

Trade, Aid, and Collective Labor Rights in the Developing World

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2012 IPES Annual Conference, University of Virginia

Research Question

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Hypothesis and Theory

Data and Methodology

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- Trade and Aid: Two distinct types of resource inflows from the developed to the developing world.
- Collective Labor Rights: An important issue area pertaining to the spillover effects of economic globalization.

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Aid, Trade and Labor Rights: what do we know?

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- No study has examined the **interactive/conditional effect**.

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- **Bilateral Trade Context:** Dependence on high labor standard markets makes a developing country government susceptible to pressures from external pro-labor rights actors.
- **Foreign aid:** Availability of foreign aid reduces the leverage held by the pro-labor rights actors.
- Thus, **Unintended, negative conditioning effect of Foreign Aid.**

Data

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- **Controls.** Economic, Political, and Demographic Attributes.

Methodology

- **Model:** Autoregressive Distributed Lags (ADL) Model with Country and Year Fixed Effects.

$$\begin{aligned} \text{LaborLaw}_{it} = & \phi_1 \text{LaborLaw}_{i,t-1} + \gamma_1 \text{BTC}_{it} + \gamma_2 \text{BTC}_{i,t-1} \\ & + \gamma_3 \text{Aid}_{it} + \gamma_4 \text{Aid}_{i,t-1} + \gamma_5 \text{BTC} * \text{Aid}_{it} + \gamma_6 \text{BTC} * \text{Aid}_{i,t-1} \\ & + \mathbf{x}_{it} \boldsymbol{\beta}_1 + \mathbf{x}_{i,t-1} \boldsymbol{\beta}_2 + \alpha_i + \tau_t + \varepsilon_{it} \end{aligned}$$

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- **Long Run Multiplier (LRM)**

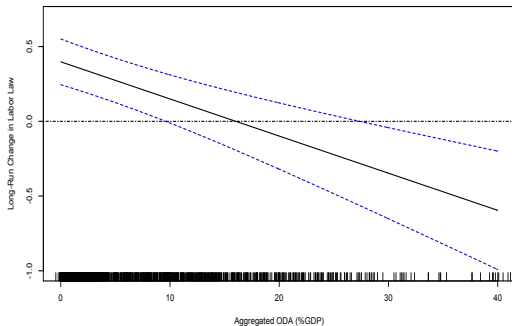
$$\text{LRM}_{BTC} = (\gamma_1 + \gamma_2) / (1 - \phi_1)$$

$$\text{LRM}_{Aid} = (\gamma_3 + \gamma_4) / (1 - \phi_1)$$

Determinants of Collective Labor Laws

	Model 1 Null		Model 2 Main	
	LRM	Pr(> t)	LRM	Pr(> t)
BTC	0.194	0.038	0.413	0.000
Aid	0.012	0.411	0.628	0.000
BTC x Aid			-0.024	0.000
Trade	-0.021	0.016	-0.021	0.013
FDI	0.046	0.004	0.042	0.004
GDP per capita	0.520	0.686	0.604	0.660
Natural Resource	-0.019	0.527	-0.025	0.411
Democracy	0.111	0.000	0.097	0.000
Left Ruling Party	0.500	0.096	0.551	0.066
Industry	0.068	0.014	0.068	0.013
Hard PTA	-0.718	0.129	-0.681	0.143
Civil war	-0.026	0.939	-0.079	0.824
Urban population	0.338	0.883	0.111	0.956
Lagged DV	0.251	0.000	0.250	0.000
Obs	N=1226	(n=91)	N=1226	(n=91)

Marginal Effect of BTC



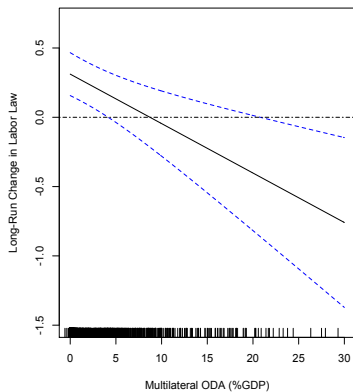
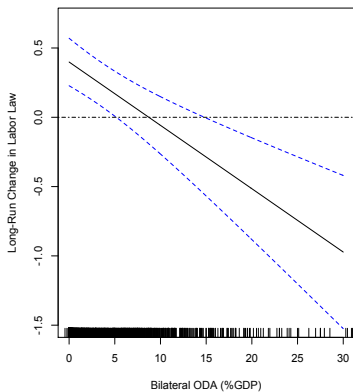
As the level of aid increases, the positive effect of BTC is weakened and eventually nullified.

