

SUPPLEMENTARY MATERIAL FOR:

Do the Bretton Woods Institutions Promote Economic Transparency?*

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Abstract

Disseminating data is a core mission of international organizations. The Bretton Woods Institutions (BWIs), in particular, have become a main data source for research and policy-making. Due to their extensive lending activities, the BWIs often find themselves in a position to assist and pressure governments to increase the amount of economic data that they provide. In this study, we explore the association between loans from the BWIs and an index of economic transparency derived from the data-reporting practices of governments to the World Bank. Using a matching method for causal inference with panel data complemented by a multilevel regression analysis, we examine, separately, loan commitments and disbursements from the IMF and the World Bank. The multilevel regression analysis finds a significant association between BWI loans and the improvement of economic transparency in all developing countries; the matching method identifies a causal effect in democracies.

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I Supplemental multilevel analysis results (from Table 2)

Recall from the main text that Table 2 reports the estimated coefficients associated with the control variables based on the best model with a pooled effect of BWI loans, using the size of BWI loans (M1 in Figure 6(a)). Here, we report the results for M1 using BWI loan dummies, as well as the results for M2 and M3.

Tables S1 to S5 report the estimates and standard errors of the control variables based on multilevel models with pooled effects, regime-specific coefficients, and interactive terms of regime and loans, using loan size and loan dummy, respectively.

Table S1: M1: Estimated Coefficients of Control Variables (Loan Dummy)

Covariates	IMF Com.	IMF Disb.	WB Com.	WB Disb.
Constant	-0.528*** (0.115)	-0.515*** (0.115)	-0.568*** (0.116)	-0.584*** (0.118)
Lagged Transparency	0.968*** (0.004)	0.968*** (0.004)	0.966*** (0.004)	0.966*** (0.004)
Democracy	0.047** (0.017)	0.047** (0.017)	0.042* (0.017)	0.044** (0.017)
Trade	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
WTO Member	-0.008 (0.025)	-0.010 (0.025)	-0.008 (0.025)	-0.011 (0.025)
UNSC Member	0.019 (0.024)	0.019 (0.024)	0.016 (0.024)	0.016 (0.024)
Population	0.304 (0.189)	0.305 (0.189)	0.251 (0.189)	0.265 (0.189)
GDP pc	0.283 (0.188)	0.283 (0.188)	0.242 (0.188)	0.256 (0.188)
GDP	-0.275 (0.188)	-0.277 (0.188)	-0.225 (0.188)	-0.239 (0.188)
Signed BITs	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
America	0.044 (0.027)	0.046 (0.027)	0.037 (0.027)	0.040 (0.027)
Asia	0.044* (0.020)	0.042* (0.020)	0.045* (0.020)	0.046* (0.020)
Europe	0.183*** (0.028)	0.180*** (0.028)	0.191*** (0.028)	0.194*** (0.028)
Oceania	-0.006 (0.041)	-0.008 (0.041)	0.003 (0.041)	0.004 (0.041)
Political Instability	-0.011** (0.003)	-0.011** (0.003)	-0.009** (0.003)	-0.010** (0.003)
Geo-Distance	0.000 (0.003)	0.000 (0.003)	-0.001 (0.003)	-0.000 (0.003)
AIC	3413.604	3417.131	3407.683	3410.287
BIC	3544.424	3547.951	3538.502	3541.107
Log Likelihood	-1685.802	-1687.566	-1682.841	-1684.144
Num. obs.	3750	3750	3750	3750
Num. groups: ccode	125	125	125	125
Num. groups: year	30	30	30	30
Num. groups: democracy_dd_bd_lag	2	2	2	2

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Multilevel regression for pooled sample.

Table S2: M2: Estimated Coefficients (Loan Size)

Covariates	IMF Com.	IMF Disb.	WB Com.	WB Disb.
Constant	-0.503*** (0.117)	-0.492*** (0.117)	-0.528*** (0.117)	-0.545*** (0.118)
IMF Commitment	0.003** (0.001)			
IMF Disbursement		0.003* (0.001)		
WB Commitment			0.003*** (0.001)	
WB Disbursement				0.003*** (0.001)
Lagged Transparency	0.968*** (0.004)	0.969*** (0.004)	0.966*** (0.004)	0.966*** (0.004)
Trade	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
WTO Member	-0.006 (0.025)	-0.007 (0.025)	-0.005 (0.025)	-0.009 (0.025)
UNSC Member	0.019 (0.024)	0.019 (0.024)	0.015 (0.024)	0.016 (0.024)
Population	0.309 (0.189)	0.310 (0.189)	0.244 (0.189)	0.261 (0.189)
GDP pc	0.289 (0.188)	0.289 (0.188)	0.238 (0.188)	0.254 (0.188)
GDP	-0.281 (0.188)	-0.282 (0.188)	-0.220 (0.189)	-0.236 (0.188)
Signed BITs	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
America	0.047 (0.027)	0.049 (0.027)	0.040 (0.027)	0.045 (0.026)
Asia	0.045* (0.020)	0.043* (0.020)	0.046* (0.020)	0.048* (0.020)
Europe	0.186*** (0.028)	0.184*** (0.028)	0.195*** (0.028)	0.198*** (0.028)
Oceania	-0.002 (0.041)	-0.005 (0.041)	0.007 (0.041)	0.008 (0.041)
Political Instability	-0.011** (0.003)	-0.011** (0.003)	-0.009** (0.003)	-0.010** (0.003)
Geo-Distance	0.000 (0.003)	0.000 (0.003)	-0.001 (0.003)	-0.000 (0.003)
AIC	3418.801	3422.703	3412.263	3415.751
BIC	3555.850	3559.753	3549.312	3552.800
Log Likelihood	-1687.401	-1689.352	-1684.132	-1685.875
Num. obs.	3750	3750	3750	3750
Num. groups: ccode	125	125	125	125
Num. groups: year	30	30	30	30
Num. groups: democracy_dd_bd_lag	2	2	2	2

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Multilevel regression for pooled sample.

Table S3: M2: Estimated Coefficients (Loan Dummy)

Covariates	IMF Com.	IMF Disb.	WB Com.	WB Disb.
Constant	-0.508*** (0.117)	-0.495*** (0.117)	-0.552*** (0.118)	-0.565*** (0.119)
IMF Commitment	0.055** (0.018)			
IMF Disbursement		0.050* (0.022)		
WB Commitment			0.061*** (0.016)	
WB Disbursement				0.059*** (0.017)
Lagged Transparency	0.968*** (0.004)	0.969*** (0.004)	0.966*** (0.004)	0.966*** (0.004)
Trade	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
WTO Member	-0.006 (0.025)	-0.007 (0.025)	-0.006 (0.025)	-0.009 (0.025)
UNSC Member	0.019 (0.024)	0.019 (0.024)	0.016 (0.024)	0.016 (0.024)
Population	0.311 (0.189)	0.312 (0.189)	0.256 (0.189)	0.268 (0.189)
GDP pc	0.290 (0.188)	0.290 (0.188)	0.248 (0.188)	0.259 (0.188)
GDP	-0.283 (0.188)	-0.283 (0.188)	-0.230 (0.188)	-0.242 (0.188)
Signed BITs	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
America	0.047 (0.027)	0.050 (0.027)	0.041 (0.027)	0.045 (0.026)
Asia	0.045* (0.020)	0.043* (0.020)	0.046* (0.020)	0.048* (0.020)
Europe	0.187*** (0.028)	0.184*** (0.028)	0.196*** (0.028)	0.198*** (0.028)
Oceania	-0.002 (0.041)	-0.005 (0.041)	0.007 (0.041)	0.007 (0.041)
Political Instability	-0.011** (0.003)	-0.011** (0.003)	-0.009** (0.003)	-0.010** (0.003)
Geo-Distance	0.000 (0.003)	0.000 (0.003)	-0.001 (0.003)	-0.000 (0.003)
AIC	3419.648	3423.165	3413.389	3416.000
BIC	3556.697	3560.214	3550.438	3553.050
Log Likelihood	-1687.824	-1689.582	-1684.694	-1686.000
Num. obs.	3750	3750	3750	3750
Num. groups: ccode	125	125	125	125
Num. groups: year	30	30	30	30
Num. groups: democracy_dd_bd_lag	2	2	2	2

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Multilevel regression for pooled sample.

Table S4: M3: Estimated Coefficients (Loan Size)

Covariates	IMF Com.	IMF Disb.	WB Com.	WB Disb.
Constant	-0.523*** (0.115)	-0.511*** (0.115)	-0.547*** (0.116)	-0.566*** (0.117)
Democracy	0.048** (0.018)	0.048** (0.017)	0.050* (0.024)	0.054* (0.025)
IMF Commitment	0.003* (0.001)			
Democracy × IMF Commitment	-0.000 (0.002)			
IMF Disbursement		0.003 (0.002)		
Democracy × IMF Disbursement		-0.000 (0.002)		
WB Commitment			0.004*** (0.001)	
Democracy × WB Commitment			-0.001 (0.001)	
WB Disbursement				0.004** (0.001)
Democracy × WB Disbursement				-0.001 (0.002)
Lagged Transparency	0.968*** (0.004)	0.968*** (0.004)	0.965*** (0.004)	0.966*** (0.004)
Trade	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
WTO Member	-0.009 (0.025)	-0.010 (0.025)	-0.008 (0.025)	-0.011 (0.025)
UNSC Member	0.019 (0.024)	0.019 (0.024)	0.015 (0.024)	0.016 (0.024)
Population	0.302 (0.189)	0.302 (0.189)	0.233 (0.190)	0.249 (0.190)
GDP pc	0.281 (0.188)	0.281 (0.188)	0.226 (0.189)	0.242 (0.189)
GDP	-0.274 (0.188)	-0.274 (0.188)	-0.209 (0.190)	-0.225 (0.189)
Signed BITs	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
America	0.043 (0.027)	0.046 (0.027)	0.037 (0.027)	0.042 (0.027)
Asia	0.044* (0.020)	0.042* (0.020)	0.046* (0.021)	0.048* (0.021)
Europe	0.183*** (0.028)	0.180*** (0.028)	0.191*** (0.028)	0.193*** (0.028)
Oceania	-0.006 (0.041)	-0.009 (0.041)	0.002 (0.041)	0.003 (0.041)
Political Instability	-0.011** (0.003)	-0.011** (0.003)	-0.009** (0.003)	-0.010** (0.003)
Geo-Distance	0.000 (0.003)	0.000 (0.003)	-0.001 (0.003)	-0.000 (0.003)
AIC	3414.735	3418.642	3408.368	3411.741
BIC	3551.784	3555.691	3545.417	3548.791
Log Likelihood	-1685.367	-1687.321	-1682.184	-1683.871
Num. obs.	3750	3750	3750	3750
Num. groups: ccode	125	125	125	125
Num. groups: year	30	30	30	30
Num. groups: democracy_dd_bd_lag	2	2	2	2

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Multilevel regression for pooled sample.

