

Does the Stringency of State TELs Discourage Political Manipulation in Fiscal Reserves?

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Presentation

1. Introduction

- Two Saving Accounts
- Tax and Expenditure Limits (TEs)

2. Theoretical Framework

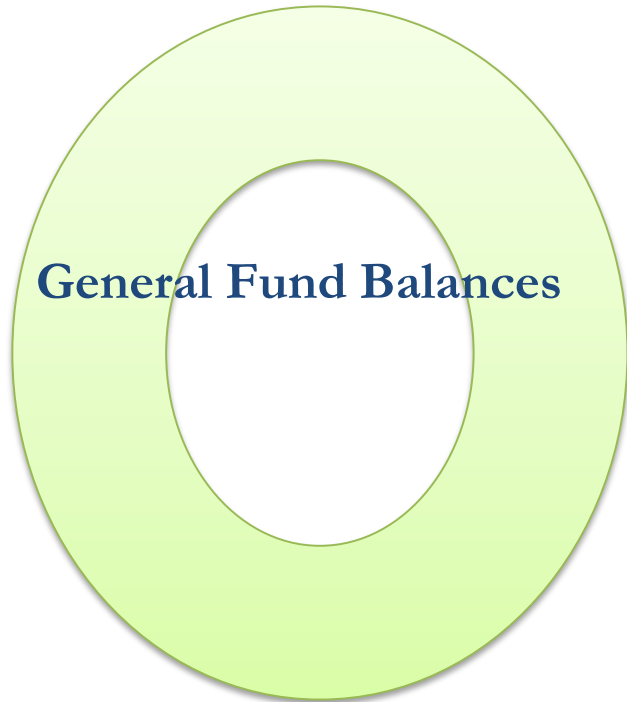
- Relationships b/w Two Saving Accounts & (TEs)

3. Empirical Framework & Results

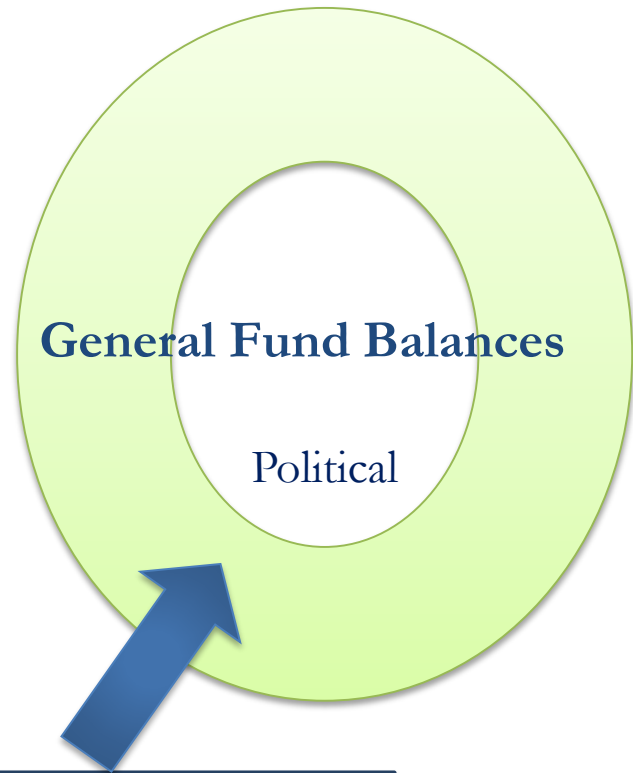
4. Conclusion

5. Future Research

Two Saving Accounts in State Gov'ts



Two Saving Accounts in State Gov'ts



General Fund Balances

Political

**Balanced Budget
Requirements**

Balance > 0



**Budget Stabilization Fund
(Rainy Day Fund) Balances**

Less Political

BSF Rules

Deposit

Withdrawal

Electoral Cycle



Fiscal Reserves

**General Fund
Balances**

**Budget Stabilization
Fund Balances**

Literature Review

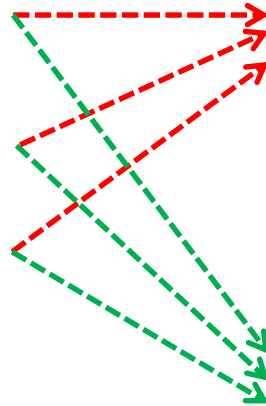
Hou & Duncombe (2008);
Hou & Smith (2006);
Rose (2006, 2008);

Electoral Cycle

Pre-election (-)

Election (-)

Post-election (+)



