

**ONLINE SUPPLEMENT TO:**  
**Constrained by the Bank and the Ballot**  
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Table 1: Estimated Interactive Impacts on Repression using OLS

	$\beta$ (r.s.e.)	$\beta$ (r.s.e.)
Fuel Rents	.018** (.009)	–
Oil Exporter	–	.153*** (.047)
Democracy	-.008** (.004)	-.009*** (.002)
UER*Democracy	-.001* (.001)	-.004 (.005)
GDP	-.0000*** (1.77e <sup>-6</sup> )	-.0000*** (1.53e <sup>-6</sup> )
Population	9.10e <sup>-8</sup> * (5.71e <sup>-8</sup> )	1.15e <sup>-7</sup> * (7.34e <sup>-8</sup> )
Dissent	.023** (.010)	.132*** (.010)
War	.458*** (.055)	.449*** (.042)
PTS <sub>t-1</sub>	.699*** (.025)	.704*** (.018)
N	1598	2443
R <sup>2</sup>	.8046	.5582

\*\*\*  $p \leq 0.01$ ; \*\*  $p \leq 0.05$ ; \*  $p \leq 0.1$ , (two-tailed). Dependent variable: PTS. Models estimated via OLS regression. Robust ses (clustered by country) in parentheses.

Table 2: List of Countries in Estimation Sample

Afghanistan	<i>Dominican Rep.</i>	Kyrgyz Rep.	<i>Rep. of Korea</i>
Albania	DR of Congo	<i>Laos</i>	Russia
Algeria	Ecuador	<i>Latvia</i>	Rwanda
Angola	Egypt	<i>Lesotho</i>	Saudi Arabia
Argentina	<i>El Salvador</i>	<i>Liberia</i>	<i>Senegal</i>
Armenia	<b>Eq. Guinea</b>	Libya	<i>Sierra Leone</i>
Australia	<i>Eritrea</i>	Lithuania	<i>Singapore</i>
Austria	<i>Estonia</i>	<i>Macedonia</i>	Slovak Republic
Azerbaijan	<i>Ethiopia</i>	<i>Madagascar</i>	<i>Somalia</i>
Bahrain	<i>Fiji</i>	<i>Malawi</i>	<i>South Africa</i>
Bangladesh	<i>Finland</i>	Malaysia	Spain
Belarus	France	<i>Mali</i>	<i>Sri Lanka</i>
Belgium	Gabon	<i>Mauritania</i>	<i>Sudan</i>
Benin	Gambia	<i>Mauritius</i>	<i>Swaziland</i>
<i>Bhutan</i>	Georgia	Mexico	Sweden
Bolivia	Ghana	<i>Mongolia</i>	Switzerland
Bosnia Herz.	Greece	Morocco	Syria
<i>Botswana</i>	Guatemala	<i>Mozambique</i>	Tajikistan
Brazil	<i>Guinea</i>	Namibia	Tanzania
Bulgaria	<i>Guinea-Bissau</i>	<i>Nepal</i>	Thailand
<i>Burkina Faso</i>	<i>Guyana</i>	Netherlands	<i>Togo</i>
<i>Burundi</i>	<i>Haiti</i>	New Zealand	Trinidad & Tob.
Cambodia	<i>Honduras</i>	<i>Nicaragua</i>	Tunisia
Cameroon	Hungary	<i>Niger</i>	Turkey
Canada	India	Nigeria	Turkmenistan
Central. Af. Rep.	Indonesia	Norway	UAE
<i>Chad</i>	Iran	Oman	<i>Uganda</i>
Chile	Iraq	Pakistan	Ukraine
China	Ireland	<i>Panama</i>	United Kingdom
Colombia	Israel	Papua New Guinea	<i>Uruguay</i>
<i>Costa Rica</i>	Italy	<i>Paraguay</i>	Uzbekistan
Cote d'Ivoire	<i>Jamaica</i>	Philippines	Venezuela
Croatia	Japan	Poland	Vietnam
Cuba	Jordan	Portugal	Yemen
<i>Cyprus</i>	Kazakhstan	<b>Qatar</b>	<i>Zambia</i>
Czech Republic	<i>Kenya</i>	Rep. of Congo	<i>Zimbabwe</i>
Denmark	Kuwait		

NOTE: Bolded in Model 1 only. Italicized in Model 2 only.

Table 3: Estimated Interactive Impacts on Repression using CIRI Physint Measure

	$\beta$ (r.s.e.)	$\beta$ (r.s.e.)
Fuel Rents	.079** (.036)	–
Oil Exporter	–	.458** (.193)
Democracy	-.025* (.015)	-.043*** (.008)
UER*Democracy	-.003 (.003)	.000 (.024)
GDP	-.0001*** (7.60e <sup>-6</sup> )	-.0000*** (6.68e <sup>-6</sup> )
Population	7.94e <sup>-7</sup> *** (2.55e <sup>-7</sup> )	8.76e <sup>-7</sup> *** (2.49e <sup>-7</sup> )
Dissent	.087* (.047)	.137*** (.045)
War	.923*** (.140)	.873*** (.125)
CIRI <sub>t-1</sub>	1.026*** (.052)	.965*** (.039)
N	1601	2291
Pseudo R <sup>2</sup>	.3251	.2957
LPL	-2321.2405	-3447.8475

\*\*\*  $p \leq 0.01$ ; \*\*  $p \leq 0.05$ ; \*  $p \leq 0.1$ , (two-tailed). Dependent variable: CIRI Physint Measure. Models estimated via ordered logit. Robust ses (clustered by country) in parentheses.