Table S5: M3: Estimated Coefficients (Loan Dummy)

Covariates	IMF Com.	IMF Disb.	WB Com.	WB Disb.
Constant	-0.528*** (0.115)	-0.515*** (0.115)	-0.570*** (0.116)	-0.586*** (0.118)
Democracy	0.047** (0.018)	0.048** (0.017)	0.048* (0.024)	0.055* (0.025)
IMF Commitment	0.055* (0.024)			
Democracy × IMF Commitment	0.000 (0.036)			
IMF Disbursement		0.052 (0.029)		
Democracy × IMF Disbursement		-0.006 (0.042)		
WB Commitment			0.064** (0.020)	
Democracy × WB Commitment			-0.008 (0.028)	
WB Disbursement				0.066** (0.020)
Democracy × WB Disbursement				-0.016 (0.028)
Lagged Transparency	0.968*** (0.004)	0.968*** (0.004)	0.966*** (0.004)	0.966*** (0.004)
Trade	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
WTO Member	-0.008 (0.025)	-0.010 (0.025)	-0.008 (0.025)	-0.011 (0.025)
UNSC Member	0.019 (0.024)	0.019 (0.024)	0.016 (0.024)	0.016 (0.024)
Population	0.304 (0.189)	0.304 (0.189)	0.245 (0.190)	0.256 (0.190)
GDP pc	0.283 (0.188)	0.283 (0.188)	0.236 (0.189)	0.247 (0.189)
GDP	-0.275 (0.188)	-0.276 (0.188)	-0.220 (0.189)	-0.230 (0.189)
Signed BITs	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
America	0.044 (0.027)	0.046 (0.027)	0.038 (0.027)	0.043 (0.027)
Asia	0.044* (0.020)	0.042* (0.020)	0.045* (0.021)	0.048* (0.021)
Europe	0.183*** (0.028)	0.181*** (0.028)	0.191*** (0.028)	0.193*** (0.028)
Oceania	-0.006 (0.041)	-0.008 (0.041)	0.002 (0.041)	0.003 (0.041)
Political Instability	-0.011** (0.003)	-0.011** (0.003)	-0.009** (0.003)	-0.010** (0.003)
Geo-Distance	0.000 (0.003)	0.000 (0.003)	-0.001 (0.003)	-0.000 (0.003)
AIC	3415.604	3419.114	3409.596	3411.948
BIC	3552.654	3556.163	3546.645	3548.997
Log Likelihood	-1685.802	-1687.557	-1682.798	-1683.974
Num. obs.	3750	3750	3750	3750
Num. groups: ccode	125	125	125	125
Num. groups: year	30	30	30	30
Num. groups: democracy_dd_bd_lag	2	2	2	2

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Multilevel regression for pooled sample.

II Varying lags and leads

We vary the length of treatment history for matching, denoted as L , and the number of post-treatment periods, denoted as F , to assess the robustness of the findings from the main analysis. No substantively noticeable differences are observed when F and L vary modestly.

Figure S1: IMF Loans: Causal Effects ($L = 3, F = 4$)

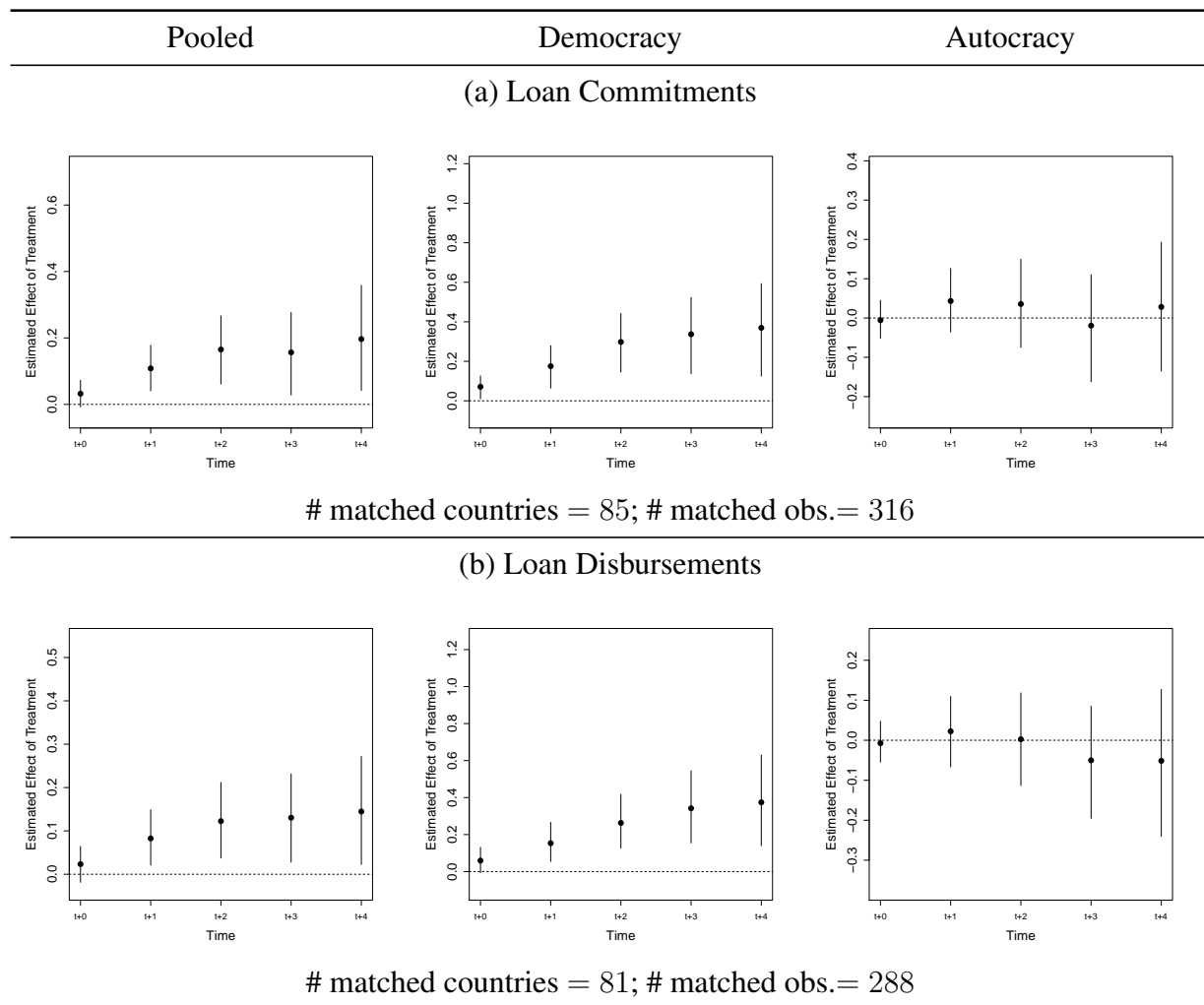


Figure S2: WB Loans: Causal Effects ($L = 3, F = 4$)

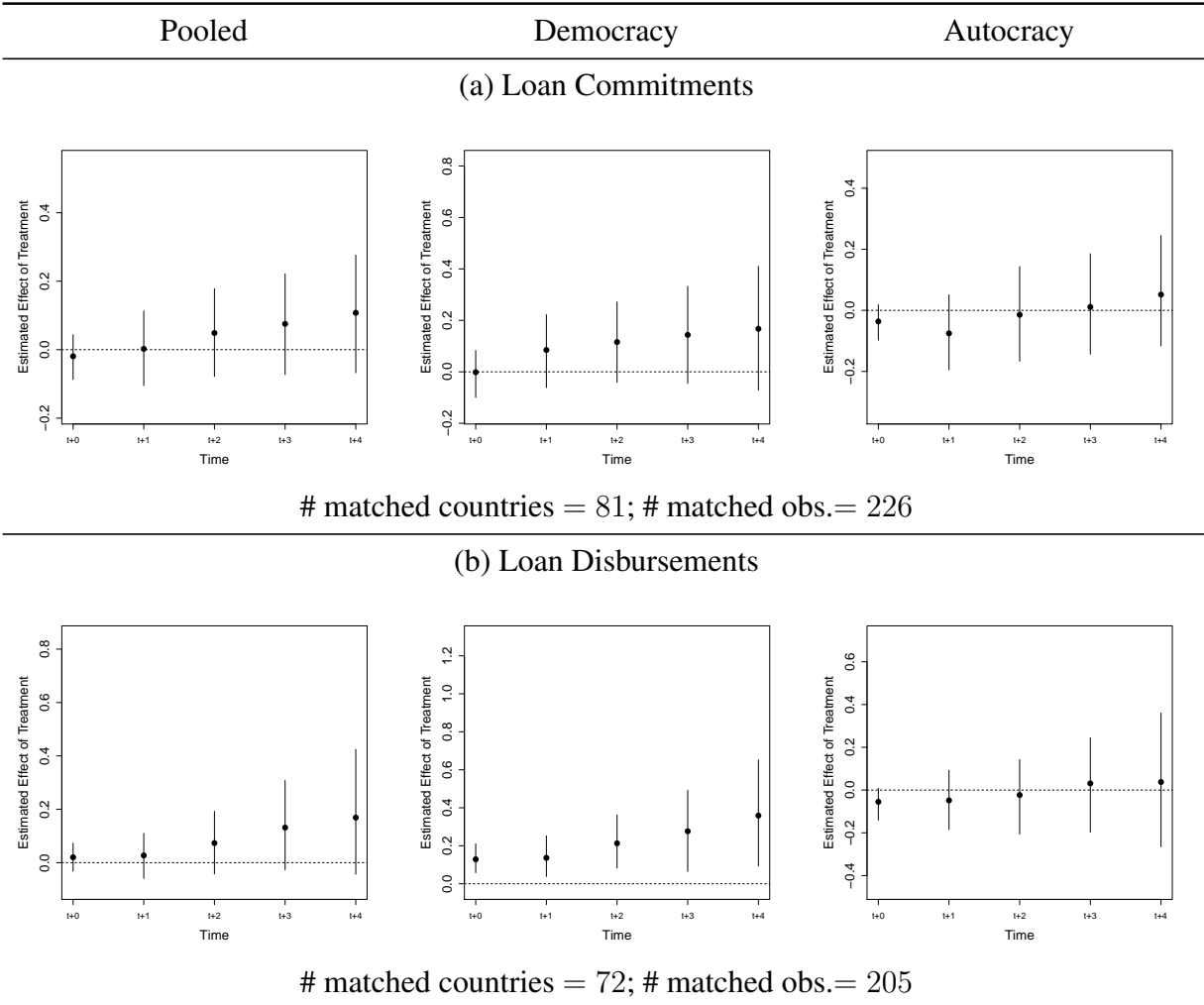


Figure S3: IMF Loans: Causal Effects ($L = 5, F = 8$)