Determinants of Collective Labor Laws

Alternative Operationalizations of Foreign Aid

	Model 3		Model 4		Model 5		Model 6	
	Including LRM	Non-DAC Pr(> t)	Bilateral LRM	Aid Pr(> t)	Multilateral LRM	Aid Pr(> t)	Aid per Capita LRM	Aid per Capita Pr(> t)
BTC	0.423	0.000	0.416	0.000	0.329	0.000	0.404	0.011
Aid	0.640	0.000	1.150	0.000	0.894	0.004	1.404	0.043
BTC x Aid	-0.024	0.000	-0.044	0.001	-0.035	0.005	-0.063	0.037
Trade	-0.021	0.012	-0.021	0.011	-0.019	0.025	-0.021	0.006
FDI	0.042	0.004	0.042	0.004	0.044	0.005	0.046	0.001
GDP per capita	0.603	0.659	0.577	0.677	0.483	0.729	0.548	0.343
Natural Resource	-0.024	0.430	-0.022	0.455	-0.025	0.420	-0.021	0.226
Democracy	0.097	0.000	0.099	0.000	0.101	0.000	0.117	0.000
Left Ruling Party	0.555	0.065	0.574	0.062	0.523	0.083	0.499	0.051
Industry	0.068	0.013	0.063	0.025	0.069	0.012	0.062	0.016
Hard PTA	-0.670	0.150	-0.679	0.133	-0.681	0.148	-0.747	0.068
Civil war	-0.094	0.788	-0.122	0.737	-0.075	0.828	-0.126	0.357
Urban population	0.141	0.943	0.080	0.967	0.113	0.960	0.262	0.452
Lagged DV	0.248	0.000	0.249	0.000	0.250	0.000	0.250	0.000
Obs	N=1226	(n=91)	N=1226	(n=91)	N=1226	(n=91)	N=1226	(n=91)

Marginal Effect of BTC - Aid Disaggregated



Determinants of Collective Labor Laws

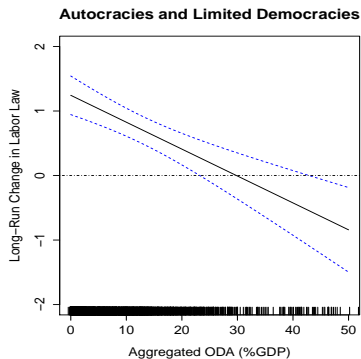
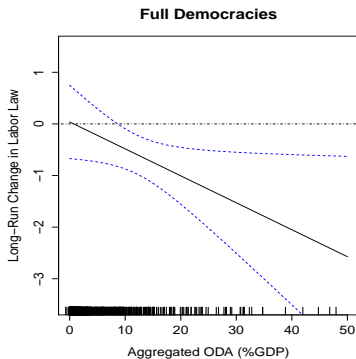
Split Sample Analysis- by Regime Type*

	Model 7		Model 8	
	Full Democracies [†]		Limited/Non Democracies	
	LRM	Pr(> t)	LRM	Pr(> t)
BTC	0.038	0.929	1.243	0.000
Aid	1.524	0.056	1.060	0.000
BTC x Aid	-0.052	0.089	-0.042	0.000
Trade	-0.030	0.001	0.001	0.890
FDI	-0.052	0.018	0.004	0.630
GDP per capita	2.984	0.697	-1.800	0.384
Natural Resource	0.199	0.093	-0.105	0.044
Left Ruling Party	2.124	0.091	0.925	0.135
Industry	-0.138	0.067	0.119	0.070
Hard PTA	1.918	0.306	2.158	0.520
Civil war	-1.843	0.330	0.424	0.488
Urban population	-0.425	0.984	-1.293	0.866
Lagged DV	0.642	0.000	0.571	0.000
Obs	N=362	(n=36)	N=864	(n=76)

* Only time fixed effects are estimated in Model 7 and Model 8

[†] Full democracies are those with polity2 score equal to or greater than 7

Marginal Effects of BTC- by Regime Type



Conclusion

- Interaction between different types of economic inflows can lead to unintended consequence.