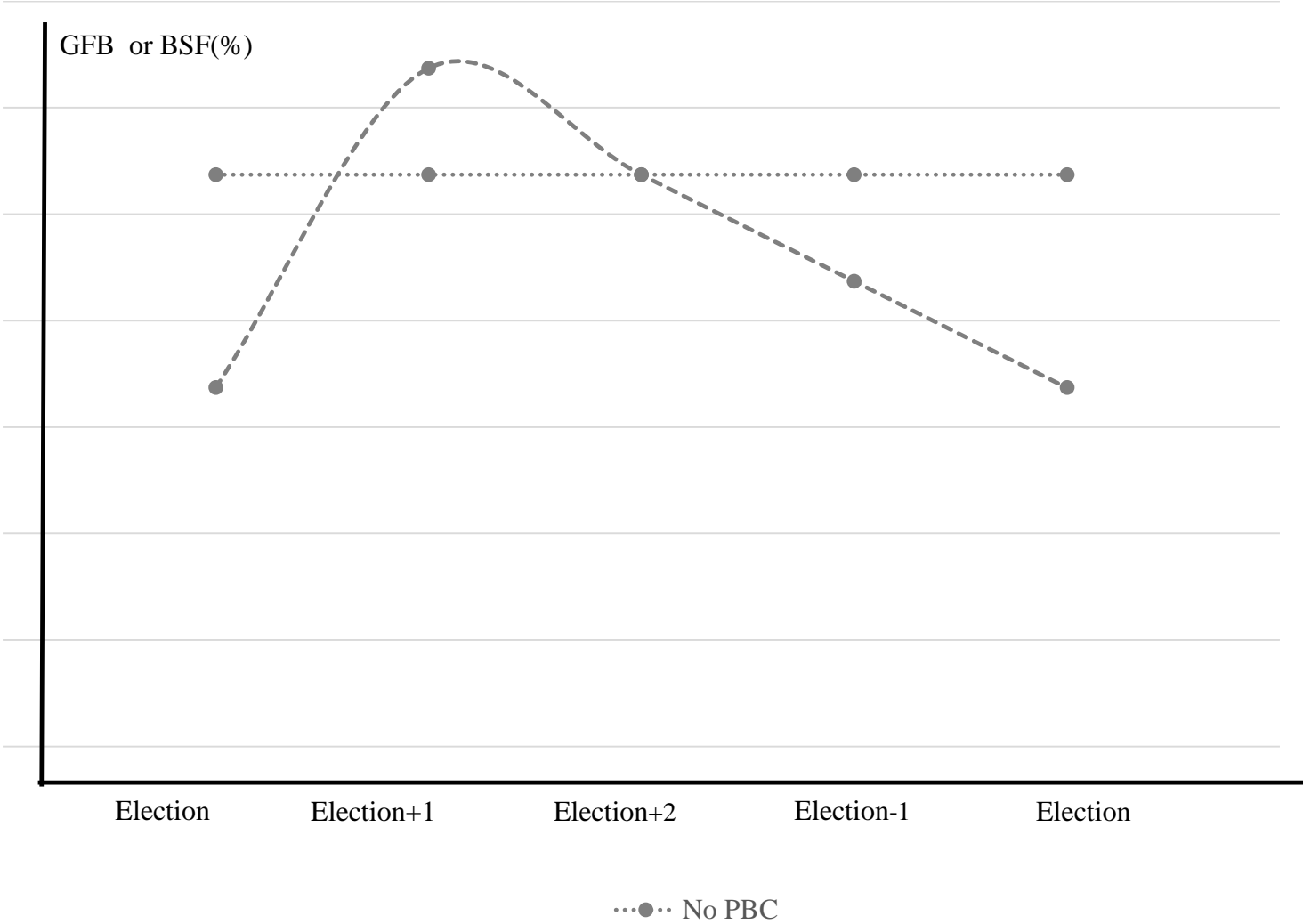
Fiscal Reserves

**General Fund
Balances**

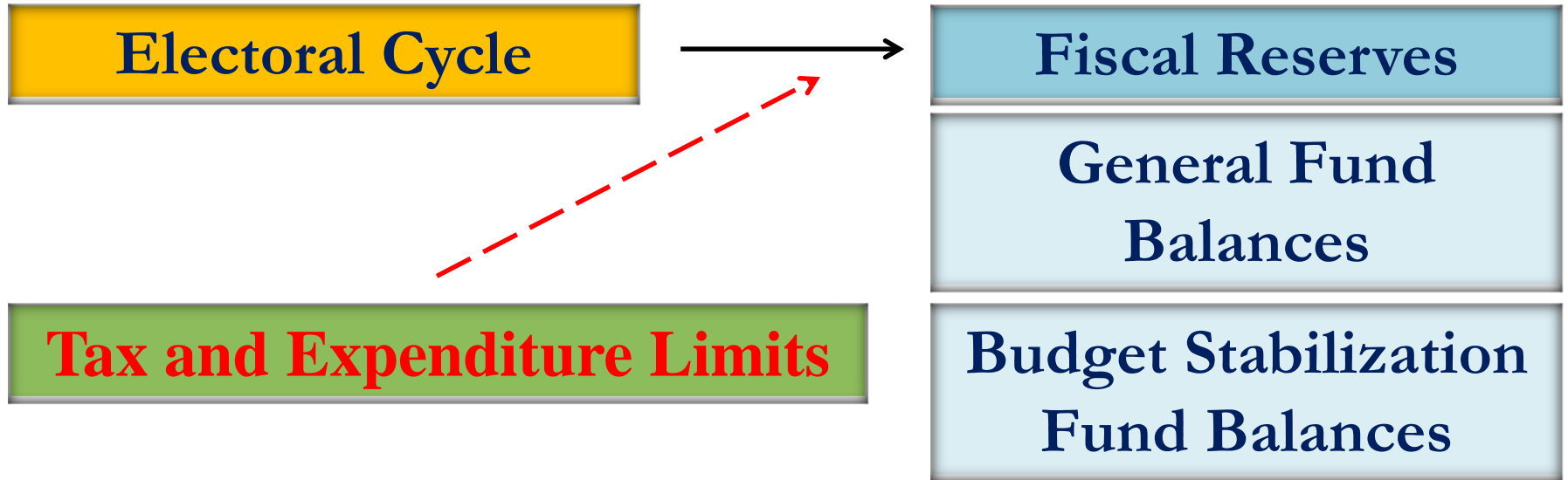
Fiscal Reserves

**Budget Stabilization
Fund Balances**

Political Budget Cycles (Nordhaus 1975; Rogoff 1990) : Good? Bad?



Research Model



Fiscal Restrictions at the State Level

- Budget Stabilization Fund Rules
- Balanced Budget Rules
- Tax and Expenditure Limits
 - Restricting increases in tax and spending

Tax and Expenditure Limits (TEs)

- Tax Revolts in the 1970s and 1980s

 - cf) BSF adoption

- Voters' (taxpayers') preferences vs.

 - Politicians' (policymakers') preferences

 - Voters: High levels of surpluses? No!

 - Politicians: Political Budget Cycle theory (Nordhaus 1975; Rogoff 1990)

Tax and Expenditure Limits (TEs)

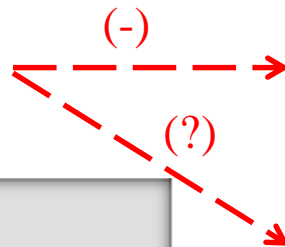