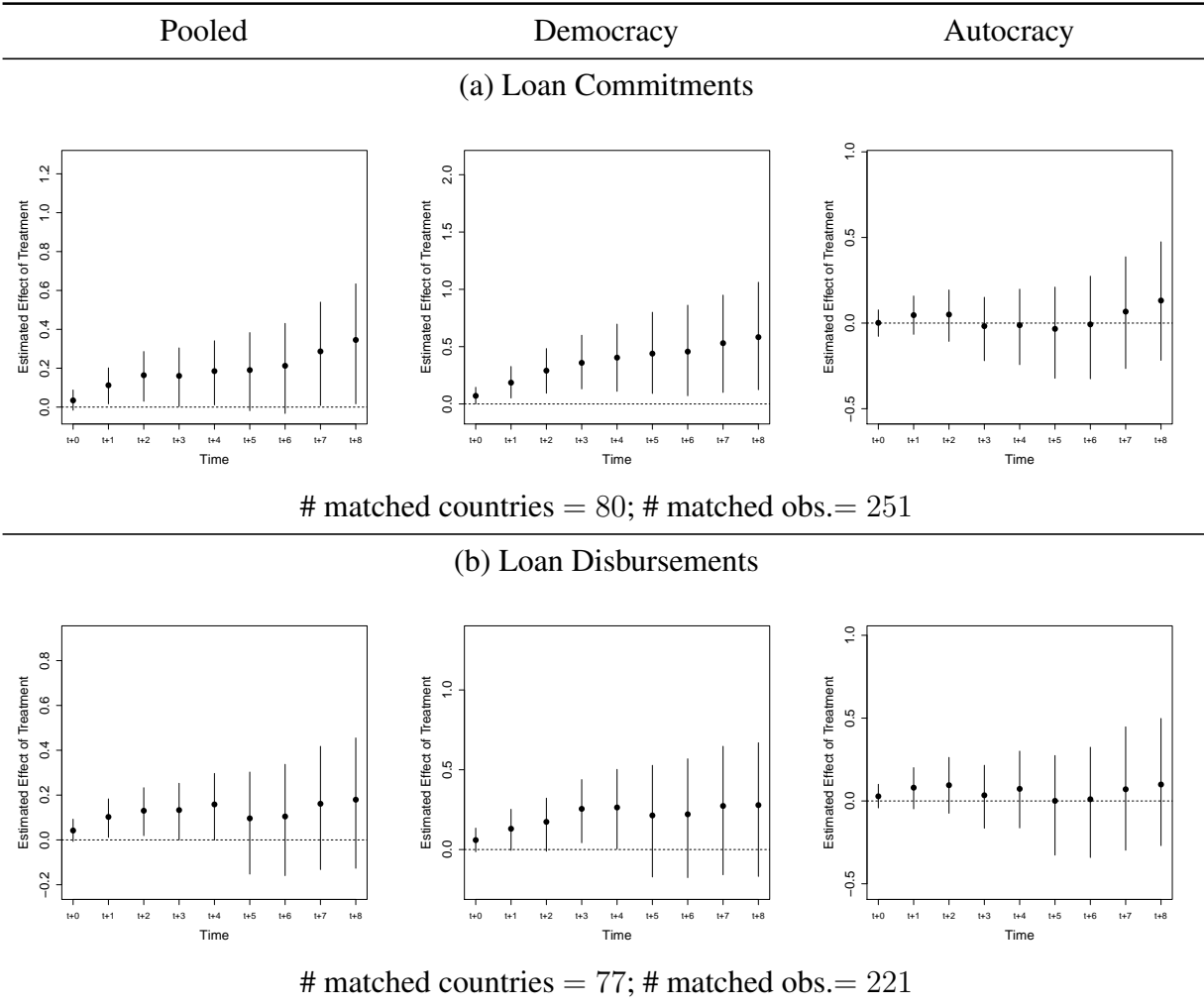
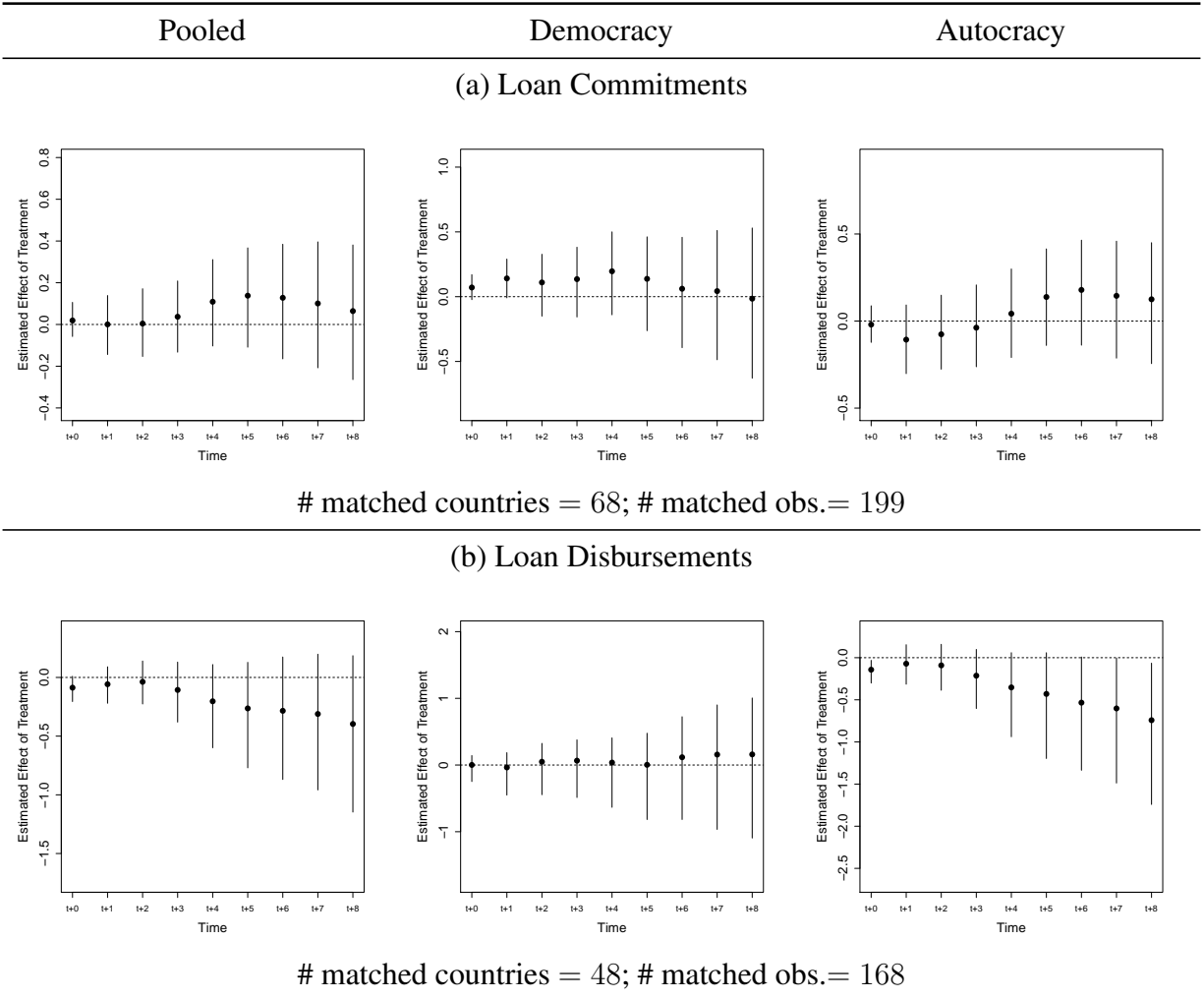


Figure S4: WB Loans: Causal Effects ($L = 5, F = 8$)



III Data structure

We report the data structure of the sample in Figure S5 and Figure S6. Figure S7 displays how loan commitments and disbursements are distributed according to the transparency level of recipient countries.

Figure S5: Treatment Assignment (IMF Loans)

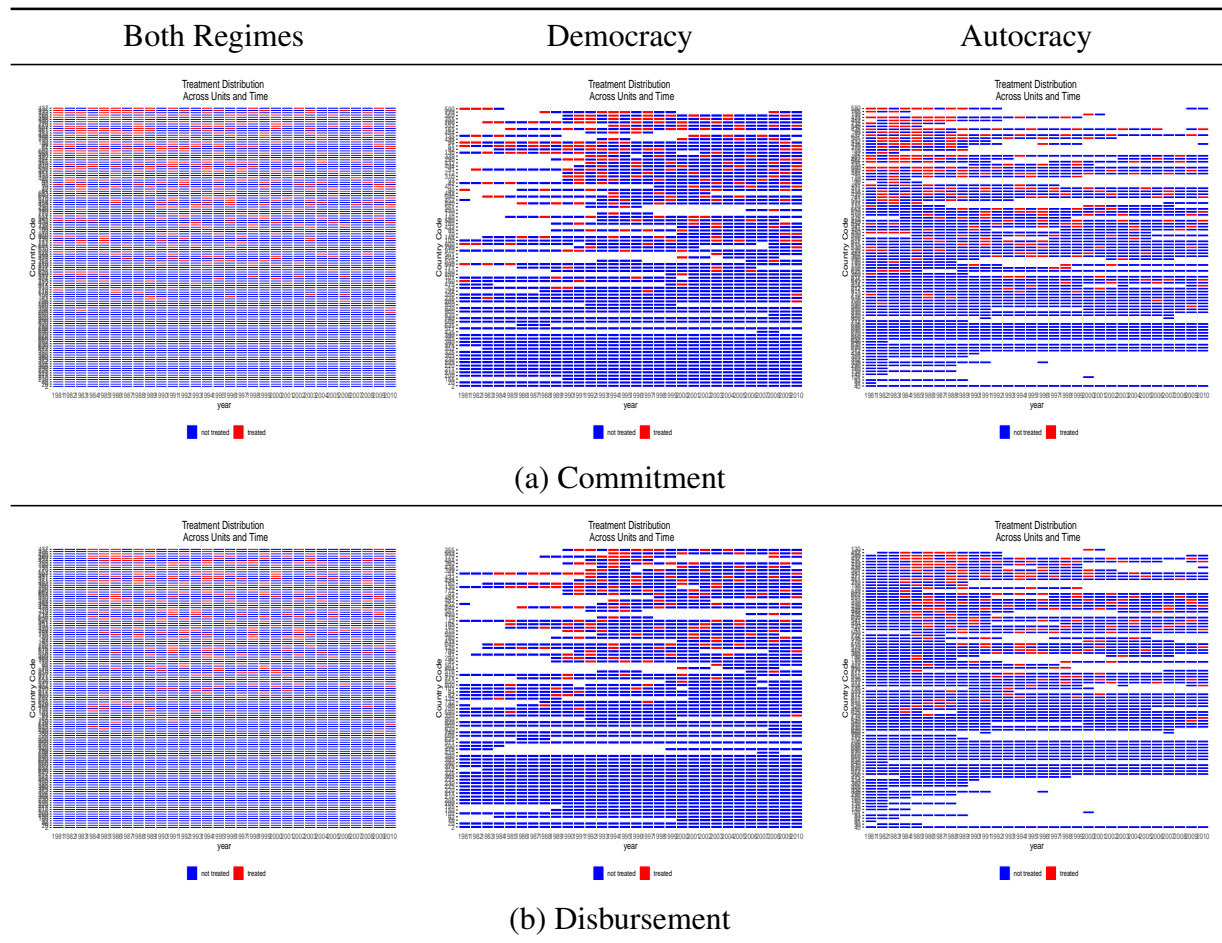


Figure S6: Treatment Assignment (WB Loans)

