

Comments on Ansell & Samuels, “Inequality & Democracy: A Contractarian Approach”

Victor Menaldo

University of Washington

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There's a lot to like here

- Robustness to Dependent Variable (Regime Type)
- Robustness to Independent Variable (Income Inequality)
- Robustness to Econometric Strategy (Dynamic Probit; Static & Dynamic OLS; Pooled and FE OLS; Instrumental Variables OLS)
- Concern over causal inference: FE models and IV Models

Your OLS FE Models = Too Simple

- Partial adjustment models may impose invalid restrictions (DeBoef & Keele 2008).
- Lagged D.V. close to unity in many models and we know Polity tends to not revert back to its mean (Haber & Menaldo 2011).
- We also know inequality is slow moving.

Prescriptions

- **Diagnose time-series properties variables**
 - 1) Panel Unit Root Tests for each series and
 - 2) Panel Co-integration Tests for Polity & Gini
- **Run more sophisticated dynamic models**
 - 1) Finitely distributed Lag Models (FDL)
 - 2) Autoregressive Distributed Lag Models (ADL)

Your IV Models = I'm Skeptical

- **Instruments may not satisfy exclusion restriction**
 - 1) Inequality = high serial correlation; lags not ideal
 - 2) Regional inequality may operate via diffusion
 - 3) Bigger betas in IV second-stage may signal exclusion restriction not satisfied

- **Instruments may be weak**

We have no way of knowing, you don't diagnose

Perhaps Regional Inequality correlated with these omitted variables?

	GINI	Coercion	Growth	Oil P.C.	#Past Trans.	Inflation
GINI	1.0000					
Coercion	-0.1363***	1.0000				
Growth	-0.0946***	0.0894***	1.0000			
Oil P.C.	-0.0193	0.1922***	0.0193	1.0000		
#Past Trans.	-0.1323***	0.1348***	0.0085	-0.0370	1.0000	
Inflation	-0.1448***	0.1801***	-0.1113***	0.1861***	0.1010***	1.0000

“Coercive Capacity and the Prospects for Democratization”

Comparative Politics 2012 (w/Mike Albertus)

Table 3. Determinants of Democratic Transition after controlling for Income Inequality (1950 to 2002)

Dependent variable is Binary Democracy measured as REGIME (Markov Transition Model)

Robust z statistics clustered by country in brackets

Measure of Income Inequality	<i>Boix Gini</i> (1)	<i>Boix Gini</i> (2)	<i>SIDD Gini</i> (3)	<i>SIDD Gini</i> (4)	<i>Capital Shares</i> (5)	<i>Capital Shares</i> (6)	<i>Capital Shares</i> (7)
Income Inequality	-0.021 [0.54]	0.848 [2.02]**	0.009 [0.48]	0.074 [0.40]	-0.019 [1.10]	-0.223 [2.10]**	-0.238 [2.63]***
Income Inequality Quadratic		-0.008 [2.00]**		-0.001 [0.35]		0.159 [1.91]*	0.169 [2.37]**
Turning Point for Income Inequality		50.64 GINI		55.34 GINI		69.99% C.S.	70.48% C.S.
95% Confidence Intervals		[45.13, 56.16]		[6.59, 104.08]		[59.70, 80.27]	[61.39, 79.57]
log(Military Size)	-1.098 [2.69]***	-1.257 [3.17]***	-0.616 [2.42]**	-0.602 [2.44]**	-0.667 [2.03]**	-0.583 [1.57]	-0.468 [1.95]**
log(Per Capita Income)	0.287 [0.52]	0.358 [0.58]	-0.041 [0.14]	-0.029 [0.10]	0.09 [0.23]	-0.016 [0.04]	-0.28 [0.96]
Growth Rate	-0.09 [1.79]*	-0.091 [1.87]*	-0.045 [0.92]	-0.045 [0.92]	-0.051 [0.68]	-0.046 [0.58]	-0.045 [0.94]
log(Total Oil Income)	-0.361 [3.03]***	-0.436 [3.43]***	-0.206 [2.74]***	-0.208 [2.74]***	-0.235 [2.65]***	-0.273 [2.62]***	-0.194 [2.07]**
Number of Previous Transitions	0.194 [0.80]	0.1 [0.41]	0.325 [2.24]**	0.324 [2.26]**	0.046 [0.27]	-0.044 [0.28]	
Inflation	2.093 [1.32]	2.026 [1.20]	4.926 [3.10]***	5.063 [2.92]***	2.096 [1.09]	2.112 [1.14]	
Military Regime in power	1.829 [2.57]**	1.966 [2.43]**	2.038 [5.72]***	2.037 [5.69]***	1.977 [4.41]***	1.859 [4.19]***	1.772 [4.53]***
Region Dummies	YES	YES	YES	YES	YES	YES	YES
Year Dummies	YES	YES	YES	YES	YES	YES	YES
Observations	594	594	1342	1342	1115	1115	1626

* significant at 10%; ** significant at 5%; *** significant at 1%

All independent variables lagged by 1 period.

Year dummies estimated but not shown; region dummies estimated but not shown.

Prescriptions

- **For Exclusion Restriction concerns**

- 1) Include more covariates in IV model
- 2) Provide more than 1 instrument in First-Stage & run Sargan Test of over-identifying restrictions

- **For Weak Instrument concern**

- 1) Show us first-stage models!
- 2) Conduct first-stage F-test/weak instrument tests

Some Instrument Ideas

- Exploit fact that technology increases inequality because of higher returns to human capital and does not diffuse uniformly (endogenous growth theory)
- Exploit fact that capital market liberalization increases inequality
- Exploit fact that trade liberalization sometimes increases inequality

Table 6.3 Conditional Logit FE Models?

- How are these conditional models if they include dummy variables?
That's unconditional FE regression.
- If so, estimation inconsistent because of incidental parameters problem (Neyman & Scott 1948).

No conditional FE for cloglog (gompit)

From the Stata Manual...

xtcloglog fits population-averaged and random-effects complementary log-log (cloglog) models...