- Codification, Approval (Voters, Legislature), Exemption, Override, Refund Requirement, Growth Restriction (e.g., Population, Income)
- Stringency of TEs
 - Stringent TEs:
 - ✓ Constitutional, No Override, Supermajority Voters' Approval, Growth restriction, Refund Requirement

Literature Review

Hou & Brewer (2010); Hou&Duncombe (2008)

- TELs → a decline in general fund surplus

**Strict
TELS**



Fiscal Reserves

**General Fund
Balances**

**Budget Stabilization
Fund Balances**

Wagner & Sobel (2006)

- TELs → BSF Adoption
- Stringent TELs (Refund of Surplus) → Less binding BSF deposit & withdrawal rules
- Stringent TELs → Levels of BSF Increase?

Maher et al. (2017)

- Stringent TELs → Levels of BSF Increase?
No significant effect

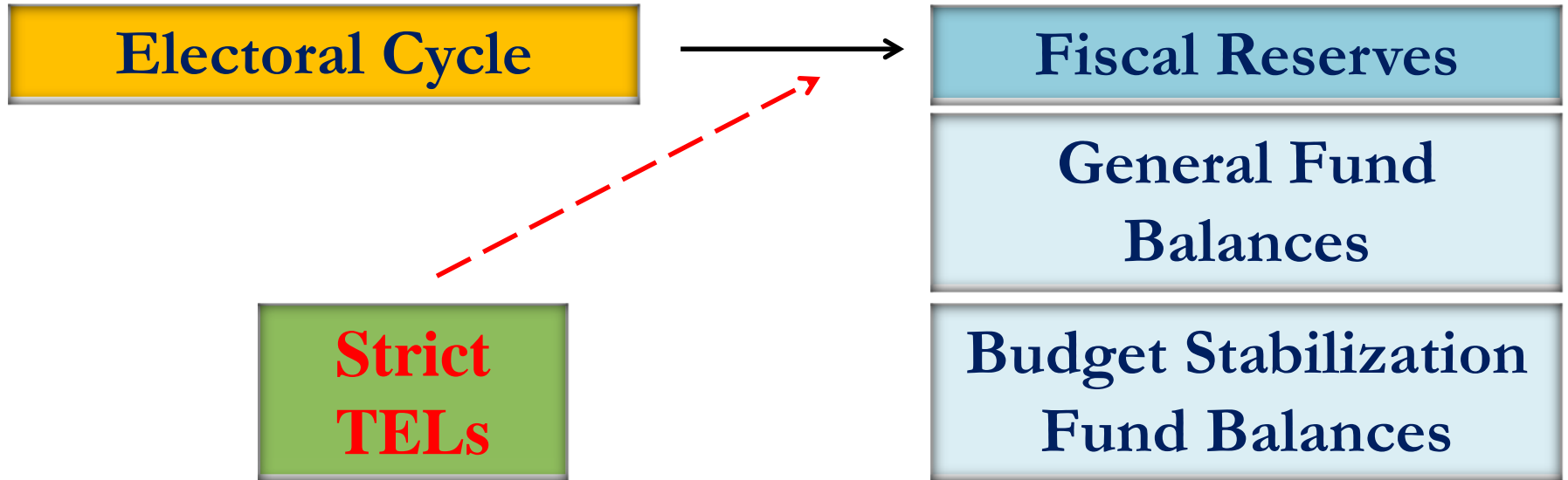
Hou & Duncombe (2008, 54)

