Commitment Institutions and Electoral and Political Instability

A Reduced-Form Approach

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Do the commitment institutions of central bank independence and fixed exchange rates affect electoral and political instability?

- Net Welfare Benefits
  - Inflation Time Inconsistency
  - Political efficacy, access to capital
  - Economic Voting, Increased Stability
- Political Business Cycles
  - Inability to manipulate economy or satisfy partisans
  - Monetary (perhaps fiscal) policy
  - Economic voting, Decreased Stability

Can Trump fire Fed Chair Jerome Powell?

Adriene Hill, Janet Nguyen, and Daisy Palacios | Dec 24, 2018

Literature

- Bernhard and Leblang (2002)
  - OLS, 16 parliamentary democracies since 1970s
  - CBI increases cabinet duration by 3mos, Fixed rates by 5mos
- Clark, Golder, and Poast (2013)
  - Survival Analysis, 19 OECD countries since 1970s
  - Both institutions increase leader survival but only after 7y in office
- Contribution:
  - Far larger dataset including non/semi-democracies
  - More consideration of endogeneity: choice of institutions based on stability consideration, de jure independence
  - Political, not just electoral stability (coups, civil wars, etc), consideration for specific governmental positions

Data

- Panel of 192 countries, 1970-2016
- Varieties of Democracy
  - V2elturnhos, v2eltturnhog, v2eltvrig
  - 0 for same individual, 1 for same party or coalition, 2 for new party & ind.
  - WGI Political Violence (neg = unstable)
  - Instability Event- coup, civil war, internal conflict
- Garriga (Cukierman, Webb, Neyapti)- de jure CBI
- Dreher et al.- Irregular turnover of governor- de facto CBI
- Reinhart, Rogoff Exchange Rates: 16 categories (higher = float)

Results

- Separate regressions (bad control problem)
- FEs, clustered SEs
- De Jure CBI and more instability: PBCs
- Less De Facto CBI (high irregular turnover) and more lower chamber turnover
- Floating rate and HOS turnover
- Welfare Benefits of De Facto CBI, Fixed Rates?

Fixed Effects Regression with Clustered Standard Errors

Table: De Jure CBI, Fixed Effects Regression with Clustered Standard Errors

	(1) HoG Turnover	(2) HoS Turnover	(3) L. H. Turnover	(4) WB Pol. Stability	(5) Instab. Event
De Jure CBI	0.276	0.303*	0.389*	-0.417**	1.000***
	(1.44)	(2.30)	(1.99)	(-2.75)	(11.15)
Fixed Rate	-0.0120	-0.0207***	-0.00615	0.0106	0.00690
	(-1.61)	(-3.45)	(-0.71)	(1.69)	(1.33)
Constant	0.618***	0.390***	0.535***	0.0283	-0.113*
	(6.15)	(5.43)	(4.99)	(0.31)	(-2.20)
Observations	1399	1399	1141	2141	4207

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Fixed Effects Regression with Clustered Standard Errors

Table: De Facto CBI, Fixed Effects Regression with Clustered Standard Errors

	(1) HoG Turnover	(2) HoS Turnover	(3) L. H. Turnover	(4) WB Pol. Stability	(5) Instab. Event
De facto CBI	-0.117	-0.0512	-0.211**	0.00955	0.0244
	(-1.68)	(-0.81)	(-2.81)	(0.36)	(1.36)
Fixed Rate	-0.00548	-0.0117*	0.00444	0.0153*	0.0128**
	(-0.82)	(-2.06)	(0.53)	(2.08)	(2.73)
Constant	0.805***	0.521***	0.865***	-0.247***	0.261***
	(9.91)	(7.75)	(9.43)	(-3.54)	(6.77)
Observations	1651	1651	1334	2669	4491

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Ordered Logit (Mean Marginal Effects)

- Nothing changes in terms of significance, except for fixed Erates and HOG
- xtologit; random effects

Ordered Logit Mean Marginal Effects

Table: De Jure CBI, Mean Marginal Effects, Ordered Logit Panel Regression, Random Effects, Clustered Standard Errors