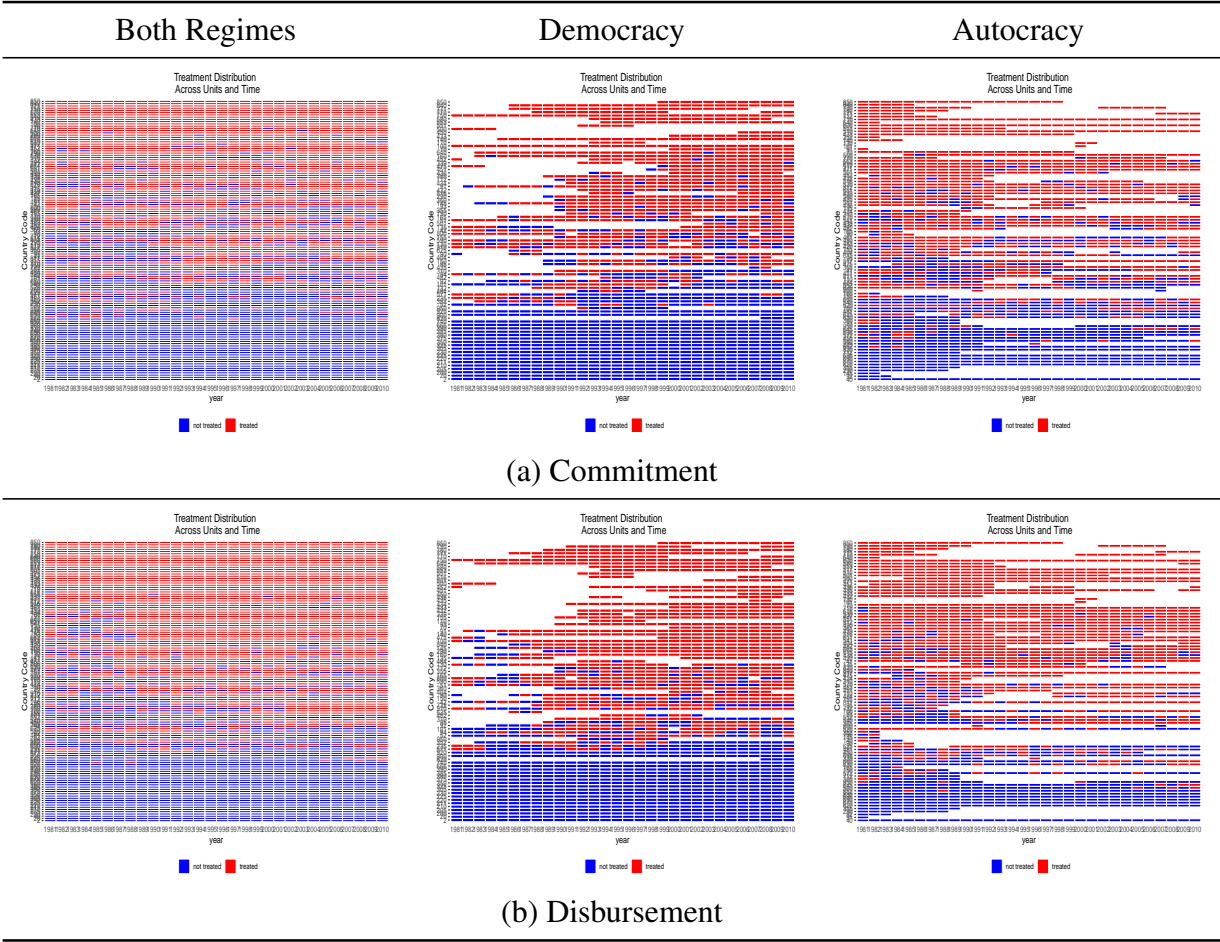
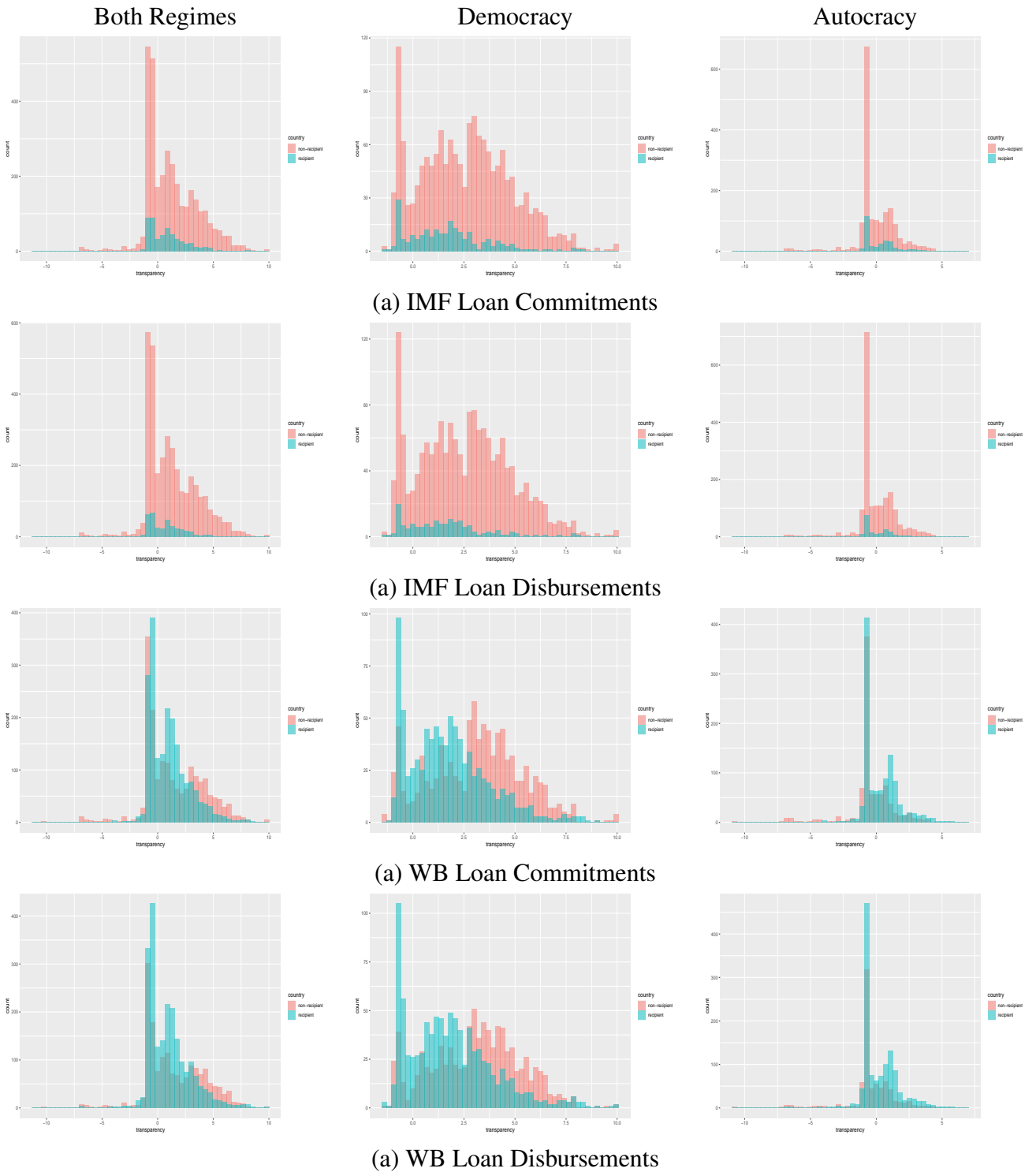


Figure S7: Loans and Transparency



IV Checks on causal mechanisms

We conduct several additional analyses to explore the causal mechanism. We consider a more granular set of regime type measures (for democracies, we considered parliamentary, presidential, and mixed systems; for autocracies, we considered civilian, military, and royal regimes). We next examine high- and low-transparency countries (above/below the median level). Finally, we look at whether the effect of regime type varies with international importance.

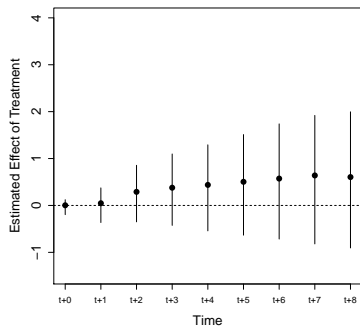
Different types of regimes

First, instead of employing a dichotomous measure of regime type, we examine how the effects of BWI loans varies across six different categories of regimes. Figures S8, S9, S10, and S11 illustrate the regime-specific effects using the 6-category regime variable as a moderator. The general finding confirms that the effects are concentrated in democracies, and non-democracies are barely affected by BWI loans. But there are also some interesting findings in this analysis:

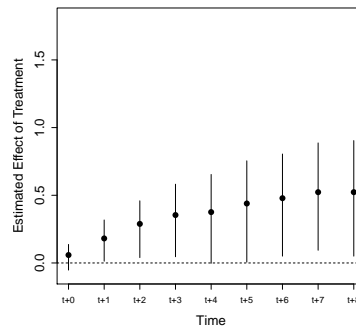
- Regarding IMF loan commitments, their primary effect is observed in democracies, particularly in mixed (semi-presidential) democracies. There is an almost significant positive effect on civilian dictatorship in the autocracy domain. Interestingly, loan commitments exhibit significant negative effects on military dictatorship, and these effects are longer-term. The confidence intervals (CIs) of the effects on royal dictatorship cannot be accurately estimated due to the limited matched observations, making inference challenging.
- Regarding IMF loan disbursements, we observe a very similar pattern to that of IMF loan commitments.
- Concerning the effect of WB commitments, we note that the impact is primarily observed in mixed (semi-presidential) democracies and presidential democracies. No discernible effects on autocracies are found, except for a short-term negative effect on civilian dictatorship. Again, CIs of the effects on royal dictatorship cannot be accurately estimated.

- The estimated effects of WB loan disbursements are perplexing and challenging to interpret. We observe short-term, significant, positive effects on mixed (semi-presidential) democracies and presidential democracies, almost significant negative effects on parliamentary democracies, and significant, shorter- and longer-term effects on civilian dictatorship.

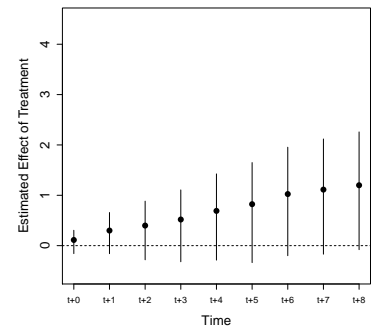
Figure S8: IMF Loan Commitments: Regime Categories ($L = 3, F = 8$)



Parliamentary Democracy

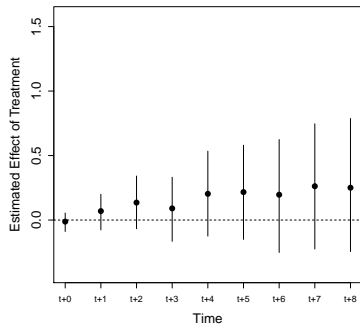


Mixed (semi-presidential) democracy

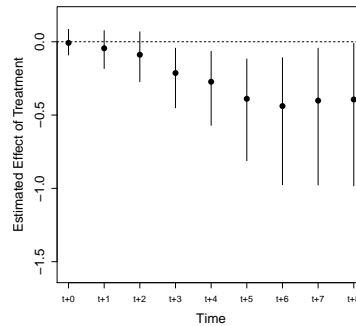


Presidential Democracy

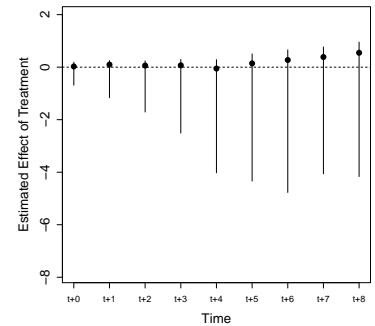
(b) Loan Disbursements



Civilian Authoritarianism

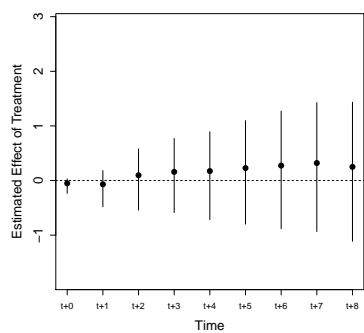


Military Authoritarianism

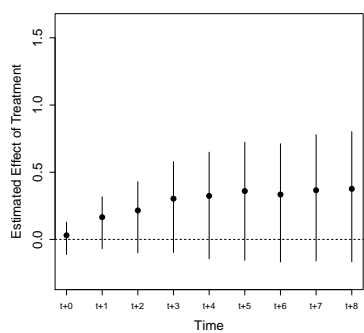


Royal Authoritarianism

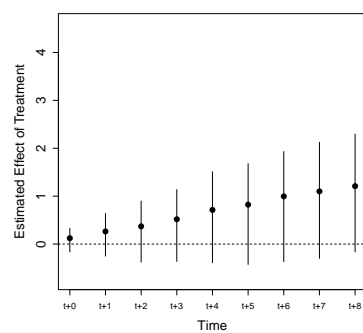
Figure S9: IMF Loan Disbursements: Regime Categories ($L = 3, F = 8$)



