The effects of term limits and yardstick competition on local government provision of health insurance and other public services: The Philippine case

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Introduction

- Developing countries like Vietnam and the Philippines target universal health insurance coverage, but still face challenges
  - Low coverage of the poor and voluntary/informal sector

- To achieve this goal, local governments are tasked to extend insurance coverage to the indigents or provide basic health services
  - LGU performance is at best mixed
  - Local officials differ in goals, incentives or competence; weak accountability mechanisms (World Bank, 2005)

The NHIP Sponsored Program

- National Health Insurance Act of 1995 aims to extend health insurance coverage to all Filipinos
- Started in 1997, the NHIP-Sponsored Program (SP) provides coverage to indigent households, with the following roles assigned to LGUs until 2012:
  - Identify the indigent households
  - Pay a share of the premium contributions (with subsidy from the national government; share vary by income class and years of SP participation)

NHIP Membership: 1997-2011
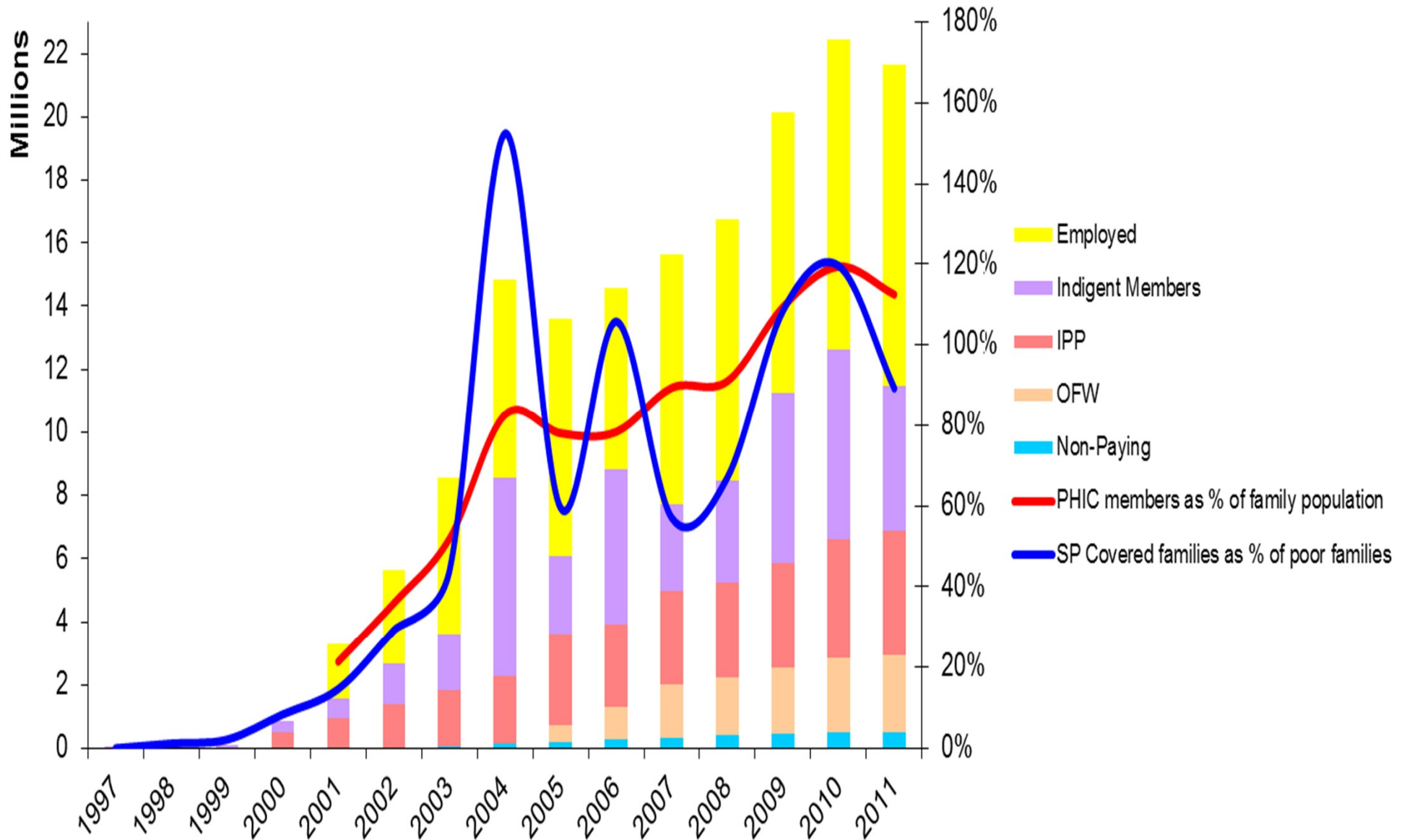
Distribution of LGUs by SP enrolment rate, various years
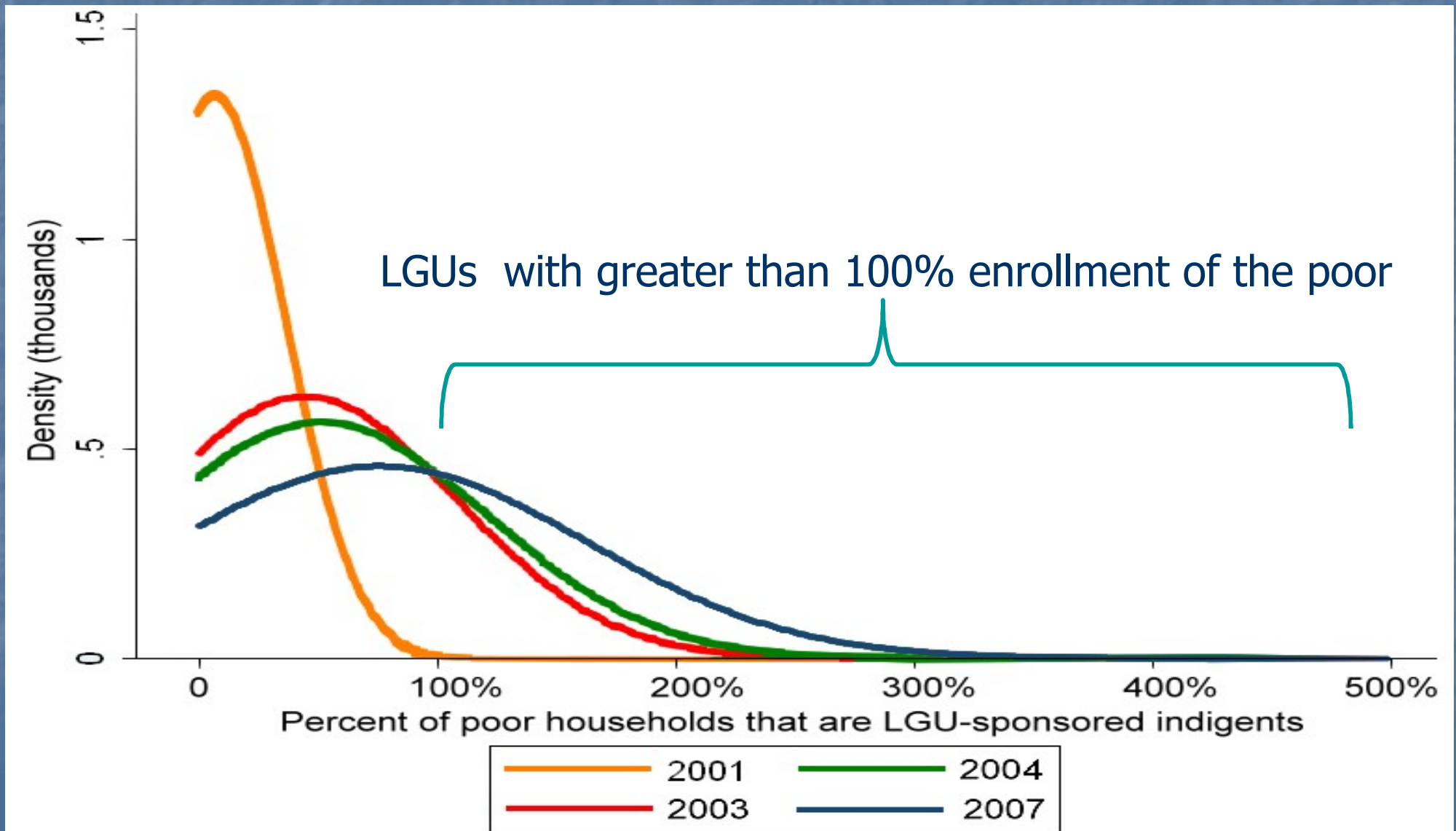
EO 867 (March 2010)