Table 4: Estimated Interactive Impacts on Repression using CIRI Physint Measure and OLS

	$\beta$ (r.s.e.)	$\beta$ (r.s.e.)
Fuel Rents	.040* (.022)	–
Oil Exporter	–	.277** (.131)
Democracy	-.017** (.008)	-.027*** (.005)
UER*Democracy	-.001 (.002)	.007 (.013)
GDP	-.0000*** (4.20e <sup>-6</sup> )	-.0000*** (3.14e <sup>-6</sup> )
Population	4.92e <sup>-7</sup> *** (9.76e <sup>-8</sup> )	5.78e <sup>-7</sup> *** (1.02e <sup>-7</sup> )
Dissent	.063*** (.024)	.092*** (.025)
War	.608*** (.095)	.680*** (.089)
CIRI <sub>t-1</sub>	.695*** (.026)	.676*** (.020)
N	1601	2291
R <sup>2</sup>	.7739	.7304

\*\*\*  $p \leq 0.01$ ; \*\*  $p \leq 0.05$ ; \*  $p \leq 0.1$ , (two-tailed). Dependent variable: CIRI Physint Measure. Models estimated via OLS. Robust ses (clustered by country) in parentheses.

Table 5: Estimated Interactive Impacts on Repression using AI-based PTS

	$\beta$ (r.s.e.)	$\beta$ (r.s.e.)
Fuel Rents	.094*** (.036)	–
Oil Exporter	–	.507*** (.200)
Democracy	-.013 (.016)	-.033*** (.009)
UER*Democracy	-.007** (.003)	-.009 (.021)
GDP	-.0001*** (8.15e <sup>-6</sup> )	-.0001*** (7.71e <sup>-6</sup> )
Population	2.56e <sup>-7</sup> (2.49e <sup>-7</sup> )	2.33e <sup>-7</sup> (3.71e <sup>-7</sup> )
Dissent	.083** (.042)	.125*** (.041)
War	1.127*** (.167)	1.067*** (.144)
PTS <sub>t-1</sub>	2.461*** (.130)	2.276*** (.041)
N	1598	2443
Pseudo R <sup>2</sup>	.4657	.4211
LPL	-1294.3934	-2135.6549

\*\*\*  $p \leq 0.01$ ; \*\*  $p \leq 0.05$ ; \*  $p \leq 0.1$ , (two-tailed). Dependent variable: AI-based PTS. Models estimated via ordered logit. Robust ses (clustered by country) in parentheses.

## Alternative Conceptualizations of Democracy

In our article, we argue that repression covaries negatively with democracy because more democracy means more ballot-related constraints. In this context, democracy is a continuous concept and its additive relationship with repression is linear: as democracy increases, abuse should decrease. Differently, some scholars argue that anocracies (i.e., states that are neither fully democratic nor fully autocratic) may be more likely to engage in repression than either fully consolidated democracies or autocracies (e.g., Ellingsen and Gleditsch 1997, Fein 1995, Opp 1994, Regan and Henderson 2002, Vreeland 2008). Thus, there is “more murder in the middle” (MMM) because anocracies lack both the possibility of peaceful collective action that characterizes democracy and the coercive apparatus inherent in autocracy. Democracies do not repress (or repress at lower rates than their less democratic counterparts) because the costs of human rights violations under that institutional context are so large. Autocracies have such a monopoly on coercion that few citizens speak out against the state; because citizens fear the state’s reaction to dissent, repression is unnecessary.

What does this mean for our argument? Our theory engages democracy as a form of constraint; more democracy makes repression increasingly costly. Differently, the MMM thesis suggests that mid-range democracies are the ones that repress, both because they may need to and because they are not constrained by population dependence at the ballot box. In this case, the relationship between democracy and human rights abuse is driven by two factors: constraints (i.e., costs, which we argue impact repression in the same way) and the need to engage domestic threats (i.e., benefits, which we consider independent of costs). Since the theoretical underpinnings of MMM differ from the motivation for our own expectations about regime type, the MMM specification strikes us as a poor way to capture our key concept ‘democracy.’ Nonetheless, we wonder whether incorporating this different conceptualization of regime type will affect our main results. In this online supplement, we specify a non-linear relationship between regime type and repression; the squared polity scale score is statistically significant in both models, and all other results remain as reported.

Another possibility is that ballot constraints are a binary influence on abuse: Perhaps strong democracies are constrained by the ballot, while other states are not. Using a dichotomous indicator of democracy, or splitting our sample across democracies and autocracies, would grant leverage on whether UER increases repression in autocracies but not democracies, and on whether democracy—but not autocracy—reduces repression as UER increases. In this article, however, we develop expectations about modifying relationships rather than directional differences. Thus we are interested in whether (and how) changes in democracy modify the relationship between UER and repression, and in whether (and how) changes in UER modify the relationship between democracy and repression. As a robustness check, in our online supplement we look at three different binary conceptualizations of democracy: a minimalist, binary measure of political regime type from the Democracy-Dictatorship (DD) data first described by Alvarez et al. (1996) and Przeworski, Alvarez and Cheibub (2000) and extended by Cheibub, Gandhi and Vreeland (2010) as well as dichotomization of the Polity IV measure at both 6 and 7. In each case, as shown below, our results are robust to the respecification of democracy.

