# Veto Player and Fiscal Policy Stability \*

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Veto player theory (Tsebelis, 2002) predicts that the number of veto players influencing policy stabilities. While studies in OECD countries have shown supportive evidence (Tsebelis and Chang, 2004), there is few work on policy stability in nondemocracies. This project uses a new dataset from GSRE (Global State Revenues and Expenditures dataset) and perform an empirical test on veto player and budget stability in authoritarian countries. Preliminary analysis show that even in authoritarian countries, institutional constrians (veto players) lead to incremental budget changes.

*Keywords*: veto player, public policy

#### Intro

Veto player theorys (Tsebelis, 2002) defines 'veto players' as individuals or institutions whose agreement is required for a change of the status quo. This theory predicts that: when the number of veto players increase, the winning set that can defeat status quo will shrink, which in turn leads to higher policy stability. Since veto player is ultimately related to the level of institutional constraints, a collary is that institutional checks leads to more stable, incremental policy outcomes. With many checks and balances in the government, it will be harder to move policies from status quo equibilibrium.

Tsebelis and Chang (2004) apply veto player theory in the budget changes of the 19 OECD countries. In their analysis, parties with more polarized positions are modeled as potential veto players who could have blocked the policy proposals.

Punctuated Equilibrium Theory (PET) argues that government budget shifts over and under attention to certain policy areas lead to long periods of stability and short periods of radical changes. Most empirical evidence, however, is drawn from developed democracies. Following Baumgartner et al. (2015) and Lam and Chan (2015), we explore the determinants of policy stability in different authoritarian regimes. We extend the existing theory by examining the variations among authoritarian countries. Our results suggest that institutionalization in the policy making process is an important factor that explains cross national variation.

<sup>\*</sup>Replication files are available on the author's Github account (http://github.com/haowang666). Current version: April 11, 2017

### Argument

#### Institutional Constraints

Veto player  $\Rightarrow$  unable to change policy rapidly  $\Rightarrow$  long term incremental changes and short-term rapid changes  $\Rightarrow$  punctual equilibrium (Epp and Baumgartner, 2016).

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(Henisz, 2000)
(Keefer and Stasavage, 2003)
(John and Bevan, 2012)
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### Policy Punctuations

#### Data

Data in this project comes from various sources. The dependent variable comes from the GSRE project (Global State Revenues and Expenditures dataset). GSRE is a comprehensive budget dataset based on the previous released historical documents from the International Monetary Fund (IMF). Comparing with the IMF COFOG dataset, GSRE increases coverage and accuracy of budgeting data for most authoritarian regimes and some democratic regimes. Since GSRE is built on IMF historical documents, it covers all independent states that have been or are the members of the IMF and are being coded as an authoritian regime in the (Geddes, Wright and Frantz, 2014) dataset.

Data on deliberative democracies and other regime-related variables come from the Variaties of Democracy (Vdem) project (Coppedge et al., 2016). Unlike the widely used democracy index like Polity (Marshall, Gurr and Jaggers, 2015), Vdem provides multidimensional measurements of regimes, including both democracies and autocracies.

Data on institutional constraints come from the political constraints index (Henisz, 2000). Henisz develops a measure of institutional commitment that is objective, extensive, and based in positive political theory. He uses a quantitative model to capture the competitiveness portion of the definition of democracy (competitiveness and participation) with a proxy of number of independent veto points over policy outcomes and distribution of preferences of those actors. The measure is objective, with clear rules for measurement and aggregation, however it incorporates some of the Polity data coding for "independent judiciary" that gives it a slight subjective bias. POLCON is based on strong assumptions about each actor's veto power. The measures are strongly correlated with the ICRG indexes and the Polity "Executive Constraint" index. "The new release of the political constraint dataset expands the scope of coverage to as many as 234 countries over the period 1800–2001. It also corrects a small number of computational, coding and factual errors in the previous release. The new database also includes country codes from the Cross-national time series data archive, Polity and the World Bank to facilitate matching this dataset to other international datasets that you may have. Finally, it contains the component variables used to construct the political constraint indexes."

Data on decentralization draws from the Political Institution Index (Beck et al., 2001).