- Adoption of the National Household Targeting System for Poverty Reduction (NHTS PR) as the mechanism of for identifying poor households to be covered under all government social protection programs
- DOH DO 2011-0188 – *Kalusugang Pangkalahatan* Execution Plan and Implementation Arrangements
  - NG budget will be used to enroll the beneficiary families of the DSWD 4P in the NHIP-SP
    - 2.3 million families in 2011, 5.2 million families in 2012-2013
- Policy issue – who will re-enroll the SP-covered families that do not qualify under NHTS PR?
  - Will LGUs extend them insurance coverage?

Research questions

- What motivate local governments to enroll (or over-enroll) the poor (and "political indigents") in the SP?
  - Is it their fiscal resources (particularly, IRA) or other expenditure priorities (i.e., non-health services)?
  - Is it the insurance premium contribution?
  - Is it the effective insurance subsidy from NG and other sponsors?
  - Is it the political incentives facing the incumbent LCE?
- What are the implications of the results to the current policy (EO 867 s. 2010)?

A model of incumbent behavior

- Studies find clientilism, rents from office and electoral accountability as important in understanding LGU fiscal behavior

- Rent-maximizing incumbent mayor seeking re-election

- Main hypothesis: SP coverage rate is higher in LGUs with

  - Higher fiscal revenues per capita

  - Lower premiums contributions (due to NG premium subsidy)

  - Lower SP coverage under Plan 5 Million and other sponsors

  - Incumbents not facing *term limit* (or who belong to dynasties)

  - High SP coverage in neighboring LGUs (*yardstick competition*)

Estimation method

- **Panel of municipalities and cities**
  - *n*=1515 per year; years 2001, 2004 and 2007
  - Full sample and sub-sample regression (to capture costs of SP participation)
  - Time period covers implementation of Plan 5/2.5 million

- Fixed-effects panel regression model

$$H_{ij}=\beta_0+\beta_1 D_{ij}+\beta_2 H^0_{ij}+\boldsymbol{X'}_{ij}\boldsymbol{\beta}+\varepsilon_{ij}, \quad i=1,2,..,n;\, j=1,2,3$$

$$G_{ij}=\alpha_0+\alpha_1 D_{ij}+\alpha_2 H^0_{ij}+\boldsymbol{X'}_{ij}\alpha+\nu_{ij}, \quad i=1,2,..,n;\, j=1,2,3$$

Table 1. Variable definitions

Variable	Variable Definition / remarks
LGU-sponsored coverage rate	Ratio of SP members enrolled by the LGU to number of poor families
Other expenditures1	Total expenditures of the local government net of SP premium payments, per capita (in 2001 prices)
Other expenditures2	Total expenditures of the local government net of SP premium payments and expenditures on general public services, per capita (in 2001 prices)
Last term	=1 if incumbent mayor is on his/her third consecutive term in office
Dynasty	= 1 if incumbent mayor is related by blood or marriage to a previous or current mayor, governor or member of Congress, in the same province
Last term_dynasty	Interaction of Last term and Dynasty
Yardstick	Ave SP coverage rate for all other local governments in the provinces.
Urban	=1 if urban, 0 otherwise
Premium	Premium share of the LGU per indigent (2001 and 2004 based on old premium schedule, 2007 based on new premium schedule)
Years of SP participation	Cumulative number of years with positive SP enrolment
SP coverage by national government in 2007	Number of SP members enrolled by the national government in 2007
SP coverage by national government in 2004	Number of SP members enrolled by the national government in 2004
SP coverage by other sponsors	Number of indigents enrolled by legislative or private sponsors
Real income per capita	Total local government revenues per capita (in 2001 prices)
Year 2004	=1 if year is 2004, 0 otherwise
Year 2007	=1 if year 2007, 0 otherwise