There is no command for a conditional fixed-effects model, as there does not exist a sufficient statistic allowing the fixed effects to be conditioned out of the likelihood. Unconditional fixed-effects cloglog models may be fit with cloglog with indicator variables for the panels. However, unconditional fixed-effects estimates are biased.

You need to estimate dynamic clogit model

Simple example with 4 time periods

The dynamic case

One lag, individual fixed effects, **no other covariates**, logit form:

$$\mathbb{P}(y_{it}|y_{it-1}, \alpha_i) = \frac{e^{y_{it}(\alpha_i + y_{it-1}\delta)}}{1 + e^{\alpha_i + y_{it-1}\delta}}$$

To make the α_i **vanish**, you need to condition on

- y_{i1} and y_{i4}
- $y_{i2} + y_{i3} = 1$

With this particular conditioning, you need to consider the two sets of events:

- $A = \{y_{i1}, y_{i2} = 0, y_{i3} = 1, y_{i4}\}$
- $B = \{y_{i1}, y_{i2} = 1, y_{i3} = 0, y_{i4}\}$

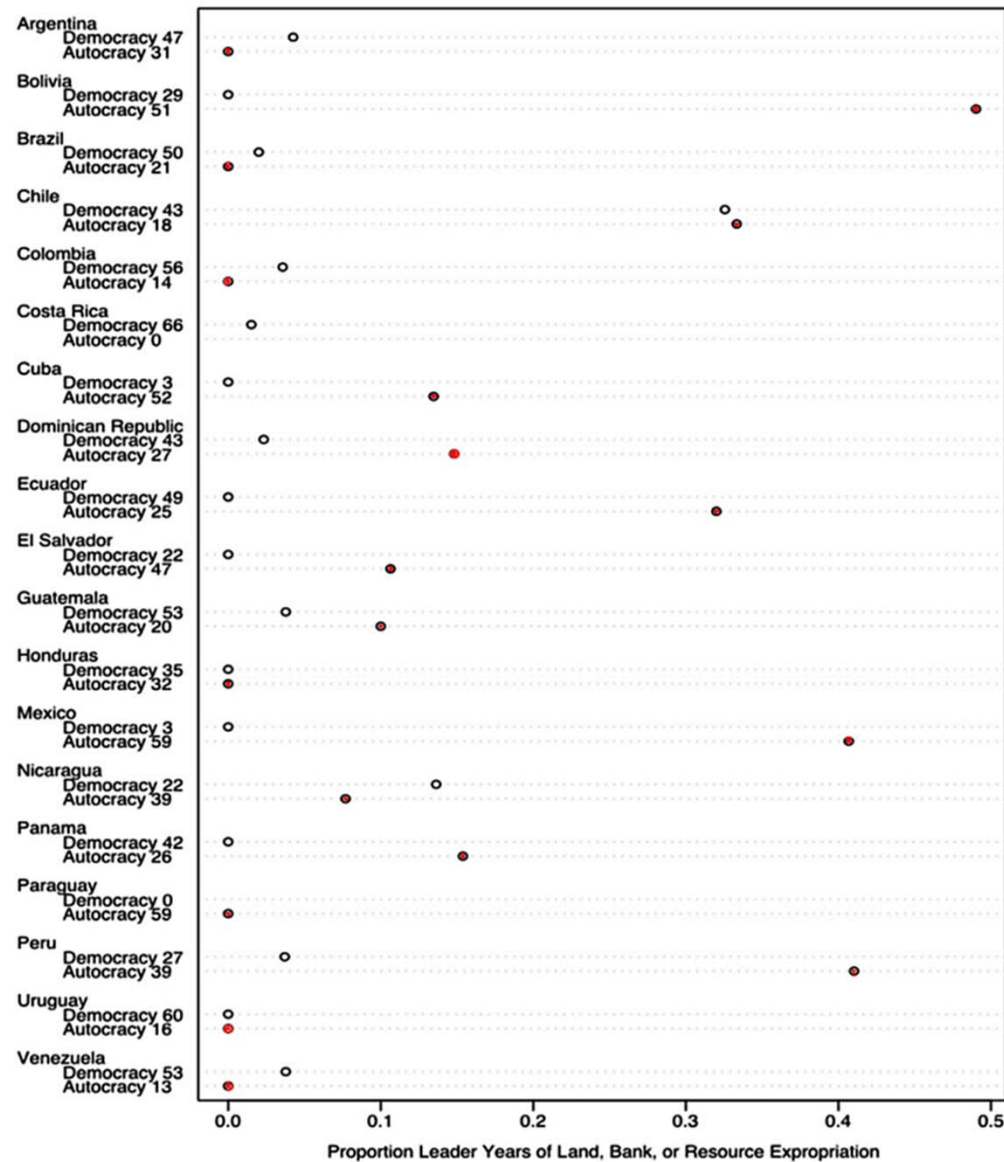
Some broad theoretical points

You are totally correct!

Economic elites should fear
expropriation-happy autocrats.

And they should especially fear
them in highly unequal countries.

