

# 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



- ▶ 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

- ▶ 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)

- ▶ Separate regressions (bad control problem)
- ▶ FEs, clustered SEs
- ▶ De Jure CBI and more instability: PBCs
- ▶ De Facto CBI (high irregular turnover) and less lower chamber turnover
- ▶ Fixed rate and less 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 (1.44)	0.303* (2.30)	0.389* (1.99)	-0.417** (-2.75)	1.000*** (11.15)
Fixed Rate	-0.0120 (-1.61)	-0.0207*** (-3.45)	-0.00615 (-0.71)	0.0106 (1.69)	0.00690 (1.33)
Constant	0.618*** (6.15)	0.390*** (5.43)	0.535*** (4.99)	0.0283 (0.31)	-0.113* (-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 (-1.68)	-0.0512 (-0.81)	-0.211** (-2.81)	0.00955 (0.36)	0.0244 (1.36)
Fixed Rate	-0.00548 (-0.82)	-0.0117* (-2.06)	0.00444 (0.53)	0.0153* (2.08)	0.0128** (2.73)
Constant	0.805*** (9.91)	0.521*** (7.75)	0.865*** (9.43)	-0.247*** (-3.54)	0.261*** (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 (-1.93)	-0.208*** (-3.54)	-0.316*** (-3.65)
2._predict	0.0152 (1.80)	0.0390*** (3.32)	0.0980** (3.21)
3._predict	0.131 (1.93)	0.169*** (3.47)	0.218*** (3.68)
Fixed Rate			
1._predict	0.00792* (2.45)	0.00896** (3.21)	0.00392 (0.96)
2._predict	-0.000826* (-2.22)	-0.00168** (-3.00)	-0.00122 (-0.96)
3._predict	-0.00710* (-2.46)	-0.00728** (-3.18)	-0.00271 (-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* (2.23)	0.0356 (1.30)	0.119** (3.19)
2._predict	-0.00756* (-2.02)	-0.00655 (-1.24)	-0.0296** (-3.05)
3._predict	-0.0658* (-2.23)	-0.0290 (-1.31)	-0.0890** (-3.14)
Fixed Rate			
1._predict	0.00384 (1.32)	0.00473 (1.93)	-0.00440 (-1.19)
2._predict	-0.000396 (-1.27)	-0.000870 (-1.87)	0.00110 (1.18)
3._predict	-0.00345 (-1.32)	-0.00386 (-1.92)	0.00331 (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 classification) 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; strange sign for WB stability
- ▶ Fixed rates appear to increase instability
- ▶ De facto CBI more or less 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 (1.55)	-0.478 (-1.42)	0.847* (1.97)	6.976*** (13.27)	0.835*** (4.30)
Fixed Rate	-0.00669 (-0.19)	0.0171 (0.51)	0.0266 (0.76)	-0.0865** (-2.84)	-0.0295 (-1.66)
Constant	0.401 (1.28)	0.576* (2.01)	0.0636 (0.22)	-3.422*** (-9.22)	0.292 (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 (1.19)	-0.626 (-0.74)	2.071 (1.66)	39.47* (1.97)	-18.01 (-0.46)
Fixed Rate	0.0152 (0.46)	-0.0101 (-0.32)	0.0864* (2.08)	0.581 (1.49)	-0.131 (-0.47)
Constant	-0.538 (-0.50)	1.085 (1.32)	-1.708 (-1.39)	-40.72 (-1.96)	17.29 (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 (0.49)	14.48 (0.47)	-22.04 (-0.48)	-19.44 (-0.24)	2.704*** (4.11)
Fixed Rate	-1.277 (-0.47)	-0.422 (-0.44)	0.704 (0.51)	0.722 (0.27)	-0.129 (-1.60)
Constant	-19.38 (-0.50)	-6.144 (-0.46)	10.39 (0.52)	8.414 (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 (-0.83)	-5.278 (-0.40)	19.37 (0.80)	-7.488 (-0.66)
Fixed Rate	0.0129 (0.22)	-0.0133 (-0.25)	0.131* (2.07)	0.0659 (1.16)
Constant	19.38 (0.85)	5.799 (0.44)	-19.06 (-0.79)	7.212 (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

# 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*** (3.35)	-0.257*** (-4.13)
Constant	0.0991 (0.58)	1.992*** (4.16)
Observations	835	437