- “Adopting BSF is one thing and increasing its savings is another.”

Maher et al. (2017, 135)

- “TELS seem to matter much less than political will regarding the size of reserves.”

Research Model



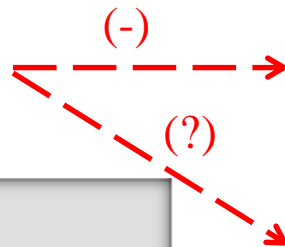
**So Far, Have (Strict) TELs Effectively
Discouraged State Political Manipulation in
Fiscal Reserves?**

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**Strict
TELs**



Fiscal Reserves

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Principal-Agent Model



Information Asymmetry
Asymmetry in Preferences

Principal-Agent Model

POLITICIANS (A)



VOTERS (P)



Voters' monitoring is costly, imperfect

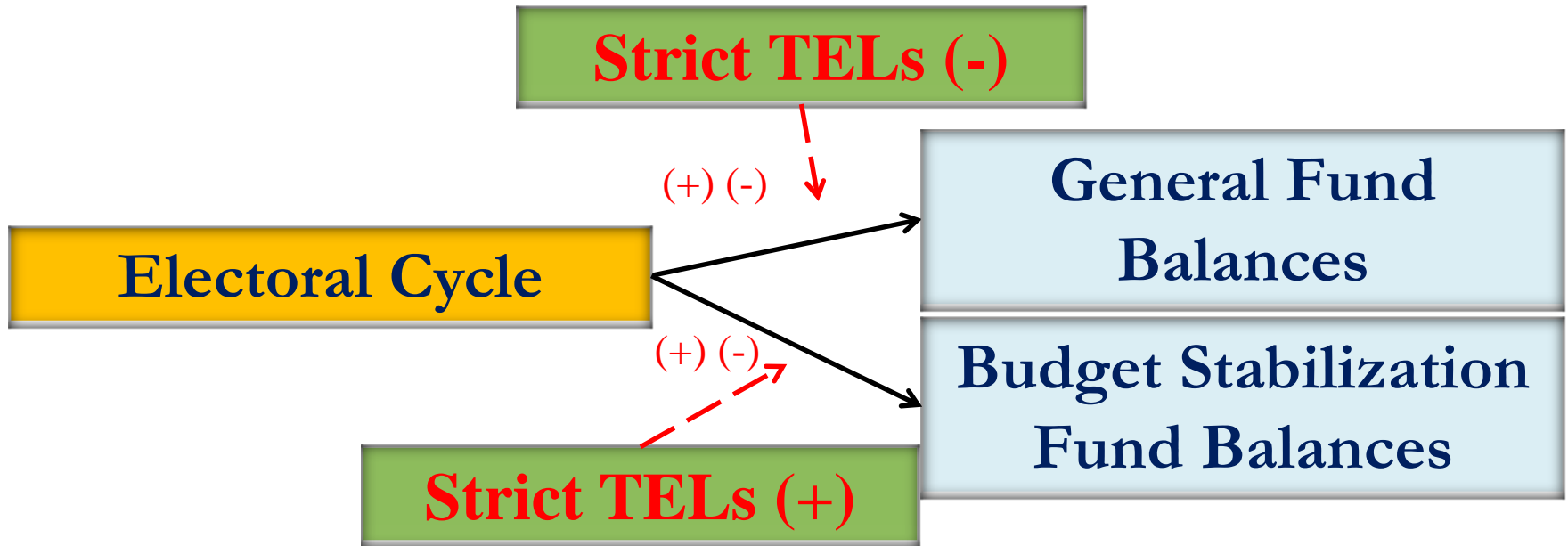
Moral Hazard!!!

The expected result :

Politicians will shirk TELs and find alternatives to increase slack resources. (No Dampening Effect!)