Parliamentary Democracy

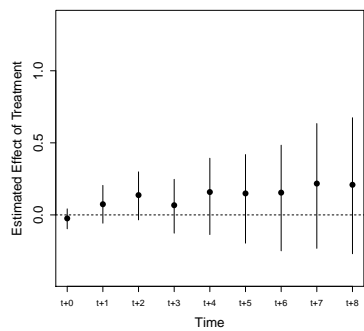


Mixed (semi-presidential) democracy

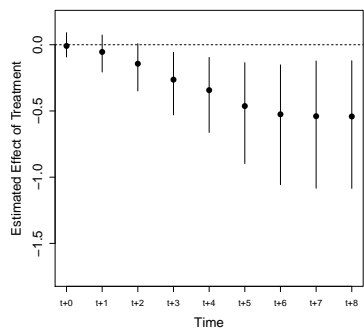


Presidential Democracy

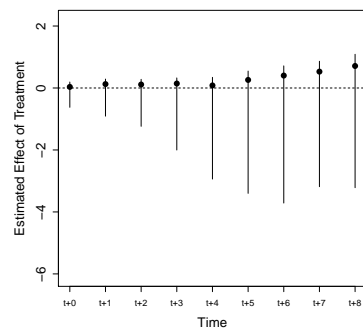
(b) Loan Disbursements



Civilian Authoritarianism

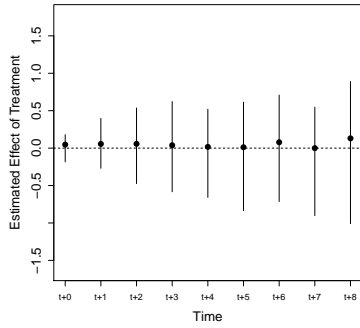


Military Authoritarianism

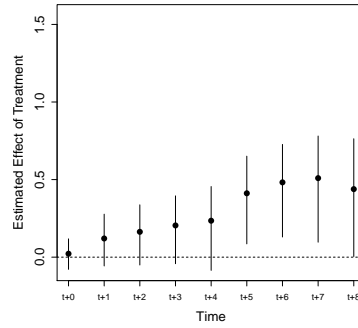


Royal Authoritarianism

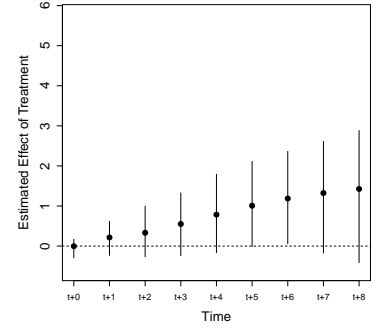
Figure S10: WB Loan Commitments: Regime Categories ($L = 3, F = 8$)



Parliamentary Democracy

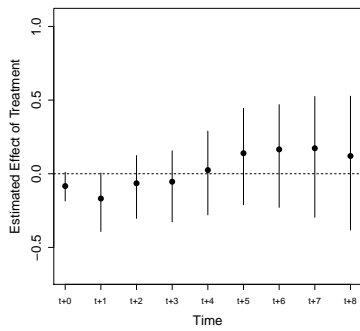


Mixed (semi-presidential) democracy

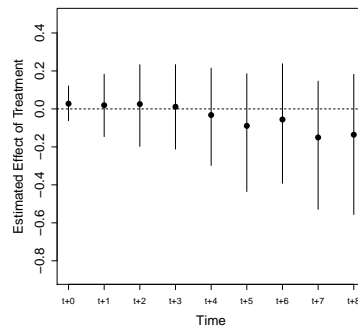


Presidential Democracy

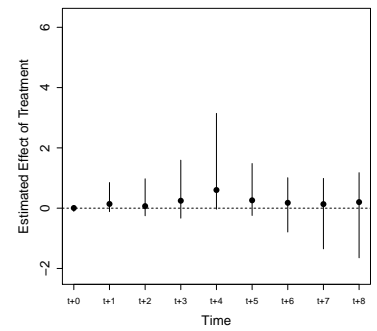
(b) Loan Disbursements



Civilian Authoritarianism

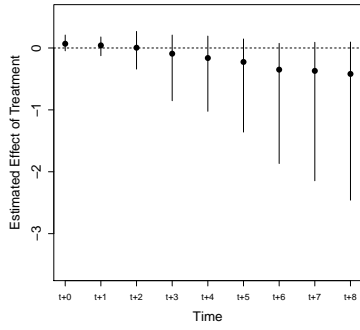


Military Authoritarianism

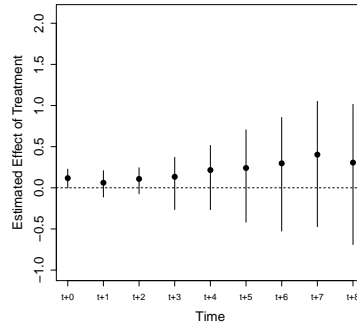


Royal Authoritarianism

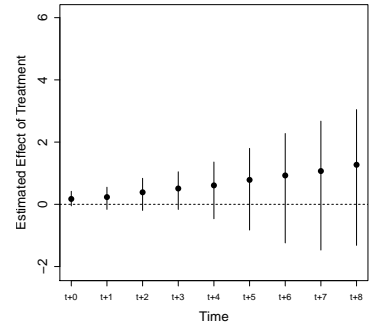
Figure S11: WB Loan Disbursements: Regime Categories ($L = 3, F = 8$)



Parliamentary Democracy

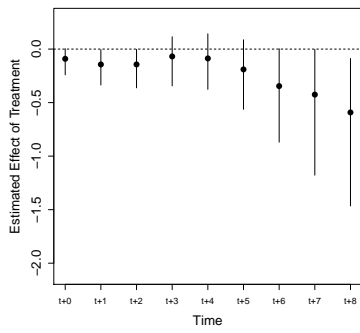


Mixed (semi-presidential) democracy

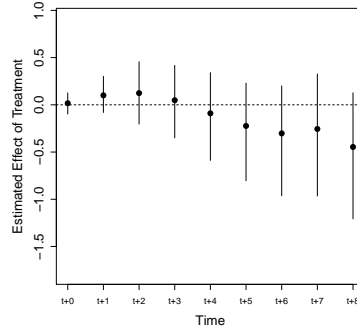


Presidential Democracy

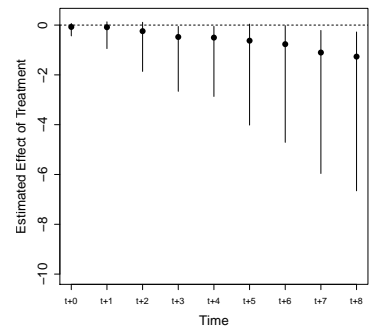
(b) Loan Disbursements



Civilian Authoritarianism



Military Authoritarianism



Royal Authoritarianism

Above/below median-level transparency

Secondly, we compare the ATTs of BWI loans on countries above or below the median level of transparency in the year before they are treated. The analysis uses $GDP\ pc > median(GDP\ pc)$ × *democracy* as the moderator in causal inference. Figures S12, S13, S14, S15 report the estimates. We find that overall, BWI loans increase transparency in more developed recipients, and barely have significant effects on less developed ones.

Figure S12: IMF Loans: Causal Effects ($L = 3, F = 8$) (Above Median)

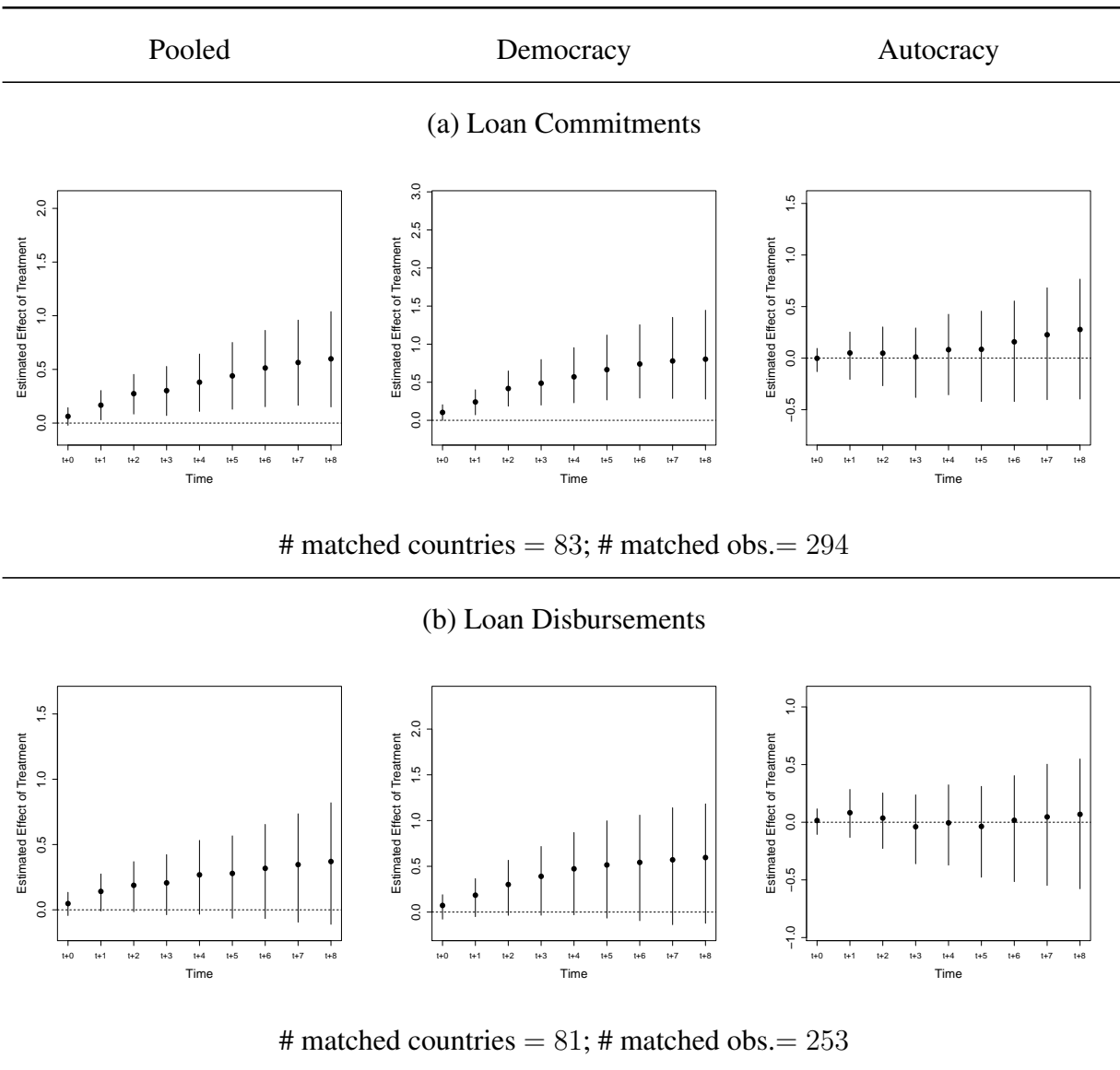


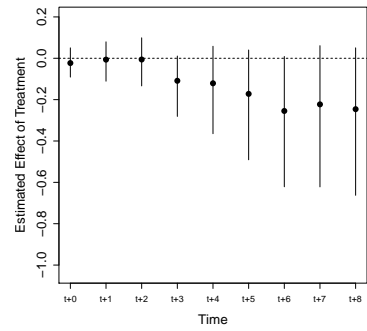
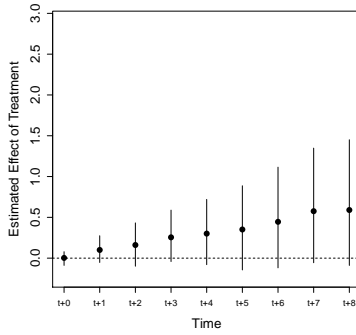
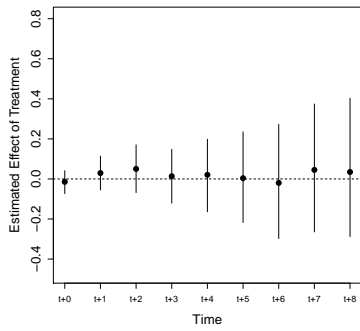
Figure S13: IMF Loans: Causal Effects ($L = 3, F = 8$) (Below Median)

Pooled

Democracy

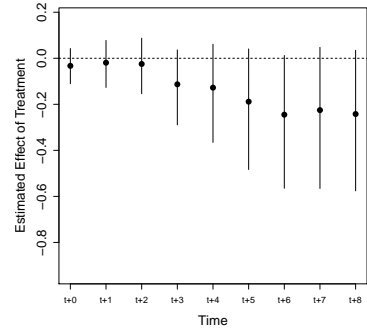
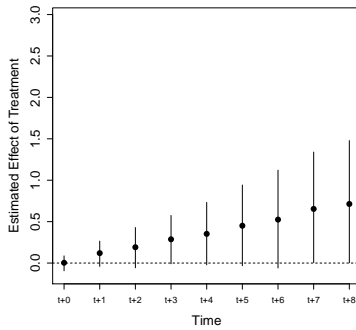
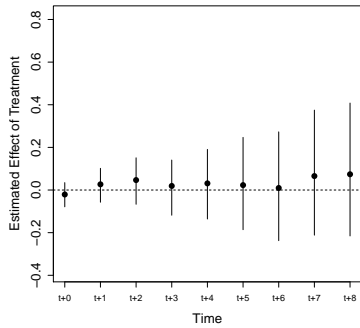
Autocracy