Redistribution of land, natural resources & capital in Latin America, 1950-2003



Heck, elites should even fear redistribution under relatively equal autocracies

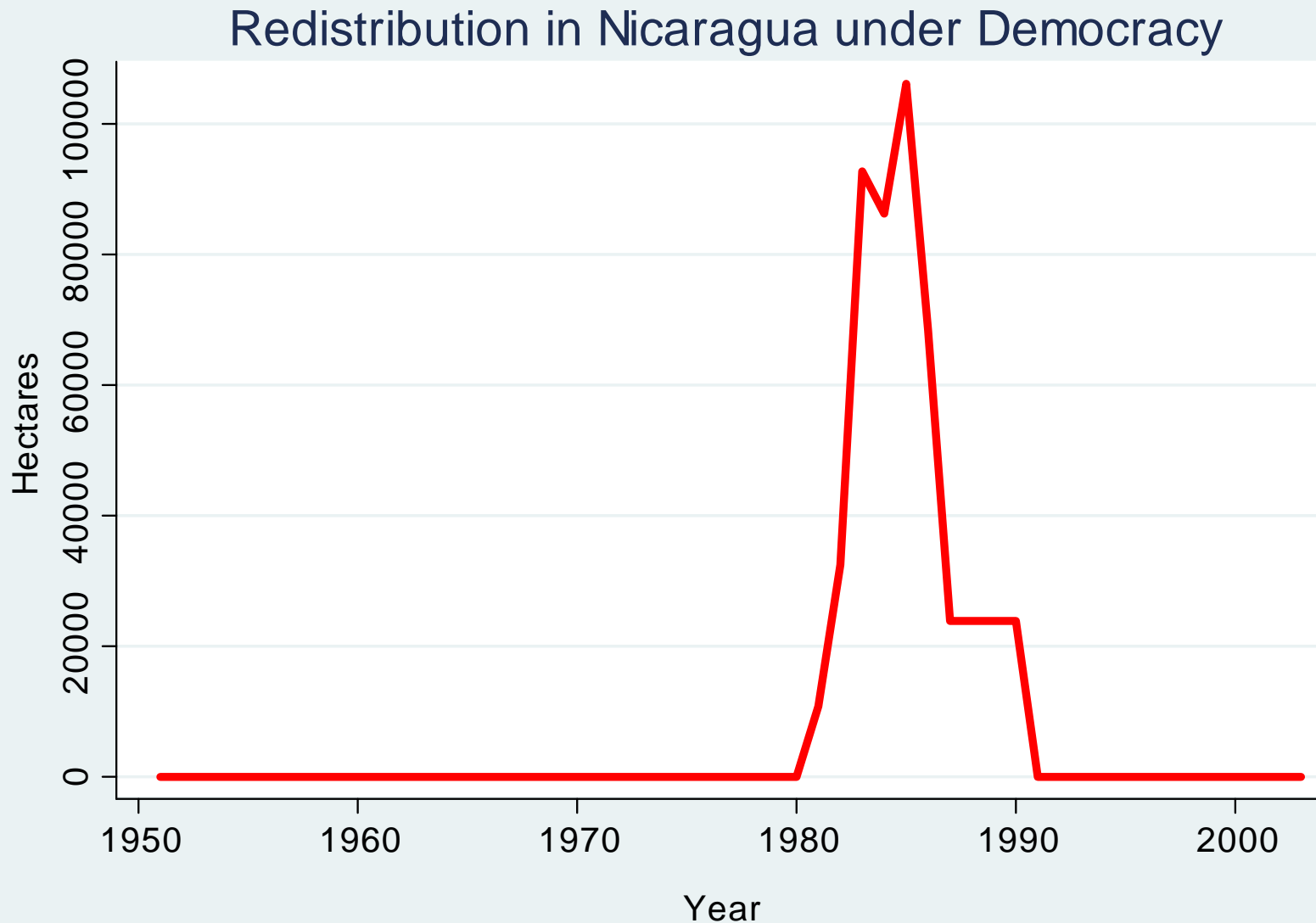
- Soviet Revolution in 1917
- Egypt under military dictatorship after monarchical rule in 1952
- Scores of examples during the late 1940s and early 1950s for East Asia, including Taiwan, Vietnam, Sri Lanka, Indonesia and the Philippines
- Robert Mugabe's expropriation of white landlords in Zimbabwe

But elites may have conflictive fears

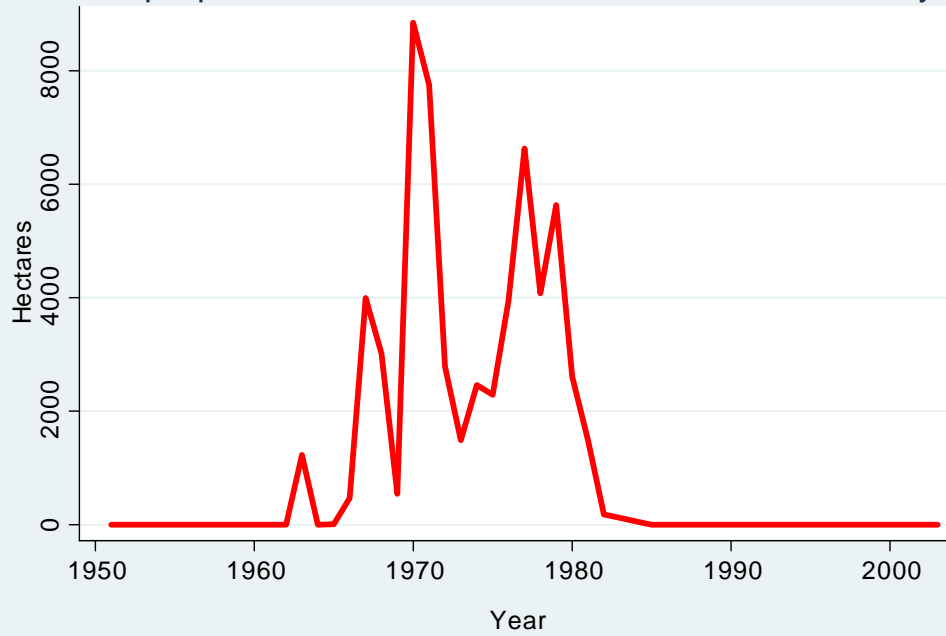
Economic elites should sometimes fear redistribution under democracy.

Especially when populists are elected in highly unequal countries.