	(1) HoG Turnover	(2) HoS Turnover	(3) L.H. Turnover
De Jure CBI			
1._predict	-0.146	-0.208***	-0.316***
	(-1.93)	(-3.54)	(-3.65)
2._predict	0.0152	0.0390***	0.0980**
	(1.80)	(3.32)	(3.21)
3._predict	0.131	0.169***	0.218***
	(1.93)	(3.47)	(3.68)
Fixed Rate			
1._predict	0.00792*	0.00896**	0.00392
	(2.45)	(3.21)	(0.96)
2._predict	-0.000826*	-0.00168**	-0.00122
	(-2.22)	(-3.00)	(-0.96)
3._predict	-0.00710*	-0.00728**	-0.00271
	(-2.46)	(-3.18)	(-0.96)
Observations	1399	1399	1141

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Ordered Logit Mean Marginal Effects

Table: De Facto CBI, Mean Marginal Effects, Ordered Logit Panel Regression, Random Effects, Clustered Standard Errors

	(1) HoG Turnover	(2) HoS Turnover	(3) L.H. Turnover
De facto CBI			
1._predict	0.0734*	0.0356	0.119**
	(2.23)	(1.30)	(3.19)
2._predict	-0.00756*	-0.00655	-0.0296**
	(-2.02)	(-1.24)	(-3.05)
3._predict	-0.0658*	-0.0290	-0.0890**
	(-2.23)	(-1.31)	(-3.14)
Fixed Rate			
1._predict	0.00384	0.00473	-0.00440
	(1.32)	(1.93)	(-1.19)
2._predict	-0.000396	-0.000870	0.00110
	(-1.27)	(-1.87)	(1.18)
3._predict	-0.00345	-0.00386	0.00331
	(-1.32)	(-1.92)	(1.19)
Observations	1651	1651	1334

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Panel Logit (binary instability event variable) Mean Marginal Effects

- Fixed effects
- More evidence that de jure CBI increases political instability
- Fixed exchange rate (low RR rate) increases pol. instability, but very small effect size

Binary Instability Event Logit, Mean Marginal Effects

Table: Instability Event Panel Logit, Fixed Effects and Clustered Standard Errors, Mean Marginal Effects

	(1) Instab. Event
De Jure CBI	0.376***
	(12.93)
Fixed Rate	0.00227**
	(2.99)
Observations	3912

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Binary Instability Event Logit, Mean Marginal Effects

Table: Instability Event Panel Logit, Fixed Effects and Clustered Standard Errors, Mean Marginal Effects

	(1) Instab. Event
De facto CBI	0.0282 (1.18)
Fixed Rate	0.0152*** (6.71)
Observations	4163

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

IV1: Tertiary Ed Enrollment (CBI), Aggregate GDP (Fixed Rate)

- Good first stages
- Poor exclusion restrictions for political stability, better ones for electoral stability/turnover
- De jure CBI now increases lower chamber turnover, but no longer HOS
- Unclear sign for fixed rates (last two cols)
- De facto CBI omitted, insignificant

Tertiary Education and Aggregate GDP Instruments

Table: Instruments of Tertiary Education Enrollment Rate and Aggregate GDP, Robust Standard Errors

	(1) HoG Turnover	(2) HoS Turnover	(3) L. H. Turnover	(4) WB Pol. Stability	(5) Instab. Event
De Jure CBI	0.629	-0.478	0.847*	6.976***	0.835***
	(1.55)	(-1.42)	(1.97)	(13.27)	(4.30)
Fixed Rate	-0.00669	0.0171	0.0266	-0.0865**	-0.0295
	(-0.19)	(0.51)	(0.76)	(-2.84)	(-1.66)
Constant	0.401	0.576*	0.0636	-3.422***	0.292
	(1.28)	(2.01)	(0.22)	(-9.22)	(1.65)
Observations	851	851	686	1865	2047

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Tertiary Education and Aggregate GDP Instruments

Table: Instruments of Tertiary Education Enrollment Rate and Aggregate GDP, Robust Standard Errors

