Online Appendix

A   Replication Materials

Data and code to replicate all results from the main paper and this supplementary appendix can be found at `https://github.com/ausmani23/longmarch`. Details on how to run the code are available at the repository itself.

B   Robustness Checks

As illustrated in Figure 2, we conducted a wide array of robustness checks. For reference, Figure 2 displays the statistical significance of all relevant covariates under all the alternative models we considered. For sake of brevity, we here focus on the robustness of our key result: the impact of prolonged unarmed mobilization on democratic deepening.

In total, we consider 21 alternative models, meaning that there are 63 total estimates to consider (i.e., one for each dependent variable). To summarize, it is only in 8 cases that our key hypothesis is not statistically significant at $\alpha = 0.10$ or below. In all 8 of these cases the sign remains positive, and we have strong reasons to prefer the specification we discuss in the main paper.

One set of robustness checks examines our choice of independent variable. We found no evidence that our estimates are driven by campaigns of outlying length. Estimates are unchanged when we drop the longest campaign in our sample (South Africa in 1994), or when we use the natural log of campaign length. One might argue that strength of a movement is better approximated by considering years in which movements exist but do not actively mobilize (as in Poland's Solidarity, mid 1980s), so we constructed an alternative coding scheme that counts both years of public protest as well as years of organizing or abeyance. We also constructed an alternative measure of pre-transition mobilization which codes all violent and nonviolent campaigns during the 20th century (Chenoweth and Lewis 2013). In both cases, our key estimates remain statistically significant at conventional levels. Separately, we replaced our measure of the duration of mobilization with a dummy variable denoting the existence of a campaign ('Campaign Dummies'). Here we find that the simple existence of a nonviolent campaign is not a consistently significant predictor of deepening in all five democratic dimensions, even though estimates are still all positive. This result thus affirms the importance of measuring not just the presence of contention but also its duration.

The removal or addition of other controls leaves results unchanged, with a single exception. When we employ a sparse specification and retain our truncated sample, we find that our estimate of the impact of unarmed mobilization on egalitarian democracy is positive but not statistically significant. When we use the same specification on a larger and more diverse sample, the estimate is statistically significant. Otherwise, results are unchanged. The inclusion of four lags (rather than one) of the dependent variable makes no difference to our preferred specification, suggesting that a single lag captures the dynamic behavior of these series reasonably well. Neither do our results seem to be driven by measures of a country's membership in international governmental organizations, or the proportion of a country's trade conducted with the US, the EU, China or Russia. These results suggest that the coincidence of sustained mobilizations and democratic deepening is not an artifact of international linkages. Nor does it matter how we modify the set of pre-transition controls we include: whether we add a measure of state fiscal capacity or alternative measures of state repressiveness or permissiveness towards civil society.

The results are also robust to including all post-WWII transitions from before 1950, or to excluding all transitions that we have not had much time to observe (i.e., those which happened after 2000). We also ran the models using an alternative measure of democracy (Cheibub, Gandhi, and Vreeland

2010) to define our universe of cases; each of the estimates is positive and statistically significant. Finally, as discussed already, we also estimate specifications which include country fixed-effects. In the first ('Dem. Years, Country Fixed Effects' in Figure 2), we replace the random-effects in our preferred model with fixed effects, but change nothing else. While all estimates are still positive, they are also generally more imprecise— significant in the deliberative dimension, but not in the egalitarian or participatory dimensions. Given the absence of within-country variation in our key independent variable, this imprecision is not surprising. For this reason, we also estimate country fixed-effects models on an expanded sample (all years for all countries in our sample, whether democracies or dictatorships). In effect, these models ask: over the post- WWII world, were countries which experienced sustained unarmed mobilizations more democratic during the subsequent democratization episode than when dictatorships or when in democratic episodes which were preceded by shorter or negligible contentious mobilizations? These models are very similar to those estimated by Haggard and Kaufman (2016: Chp. 5) The estimated impact of mobilization on participatory democracy is statistically significant. It is positive though still not significant in the case of egalitarian democracy.