Table 6: Estimated Interactive Impacts on Repression using  
Binary Polity IV Measure of Democracy  
(Democracy: DEM-AUT  $\geq$  6)

	$\beta$ (r.s.e.)	$\beta$ (r.s.e.)
Fuel Rents	.092*** (.030)	–
Oil Exporter	–	.651*** (.143)
Democracy	-.248 (.237)	-.526*** (.134)
UER*Democracy	-.108** (.055)	-.458 (.351)
GDP	-.0001*** (9.85e <sup>-6</sup> )	-.0001*** (8.87e <sup>-6</sup> )
Population	1.24e <sup>-7</sup> (2.30e <sup>-7</sup> )	2.29e <sup>-7</sup> (2.48e <sup>-7</sup> )
Dissent	.088** (.036)	.112*** (.032)
War	1.431*** (.193)	1.343*** (.149)
PTS <sub>t-1</sub>	2.553*** (.131)	2.483*** (.099)
N	1610	2475
Pseudo R <sup>2</sup>	.5098	.4794
LPL	-1190.7896	-1939.6182

\*\*\*  $p \leq 0.01$ ; \*\*  $p \leq 0.05$ ; \*  $p \leq 0.1$ , (two-tailed). Dependent variable: PTS. Models estimated via ordered logit. Robust ses (clustered by country) in parentheses.

Table 7: Estimated Interactive Impacts on Repression using  
Binary Polity IV Measure of Democracy  
(Democracy: DEM-AUT  $\geq 7$ )

	$\beta$ (r.s.e.)	$\beta$ (r.s.e.)
Fuel Rents	.093*** (.029)	–
Oil Exporter	–	.680*** (.141)
Democracy	-.239* (.257)	-.517*** (.158)
UER*Democracy	-.114** (.058)	-.456 (.357)
GDP	-.0001*** (9.94e <sup>-6</sup> )	-.0001*** (9.06e <sup>-6</sup> )
Population	1.24e <sup>-7</sup> (2.27e <sup>-7</sup> )	2.64e <sup>-7</sup> (2.46e <sup>-7</sup> )
Dissent	.087** (.035)	.108*** (.031)
War	1.424*** (.196)	1.350*** (.147)
PTS <sub>t-1</sub>	2.550*** (.131)	2.487*** (.099)
N	1610	2475
Pseudo R <sup>2</sup>	.5099	.4790
LPL	-1190.5412	-1941.8475

\*\*\*  $p \leq 0.01$ ; \*\*  $p \leq 0.05$ ; \*  $p \leq 0.1$ , (two-tailed). Dependent variable: PTS. Models estimated via ordered logit. Robust ses (clustered by country) in parentheses.



Table 8: Estimated Interactive Impacts on Repression using Minimalist Measure of Democracy

	$\beta$ (r.s.e.)	$\beta$ (r.s.e.)
Fuel Rents	.099*** (.031)	–
Oil Exporter	–	.706*** (.150)
Democracy	-.198 (.247)	-.396*** (.125)
UER*Democracy	-.134** (.057)	-.567* (.351)
GDP	-.0001*** (9.92e <sup>-6</sup> )	-.0001*** (9.04e <sup>-6</sup> )
Population	9.03e <sup>-8</sup> (2.26e <sup>-7</sup> )	1.95e <sup>-7</sup> (2.73e <sup>-7</sup> )
Dissent	.086** (.034)	.106*** (.032)
War	1.434*** (.194)	1.358*** (.144)
PTS <sub>t-1</sub>	2.536** (.034)	2.499*** (.100)
N	1602	2475
Pseudo R <sup>2</sup>	.5098	.4782
LPL	-1185.6844	-1944.1711

\*\*\*  $p \leq 0.01$ ; \*\*  $p \leq 0.05$ ; \*  $p \leq 0.1$ , (two-tailed). Dependent variable: PTS. Models estimated via ordered logit. Robust ses (clustered by country) in parentheses.

Table 9: Estimated Interactive Impacts on Repression including Squared Democracy Term (MMM)