Research Model

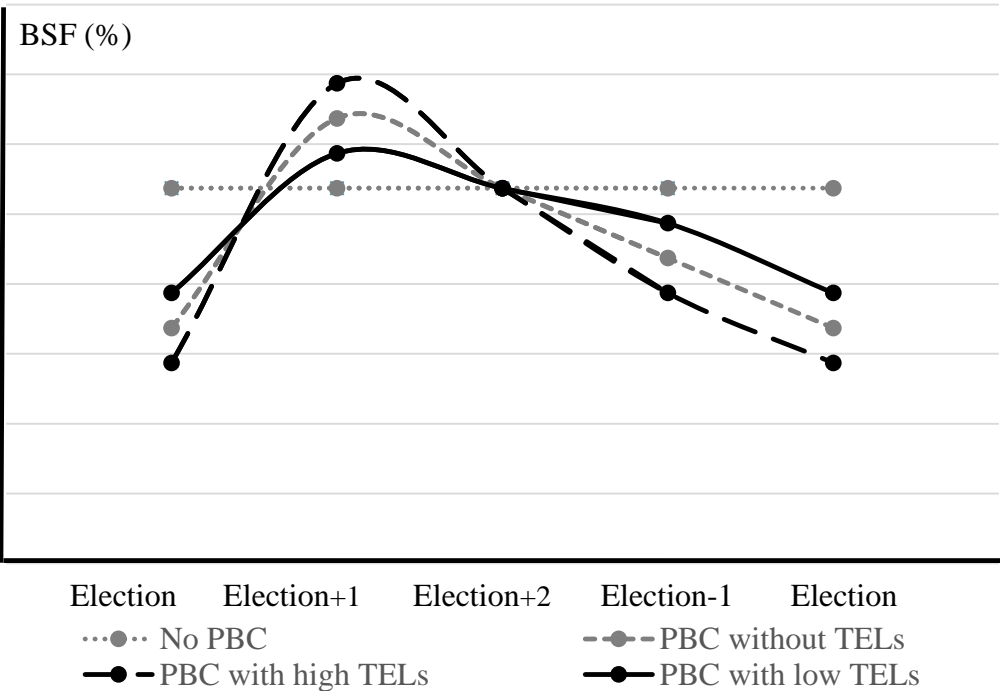
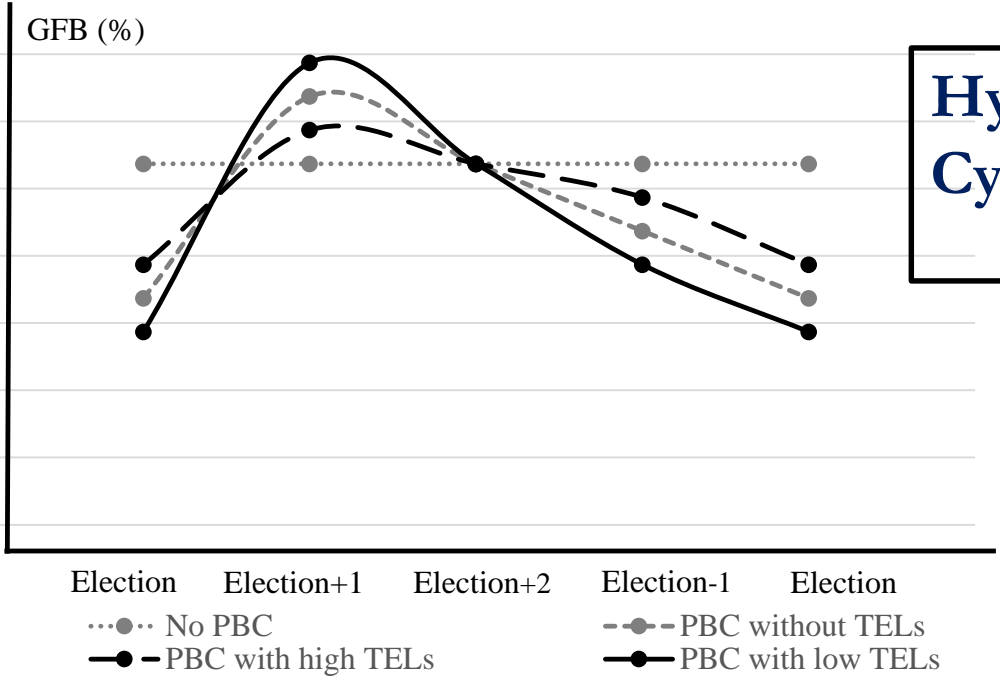
H0: No dampening effect