C   Long-Run Multiplier

As is well-known, the specification described in the main text permits the calculation of both immediate (or short-run) effects on the dependent variable, as well as persistent (or long-run) effects. As (De Boef and Keele 2008: pp.191-192) explain, calculating the standard error of this long-run estimate is not straightforward, since the long-run multiplier is the ratio of two (or more) coefficients. It is possible to directly estimate this uncertainty using the Bewley transformation. It is also possible to estimate it by simulation, which is how we proceeded in this paper. We simulated 10,000 draws from the relevant variance-covariance matrix (adjusted for clustering at the country level), and calculated a distribution for the long-run multipliers of interest. We calculate a 95% confidence interval for the estimate by computing the 2.5th and 97.5th percentiles of this distribution. This is our preferred gauge of uncertainty, which is why we report confidence intervals rather than standard errors.

D   Counterfactuals

D.1   Predictions

To generate predictions from the model discussed in the text, we had to account for the inclusion of a lag of the dependent variable on the right-hand side of the Model described in the main text. Predicted values at time t enter as regressors for predictions at time $t + 1$, which requires that predictions be generated sequentially rather than all at once. To do this, we looped through each democratic spell and counterfactual, and predicted outcomes sequentially for all years that this spell entered our regression sample. This approach is very similar to that used by Lin and Tomaskovic-Devey (2013) in their analysis of financialization and inequality, except that they estimate error-correction models, whereas here we have estimated auto-regressive distributed lag models.

We make some effort to capture the standard errors associated with this prediction. After all, the β's are not at all quantities about which we are certain, and so neither are any derivative predictions. We estimate the errors associated with these predictions by drawing 100 samples from $N(\beta, \Omega)$, where β is the vector of coefficient estimates, and Ω is the associated variance-covariance matrix. This follows the recommendations of King, Tomz, and Wittenberg (2000).

Note that because we fit the random-effects model by transforming the data first (using the `plm` package in R), we do not have estimates of the country-specific intercepts. These fall into the error term. As a result, these terms do not figure in our predictions, or in the associated estimates

of uncertainty. This is not ideal, but it suffices for our purpose here, which is to illustrate the magnitude of the impact of mobilization implied by our estimates.

D.2 Counterfactual Trajectories

As we mention in the main text, even in a world in which all transitions were stage-managed, elite-driven affairs, democracies would have made progress. In other words, even as mass mobilization had a discernible, significant impact, other factors certainly mattered alongside. This invites estimates of the *share* of progress due to mass mobilization. Would democracies have progressed more-or-less as much as in a quiescent world as in a mobilized one? This is another way of asking whether mass mobilization *really* mattered.

One can estimate the share of progress due to mobilization in two ways: either by gauging the extent to which progress would have been muted in a quiescent world, or the extent to which it would have been amplified in a world filled with mass mobilizations. We calculated the first by measuring progress made under quiescence as a percentage of the progress made in the observed world, and subtracting from 100. We calculated the second by measuring the additional progress made in a world of mass mobilization as a percentage of progress made in the observed world, and subtracting 100. Figure 3 illustrates both, ten years out from transition.[1] The left-hand panel illustrates the percentage of average democratic progress that would have vanished in the absence of mobilizations ('Losses from Quiescence'), while the right-hand panel illustrates the additional progress witnessed in a universe of mass mobilizations ('Gains from Mobilization'). Again, the overall lesson is the same: progress due to mobilization is far from trivial in any of the three dimensions. By either measure, mobilization accounts for anywhere from 15% to almost 60% of the progress made after transition.