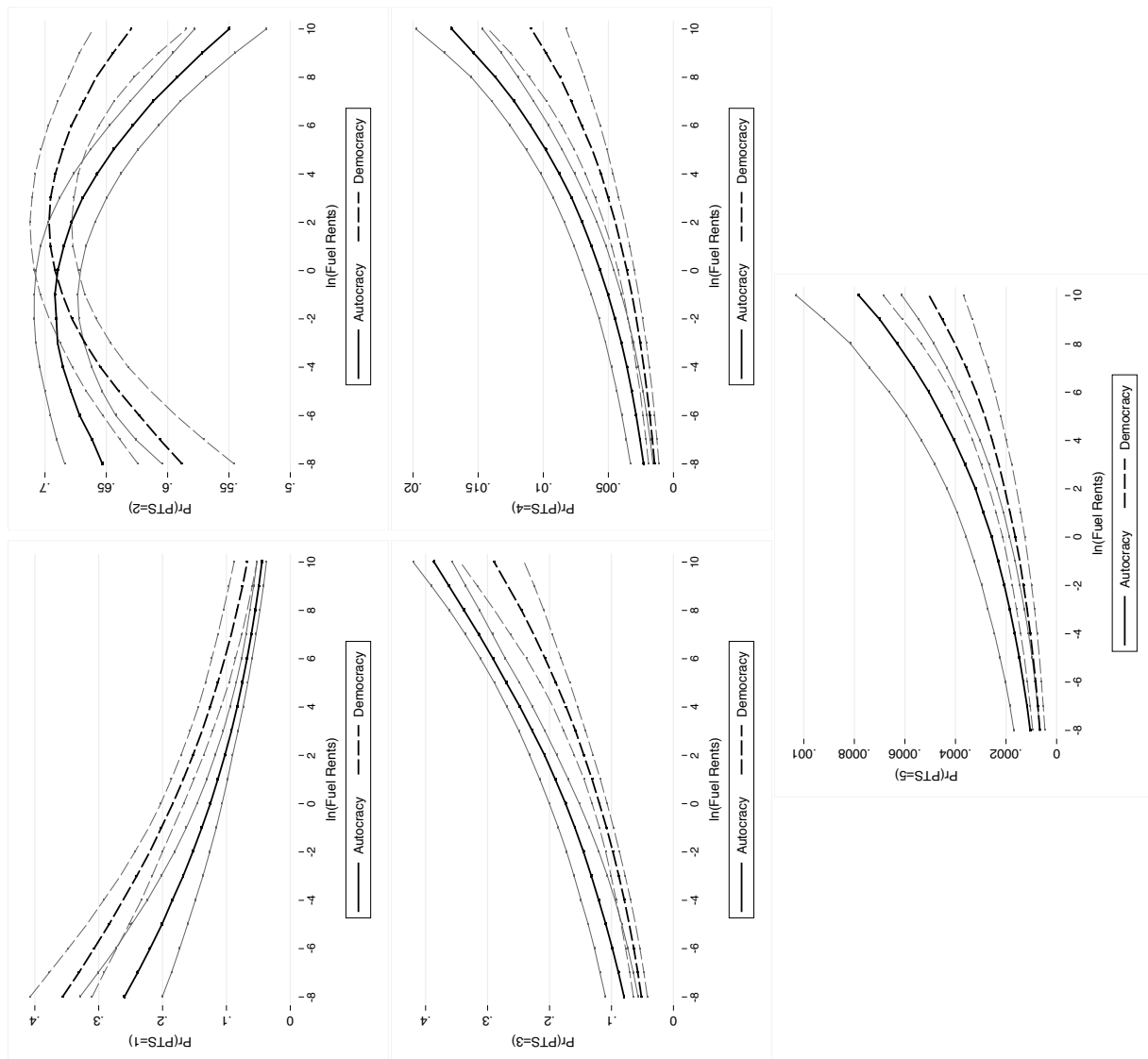
	$\beta$ (r.s.e.)	$\beta$ (r.s.e.)
Fuel Rents	.130*** (.040)	–
Oil Exporter	–	.808*** (.200)
Democracy	.140** (.055)	.151*** (.036)
Democracy <sup>2</sup>	-.008*** (.003)	-.009*** (.002)
UER*Democracy	-.010*** (.004)	-.034 (.022)
GDP	-.0001*** (9.26e <sup>-6</sup> )	-.0001*** (7.30e <sup>-6</sup> )
Population	2.27e <sup>-7</sup> (2.00e <sup>-7</sup> )	4.03e <sup>-7**</sup> (2.04e <sup>-7</sup> )
Dissent	.090** (.038)	.111*** (.034)
War	1.551*** (.203)	1.390*** (.156)
PTS <sub>t-1</sub>	2.482*** (.130)	2.425*** (.099)
N	1598	2443
Pseudo R <sup>2</sup>	.5154	.4847
LPL	-1162.3292	-1887.9704

\*\*\*  $p \leq 0.01$ ; \*\*  $p \leq 0.05$ ; \*  $p \leq 0.1$ , (two-tailed). Dependent variable: PTS. Models estimated via ordered logit. Robust ses (clustered by country) in parentheses.

