	20	38
Yes	55	33	56	14
Total	72	64	76	52
<i>Panel B. Cooperation percentage in round 11</i>				
No	41.18	41.94	35.00	23.68
Yes	81.82	57.58	62.50	64.29
Total	72.22	50.00	55.26	34.62
<i>Panel C. Cooperation percentage in part 2</i>				
No	43.53	26.45	22.00	18.42
Yes	71.82	40.00	50.36	33.57
Total	65.14	33.44	42.89	22.50

Note: The column Vote share ≥ 2 (≤ 2) corresponds to the subjects under exogenous modification in the additional sessions who were informed that at least (at most) two subjects in the group had voted for modification.

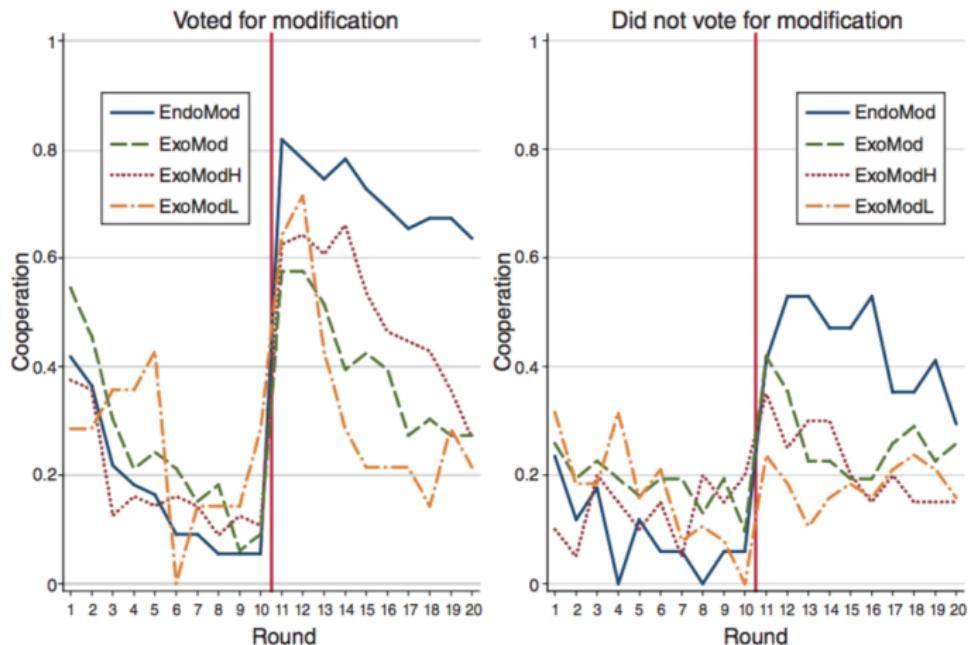


FIGURE 4. COOPERATION BY ROUND AND INDIVIDUAL VOTE UNDER MODIFIED PAYOFFS
ORIGINAL AND ADDITIONAL SESSIONS COMPARISON

Note: EndoMod and ExoMod denote endogenous and exogenous modification in the original sessions; ExoModH and ExoModL denote exogenous modification when the group knew that there were at least two or at most two votes in favor of modification, respectively, in the additional sessions.