---

1. These quantities can be calculated any number of years after transition, so this choice of ten years is arbitrary. (Recall that we observe democratic spells for varying amounts of time after transition, either because they fell back into dictatorship or because they transitioned to democracy at varying remove from the end of our sample in 2010. As a result, the number of democracies observed falls in proportion to years elapsed.) We choose to summarize progress after ten years because this is the median length of all democratic spells. Results are not substantively different if a different year is chosen. Note also that, in each scenario, some of the raw progress observed since transition could be a function of the shifting composition of the sample (since democracies predisposed to progress are also probably more likely to stay in our sample). This is not a problem for our discussion in the main text, since there we compare scenarios in which the sample changes in the same way each year. But it could skew interpretation of raw progress (as plotted in Figure 4), so that figure should be interpreted with this caveat in mind.

Table 5: Short-Run Estimates, Main Outcomes

	Deliberative	Participatory	Egalitarian
Lagged Dep. Var			
Deliberative Dimension$_{t-1}$	0.032**		
	(0.004)		
Participatory Dimension$_{t-1}$		0.063**	
		(0.004)	
Egalitarian Dimension$_{t-1}$			0.038**
			(0.002)
Short-Run Impact			
Unarmed Mobilization	0.235**	0.104*	0.050**
	(0.059)	(0.042)	(0.017)
Armed Mobilization	-0.058	-0.002	0.002
	(0.040)	(0.024)	(0.010)
GDP per capita (log)$_{t-1}$	-0.001	-0.049	-0.038
	(0.083)	(0.056)	(0.027)
Growth Rate$_{t-1}$	-0.022	-0.025^{+}	-0.001
	(0.014)	(0.014)	(0.005)
Educational Attainment$_{t-1}$	-0.265**	-0.126*	0.048
	(0.091)	(0.061)	(0.035)
Urbanity$_{t-1}$	0.029	0.068	0.041
	(0.096)	(0.057)	(0.025)
Income Inequality$_{t-1}$	-0.097*	-0.030	-0.034^{+}
	(0.046)	(0.045)	(0.020)
Landlord Power$_{t-1}$	-0.083	-0.064^{+}	-0.059**
	(0.054)	(0.035)	(0.020)
Disruptive Capacity$_{t-1}$	0.065^{+}	0.085**	0.013
	(0.040)	(0.030)	(0.010)
Oil Production per capita$_{t-1}$	0.147**	0.102**	0.057**
	(0.030)	(0.028)	(0.018)
Population (log)$_{t-1}$	-0.113*	-0.088**	-0.077**
	(0.051)	(0.030)	(0.024)
Globalization$_{t-1}$	0.078*	-0.032	0.011
	(0.035)	(0.033)	(0.010)
Colonial Duration	0.020	-0.127**	-0.019
	(0.055)	(0.048)	(0.022)
Democratic Experience	0.171**	0.034	0.019
	(0.050)	(0.046)	(0.019)
Excluded Population$_{t-1}$	-0.062	-0.072*	-0.004
	(0.045)	(0.036)	(0.007)
Ethnic Fractionalization	0.094	0.046	0.001
	(0.063)	(0.039)	(0.012)
Post-Military Rule	-0.105	-0.016	0.018
	(0.110)	(0.091)	(0.039)
Post-Personalistic Rule	0.055	-0.013	0.026
	(0.109)	(0.062)	(0.031)
Post-Party Rule	0.383**	0.108	0.048
	(0.107)	(0.072)	(0.039)
Civil Society Pre-Mob.	0.052	0.176**	0.010
	(0.055)	(0.046)	(0.020)
Civil Liberties During Mob.	-0.064	-0.064^{+}	0.010
	(0.053)	(0.038)	(0.017)
Deliberative Dimension (Reg. Avg.)$_{t-1}$	0.060		
	(0.056)		
Participatory Dimension (Reg. Avg.)$_{t-1}$		0.104	
		(0.080)	
Egalitarian Dimension (Reg. Avg.)$_{t-1}$			0.069*
			(0.031)

This table reports short-run estimates from our preferred models. In models which include lags of the dependent variable, short-run estimates are not useful gauges of practical significance (i.e. effect size), and the statistical significance of any given estimate is typically identifcal to the statistical significance of the corresponding long-run estimate. For these reasons, we relegate these estimates to the Appendix. Because standard errors for short-run estimates are easy to compute analytically, we report these rather than the confidence intervals reported in 4.