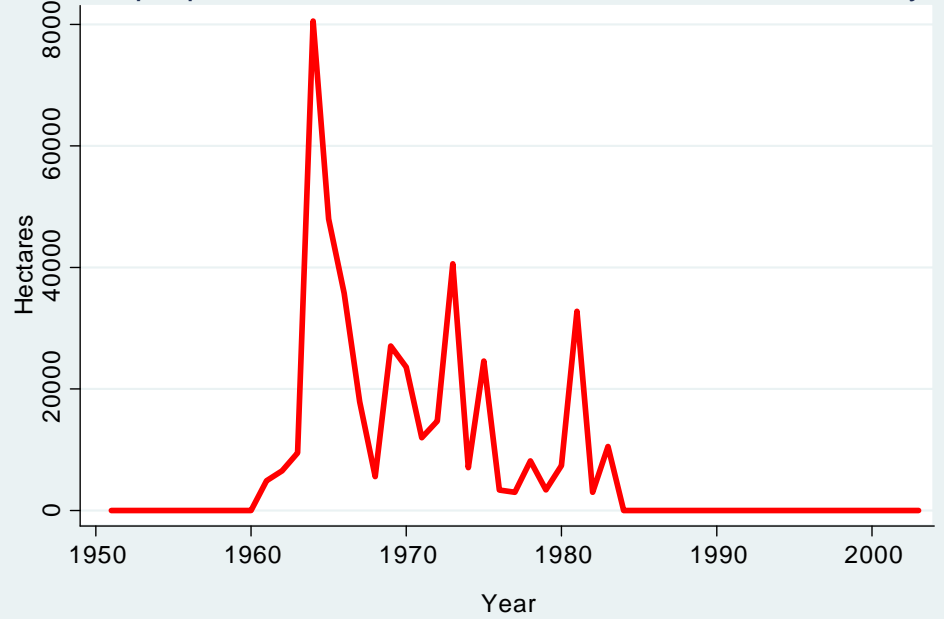
Somoza oligarchy expropriated



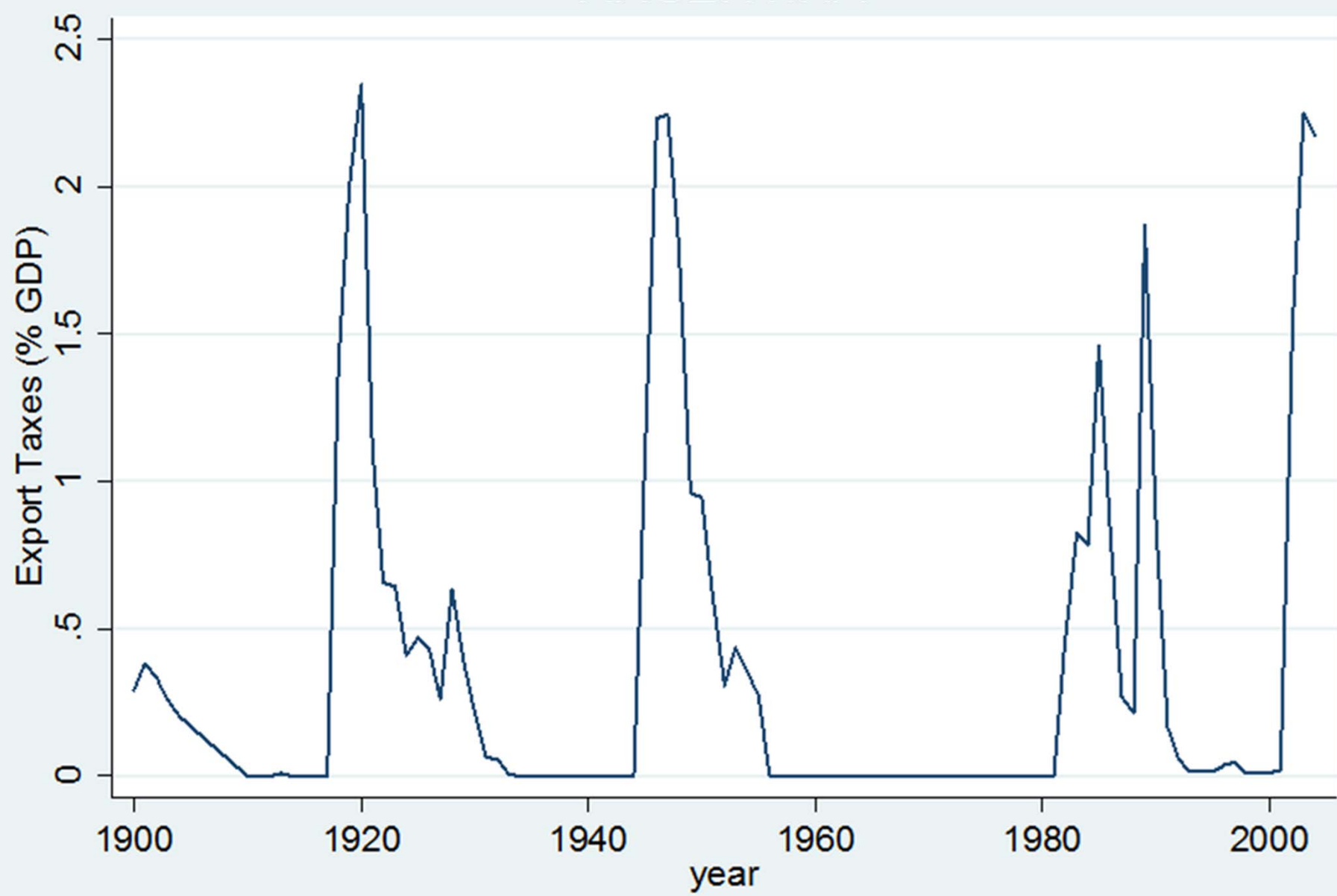
Expropriation of Land in Colombia under Democracy