*t* statistics in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

# Table of Lags (see paper)

- ▶ Additional observations for the longer term:
  - ▶ 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
  - ▶ De facto CBI not very significant
  - ▶ Similar results with lagged ordinal logit specification, though de facto CBI more significant in reducing L.H. turnover

# Institutional Interaction Terms

- ▶ De jure CBI and fixed rates jointly grow political instability
- ▶ Signs mixed for other kinds of instability
- ▶ De facto CBI and fixed rates in combination somewhat increase instability relative to individually
- ▶ Pseudo Mundell-Fleming trilemma and PBCs: more difficult to manage the economy
  - ▶ Is CBI a good representation of “domestic monetary autonomy”?
  - ▶ See appendix for test with capital controls explicitly

# Summary

- ▶ De jure CBI generally decreases (esp. pol) stability, suggesting limits on PBCs
- ▶ Unclear sign for de facto CBI though it appears to increase stability if anything
- ▶ Fixed rates mostly appear to increase stability in fixed effects regressions, but the sign flips in more robust models (IV, lags)
- ▶ Combinations/interactions of commitment institutions more destabilizing
- ▶ Commitment institutions politically costly, at odds with literature
- ▶ Robust results
  - ▶ Not covered: institutional controls for federalism and corporatism do not affect signs or cause large changes in effects, unclear results on HOS = HOG and legislative power in practice, interactions with democracy do not matter, capital account openness may increase significance somewhat



- ▶ More complex theory for de jure versus de facto CBI puzzle, importance of credible commitment
- ▶ 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)

## Further Explorations

- ▶ Regional government exists and has autonomy and authority, checks and balances/horizontal accountability
- ▶ Not strictly necessary
  - ▶ Many items already included in FEs
  - ▶ No sign flips for main variables
- ▶ Omitted: Corporatism
- ▶ The controls themselves are often significant and somewhat interesting

# 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. Event
De Jure CBI	0.181 (0.62)	0.151 (0.70)	0.481 (1.25)	-0.531 (-1.98)	0.961*** (5.33)
Fixed Rate	-0.00641 (-0.48)	-0.0356*** (-3.93)	0.00257 (0.15)	-0.000489 (-0.05)	0.0232* (2.49)
Reg. Govt. Exists	0.863*** (3.65)	0.0000816 (0.00)	1.010*** (3.50)	0.107 (1.98)	-0.221* (-2.22)
Horiz. Acctability	0.390** (3.30)	0.371** (3.38)	0.220 (1.85)	0.0639 (0.56)	0.100* (2.20)
Checks and Balances	-0.0126 (-0.31)	-0.0392 (-1.40)	0.00165 (0.04)	0.00951 (0.75)	0.00762 (0.63)
Autonomous Regions	-0.714 (-1.37)	-0.0764 (-0.58)	-1.274*** (-4.10)	-0.359*** (-7.85)	-0.0416 (-0.69)
State Govt. Auth.	0.306 (0.40)	0.0825 (1.19)	0.465 (1.65)	0 (.)	-0.0651 (-1.28)
Constant	-0.317 (-0.73)	0.522** (2.67)	-0.676* (-2.35)	0.168 (0.95)	-0.164 (-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. Event
De facto CBI	-0.264* (-2.39)	-0.119 (-1.13)	-0.321* (-2.57)	0.0570 (1.44)	0.0307 (0.98)
Fixed Rate	-0.00661 (-0.56)	-0.0207* (-2.16)	0.00415 (0.24)	-0.000246 (-0.03)	0.0311*** (3.53)
Reg. Govt. Exists	0.681** (2.75)	0.0312 (0.33)	0.985*** (5.03)	0.0731 (0.68)	-0.0622 (-0.36)
Horiz. Acctability	0.306** (3.17)	0.308** (3.24)	0.223 (1.81)	0.0329 (0.34)	0.133* (2.36)
Checks and Balances	-0.0415 (-1.22)	-0.0507 (-1.74)	-0.00753 (-0.20)	0.01000 (0.61)	-0.00346 (-0.27)
Autonomous Regions	-0.553 (-1.10)	-0.0437 (-0.64)	-1.206** (-3.16)	-0.302*** (-7.57)	0.0203 (0.23)
State Govt. Auth.	0.308 (0.38)	0.0861 (1.41)	0.615* (2.52)	0 (.)	0.123 (1.45)
Constant	0.322 (0.71)	0.651*** (4.73)	-0.134 (-0.56)	-0.192 (-1.12)	0.0226 (0.15)
Observations	563	563	477	993	1416

# HOS = HOG?

- ▶ V2exhoshog is an indicator for whether HOS and HOG are the same person
- ▶ Fixed erates reduce turnover for both more when they are the same person in the results shown here
- ▶ In more robust results de jure CBI has more of an impact on both positions when they are the same individual
- ▶ However, fixed rates only affect turnover when the head of state and head of government are not the same individual
- ▶ In most cases, effects occur when  $HoS = HoG$ 
  - ▶ Direct accountability under presidentialism?