Hypotheses

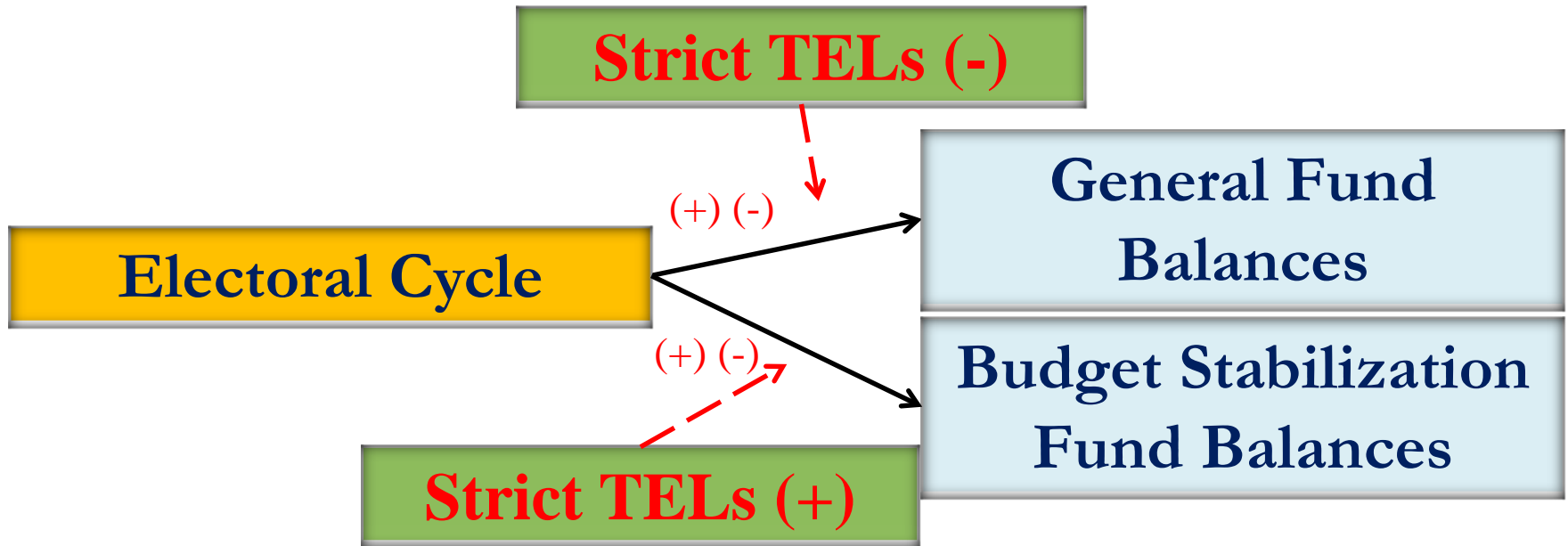
- **H1:** TELs stringency will change opportunistic saving behavior, such that fiscal reserves decrease in pre-election and election periods while increasing in post-election periods.
- **H1-1:** States with more stringent TELs will spend less GFBs in pre-election and election periods, whereas saving less in post-election periods than states with less stringent TELs.
- **H1-2:** States with more stringent TELs will spend more BSFs in pre-election and election periods, whereas saving more in post-election periods than states with less stringent TELs.