Expropriation of Land in Venezuela under Democracy

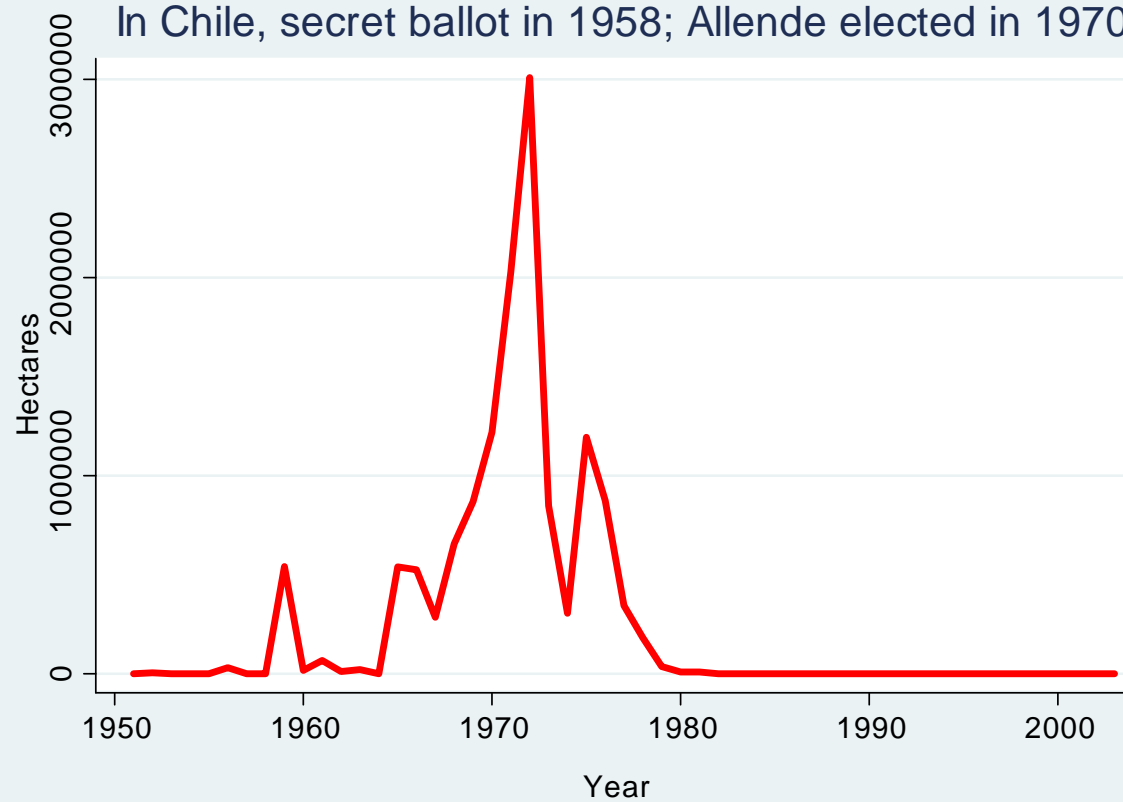


ARGENTINA





In Chile, secret ballot in 1958; Allende elected in 1970



Other redistribution adopted by Allende

- Expropriated private copper mines without compensation.
- Nationalized country's banks & more than 150 firms, including over 50% of Chile's largest.
- Labor & peasants took over factories & farms.

In other words, these guys aren't totally nuts!

- **Plato:** “[democrats] rob the rich, keep as much for themselves and distribute the rest to the people.”
- **Madison:** “[democracy ushers in] abolition of debts, an equal division of property and any other improper or wicked projects.”
- **Adams:** “rule by the masses leads to heavy taxes on the rich in the name of equality.”
- **Aristotle and Tocqueville** agree.

*Should elites always fear
dictatorship under conditions of
high inequality?*

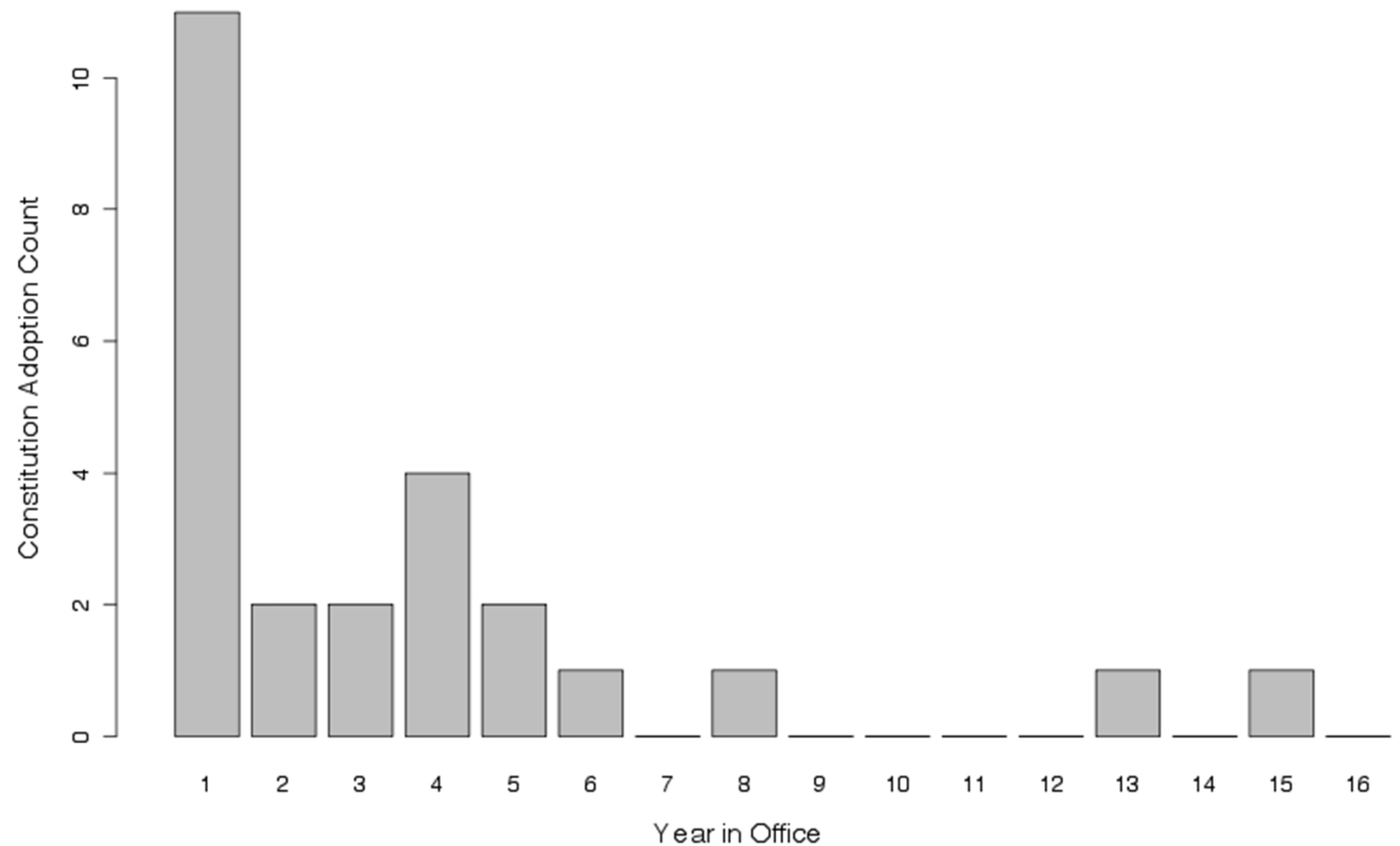
No

Economic elites should NOT fear
autocracy when they can
effectively constrain a dictator