# Legislative Power in Practice

- ▶ In the results shown here, de facto CBI most significant without legislative power in practice
- ▶ However, examining more robust results, in mosts cases effects on lower house turnover occur when it has power in practice

# Democracy/Nondemocracy

- ▶ Classification based on Polity IV scores
- ▶ Not really any consistent pattern of major differences
- ▶ De facto CBI (less irregular turnover) means less lower chamber turnover in democracies but not in autocracies. Rule of law?
- ▶ See paper for lagged interaction term analysis



# Capital Account Openness Interactions

- ▶ Strange sign on effects
- ▶ If anything, open capital accounts lead to more significance (logical given increased Mundell-Fleming tradeoff)
- ▶ Interesting side result on the political optimality of Bretton Woods (closed capital account, fixed rates, de facto CBI)
- ▶ See paper for lagged interaction term analysis

# High Capital Account Openness, Tertiary Education Instrument

Table

	(1) HoG Turnover	(2) HoS Turnover	(3) L. H. Turnover	(4) WB Pol. Stability	(5) Instab. Event
De Jure CBI	1.036 (0.91)	-1.759 (-1.63)	1.585 (1.16)	12.70*** (6.24)	1.960* (2.57)
Fixed Rate	-0.00654 (-0.13)	0.0410 (0.84)	0.0157 (0.30)	-0.217*** (-3.87)	-0.0199 (-0.90)
Constant	0.138 (0.30)	1.213** (2.75)	-0.322 (-0.61)	-6.097*** (-5.69)	-0.441 (-1.24)
Observations	468	468	392	1023	981

*t* statistics in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

# High Capital Account Openness, Tertiary Education Instrument

Table

	(1) HoG Turnover	(2) HoS Turnover	(3) L. H. Turnover	(4) WB Pol. Stability	(5) Instab. Event
De facto CBI	1.416 (1.02)	-1.320 (-1.07)	2.343 (1.28)	15.39** (3.29)	4.248 (1.32)
Fixed Rate	0.0181 (0.59)	-0.0133 (-0.40)	0.0764 (1.89)	0.0870 (0.91)	0.0334 (0.69)
Constant	-0.705 (-0.56)	1.777 (1.69)	-1.954 (-1.18)	-14.51*** (-3.36)	-3.497 (-1.17)
Observations	571	570	476	1320	1001

*t* statistics in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

# Low Capital Account Openness, Tertiary Education Instrument

Table

	(1) HoG Turnover	(2) HoS Turnover	(3) L. H. Turnover	(4) WB Pol. Stability	(5) Instab. Event
De Jure CBI	-0.0646 (-0.09)	-0.0470 (-0.09)	0.398 (0.60)	7.875*** (4.23)	-1.194 (-1.03)
Fixed Rate	-0.0557 (-1.05)	0.0461 (1.28)	-0.0320 (-0.55)	0.182 (1.70)	-0.161 (-1.94)
Constant	1.166 (1.66)	0.0628 (0.14)	0.784 (1.23)	-6.084*** (-3.49)	2.294* (2.00)
Observations	383	383	294	842	1066

*t* statistics in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

# Low Capital Account Openness, Tertiary Education Instrument

Table

	(1) HoG Turnover	(2) HoS Turnover	(3) L. H. Turnover	(4) WB Pol. Stability	(5) Instab. Event
De facto CBI	1.205 (0.76)	-0.435 (-0.48)	-0.244 (-0.19)	-7.957** (-3.03)	241.5 (0.01)
Fixed Rate	-0.0404 (-0.75)	0.0184 (0.53)	-0.0473 (-0.82)	-0.106 (-1.22)	-16.01 (-0.01)
Constant	0.0372 (0.02)	0.640 (0.71)	1.349 (1.10)	7.554** (2.89)	-84.95 (-0.01)
Observations	391	392	312	916	1010

*t* statistics in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$