Hypothetical Political Budget Cycles in GFBs and BSFs



Research Model

H0: No dampening effect



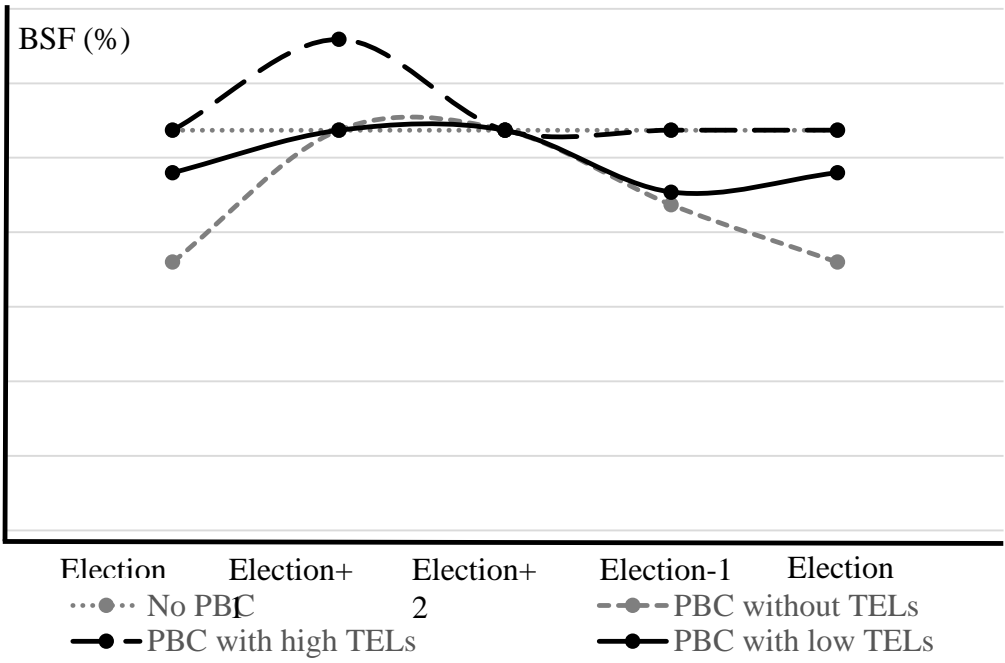
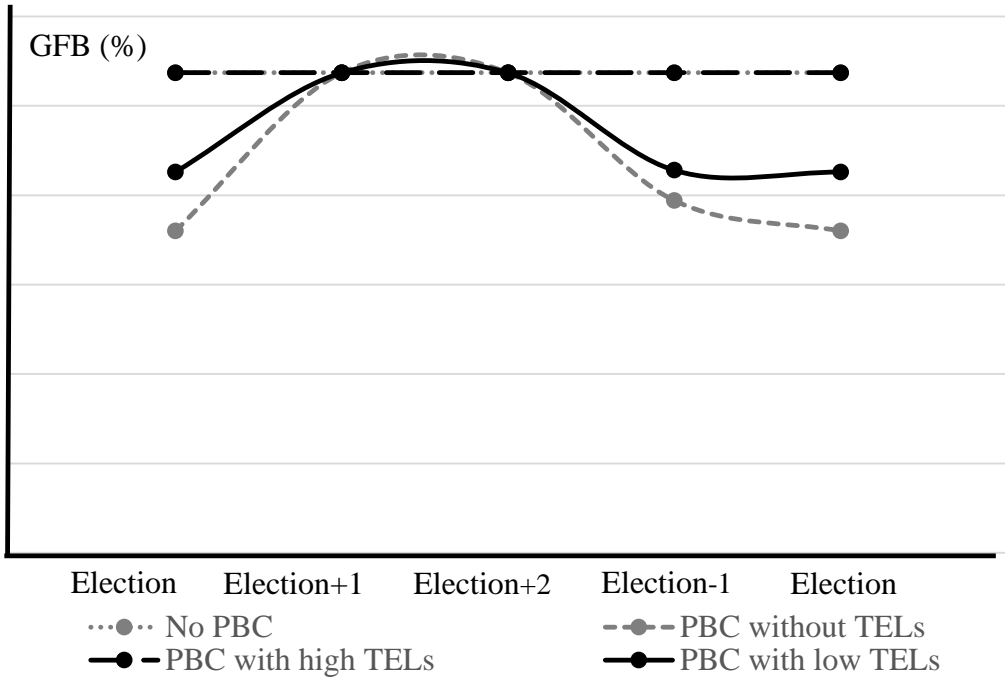
- Panel Data: 1986 to 2013, 47 states
- GFBs and BSFs as % of total general fund expenditures: NASBO
- Electoral cycle: Gubernatorial Electoral cycles (4 year term): *Book of States*
- Stringency Index of TELs: Amiel et al. (2014), Kallen (2017)
- System GMM Regression

Empirical Specifications

- $y_{it} = \alpha y_{it-1} + \beta C_{it} + h_{it}[\delta_1 preelection_{it} + \delta_2 election_{it} + \delta_3 postelection_{it}] + l_{it}[\theta_1 preelection_{it} + \theta_2 election_{it} + \theta_3 postelection_{it}] + \lambda_t + v_i + u_{it}$ (Model 1)
- $y_{it} = \alpha y_{it-1} + \beta C_{it} + \delta_1 preelection_{it} + \delta_2 election_{it} + \delta_3 postelection_{it} + \rho_1 tel_{it} + tel_{it} * [\theta_1 preelection_{it} + \theta_2 election_{it} + \theta_3 postelection_{it}] + \lambda_t + v_i + u_{it}$ (Model 2)

Dependent Variables	GFBs	GFBs	BSFs	BSFs
Lagged dependent variable	0.22*** (.06)	0.28*** (.05)	0.53*** (.14)	0.53*** (.14)
E-1*high TEL-stringency	-0.72 (.54)		0.01 (.24)	
E*high TEL-stringency	-0.21(.52)		-0.13 (.24)	
E+1*high TEL-stringency	-0.52 (.50)		0.45* (.27)	
E-1*low TEL-stringency	-1.03** (.41)		-0.28 (.34)	
E*low TEL-stringency	-1.32* (.75)		-0.53** (.27)	
E+1*low TEL-stringency	-0.17 (.55)		0.24 (.39)	
E-1		-1.43*** (.39)		-0.87*** (.33)
E		-1.77** (.86)		-0.61* (.33)
E+1		-0.37 (.56)		-0.22 (.33)
TEL stringency		-0.07 (.14)		0.01 (.04)
E-1*TEL stringency		0.05* (.03)		0.04* (.02)
E*TEL stringency		0.09** (.05)		0.03* (.02)
E+1*TEL stringency		-0.01 (.04)		0.04** (.02)
Control Variables: Unemployment rate, personal income (ln), population (ln), poverty rate, pop up to 18 & pop 65& over 65, revenue volatility, intergov't revenue, Dem governor, Dem in upper house, Dem in lower house, strict BBRs, state & year dummies				

Actual Political Budget Cycles in GFBs and BSFs



Marginal Effects of an Electoral Cycle on GFBs & BSFs Depending on the Stringency of TELs