This can happen via either formal
institutions or informal ones

“Dictators as Founding Fathers” *Economic & Politics* 2012 (w/Mike Albertus)

Figure 1. Timing of Constitutional Adoption by Dictators in Latin America, 1950-2002



“Constitutioned” Autocracies = greater protection of property rights

Table 3: Autocratic Constitutions and Property Rights Protection in Latin America, 1950-2002
(Dependent Variable: Contract Intensive Money)

	Model 1	Model 2	Model 3	Model 4
Autocratic Constitution	10.339*	6.908**	5.476*	4.952*
	(4.876)	(3.161)	(2.763)	(2.811)
log(GDP Per Capita)	21.621**	-5.137	-1.332	-1.392
	(9.682)	(14.213)	(13.739)	(13.587)
Growth Rate	-0.123	0.197	0.222	0.232
	(0.166)	(0.173)	(0.170)	(0.166)
Civil War	6.441	-0.522	-1.197	-0.925
	(7.672)	(5.918)	(5.586)	(5.575)
Resources Income Per Capita	1.694	-2.393	-2.520	-2.272
	(6.837)	(7.327)	(7.148)	(7.236)
Coup Count	4.650***	2.224**	2.647***	2.675***
	(0.797)	(0.838)	(0.869)	(0.889)
Military Regime			-8.007	-7.854
			(4.625)	(4.616)
Legislature				0.719
				(0.775)
Year Effects	NO	YES	YES	YES
Country Fixed Effects	YES	YES	YES	YES
Observations	386	386	386	386
R-Squared	0.820	0.881	0.888	0.888

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$ (two-tailed)

All independent variables lagged except Constitutions, Military Regime, and Legislature. Robust standard errors clustered by country in parentheses. Constants estimated but not reported.

“Constitutioned” Autocracies = higher private investment

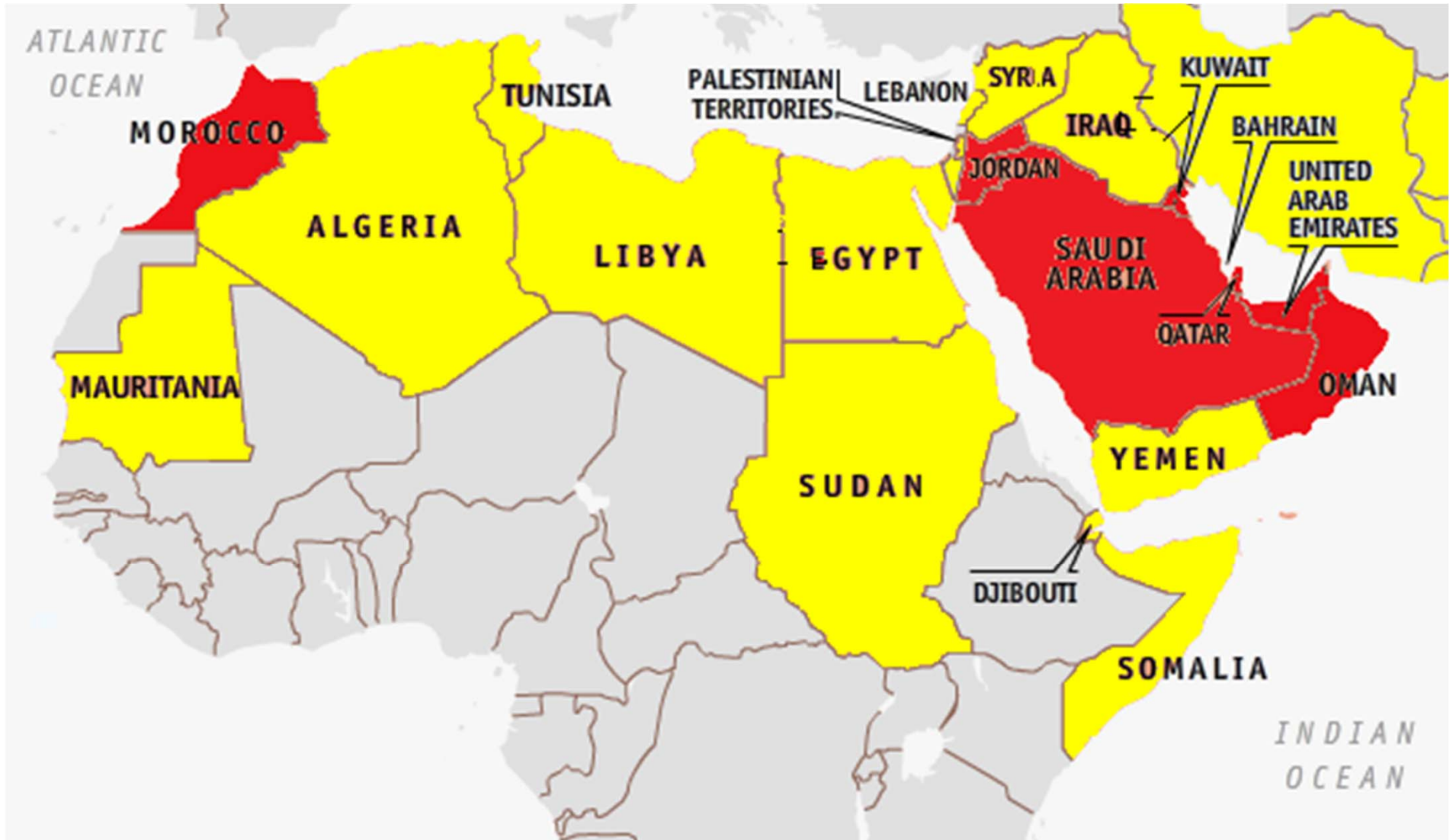
Table 4: Autocratic Constitutions and Private Investment (%GDP) in Latin America, 1950-2002

