

Elections and Public Health Spending in South Asia

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Outline

- 1 Introduction
 - Objective
 - Contribution
- 2 Data and Methodology
 - Methodology
 - Data
- 3 Main Results
 - Summary Statistics
- 4 Conclusions

- **Question:** What is the relationship between elections and public health spending?

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- **Electoral hypothesis:** opportunistic politicians manipulate spending to improve their electoral chances
- **Related studies:** Potrafke (2010), Herwartz and Theilen (2014), and Joshi (2015)

Potrafke (*Journal of Health Economics*, 2010)

- Focuses on 18 Organization for Economic Co-operation and Development countries from 1971 to 2004

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- Finds the positive impact of elections on the public health spending but no relationship between government ideology and the public health spending

Herwartz and Theilen (*Health Economics*, 2014)

- Focus on 22 Organization for Economic Co-operation and Development countries from 1971 to 2008

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Joshi (*Economics & Politics*, 2015)

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- Finds no relationship between political partisanship and healthcare spending

- Possible reasons: heterogeneities of political systems and healthcare financing

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- Extend the analysis to six South Asian countries over the 1995 - 2012 period

- Empirically examines whether the incumbent politicians manipulate the growth of public health spending in elections years to increase chances of becoming re-elected

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- Employs the dynamic panel data model
- Findings
 - 1 No impact of elections on public health spending
 - 2 Findings not consistent with that documented for Organization for Economic Co-operation and Development countries (Potrafke, 2010; Herwartz and Theilen, 2014)

Findings contribute to the two strands of literature:

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- 1 **Health economics literature:** analyzing the determinants of health spending
- 2 **Political economy literature:** analyzing the impact of elections on economic variables, e.g., **Shi and Svensson** (*Journal of Public Economics*, 2006)

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Dynamic panel data model

$$y_{ct} = \rho y_{ct-1} + \lambda ELE_{ct} + \theta CONTROL_{ct} + \alpha_t + \gamma_c + \epsilon_{ct} \quad (1)$$

where,

y : growth of per capita real public health spending

ELE : election indicator (one in election years, and zero otherwise)

$CONTROL$: a vector of control variables (includes the growth of per capita real GDP (in US\$))

α_t : year fixed effects

γ_c : country fixed effects

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- positive and significant coefficient on ELE in equation 1 : suggests that incumbent politicians increase the growth of public health spending in election years to become re-elected
- Since the number of countries (N) is small, I estimate equation 1 using Bruno's (2005) bias corrected least squares dummy variable estimator for dynamic panel data models with small N

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- (c) **Population:** World Health Organization (for converting public health spending into per capita term)

(d) Election variable

- Database of Political Institutions (Beck et al., 2001) from the World Bank
- Voter Turnout Since 1945 to Date from the Institute for Democracy and Electoral Assistance
- PARLINE database on national parliaments from the Inter Parliamentary Union
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(e) Control variables

- growth of per capita real GDP (in US\$)

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Table 1: Summary Statistics

	Full Sample		Election		No Election	
	Mean	Std.dev.	Mean	Std.dev.	Mean	Std.dev.
GPHS	4.9359	14.9400	6.7576	18.3788	4.5439	14.2016
GGDP	4.6417	0.0284	4.6435	0.025	4.6413	0.0292
N	96		17		79	

Footnote: GPHS is the growth of per capita real public health spending; GGDP is the growth of per capita real gross domestic product; Election indicates years during which election took place; No Election indicates years during which elections did not take place. The sample period is 1996-2012.

Table 2: Ordinary least squares and fixed effects estimates of the impact of elections on the growth of public health spending

	Ordinary least squares model	Fixed effects model
Election	2.2137 (4.6554)	3.2859 (5.6222)
Country FEs	No	Yes
Year FEs	No	Yes
N		96

Footnote: Growth of public health spending is the growth of per capita real public health spending. Election is a binary variable that takes a value of one in election years, and zero otherwise. Control variable include the growth of per capita real gross domestic product. The sample period is 1996-2012. Standard errors are in brackets.

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