TEL Stringency	General Fund Balance Case			Budget Stabilization Fund Balance Case		
	E-1	E	E+1	E-1	E	E+1
1	-1.38*** (0.38)	-1.67** (0.82)	-0.37 (0.54)	-0.83*** (0.32)	-0.57* (0.32)	-0.17 (0.31)
2	-1.34*** (0.37)	-1.58** (0.79)	-0.37 (0.51)	-0.79*** (0.30)	-0.54* (0.30)	-0.13 (0.30)
3	-1.29*** (0.37)	-1.48* (0.76)	-0.37 (0.49)	-0.75*** (0.29)	-0.50* (0.29)	-0.09 (0.28)
4	-1.24*** (0.37)	-1.39* (0.73)	-0.37 (0.47)	-0.71*** (0.27)	-0.47* (0.28)	-0.04 (0.27)
5	-1.19*** (0.37)	-1.30* (0.70)	-0.38 (0.45)	-0.68*** (0.26)	-0.43 (0.26)	0.00 (0.26)
6	-1.14*** (0.37)	-1.20* (0.68)	-0.38 (0.43)	-0.64*** (0.25)	-0.40 (0.25)	0.04 (0.24)
7	-1.09*** (0.37)	-1.11* (0.66)	-0.38 (0.42)	-0.60*** (0.25)	-0.36 (0.24)	0.09 (0.23)
8	-1.04*** (0.38)	-1.01 (0.64)	-0.38 (0.41)	-0.56*** (0.24)	-0.33 (0.24)	0.13 (0.23)
9	-0.99*** (0.38)	-0.92 (0.63)	-0.39 (0.40)	-0.52** (0.23)	-0.29 (0.23)	0.17 (0.22)
...
29	-0.01 (0.75)	0.96 (0.96)	-0.42 (0.82)	0.26 (0.46)	0.39 (0.40)	1.05*** (0.40)
30	0.04 (0.77)	1.06 (1.00)	-0.43 (0.85)	0.30 (0.48)	0.43 (0.41)	1.09*** (0.42)
31	0.09 (0.80)	1.15 (1.04)	-0.43 (0.89)	0.34 (0.50)	0.46 (0.43)	1.13*** (0.44)
32	0.14 (0.82)	1.24 (1.08)	-0.43 (0.92)	0.38 (0.52)	0.50 (0.45)	1.18*** (0.46)
33	0.19 (0.85)	1.34 (1.11)	-0.43 (0.96)	0.42 (0.54)	0.53 (0.46)	1.22*** (0.47))

**So Far, Have Strict TELs Effectively
Discouraged State Political Manipulation in
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Does TELs Stringency Eliminate Electoral Cycles in Reserves?

	General Fund Balances			Budget Stabilization Fund Balances		
	Preelection	Election	Postelection	Preelection	Election	Postelection
TELs-stringency	Yes	Yes	insig	Yes	Yes	No

Conclusion & Implication

- More stringent TELs were more effective in dampening the opportunistic behavior in GFBs.
- States having more stringent TELs increased a level of BSFs and set more revenues aside in BSF, particularly, after election.
- It is crucial for a state to assess its current level of stringency of TELs and set an appropriate level of the stringency that affects a state's fiscal reserves.

Discussion & Future Research

- It is also highly plausible that the opportunistic saving behavior will vary according to the institutional attributes of TELs.
- The heterogeneity in the structure of BSF across states may matter in outcomes.
- States without the stringent BSF rules (e.g., supermajority vote requirement for use, replenishment requirement rule) have the fiscal flexibility to use their reserves when needed in crises such as the COVID-19 pandemic; thus, they may open the door for politicians to manipulate reserves.

Thank you!

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Dependent Variables	BSFs	BSFs-Robust	BSFs-Robust
Lagged dependent variable	0.53*** (.14)	0.54***(.14)	0.54*** (.15)
E-1	-0.87*** (.33)	-1.18***(.45)	-0.91* (.52)
E	-0.61* (.33)	-0.79**(.30)	-0.80*(.48)
E+1	-0.22 (.33)	-0.51(.32)	-0.15(.50)
TEL stringency	0.01 (.04)	0.03(.06)	-0.04(.05)
E-1*TEL stringency	0.04* (.02)	0.04* (.03)	0,06**(.03)
E*TEL stringency	0.03* (.02)	0.04*(.02)	0.05*(.03)
E+1*TEL stringency	0.04** (.02)	0.05**(.02)	0.05** (.02)
BSF deposit from special revenue		-0.32(.03)	
BSF deposit from GF surplus		0.20(.19)	
BSF by appropriation		-0.47(.34)	
BSF use by supermajority		-0.86*(.42)	-0.87*(.52)
BSF use for shortfall		-0.83**(.37)	-0.85*(.47)
BSF use by appropriation		-0.80**(.37)	-0.96**(.46)
E+1*BSF use for shortfall			0.11**(.05)
E +1*BSF use by appropriation			0.15*(.08)