## References

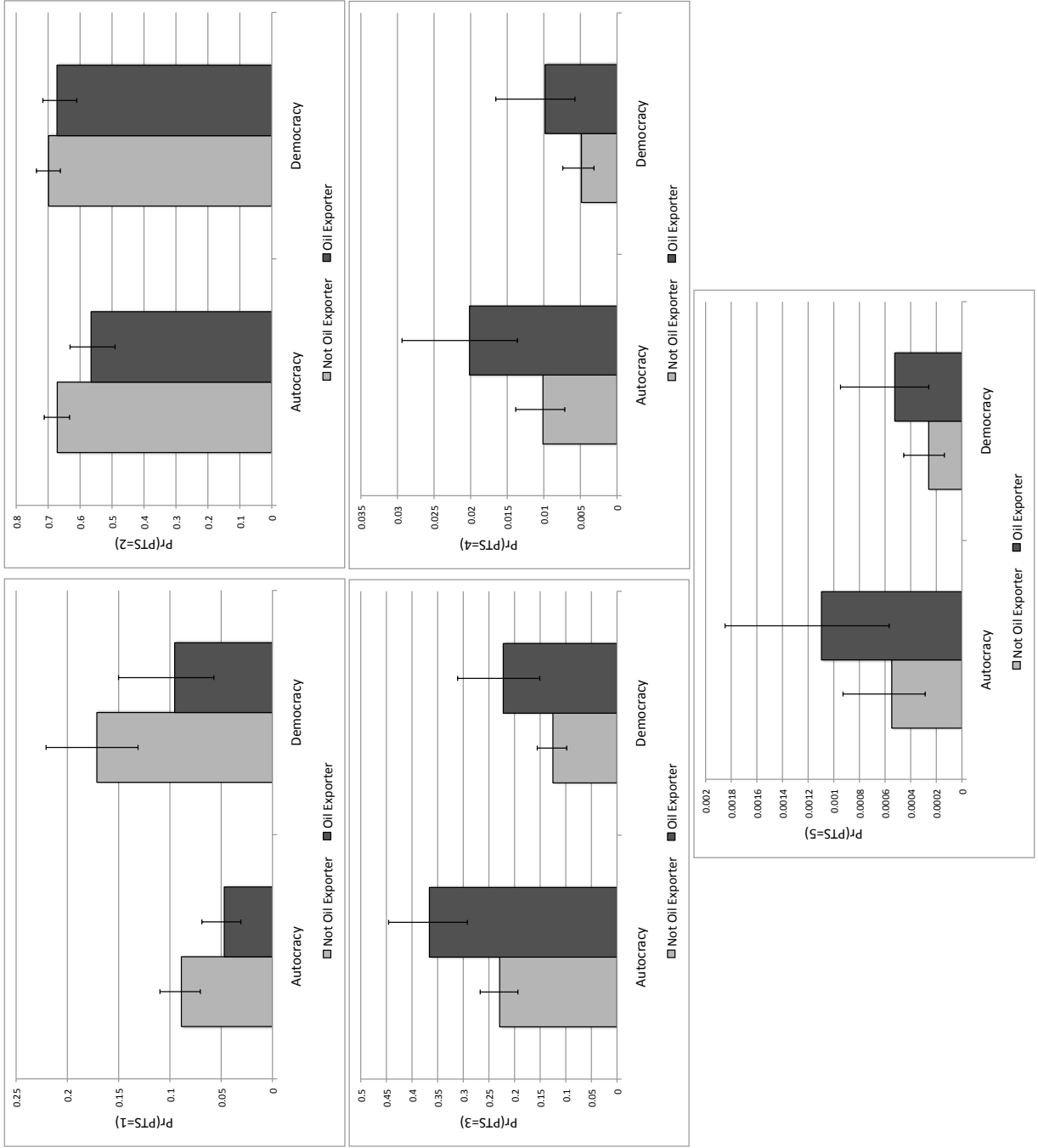
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Figure 1: Moderating Impact of Regime Type on the Relationship Between Increasing Unearned Revenues (Fuel Rents) and Repression: Full Results