# Get ready for the dependent variables:

I measure the budget stability as the simple euclidean distance of the between-year percentage differences. It can be written in the following equation:  $S_t$  is the stability index of a certain year t. Since government budget has various categories:  $p_{it}$  denotes the percentage of ith category of total expenditure.  $S_t$  will increase as the difference between  $p_{it}$  and  $p_{it-1}$  increases.

$$S_t = \sqrt{\sum_{i=1}^{i} (p_{it} - p_{it-1})^2}$$
 (1)

# Appendix

## Descriptive Statistics

## summary statistics of deliberative democracy

Table 1: Deliberative Democracy Statistics

Statistic	N	Mean	St. Dev.	Min	Max
Deliberative Democracy	6,375	0.201	0.225	0.001	0.881
Justification on Public Policy	6,384	-0.067	1.226	-3.125	3.415
Justification on Common Goods	6,384	0.083	1.152	-3.394	2.868
Respect for Counterarguments	6,384	-0.526	1.297	-3.257	2.726
Range of Consultation	6,384	-0.193	1.267	-3.211	3.713
Range of Engagement	6,384	-0.266	1.311	-3.244	3.159

### summary statistics on institutional constriants

Table 2: Institutional Constraints

Statistic	N	Mean	St. Dev.	Min	Max
Judical Constraints	6,384	0.450	0.269	0.006	0.979
Legislative Constraints	6,356	0.385	0.282	0.024	0.959
Institutionalization of Party	6,383	0.492	0.273	0.006	0.986
Institutionalizaed Democracy	5,906	2.875	3.610	0	10
Institutionalizaed Autocracy	5,906	4.402	3.517	0	10
Political Constraints Index-3	5,298	0.223	0.290	0.000	0.890
Political Constraints Index-5	6,081	0.147	0.196	0.000	0.688

### summary statistics on federalism

Table 3: Division of Power (centrl-regional) Index

Statistic	N	Mean	St. Dev.	Min	Max
Division of Power	5,776	0.304	0.330	0.000	0.991
State government Authority	1,145	0.355	0.479	0	1

**Dependent Variables** In the following table I report the components of dependent variables.

The distribution of dependent variable without multiple imputation looks like this

Table 4: Components of Budget Stability Measurements

Statistic	N	Mean	St. Dev.	Min	Max
expend_security_EXP	3,036	0.223	3.134	0.000	172.691
expenddefence_EXP	2,420	0.143	0.119	0.00001	0.712
exp_public_order_EXP	1,302	0.059	0.034	0.000	0.248
wagessalaries_EXP	3,983	0.459	7.413	0.00000	343.059
pensions_EXP	1,131	0.058	0.065	0.000	0.392
total_welfare_EXP	2,929	0.485	9.470	0.00003	382.322
education_EXP	2,626	0.133	0.061	0.00002	0.388
health_EXP	2,339	0.058	0.032	0.00001	0.212
social_protection_EXP	1,453	0.055	0.073	0.000	0.599
housing_EXP	1,086	0.035	0.036	0.000	0.420
owelfarespend_EXP	1,334	0.067	0.077	0.00000	0.510
expend_security_GDPGSRE	2,194	0.062	0.882	0.00000	41.279
expenddefence_GDPGSRE	1,749	0.058	0.988	0.00000	41.279
exp_public_order_GDPGSRE	967	0.017	0.012	0.00000	0.079
wagessalaries_GDPGSRE	3,391	0.081	0.179	0.00000	10.094
pensions_GDPGSRE	928	0.019	0.024	0.000	0.171
total_welfare_GDPGSRE	2,179	0.078	0.266	0.00000	12.209
education_GDPGSRE	1,987	0.042	0.171	0.00000	7.558
health_GDPGSRE	1,829	0.020	0.070	0.00000	2.907
social_protection_GDPGSRE	1,128	0.020	0.058	0.000	1.744
housing_GDPGSRE	886	0.010	0.012	0.000	0.074
owelfarespend_GDPGSRE	986	0.020	0.031	0.00000	0.242



# **Missing Cases**

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GSRE contains lots of missing cases. To avoid losing statistical powers and potential bias due to listwise deletion, this article employs multiple impuation of the GSRE part data. Results reported in the paper are from the first imputation. Appendix includes the rest 4 imputations.

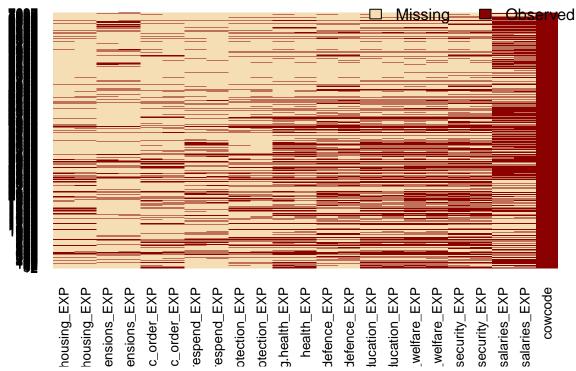
Policy Stability Index

200

400

The total missing map is showing in the correspoding figure.

## **Missingness Map**



I also calculated resutls without multiple imputation: points that are missing in the GSRE dataset is set to be 0. Theoretically in this situation missing cases will contribute zero effects to the policy stability indice.

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