	(1) HoG Turnover	(2) HoS Turnover	(3) L. H. Turnover	(4) WB Pol. Stability	(5) Instab. Event
De facto CBI	1.295	-0.626	2.071	39.47*	-18.01
	(1.19)	(-0.74)	(1.66)	(1.97)	(-0.46)
Fixed Rate	0.0152	-0.0101	0.0864*	0.581	-0.131
	(0.46)	(-0.32)	(2.08)	(1.49)	(-0.47)
Constant	-0.538	1.085	-1.708	-40.72	17.29
	(-0.50)	(1.32)	(-1.39)	(-1.96)	(0.48)
Observations	962	962	788	2236	2011

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

IV2: Population Share Social Science/Business Grads (CBI), Agg GDP (Fixed Rates)

- Better Exclusion Restriction
- Very limited data but strong result for de jure CBI and political instability

Population Share Social Science/Business Grads and Agg GDP Instruments

Table: Instruments of Social Science/Business Graduates Population Share and Aggregate GDP, Robust Standard Errors

	(1) HoG Turnover	(2) HoS Turnover	(3) L. H. Turnover	(4) WB Pol. Stability	(5) Instab. Event
De Jure CBI	44.33	14.48	-22.04	-19.44	2.704***
	(0.49)	(0.47)	(-0.48)	(-0.24)	(4.11)
Fixed Rate	-1.277	-0.422	0.704	0.722	-0.129
	(-0.47)	(-0.44)	(0.51)	(0.27)	(-1.60)
Constant	-19.38	-6.144	10.39	8.414	
	(-0.50)	(-0.46)	(0.52)	(0.25)	
Observations	20	20	17	53	12

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Population Share Social Science/Business Grads and Agg GDP Instruments

Table: Instruments of Social Science/Business Graduates Population Share and Aggregate GDP, Robust Standard Errors

	(1) HoG Turnover	(2) HoS Turnover	(3) L. H. Turnover	(4) WB Pol. Stability
De facto CBI	-18.95	-5.278	19.37	-7.488
	(-0.83)	(-0.40)	(0.80)	(-0.66)
Fixed Rate	0.0129	-0.0133	0.131*	0.0659
	(0.22)	(-0.25)	(2.07)	(1.16)
Constant	19.38	5.799	-19.06	7.212
	(0.85)	(0.44)	(-0.79)	(0.64)
Observations	59	59	52	187

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Just Aggregate GDP for Fixed Rates

- Clearer case for fixed rates decreasing pol and electoral stability (PBC)
- Note on exclusion restriction: still an imperfect case
  - Agg GDP proxies for economy size (optimum currency area)
  - Arguably not as connected to GDP per capita to stability
- Result for lower house sensitive to dataset

Aggregate GDP Instrument for Fixed Rates

Table: Instrument of Aggregate GDP for Fixed Exchange Rates, Robust Standard Errors

	(1) L. H. Turnover	(2) WB Pol. Stability
Fixed Rate	0.0779***	-0.257***
	(3.35)	(-4.13)
Constant	0.0991	1.992***
	(0.58)	(4.16)
Observations	835	437

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table of Lags (see paper)

- Irregular central bank turnover instantaneously associated with lower chamber election turnover
- T-3 sees strongest de jure CBI political instability impact
- T-6, T-8 de jure CBI increases pol instability. T-8 reduces HOG turnover (electoral instability) (similar to Clark, Golder, and Poast).
- Fixed rates increase instability in the same T-6 and up range
- Little significance for de facto CBI/governor turnover
- Similar results with lagged ordinal logit specification

Summary

- De jure CBI generally decreases (esp. pol) stability, suggesting limits on PBCs
- Sign unclear for governor turnover/de facto CBI
- Fixed exchange rates also increase electoral stability, but decrease political stability in FE & XTLogit models
- In IV and lag specifications fixed rates decrease all stability
- Commitment institutions politically costly, at odds with literature
- Robust results
  - Not covered: capital controls/openness don't matter, binary independent variables somewhat reduce effect sizes, interactions with democracy do not matter, institutional controls for federalism and corporatism do not affect signs or cause large changes in effects

Questions/future directions

- Diverging predictions for Head of Government, Head of State, Lower House Turnover
  - HOS and Lower House seem to have strongest relationships
- Endogenous elections
- Dynamic panel (A-Bond)?
- Ordinal logit regression with IV (different procedure)

Additional Results/Checks

Controls

- Regional government exists and has autonomy and authority, checks and balances/horizontal accountability
- Not strictly necessary
  - FEs
  - No sign flips
- Omitted: Corporatism
- Collinearity?