Table 6: Democratic Regimes in Final Sample

	Years When Democracy	% Years in Sample	Unarmed Mob.	Armed Mob.
Albania	1992-2010	58	3	0
Argentina	1974-1976	100	1	0
	1984-2010	93	7	0
Armenia	1992-1994	0	4	0
Azerbaijan	1993-1993	0	3	1
Bangladesh	1991-2007	94	3	0
	2009-2010	0	0	0
Benin	1992-2010	0	1	0
Bolivia	1983-2010	93	8	0
Brazil	1986-2010	92	6	0
Bulgaria	1991-2010	90	2	0
Burundi	1994-1996	0	0	3
	2006-2010	0	0	10
Central African Republic	1994-2003	0	0	0
Chile	1990-2010	90	6	0
Colombia	1959-2010	96	1	0
Congo	1993-1997	0	1	0
Croatia	1992-2010	53	0	0
Czech Republic	1990-2013	42	1	0
Dominican Republic	1963-1963	0	0	0
	1979-2010	94	0	0
Ecuador	1969-1970	100	1	0
	1980-2010	90	0	0
El Salvador	1995-2010	88	0	12
Estonia	1992-2010	53	5	0
Georgia	2005-2010	0	2	0
Ghana	1957-1960	0	4	0
	1970-1972	100	0	0
	1980-1981	100	2	0
	2001-2010	70	0	0
Greece	1975-2010	94	1	0
Guatemala	1996-2010	80	1	32
Guinea-Bissau	2001-2002	0	0	0
	2006-2010	0	0	0
Haiti	1991-1991	100	4	0
	1995-1999	0	0	0
	2007-2010	0	0	1
Honduras	1958-1963	0	0	0
	1972-1972	100	0	0
	1982-2010	93	0	0
Hungary	1991-2010	90	0	0
Indonesia	2000-2010	82	2	0
Kenya	2003-2010	75	2	0
Laos	1954-1959	0	0	7
Latvia	1992-2010	53	5	0
Lebanon	2006-2010	0	1	0

Lesotho	1966-1970	0	0	0
	1994-2010	41	1	0
Liberia	2006-2010	0	0	4
Lithuania	1992-2010	53	4	0
Macedonia	1992-2010	0	0	0
Madagascar	1994-2009	0	2	0
Malawi	1995-2010	88	1	0
Mali	1993-2010	72	2	0
Mauritania	2008-2008	0	0	0
Mauritius	1969-2010	0	0	0
Mexico	2001-2010	80	0	1
Moldova	1992-2010	53	1	1
Mongolia	1994-2010	88	1	0
Montenegro	2007-2010	0	0	0
Myanmar	1961-1962	0	0	0
Nepal	1992-2002	100	1	0
	2007-2010	0	3	10
Nicaragua	1991-2010	70	0	11
Niger	1994-1996	0	2	0
	2000-2010	0	3	0
Nigeria	1961-1966	0	2	0
	1980-1983	0	0	0
	2000-2010	0	3	0
Pakistan	1972-1975	75	3	0
	1989-1999	100	0	0
	2009-2010	0	1	0
Panama	1953-1953	0	3	0
	1956-1968	0	0	0
	1990-2010	90	0	0
Paraguay	1994-2010	88	0	0
Peru	1957-1962	100	0	0
	1964-1968	100	0	0
	1981-1992	100	3	0
	2002-2010	78	1	0
Philippines	1987-2010	92	4	18
Poland	1990-2010	90	6	0
Portugal	1977-2010	94	3	0
Romania	1991-2010	90	2	1
Russia	1992-1993	0	5	0
Senegal	2001-2010	80	0	0
Serbia	2001-2010	0	4	0
Sierra Leone	1962-1967	0	3	0
	1997-1997	0	0	6
	1999-2010	25	0	8
Slovakia	1993-2010	6	3	0
Slovenia	1992-2010	26	0	0
Somalia	1961-1969	0	5	0
South Africa	1995-2010	88	13	7
South Korea	1961-1961	100	1	0
	1988-2010	91	2	0
Spain	1978-2010	94	6	11