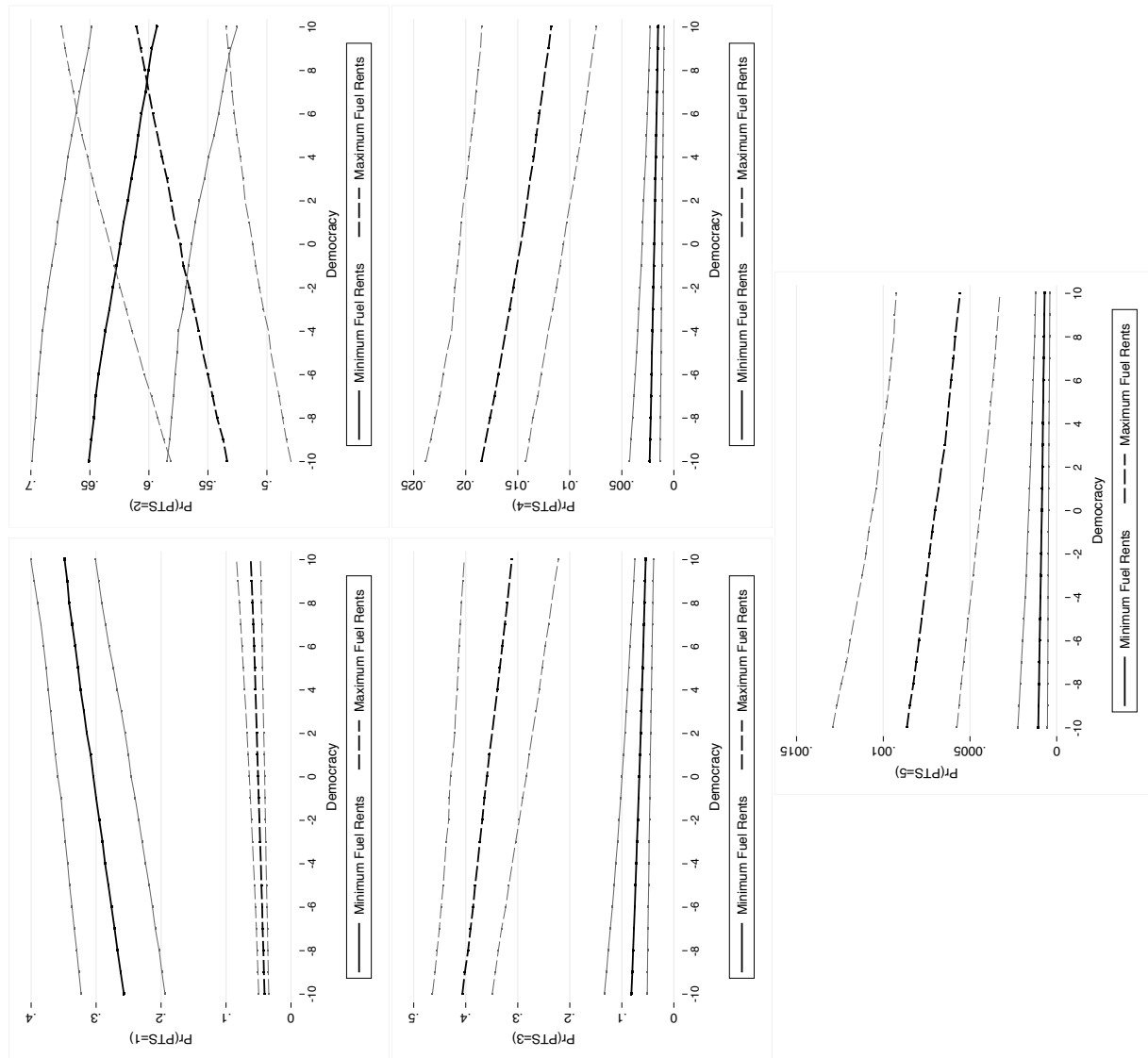
SOURCE: Table 2, column one. Values are predicted probabilities of being in each PTS category as revenues from oil and natural gas increase for full autocracies (solid line; Polity=-10) and full democracies (dashed line; Polity=10). Reported probabilities are calculated with other variables at medians.

Figure 2: Moderating Impact of Regime Type on the Relationship Between Increasing Unearned Revenues (Oil Exports) and Repression: Full Results



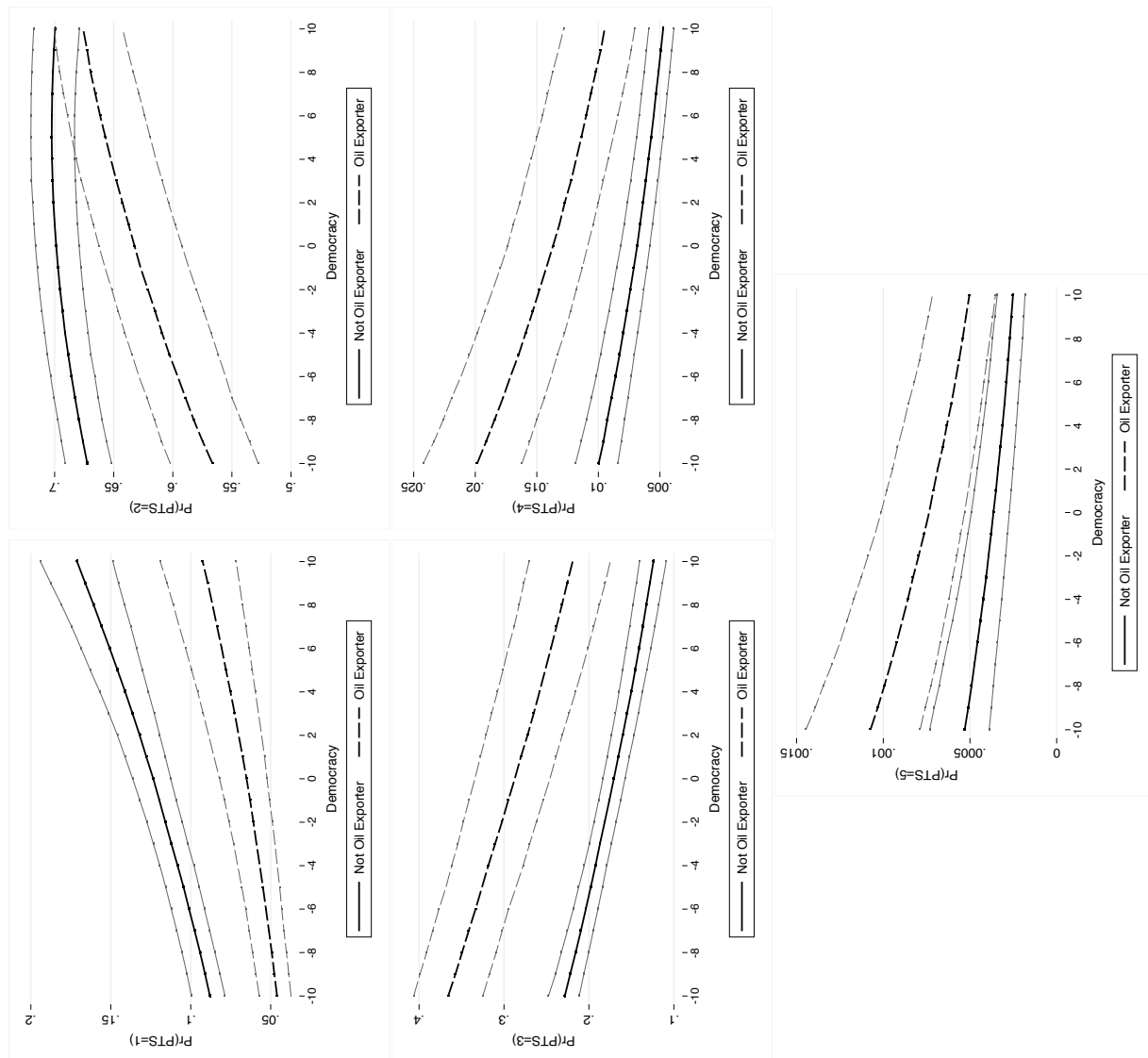
SOURCE: Table 2, column two. Values are predicted probabilities of being in each PTS category for states that do and do not earn at least one-third of export revenues from oil. Reported probabilities are calculated with other variables at medians.