	Model 1	Model 2	Model 3	Model 4	Model 5
Autocratic Constitution	2.369*** (0.742)	2.322*** (0.748)	2.749** (0.998)	3.066** (1.359)	2.883* (1.477)
Resources Income Per Capita	0.155 (2.953)	0.173 (3.032)	-0.333 (2.937)	-0.677 (2.931)	-0.701 (2.964)
Coup Count	-1.089 (0.672)	-1.146* (0.621)	-1.122* (0.582)	-1.227* (0.573)	-1.264* (0.596)
Civil War	-3.496*** (0.693)	-3.630*** (0.863)	-3.927*** (0.895)	-3.977*** (0.802)	-3.842*** (0.845)
log(GDP Per Capita)		-0.820 (3.705)	0.480 (3.576)	-1.745 (4.587)	-1.913 (4.602)
Inflation			0.524 (0.532)	0.683 (0.539)	0.659 (0.571)
Military Regime				2.169 (2.146)	2.329 (1.937)
Legislature					0.257 (0.733)
Year Effects	YES	YES	YES	YES	YES
Country Fixed Effects	YES	YES	YES	YES	YES
Observations	220	220	204	204	204
R-Squared	0.552	0.552	0.570	0.577	0.577

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$ (two-tailed)

All independent variables lagged except Constitutions, Military Regime, and Legislature. Robust standard errors clustered by country in parentheses. Constants estimated but not reported.

“MENA’s Resilient Monarchs” *Journal of Politics* 2012



Monarchies = better property rights, higher investment & faster economic growth

Table 4. Testing other Empirical Implications

Ordinary Least Squares (OLS) Pooled Regressions with Driscoll-Kraay Standard Errors (DKSE) and Newey West Adjustment (NW)
Heteroskedasticity and Autocorrelation consistent t statistics in brackets

Dependent Variable	1 <i>QOG Index</i>	2 <i>CIM Ratio</i>	3 <i>Priv. Credit</i>	4 <i>Econ. Growth</i>	5 <i>Econ. Growth</i>
Monarch	0.132	6.194	19.196	1.692	1.648
	[10.93]***	[3.66]***	[6.82]***	[2.28]**	[2.19]**
Economic Growth	0.002	-0.05	-0.405		
	[2.63]**	[0.61]	[3.22]***		
log(Total Fuel Income PC)	0	-1.328	-4.905	-0.238	-0.18
	[0.18]	[3.20]***	[8.85]***	[1.45]	[1.28]
log(Population)	0.035	15.288	13.022		
	[3.97]***	[17.58]***	[10.65]***		
log(Area)	-0.022	-9.583	-7.071		
	[7.08]***	[27.15]***	[8.48]***		
Percent Muslim	0.003	-1.107	0.305		
	[4.34]***	[12.87]***	[2.31]**		
Ethnic Fractionalization	-0.123	-32.203	-5.45	-2.759	-2.547
	[5.99]***	[11.00]***	[0.72]	[1.82]*	[1.47]
log(Per Capita Income)	0.052	16.172	17.973	-0.674	-0.619
	[4.62]***	[17.36]***	[14.60]***	[0.98]	[0.81]
Persian Gulf	-0.044	15.412	-8.224		
	[3.75]***	[6.69]***	[3.13]***		
Democracy	0.017	0.758	-38.054	1.283	1.293
	[0.98]	[0.33]	[10.08]***	[1.71]	[1.73]
Government Spending				-0.086	-0.08
				[3.41]***	[3.26]***
Trade Openness				-0.001	-0.001
				[0.10]	[0.15]
Consumption % GDP					0.011
					[0.38]
Constant	-0.493	-112.57	-278.204	8.359	7.177
	[3.33]***	[14.49]***	[12.80]***	[1.42]	[0.90]
Observations	429	775	417	786	786
Countries	19	19	19	19	19
r-squared	0.48	0.65	0.55	0.03	0.04

* significant at 10%; ** significant at 5%; *** significant at 1%

This analysis is conducted on the MENA between 1950 to 2006.

These are pooled regressions estimated via OLS with DKSE to address heteroskedasticity and spatial correlation. A NW adjustment of the error term with a one lag length is made to address first-order serial correlation. Results robust to Panel Corrected Standard Errors with Prais-Winsten Transformation (AR1); robust to a two-stage Treatment Effects, Instrumental Variables (2S TE-IV) Model instrumenting Monarch with Agricultural Legacy.