Sri Lanka	1995-2010	88	0	19
Sudan	1956-1958	0	0	0
	1966-1969	25	1	5
	1987-1989	0	1	4
Syria	1955-1957	0	1	0
	1962-1962	0	0	0
Taiwan	2001-2010	0	0	0
Tanzania	1961-1964	0	0	0
Thailand	1976-1976	100	1	0
	1989-1991	100	0	0
	1993-2006	100	1	0
	2008-2010	33	1	0
Togo	1964-1967	0	0	0
Turkey	1962-1980	100	0	0
	1984-2010	93	0	0
Uganda	1963-1966	0	0	0
Ukraine	1992-2010	53	4	0
Uruguay	1985-2010	92	2	0
Venezuela	1959-2005	100	1	0
Zambia	1965-1967	0	3	0
	1992-1996	100	1	0

Table 7: List of Robustness and Sensitivity Checks

|	Model Detail
(A)	Preferred
(B)	Campaign Dummies
(C)	Log Campaign Length
(D)	Drop Longest Campaign
(E)	Alternative Coding
(F)	NAVCO Coding
(G)	Sparse
(H)	Sparse, All Obs.
(I)	No Pre-Transition Controls
(J)	Pre-Transition Controls, Fiscal
(K)	Pre-Transition Controls, 5-Yr CL
(L)	Pre-Transition Controls, 10-Yr CL
(M)	Pre-Transition Controls, Repression
(N)	Four Lags of Dep. Var.
(O)	World Polity Vars
(P)	Trade Vars
(Q)	Includes Pre-1950 Transitions
(R)	Excludes Post-2000 Transitions
(S)	CGV-Based Spells
(T)	All Years, Country Fixed Effects
(U)	Dem Years, Country Fixed Effects
(V)	Drop Biggest Oil Producer
(W)	Drop Three Biggest Oil Producers
(X)	Sparse, Oil Only