(a) Loan Commitments



matched countries = 83; # matched obs. = 294

(b) Loan Disbursements



matched countries = 81; # matched obs. = 253

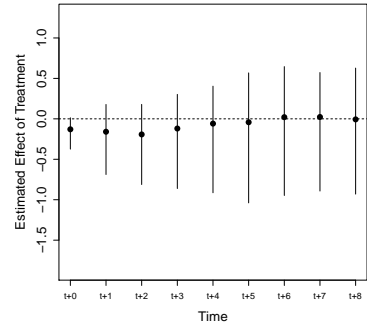
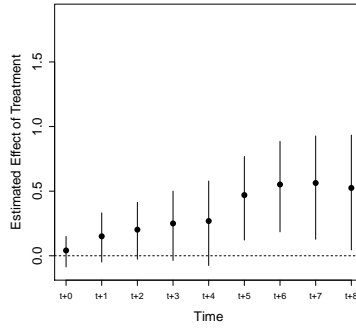
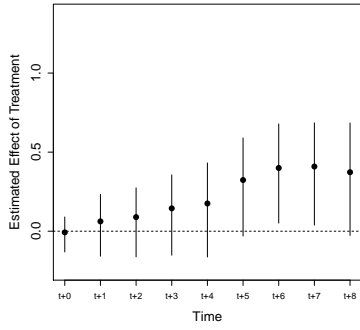
Figure S14: WB Loans: Causal Effects ($L = 3, F = 8$) (Above Median)

Pooled

Democracy

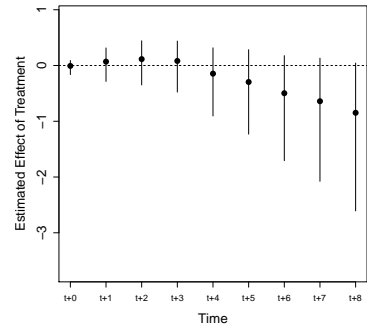
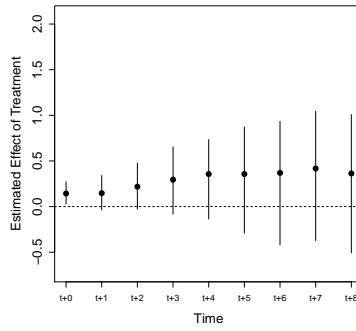
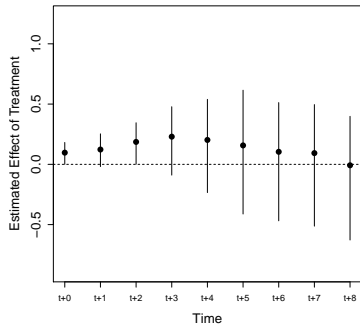
Autocracy

(a) Loan Commitments



matched countries = 78; # matched obs. = 205

(b) Loan Disbursements



matched countries = 71; # matched obs. = 194

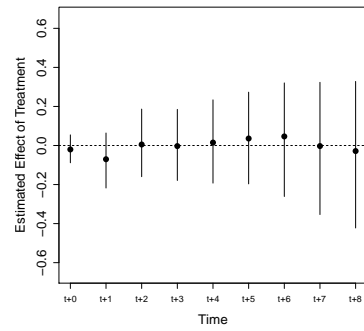
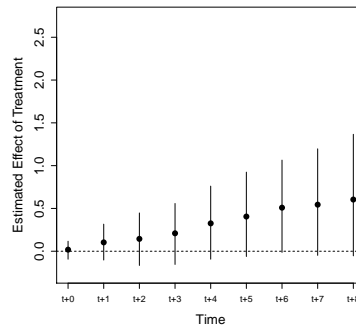
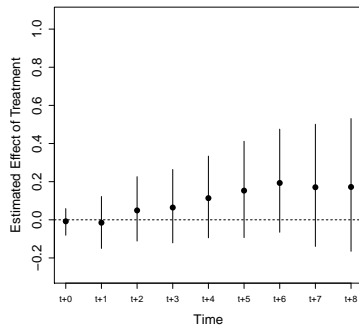
Figure S15: WB Loans: Causal Effects ($L = 3, F = 8$) (Below Median)

Pooled

Democracy

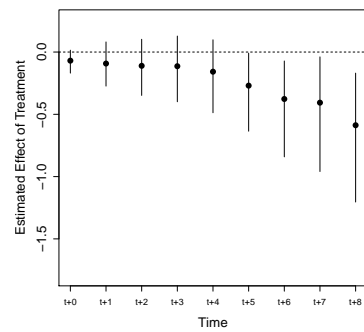
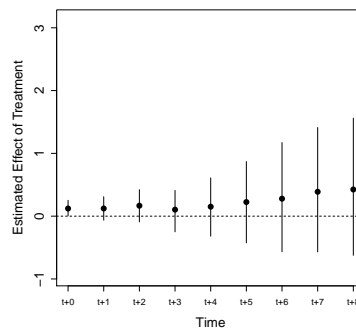
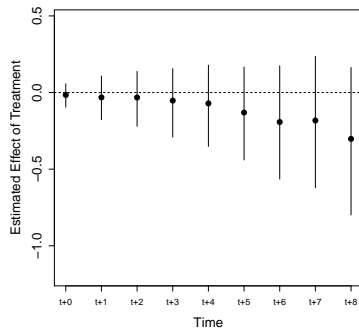
Autocracy

(a) Loan Commitments



matched countries = 78; # matched obs. = 205

(b) Loan Disbursements



matched countries = 71; # matched obs. = 194

International importance (UNSC membership)

Finally, we consider the international importance of countries. This analysis uses "UNSC member" \times the democracy indicator as the moderator in *PanelMatch* function. Figures S16, S17, S18, and S19 depict the results. The estimates suggest that: 1) BWI loans exhibit stronger positive effects on non-UNSC member states than on members; 2) The positive effects are exclusively observed in democracies; 3) We observe negative effects of IMF loans on autocratic UNSC member states.

Figure S16: IMF Loans: Causal Effects ($L = 3, F = 8$) (UNSC Member)

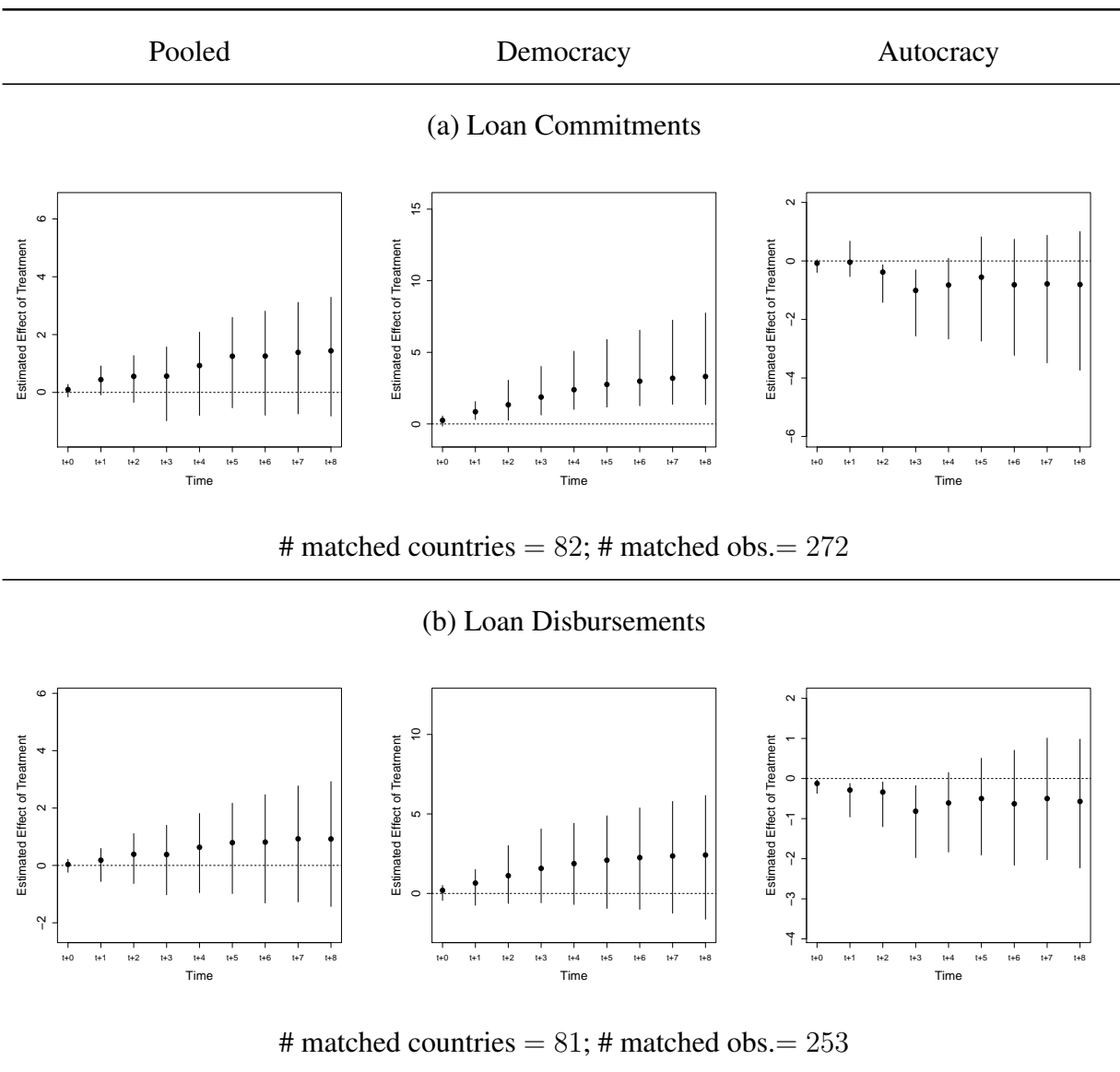


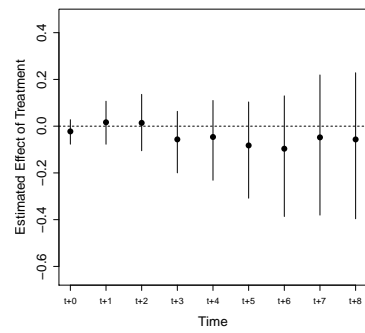
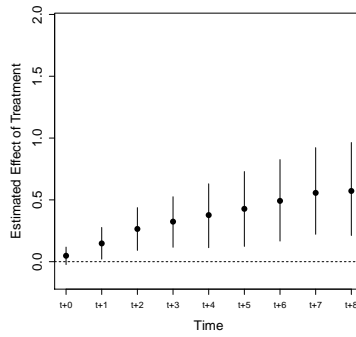
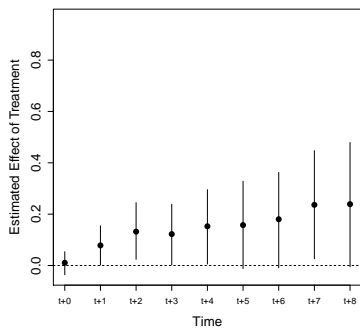
Figure S17: IMF Loans: Causal Effects ($L = 3, F = 8$) (UNSC Non-Member)