Controls Excluding Corporatism

Table: All Controls Excluding Corporatism, Fixed Effects and Clustered Standard Errors

	(1) HoG Turnover	(2) HoS Turnover	(3) L. H. Turnover	(4) WB Pol. Stability	(5) Instab. Ev
De Jure CBI	0.181	0.151	0.481	-0.531	0.961**
	(0.62)	(0.70)	(1.25)	(-1.98)	(5.33)
Fixed Rate	-0.00641	-0.0356***	0.00257	-0.000489	0.0232*
	(-0.48)	(-3.93)	(0.15)	(-0.05)	(2.49)
Regional government exists	0.863***	0.0000816	1.010***	0.107	-0.221*
	(3.65)	(0.00)	(3.50)	(1.98)	(-2.22)
Horizontal accountability index	0.390**	0.371**	0.220	0.0639	0.100*
	(3.30)	(3.38)	(1.85)	(0.56)	(2.20)
Checks and Balances	-0.0126	-0.0392	0.00165	0.00951	0.0076
	(-0.31)	(-1.40)	(0.04)	(0.75)	(0.63)
Autonomous Regions	-0.714	-0.0764	-1.274***	-0.359***	-0.041
	(-1.37)	(-0.58)	(-4.10)	(-7.85)	(-0.69)
State Govt. Auth.	0.306	0.0825	0.465	0	-0.065
	(0.40)	(1.19)	(1.65)	(.)	(-1.28)
Constant	-0.317	0.522**	-0.676*	0.168	-0.164
	(-0.73)	(2.67)	(-2.35)	(0.95)	(-1.46)
Observations	483	483	415	780	1389

Controls Excluding Corporatism

Table: All Controls Excluding Corporatism, Fixed Effects and Clustered Standard Errors

	(1) HoG Turnover	(2) HoS Turnover	(3) L. H. Turnover	(4) WB Pol. Stability	(5) Instab. Ev
De facto CBI	-0.264*	-0.119	-0.321*	0.0570	0.0307
	(-2.39)	(-1.13)	(-2.57)	(1.44)	(0.98)
Fixed Rate	-0.00661	-0.0207*	0.00415	-0.000246	0.0311**
	(-0.56)	(-2.16)	(0.24)	(-0.03)	(3.53)
Regional government exists	0.681**	0.0312	0.985***	0.0731	-0.062
	(2.75)	(0.33)	(5.03)	(0.68)	(-0.36)
Horizontal accountability index	0.306**	0.308**	0.223	0.0329	0.133*
	(3.17)	(3.24)	(1.81)	(0.34)	(2.36)
Checks and Balances	-0.0415	-0.0507	-0.00753	0.01000	-0.0034
	(-1.22)	(-1.74)	(-0.20)	(0.61)	(-0.27)
Autonomous Regions	-0.553	-0.0437	-1.206**	-0.302***	0.0203
	(-1.10)	(-0.64)	(-3.16)	(-7.57)	(0.23)
State Govt. Auth.	0.308	0.0861	0.615*	0	0.123
	(0.38)	(1.41)	(2.52)	(.)	(1.45)
Constant	0.322	0.651***	-0.134	-0.192	0.0226
	(0.71)	(4.73)	(-0.56)	(-1.12)	(0.15)
Observations	563	563	477	993	1416

HOS = HOG?