Figure 2: Estimates from Robustness Checks
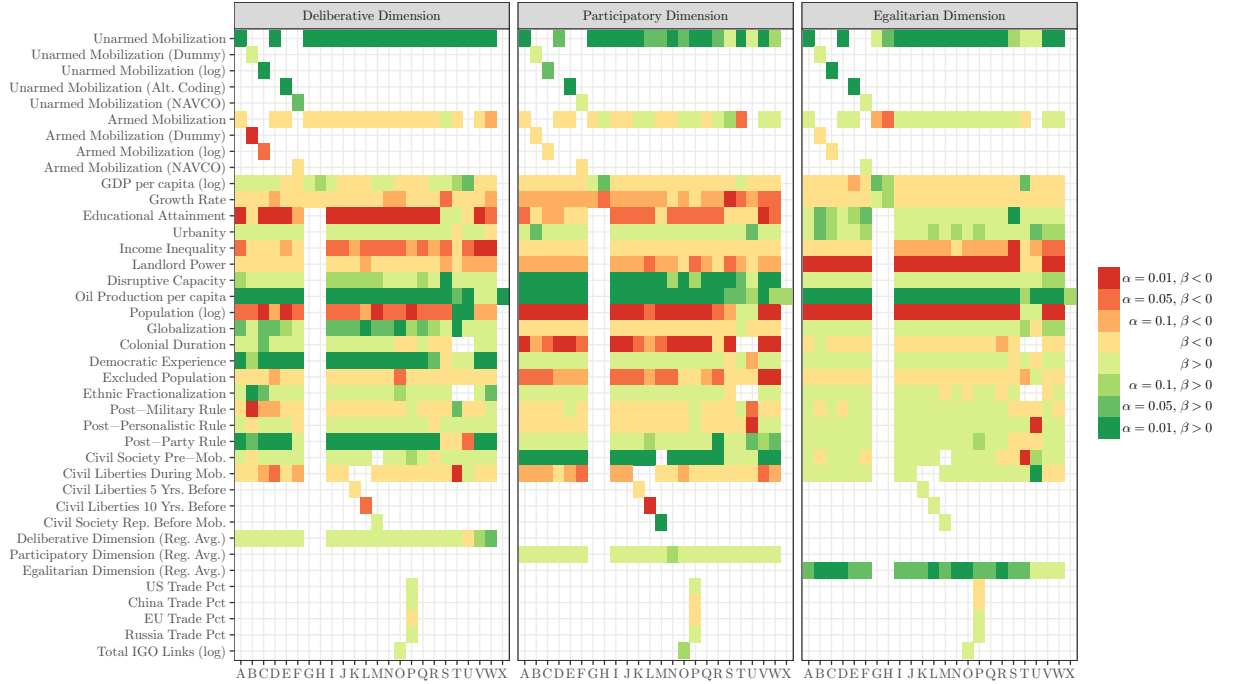
This figure illustrates results from the various robustness checks. The x-axis denotes the robustness check (i.e. model) being considered. Table 7 translates. The y-axis denotes the covariate in question. (Where the tile is empty, this is because the covariate in question is not a part of the model in question.) As we discuss in more detail in Section B, the consistency of our estimates across specifications affirms our confidence in the main inference in this paper: that the length of unarmed mobilization prior to transition predicts subsequent democratic deepening.

Figure 3: Estimated Deepening by Counterfactual
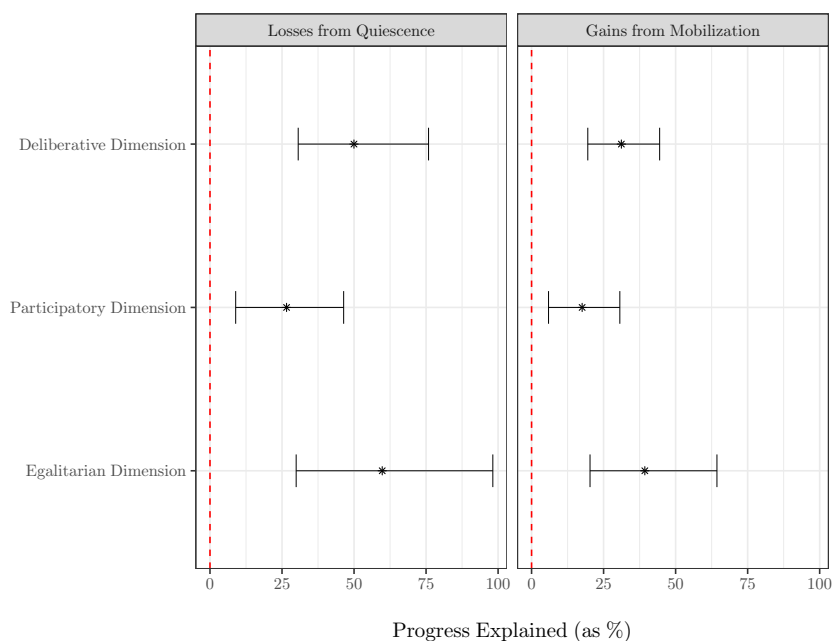
This figure presents two different estimates of the share of democratic deepening after 10 years which can be attributed to mobilization. The left-hand panel plots 'Losses from Quiescence', which are calculated as the progress made under quiescence as a percentage of the progress made in the observed world, subtracted from 100. This can be interpreted as the percentage of democratic deepening forgone in a world without mobilization. The right-hand panel plots 'Gains from Mobilization', which are calculated as the additional progress made in a world of mass mobilization as a percentage of observed progress, subtracting 100. This can be interpreted as the additional deepening that would have been witnessed in a world in which all democracies were detonated by mass mobilization. The points denote our estimate, and the error-bars a corresponding 95% confidence interval.