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- Interaction between different types of economic inflows can lead to unintended consequence.
- Need for greater coherence among policy instruments.

Determinants of Collective Labor Laws

Specifications with additional control variables

	Model 9 PLP [‡]		Model 10 IMF/IBRD Flow		Model 11 BAC [§]	
	LRM	Pr(> t)	LRM	Std. Err	Pr(> t)	
BTC	0.575	0.000	0.445	0.000	0.386	0.000
Aid	0.677	0.001	0.780	0.003	0.662	0.000
BTC x Aid	-0.022	0.008	-0.030	0.003	-0.025	0.000
PLP	0.201	0.369				
IMF/IBRD Flow			0.003	0.494		
BAC					0.366	0.060
Trade	-0.104	0.000	-0.018	0.101	-0.020	0.007
FDI	0.131	0.005	0.032	0.018	0.042	0.000
GDP per capita	6.244	0.001	0.470	0.369	0.774	0.281
Natural Resource	-0.167	0.000	-0.049	0.105	-0.016	0.289
Democracy	0.120	0.045	0.095	0.000	0.091	0.000
Left Ruling Party	0.209	0.389	0.660	0.051	0.427	0.105
Industry	0.057	0.205	0.062	0.025	0.066	0.007
Hard PTA	-0.827	0.096	-0.524	0.196	-0.637	0.179
Civil war	-0.410	0.278	-0.242	0.270	-0.102	0.379
Urban Population	4.596	0.052	-0.648	0.380	-0.135	0.470
Lagged DV	0.060	0.244	0.318	0.000	0.246	0.000
Obs	N=340 (n=42)		N=1127 (n=82)		N=1193 (n=88)	

[‡] Potential Labor Power

[§] Bilateral Aid Context

Determinants of Collective Labor Laws

Tobit Right Censored Regression: Upper Bound = 28.5 (124 out of the 1226 observations have the maximum score (28.5) in collective labor rights index.)

	Model 12		
	LRM	Std. Error	Pr(> t)
BTC	0.483	0.181	0.008
Aid	0.835	0.291	0.004
BTC X AID	-0.032	0.011	0.005
Trade	-0.025	0.011	0.028
FDI	0.040	0.015	0.008
GDP per capita	1.183	1.003	0.238
Natural Resource	-0.015	0.035	0.673
Democracy	0.117	0.040	0.003
Left Ruling Party	0.591	0.510	0.247
Industry	0.057	0.039	0.150
Hard PTA	-0.914	0.980	0.351
Civil war	0.163	0.481	0.735
Urban population	1.181	3.530	0.738
Lagged DV	0.265	0.029	0.000
Obs	N=1226, (n=91)		

Descriptive Statistics

	Min	1st Qu.	Median	Mean	3rd Qu.	Max
Collective Labor Laws	1.50	19.00	23.50	22.32	26.50	28.50
Bilateral Trade Context (BTC)	15.91	23.61	24.89	24.69	26.06	28.42
Aid Main Indicator [¶]	-0.45	0.60	3.64	8.01	11.67	93.99
(DAC) Bilateral Aid [¶]	-0.45	0.43	2.65	4.90	7.07	64.68
Multilateral Aid [¶]	-1.99	0.08	0.83	3.11	4.41	45.75
(Non DAC) Bilateral Aid [¶]	-0.52	0	0	0.03	0	3.64
Bilateral Aid Context (BAC)	21.52	25.70	26.59	26.46	27.38	28.50
Trade [¶]	11.09	39.81	56.69	66.93	83.14	368.50
FDI [¶]	0.010	5.83	11.34	20.32	25.05	358.82
GDP per Capita	359	1206	2622	4110	5449	46160
Democracy (Polity2)	-10	-6	0	0.60	7	10
Left Ruling Party	0	0	0	0.31	1	1
Hard PTA	0	0	0	0.03	0	1
Industry [¶]	4.99	20.01	27.55	28.62	34.40	88.71
Urban Population (1000s)	43	1401	3325	19106	14765	481943
Civil War	0	0	0	0.22	0	1
Natural Resource [¶]	0	2.07	4.16	8.49	9.21	75.67

[¶] as percentage of GDP