Logical & Empirical Implications

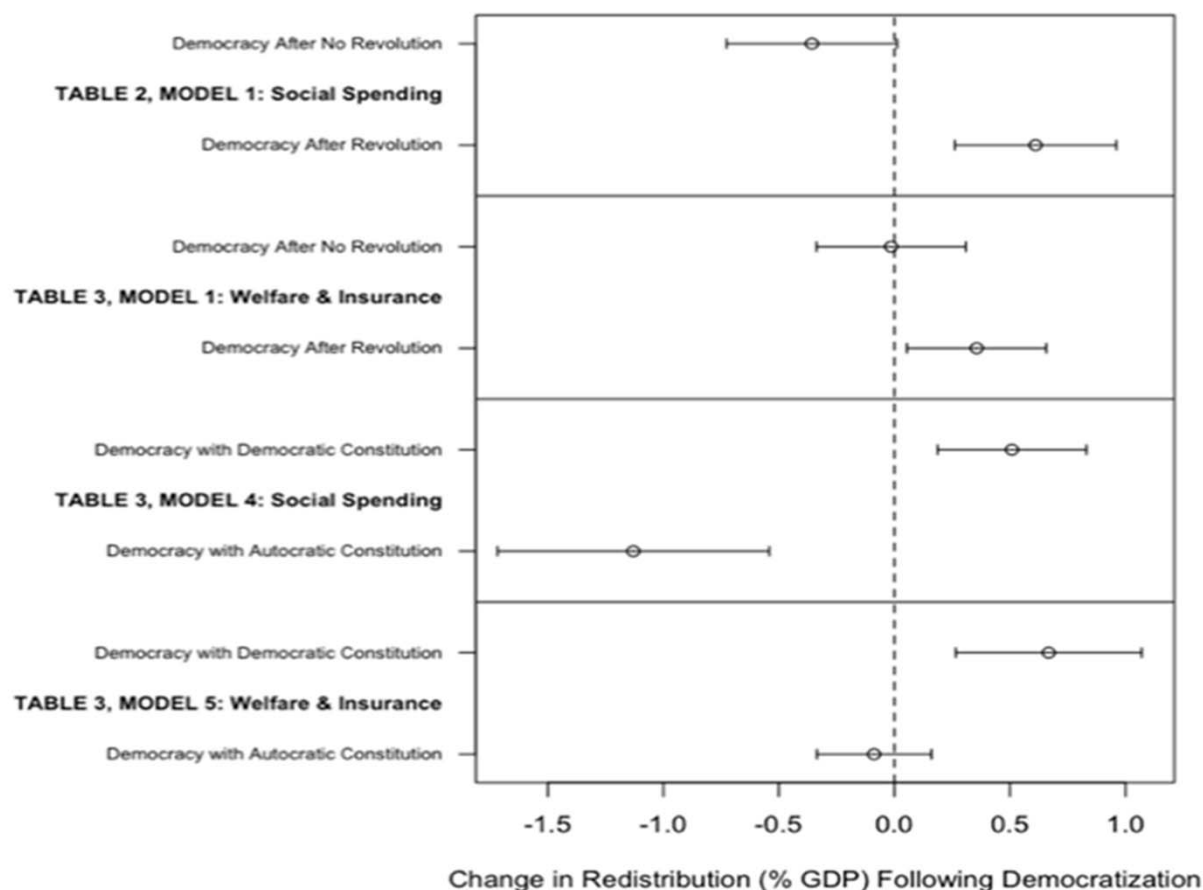
Elites may be fearful of either poor under democracy or predatory dictator.

Therefore, first preference is regime that protects them against BOTH threats.

Democracy that puts checks on arbitrary executive authority AND reduces incentives to soak rich.

“Gaming Democracy” British Journal of Political Science [forthcoming] (w/Mike Albertus)

Figure 1. Democratic Transition and Predicted Redistribution by Transition Conditions



Notes: Figure 1 shows the point estimates and 90 percent confidence intervals for the variables indicated on the left-hand side. Predictions are based on the models indicated. The dashed line indicates the excluded baseline category of autocracy. The type of redistribution, whether Social Spending (% of GDP) or spending on Welfare and Insurance (% of GDP), is listed along with the model numbers.

The reason: overrepresentation of elites

Table 4. Panel Estimation of Determinants of Elite-biased Measures under Democracy

Dependent Variable is Elite-biased Measure
Robust t-statistics in brackets

Dependent Variable	(1)	(2a)	(2b)	(3)	(4)	(5)
SPECIFICATION	<i>PR</i>	<i>ERLC-Right</i>	<i>ERLC-Center</i>	<i>Military Size</i>	<i>MUNI</i>	<i>AUT</i>
	Probit	Multinomial	Logit	OLS	Ordered Logit	Probit
Democracy with Autocratic Constitution	0.782	0.326	-0.684	0.449	-1.199	-0.814
	[11.30]***	[2.54]***	[3.91]***	[6.41]***	[8.59]***	[9.72]***
All Democracies	0.03	-0.291	-1.125	-0.43	1.61	0.825
	[0.52]	[1.11]	[5.30]***	[6.34]***	[25.14]***	[11.68]***
Revolution	0.138	-0.916	-1.303	0.169	0.209	0.26
	[1.72]*	[5.03]***	[6.58]***	[4.58]***	[2.17]**	[2.16]**
log(Per Capita Income)	0.041	0.299	-0.661	0.27	-0.17	0.838
	[0.90]	[2.35]**	[4.22]***	[9.49]***	[2.44]**	[18.46]***
log(Natural Resources Income PC)	-0.102	-0.004	0.229	0.087	0.009	-0.232
	[6.44]***	[0.11]	[6.95]***	[11.90]***	[0.48]	[13.06]***
Manufacturing Value Added	0.036	-0.07	-0.055	0.006	0.059	-0.025
	[6.20]***	[5.01]***	[7.26]***	[3.10]***	[11.25]***	[3.48]***
log(Population)	-0.032	0.005	0.12	-0.083	-0.162	0.247
	[1.30]	[0.07]	[2.13]**	[2.73]***	[8.24]***	[10.64]***
Trade Openness	-0.007	-0.003	0.004	0.001	-0.009	-0.005
	[16.64]***	[1.32]	[2.14]**	[3.98]***	[14.68]***	[7.74]***
Old Age Ratio	0.12	-0.054	0.07	0.023	0.195	-0.16
	[19.30]***	[1.96]**	[3.47]***	[2.75]***	[14.37]***	[21.66]***
log(Wheat Sugar Ratio)	-0.037	0.111	0.072	0.043	-0.069	0.244
	[3.38]***	[3.11]***	[2.16]**	[6.04]***	[6.89]***	[24.54]***
MID Count				0.008		
				[5.88]***		
International War Count				0.041		
				[10.67]***		
Non-linear time-trends	YES	YES	YES	YES	YES	YES
Observations	2427	2000	2000	3162	2071	1248

* significant at 10%; ** significant at 5%; *** significant at 1%

Notes: Intercept estimated but not reported. Results robust to controlling for region dummies; linear, quadratic and cubic time trends estimated but not reported. Regressions estimated via Maximum Likelihood: standard errors clustered by year; OLS Regressions estimated using Driscoll-Kraay robust standard errors with a Newey West correction for serial correlation. All controls starting with log(Per Capita Income) lagged by one period.

What's worse for elites?

- Autocracy without checks on executive authority?
- Democracy without curbs on majority rule?

Redistributive approach and Contractarian approach not irreconcilable

- Untrammelled autocracy & untrammelled democracy both quite bad for elites!
- Under “right” conditions elites can prevent either extreme.
- Myriad institutions → allow them to coordinate to protect their interests.
- Redistributive threat under either dictatorship or under democracy moderated by institutions.