Pooled

Democracy

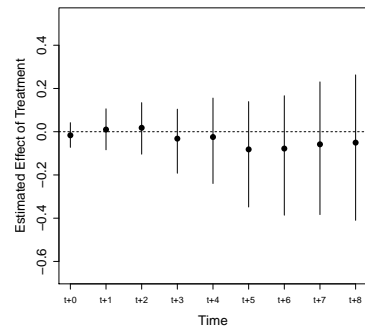
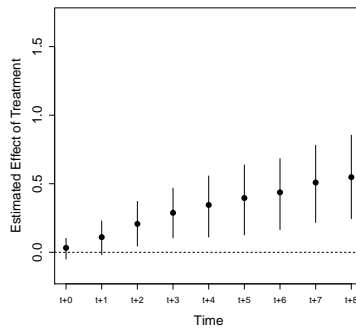
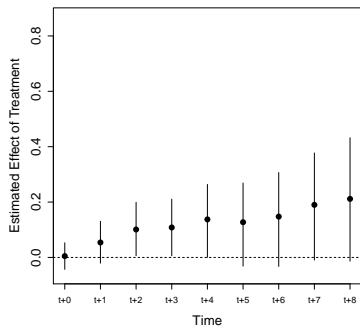
Autocracy

(a) Loan Commitments



matched countries = 75; # matched obs. = 194

(b) Loan Disbursements



matched countries = 69; # matched obs. = 183

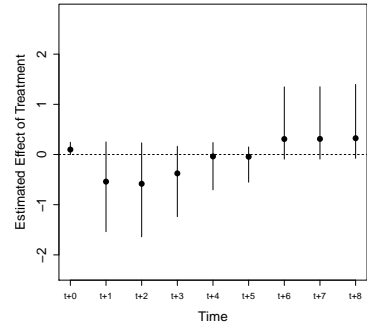
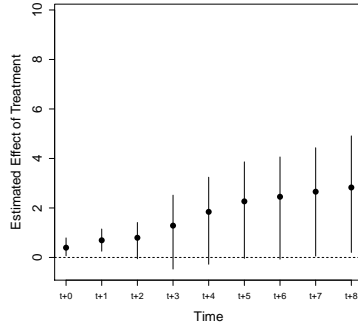
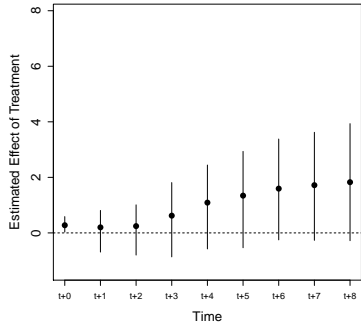
Figure S18: WB Loans: Causal Effects ($L = 3, F = 8$) (UNSC Member)

Pooled

Democracy

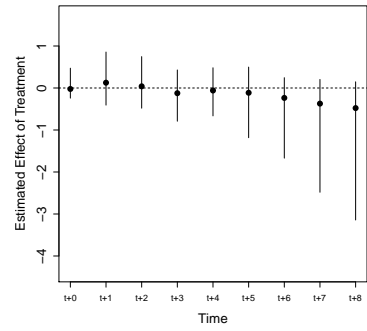
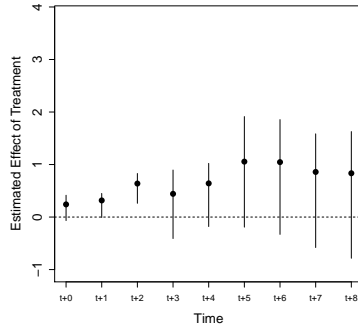
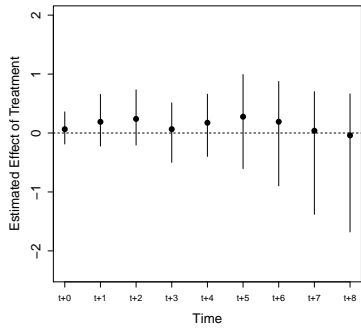
Autocracy

(a) Loan Commitments



matched countries = 82; # matched obs. = 272

(b) Loan Disbursements



matched countries = 81; # matched obs. = 253

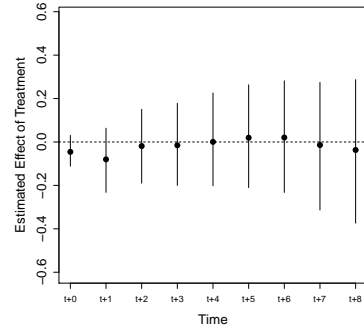
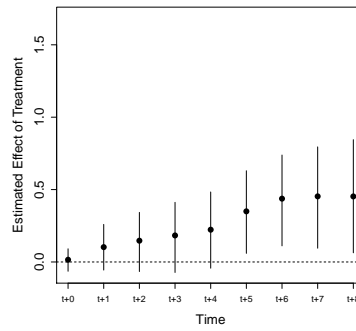
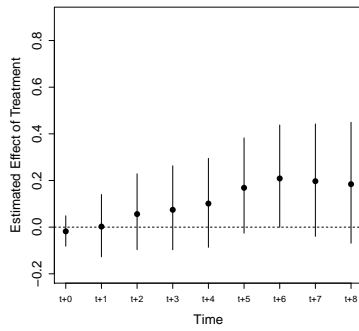
Figure S19: WB Loans: Causal Effects ($L = 3, F = 8$) (UNSC Non-Member)

Pooled

Democracy

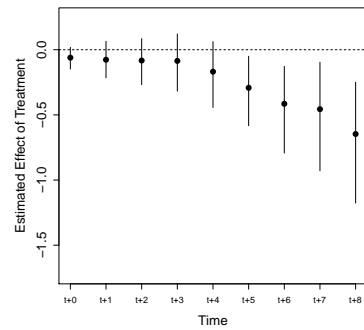
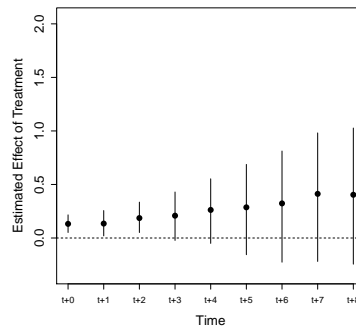
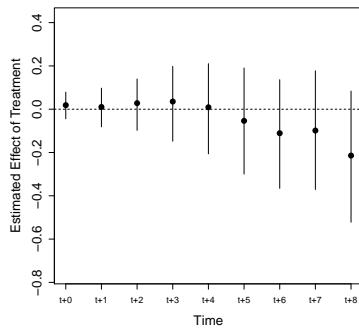
Autocracy

(a) Loan Commitments



matched countries = 75; # matched obs. = 194

(b) Loan Disbursements



matched countries = 69; # matched obs. = 183

V Further detailed results for the multilevel analysis

Table S6: Varying Effect of Size of BWI Loans by Level of Development

Covariates	IMF Com.	IMF Disb.	WB Com.	WB Disb.
Constant	-0.278 (0.213)	-0.266 (0.212)	-0.200 (0.222)	-0.041 (0.229)
GDP pc	0.525 (0.286)	0.521 (0.287)	0.462 (0.286)	0.437 (0.286)
IMF Commitment	-0.020 (0.012)			
GDP pc × IMF Commitment	0.003* (0.001)			
IMF Disbursement		-0.018 (0.014)		
GDP pc × IMF Disbursement		0.003 (0.002)		
WB Commitment			-0.018 (0.009)	
GDP pc × WB Commitment			0.003* (0.001)	
WB Disbursement				-0.035*** (0.010)
GDP pc × WB Disbursement				0.004*** (0.001)
Lagged Transparency	0.951*** (0.007)	0.952*** (0.007)	0.949*** (0.007)	0.946*** (0.007)
Trade	-0.001 (0.000)	-0.001 (0.000)	-0.001 (0.000)	-0.001 (0.000)
WTO Member	0.069 (0.052)	0.068 (0.052)	0.065 (0.052)	0.058 (0.052)
UNSC Member	0.014 (0.034)	0.015 (0.034)	0.007 (0.034)	0.005 (0.034)
Population	0.538 (0.290)	0.533 (0.290)	0.477 (0.291)	0.477 (0.290)
GDP	-0.519 (0.287)	-0.516 (0.288)	-0.459 (0.288)	-0.454 (0.287)
Signed BITs	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)
America	0.045 (0.048)	0.055 (0.048)	0.001 (0.051)	-0.024 (0.051)
Asia	0.055 (0.044)	0.056 (0.044)	0.055 (0.044)	0.049 (0.044)
Europe	0.244*** (0.050)	0.248*** (0.050)	0.237*** (0.051)	0.241*** (0.050)
Oceania	-0.005 (0.057)	-0.007 (0.057)	0.010 (0.057)	0.011 (0.057)
Political Instability	-0.006 (0.007)	-0.006 (0.007)	-0.006 (0.007)	-0.006 (0.007)
Geo-Distance	-0.001 (0.005)	-0.000 (0.005)	-0.004 (0.005)	-0.005 (0.005)
AIC	1856.884	1860.000	1849.984	1840.730
BIC	1972.150	1975.266	1965.250	1955.996
Log Likelihood	-907.442	-909.000	-903.992	-899.365
Num. obs.	1788	1788	1788	1788
Num. groups: ccode	83	83	83	83
Num. groups: year	30	30	30	30
Num. groups: democracy_dd_bd_lag	2	2	2	2

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Multilevel regression for pooled sample.

Table S7: Varying Effect of BWI Loan Dummies by Level of Development

Covariates	IMF Com.	IMF Disb.	WB Com.	WB Disb.
Constant	-0.282 (0.213)	-0.265 (0.213)	-0.196 (0.225)	-0.023 (0.235)
GDP pc	0.529 (0.286)	0.523 (0.287)	0.461 (0.286)	0.418 (0.286)
IMF Commitment	-0.435 (0.224)			
GDP pc × IMF Commitment	0.062* (0.028)			
IMF Disbursement		-0.371 (0.247)		
GDP pc × IMF Disbursement		0.053 (0.032)		
WB Commitment			-0.358* (0.171)	
GDP pc × WB Commitment			0.050* (0.020)	
WB Disbursement				-0.652*** (0.185)
GDP pc × WB Disbursement				0.082*** (0.021)
Lagged Transparency	0.951*** (0.007)	0.952*** (0.007)	0.949*** (0.007)	0.946*** (0.007)
Trade	-0.001 (0.000)	-0.001 (0.000)	-0.001 (0.000)	-0.001 (0.000)
WTO Member	0.069 (0.052)	0.069 (0.052)	0.065 (0.052)	0.056 (0.052)
UNSC Member	0.014 (0.034)	0.015 (0.034)	0.008 (0.034)	0.006 (0.034)
Population	0.542 (0.290)	0.535 (0.290)	0.478 (0.290)	0.459 (0.290)
GDP	-0.523 (0.287)	-0.517 (0.288)	-0.459 (0.287)	-0.436 (0.287)
Signed BITs	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)
America	0.042 (0.048)	0.053 (0.048)	-0.002 (0.051)	-0.025 (0.051)
Asia	0.053 (0.044)	0.055 (0.044)	0.053 (0.044)	0.048 (0.044)
Europe	0.243*** (0.050)	0.247*** (0.050)	0.235*** (0.050)	0.238*** (0.050)
Oceania	-0.006 (0.057)	-0.008 (0.057)	0.010 (0.057)	0.011 (0.057)
Political Instability	-0.006 (0.007)	-0.006 (0.007)	-0.006 (0.007)	-0.007 (0.007)
Geo-Distance	-0.001 (0.005)	-0.000 (0.005)	-0.004 (0.005)	-0.006 (0.005)
AIC	1856.169	1859.535	1849.805	1841.984
BIC	1971.435	1974.801	1965.071	1957.250
Log Likelihood	-907.084	-908.767	-903.902	-899.992
Num. obs.	1788	1788	1788	1788
Num. groups: ccode	83	83	83	83
Num. groups: year	30	30	30	30
Num. groups: democracy_dd_bd_lag	2	2	2	2

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Multilevel regression for pooled sample.