Figure 3: Moderating Impact of Uneared Revenues (Fuel Rents) on the Relationship Between Increasing Democracy and Repression: Full Results



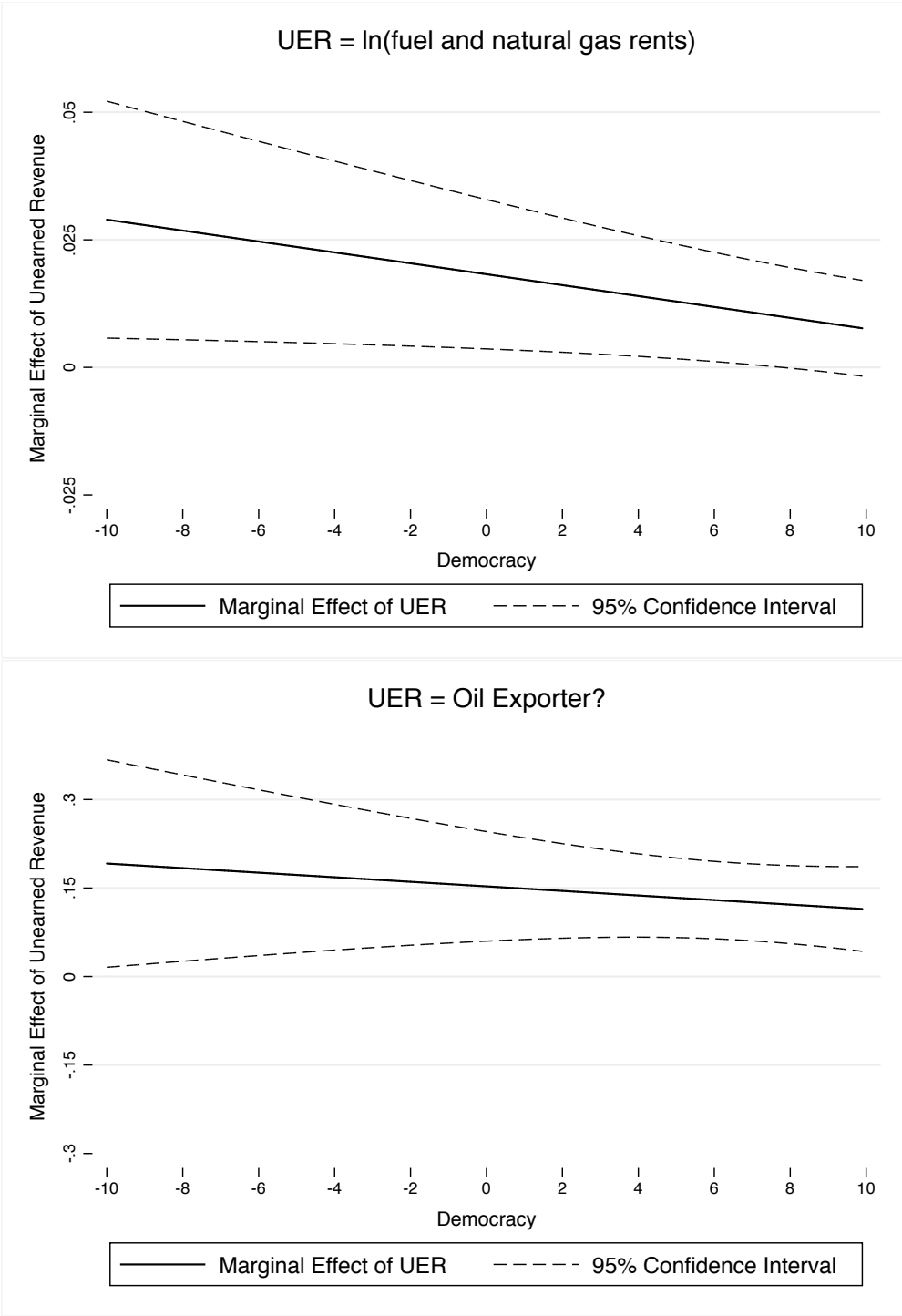
SOURCE: Table 2, column one. Values are predicted probabilities of being in each PTS category as democracy increases for states with in-sample minimum and maximum rents from oil and natural gas. Reported probabilities are calculated with other variables at medians.