Figure 4: Predicted Aggregate Trajectories by Counterfactual
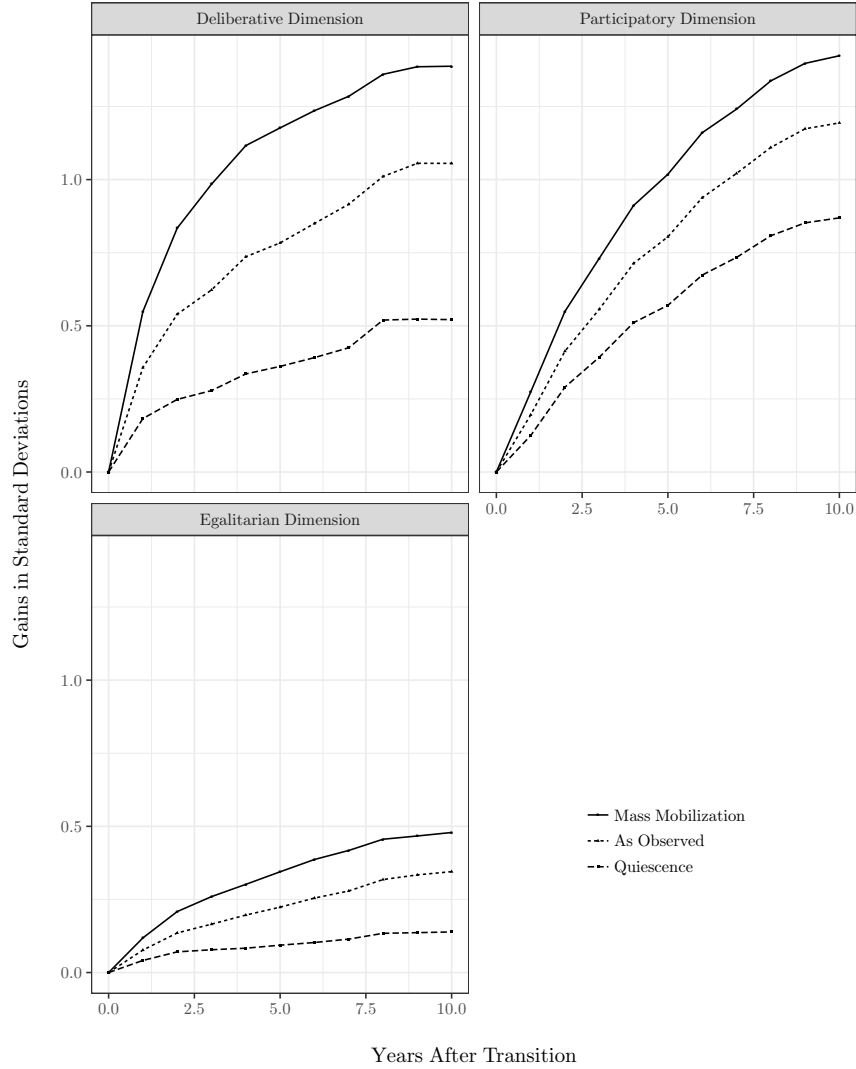
This figure illustrates the predicted gains made after after transition (averaged across all democratic spells) under each of three scenarios: (1) Mass Mobilization ('Unarmed Mobilization' set to 4.3 years); (2) As Observed ('Unarmed Mobilization' left as observed); (3) Quiescence ('Unarmed Mobilization) set to 0 years. (Section D of the Appendix describes our methods and the results in more detail). The y-axis denotes the average gains made in each scenario (in standard deviations of the dependent variable), and the x-axis denotes the number of years that have elapsed since transition. Each line plots the average trajectory under a different scenario.