- V2exhoshog is an indicator for whether HOS and HOG are the same person
- De jure CBI increases HOS turnover somewhat more when they are not the same person ???
- Weaker effect when they are
- Fixed erates reduce turnover in when they are the same person

HOS = HOG Interaction Term

Table

	(1) HoG Turnover	(2) HoS Turnover
De Jure CBI	0.195	0.261
	(0.80)	(1.83)
No	0	0
	(.)	(.)
Yes	0.0221	0.149
	(0.10)	(0.69)
No × De Jure CBI	0	0
	(.)	(.)
Yes × De Jure CBI	-0.00877	-0.0563
	(-0.02)	(-0.17)
Fixed Rate	0.00372	-0.0105
	(0.44)	(-1.55)
No × Fixed Rate	0	0
	(.)	(.)
Yes × Fixed Rate	-0.0385**	-0.0248*
	(-3.11)	(-2.06)
Constant	0.626***	0.351***
	(5.61)	(4.20)
Observations	1300	1300

HOS = HOG Interaction Term

Table

	(1) HoG Turnover	(2) HoS Turnover
De facto CBI=0	0 (.)	0 (.)
De facto CBI=1	-0.154 (-1.74)	-0.0273 (-0.38)
No	0 (.)	0 (.)
Yes	-0.0412 (-0.22)	0.225 (1.21)
De facto CBI=0 × No	0 (.)	0 (.)
De facto CBI=0 × Yes	0 (.)	0 (.)
De facto CBI=1 × No	0 (.)	0 (.)
De facto CBI=1 × Yes	0.0991 (0.68)	-0.0679 (-0.51)
Fixed Rate	0.00788 (0.95)	-0.00288 (-0.42)
No × Fixed Rate	0	0

Legislative Power in Practice

- V2exhoshog is an indicator for whether HOS and HOG are the same person
- De jure CBI increases HOS turnover somewhat more when they are not the same person ???
- Weaker effect when they are
- Fixed erates reduce turnover in when they are the same person

Legislative Power in Practice Interaction Term

Table

	(1) L. H. Turnover
De Jure CBI	0.260 (1.07)
Leg. Efficacy	0.0948 (0.79)
De Jure CBI × Leg. Efficacy	0.0429 (0.20)
Fixed Rate	-0.00932 (-1.00)
Leg. Efficacy	0 (.)
Fixed Rate × Leg. Efficacy	0.00652 (0.91)
Constant	0.519*** (3.76)
Observations	1113

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Legislative Power in Practice Interaction Term

Table

	(1) L. H. Turnover
De facto CBI=0	0 (.)
De facto CBI=1	-0.218* (-2.47)
Leg. Efficacy	0.0780 (0.83)
De facto CBI=0 × Leg. Efficacy	0 (.)
De facto CBI=1 × Leg. Efficacy	0.0134 (0.21)
Fixed Rate	-0.000275 (-0.03)
Leg. Efficacy	0 (.)
Fixed Rate × Leg. Efficacy	0.00715 (0.92)
Constant	0.814*** (7.61)
Observations	1209

Democracy/Nondemocracy

- High polity on the left, low polity on the right
- De facto CBI (less irregular turnover) means less lower chamber turnover in democracies but reverse in autocracies. Rule of law?

Democracies

Table

	(1) HoG Turnover	(2) HoS Turnover	(3) L. H. Turnover	(4) WB Pol. Stability	(5) Instab. Event
De Jure CBI	0.0978	0.122	0.0716	-0.417*	1.019***
	(0.46)	(0.81)	(0.29)	(-2.03)	(10.10)
Fixed Rate	-0.00893	-0.0198*	0.00879	0.00148	0.0112
	(-0.84)	(-2.46)	(0.73)	(0.20)	(1.76)
Constant	0.859***	0.579***	0.686***	0.254*	-0.201***
	(7.75)	(6.75)	(5.38)	(2.22)	(-3.83)
Observations	903	903	768	1419	2289

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Democracies

Table

	(1) HoG Turnover	(2) HoS Turnover	(3) L. H. Turnover	(4) WB Pol. Stability	(5) Instab. Event
De facto CBI	-0.178*	-0.0142	-0.222**	-0.0115	0.0476
	(-2.10)	(-0.19)	(-2.68)	(-0.39)	(1.86)
Fixed Rate	-0.00293	-0.00997	0.00849	0.00735	0.0240***
	(-0.32)	(-1.44)	(0.81)	(0.86)	(3.85)
Constant	1.013***	0.587***	0.950***	-0.0367	0.133**
	(10.40)	(7.00)	(8.98)	(-0.47)	(2.94)
Observations	1066	1065	903	1805	2413

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$