Figure 4: Moderating Impact of Unearned Revenues (Oil Exports) on the Relationship Between Increasing Democracy and Repression: Full Results



SOURCE: Table 2, column one. Values are predicted probabilities of being in each PTS category as democracy increases for states that do and do not earn at least one-third of all export revenues from fuel. Reported probabilities are calculated with other variables at medians.

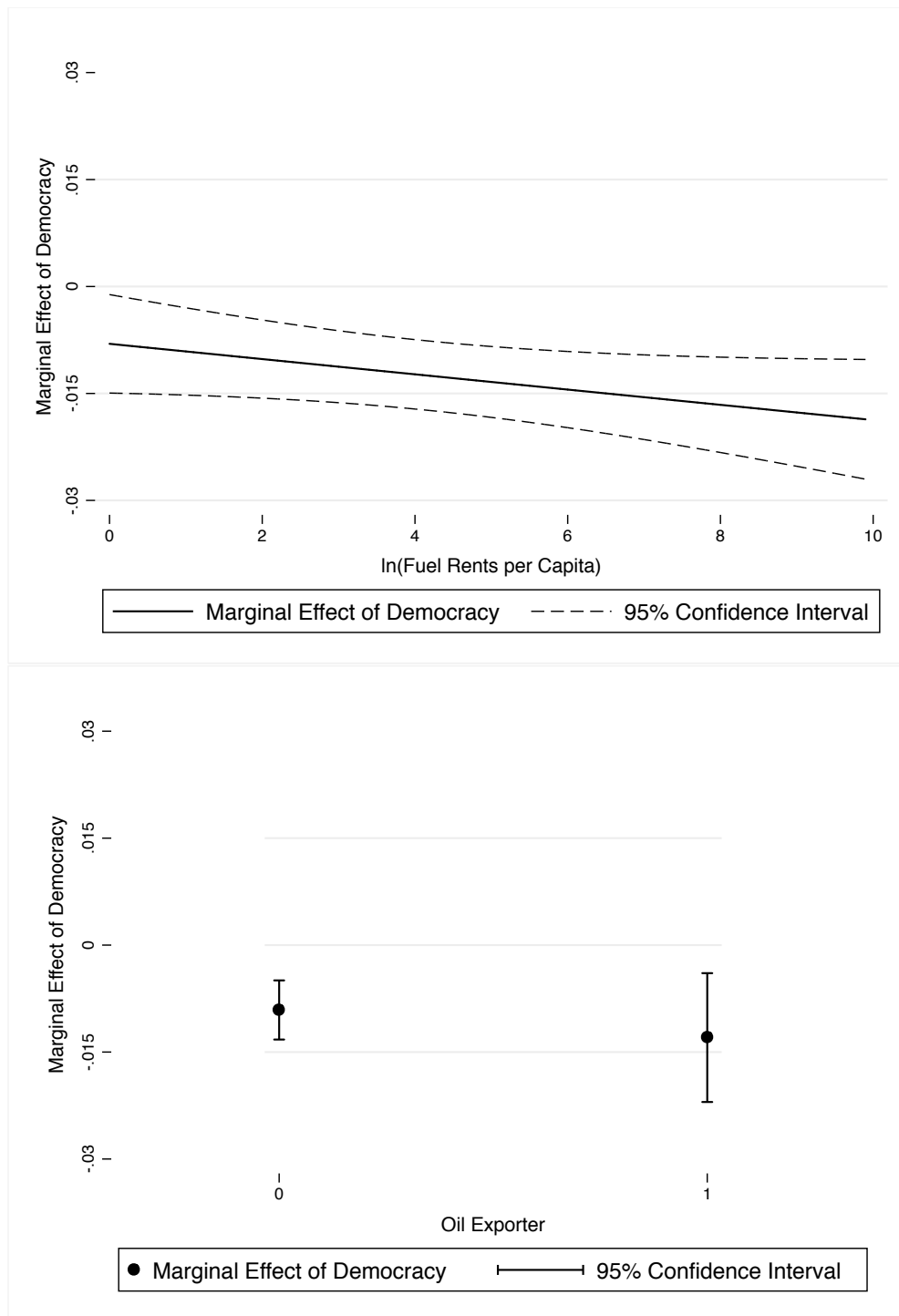
Figure 5: Moderating Impact of Regime Type on the Relationship Between Increasing Unearned Revenues and Repression: Marginal Effects



SOURCE: Table 1 of this supplement, columns one (top panel) and two (bottom panel). Values are marginal effects of UER on repression across the full range of democracy.



Figure 6: Moderating Impact of Unearned Revenues on the Relationship Between Increasing Democracy and Repression: Marginal Effects



SOURCE: Table 1 of this supplement, columns one (top panel) and two (bottom panel). Values are marginal effects of regime type on repression across the full range of UER.