Table S8: Interactive Term of UNSC and Loan Size

Covariates	IMF Com.	IMF Disb.	WB Com.	WB Disb.
Constant	-0.509*** (0.116)	-0.497*** (0.116)	-0.535*** (0.116)	-0.550*** (0.117)
UNSC Member	0.021 (0.026)	0.018 (0.026)	0.037 (0.038)	-0.016 (0.039)
IMF Commitment	0.003** (0.001)			
UNSC Member × IMF Commitment	-0.000 (0.003)			
IMF Disbursement		0.003* (0.001)		
UNSC Member × IMF Disbursement		0.001 (0.004)		
WB Commitment			0.004*** (0.001)	
UNSC Member × WB Commitment			-0.002 (0.003)	
WB Disbursement				0.003*** (0.001)
GDP pc × WB Disbursement				0.003 (0.003)
Lagged Transparency	0.969*** (0.004)	0.969*** (0.004)	0.967*** (0.004)	0.967*** (0.004)
Trade	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
WTO Member	-0.004 (0.025)	-0.005 (0.025)	-0.003 (0.025)	-0.008 (0.025)
Population	0.317 (0.189)	0.317 (0.189)	0.257 (0.189)	0.268 (0.189)
GDP pc	0.297 (0.188)	0.297 (0.188)	0.252 (0.188)	0.262 (0.188)
GDP	-0.289 (0.188)	-0.290 (0.188)	-0.233 (0.189)	-0.244 (0.188)
Signed BITs	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
America	0.051 (0.027)	0.053* (0.027)	0.045 (0.027)	0.046 (0.027)
Asia	0.046* (0.020)	0.044* (0.020)	0.046* (0.020)	0.048* (0.020)
Europe	0.191*** (0.028)	0.189*** (0.028)	0.200*** (0.028)	0.203*** (0.028)
Oceania	0.002 (0.041)	-0.000 (0.041)	0.013 (0.041)	0.013 (0.041)
Political Instability	-0.011** (0.003)	-0.011** (0.003)	-0.009** (0.003)	-0.010** (0.003)
Geo-Distance	0.000 (0.003)	0.000 (0.003)	-0.001 (0.003)	-0.000 (0.003)
AIC	3418.926	3422.837	3411.417	3414.563
BIC	3549.746	3553.657	3542.236	3545.383
Log Likelihood	-1688.463	-1690.419	-1684.708	-1686.281
Num. obs.	3750	3750	3750	3750
Num. groups: ccode	125	125	125	125
Num. groups: year	30	30	30	30
Num. groups: democracy_dd_bd_lag	2	2	2	2

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Multilevel regression for pooled sample.

Table S9: Interactive Term of UNSC and Loan Dummy

Covariates	IMF Com.	IMF Disb.	WB Com.	WB Disb.
Constant	-0.514*** (0.116)	-0.501*** (0.116)	-0.559*** (0.117)	-0.570*** (0.119)
UNCS Member	0.022 (0.026)	0.019 (0.026)	0.040 (0.038)	-0.020 (0.039)
IMF Commitment	0.057** (0.019)			
UNCS Member × IMF Commitment	-0.015 (0.068)			
IMF Disbursement		0.051* (0.022)		
UNCS Member × IMF Disbursement		0.007 (0.081)		
WB Commitment			0.065*** (0.016)	
UNCS Member × WB Commitment			-0.040 (0.049)	
WB Disbursement				0.057*** (0.017)
GDP pc × WB Disbursement				0.059 (0.050)
Lagged Transparency	0.969*** (0.004)	0.969*** (0.004)	0.967*** (0.004)	0.967*** (0.004)
Trade	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
WTO Member	-0.004 (0.025)	-0.005 (0.025)	-0.002 (0.025)	-0.007 (0.025)
Population	0.318 (0.189)	0.319 (0.189)	0.266 (0.189)	0.274 (0.189)
GDP pc	0.298 (0.188)	0.299 (0.188)	0.259 (0.188)	0.266 (0.188)
GDP	-0.290 (0.188)	-0.291 (0.188)	-0.241 (0.188)	-0.248 (0.188)
Signed BITs	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
America	0.052 (0.027)	0.054* (0.027)	0.046 (0.027)	0.046 (0.027)
Asia	0.046* (0.020)	0.044* (0.020)	0.046* (0.020)	0.048* (0.020)
Europe	0.191*** (0.028)	0.189*** (0.028)	0.200*** (0.028)	0.203*** (0.028)
Oceania	0.002 (0.041)	-0.000 (0.041)	0.012 (0.041)	0.013 (0.041)
Political Instability	-0.011** (0.003)	-0.011** (0.003)	-0.009** (0.003)	-0.010** (0.003)
Geo-Distance	0.000 (0.003)	0.000 (0.003)	-0.001 (0.003)	-0.000 (0.003)
AIC	3419.727	3423.314	3412.421	3414.544
BIC	3550.547	3554.134	3543.241	3545.364
Log Likelihood	-1688.863	-1690.657	-1685.211	-1686.272
Num. obs.	3750	3750	3750	3750
Num. groups: ccode	125	125	125	125
Num. groups: year	30	30	30	30
Num. groups: democracy_dd_bd_lag	2	2	2	2

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Multilevel regression for pooled sample.

VI Dropping time- and country-varying intercepts

Recall from the main text that serial correlation is built into the estimate of this the HRV index. Further recall that our mixed-effect/multilevel models are estimated using restricted maximum likelihood. Given concerns about including the lagged dependent-variable along with time- and country-varying intercepts, we consider models without these terms, reported below in Tables S10 and S11. The qualitative conclusions from these models are the same as in our baseline results.

Table S10: Simple Linear Model (Loan Size)

Covariates	IMF Com.	IMF Disb.	WB Com.	WB Disb.
Constant	-0.383** (0.118)	-0.371** (0.118)	-0.394*** (0.119)	-0.422*** (0.120)
IMF Commitment	0.004*** (0.001)			
IMF Disbursement ln		0.004** (0.001)		
WB Commitment			0.003*** (0.001)	
WB Disbursement				0.004*** (0.001)
Lagged Transparency	0.978*** (0.004)	0.978*** (0.004)	0.976*** (0.004)	0.976*** (0.004)
Trade	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
WTO Member	-0.050** (0.016)	-0.052*** (0.016)	-0.051** (0.016)	-0.057*** (0.016)
UNSC Member	0.017 (0.026)	0.018 (0.026)	0.014 (0.026)	0.014 (0.026)
Population	0.326 (0.199)	0.325 (0.200)	0.267 (0.200)	0.276 (0.200)
GDP pc	0.310 (0.198)	0.308 (0.198)	0.263 (0.199)	0.274 (0.199)
GDP	-0.304 (0.199)	-0.303 (0.199)	-0.249 (0.199)	-0.258 (0.199)
Signed BITs	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)
America	0.070* (0.027)	0.073** (0.027)	0.062* (0.027)	0.065* (0.027)
Asia	0.058** (0.021)	0.056** (0.021)	0.058** (0.021)	0.060** (0.021)
Europe	0.229*** (0.028)	0.227*** (0.028)	0.235*** (0.029)	0.240*** (0.029)
Oceania	0.006 (0.043)	0.003 (0.043)	0.011 (0.043)	0.015 (0.043)
Political Instability	-0.010** (0.004)	-0.010** (0.004)	-0.009* (0.004)	-0.009** (0.004)
Geo-Distance	0.002 (0.003)	0.002 (0.003)	0.001 (0.003)	0.001 (0.003)
R ²	0.971	0.971	0.971	0.971
Adj. R ²	0.971	0.971	0.971	0.971
Num. obs.	3750	3750	3750	3750

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Multilevel regression for pooled sample.

Table S11: Simple Linear Model (Loan Dummy)

Covariates	IMF Com.	IMF Disb.	WB Com.	WB Disb.
Constant	-0.389** (0.119)	-0.375** (0.119)	-0.419*** (0.120)	-0.442*** (0.121)
IMF Commitment	0.064*** (0.019)			
IMF Disbursement		0.062** (0.022)		
WB Commitment			0.058*** (0.016)	
WB Disbursement				0.062*** (0.018)
Lagged Transparency	0.978*** (0.004)	0.978*** (0.004)	0.976*** (0.004)	0.976*** (0.004)
Trade	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
WTO Member	-0.050** (0.016)	-0.053*** (0.016)	-0.051** (0.016)	-0.056*** (0.016)
UNSC Member	0.017 (0.026)	0.018 (0.026)	0.014 (0.026)	0.015 (0.026)
Population	0.326 (0.200)	0.327 (0.200)	0.273 (0.200)	0.285 (0.200)
GDP pc	0.310 (0.198)	0.310 (0.198)	0.268 (0.199)	0.280 (0.199)
GDP	-0.304 (0.199)	-0.305 (0.199)	-0.253 (0.199)	-0.265 (0.199)
Signed BITs	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)
America	0.070** (0.027)	0.074** (0.027)	0.063* (0.027)	0.066* (0.027)
Asia	0.058** (0.021)	0.056** (0.021)	0.058** (0.021)	0.060** (0.021)
Europe	0.229*** (0.028)	0.228*** (0.028)	0.235*** (0.029)	0.240*** (0.029)
Oceania	0.006 (0.043)	0.003 (0.043)	0.011 (0.043)	0.015 (0.043)
Political Instability	-0.010** (0.004)	-0.010** (0.004)	-0.009* (0.004)	-0.009** (0.004)
Geo-Distance	0.002 (0.003)	0.002 (0.003)	0.001 (0.003)	0.001 (0.003)
R ²	0.971	0.971	0.971	0.971
Adj. R ²	0.971	0.971	0.971	0.971
Num. obs.	3750	3750	3750	3750

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Multilevel regression for pooled sample.

VII Testing loans per capita

The association between BWI loans and transparency could possibly depend on the size of the loan relative to the country's size. (This is relevant only for the multi-level approach, which allows for the estimation of continuous treatment.) Using BWI loan per capita in a multilevel analysis, we find our main results are robust. We report the estimates below in Table S12:

Table S12: Loan Per Capita

Covariates	IMF Com.	IMF Disb.	WB Com.	WB Disb.
Constant	-0.502*** (0.115)	-0.490*** (0.114)	-0.529*** (0.115)	-0.547*** (0.116)
IMF Commitment	0.003** (0.001)			
IMF Disbursement		0.003* (0.001)		
WB Commitment			0.003*** (0.001)	
WB Disbursement				0.003*** (0.001)
Lagged Transparency	0.968*** (0.004)	0.969*** (0.004)	0.966*** (0.004)	0.966*** (0.004)
Democracy	0.049** (0.017)	0.049** (0.017)	0.044** (0.017)	0.045** (0.017)
Trade	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
WTO Member	-0.005 (0.025)	-0.006 (0.025)	-0.005 (0.025)	-0.009 (0.025)
UNSC Member	0.019 (0.024)	0.019 (0.024)	0.015 (0.024)	0.016 (0.024)
GDP pc	-0.022** (0.008)	-0.022** (0.008)	-0.008 (0.009)	-0.009 (0.009)
GDP	0.030*** (0.006)	0.029*** (0.006)	0.026*** (0.006)	0.027*** (0.006)
Signed BITs	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
America	0.040 (0.027)	0.042 (0.027)	0.033 (0.027)	0.037 (0.027)
Asia	0.050* (0.020)	0.048* (0.020)	0.049* (0.020)	0.051* (0.020)
Europe	0.180*** (0.028)	0.178*** (0.028)	0.190*** (0.028)	0.192*** (0.028)
Oceania	-0.007 (0.041)	-0.010 (0.041)	0.002 (0.041)	0.004 (0.041)
Political Instability	-0.011*** (0.003)	-0.011*** (0.003)	-0.010** (0.003)	-0.011** (0.003)
Geo-Distance	-0.000 (0.003)	-0.000 (0.003)	-0.001 (0.003)	-0.001 (0.003)
AIC	3413.390	3417.298	3406.245	3409.961
BIC	3537.980	3541.888	3530.836	3534.552
Log Likelihood	-1686.695	-1688.649	-1683.123	-1684.981
Num. obs.	3750	3750	3750	3750
Num. groups: ccode	125	125	125	125
Num. groups: year	30	30	30	30
Num. groups: democracy	2	2	2	2

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Multilevel regression for pooled sample.