Table 2. Summary Statistics, full sample

Variable	Obs	Mean	Std. Dev.	Min	Max
LGU-sponsored coverage rate	4431	0.43	0.89	0	19.03
Other expenditures 1 (real per capita)	4431	8.98	8.41	0.65	308.00
Other expenditures 2 (real per capita)	4431	4.27	4.68	0	184.03
Last term	4431	0.24	0.43	0	1
Dynasty	4431	0.24	0.43	0	1
Last term_dynasty	4431	0.05	0.21	0	1
Urban	4431	0.08	0.27	0	1
Premium	4431	389.11	218.44	118.80	600.00
Years of SP participation	4431	2.64	2.45	0	10
Premium_years of SP participation	4431	1323.25	1455.91	0	6000.00
SP coverage by national government in 2007	4431	86.36	812.20	0	31666.00
SP coverage by national government in 2004	4431	989.13	2628.15	0	59506.00
SP coverage by other sponsors	4431	144.28	513.47	0	13499.00
Real income per capita	4431	9.78	9.47	1.60	387.22
Yardstick	4431	0.43	0.58	0	3.87
Year 2004	4431	0.34	0.47	0	1
Year 2007	4431	0.32	0.47	0	1

LGU-sponsored coverage rate

Independent variables[1]	Full-sample	Sub-sample of LGUs with SP years <2	Sub-sample of LGUs with SP years=1	Sub-sample of LGUs with SP years>2
Last term	0.6612*	-0.00071	-0.06434	0.0904*
	(0.04)	(0.01)	(0.06)	(0.06)
Dynasty	-0.04613	0.00282	-0.02438	-0.15484
	(0.04)	(0.01)	(0.06)	(0.11)
Last term dynasty	-0.07934	-0.00126	0.08767	-0.0807
	(0.05)	(0.02)	(0.10)	(0.08)
Yardstick (ave. SP rate in other LGUs)	0.85401***	0.57913***	1.01013***	0.81093***
	(0.05)	(0.15)	(0.23)	(0.09)
Fixed effects	YES			YES
R-squared	0.404	0.159	0.329	0.196
N	4431	1795	253	2636

[1]Other variables = urban, premium, years of SP participation, premium x years of SP participation, SP coverage by NG in 2007, SP coverage by NG in 2004, SP coverage by other sponsors, real income per capita, year 2004, year 2007

*$p<0.10$, ***<0.01. Figures in parentheses are robust standard errors.

LGU expenditures on other services

Independent variables[1]	Total expenditures net of SP premium payments	Total expenditures net of SP premium payments and general public services
Last term	-0.05382 (0.07)	0.00808 (0.05)
Dynasty	0.09055 (0.12)	0.10633 (0.10)
Last term dynasty	-0.13162 (0.14)	-0.1654 (0.14)
Yardstick (ave. SP rate in other LGUs)	-0.0623 (0.10)	-0.14796** (0.07)
Fixed effects	YES	YES
R-squared	0.903	0.83
N	4431	4431

[1]Other variables = urban, premium, years of SP participation, premium *x* years of SP participation, SP coverage by NG in 2007, SP coverage by NG in 2004, SP coverage by other sponsors, real income per capita, year 2004, year 2007

**$p<0.05$. Figures in parentheses are robust standard errors.

Preliminary conclusions (1)

- LGU decisions to expand SP coverage rate and provide other public services respond to fiscal factors
  - IRA increases SP coverage rate and provision of other local public services
  - LGUs new to the SP are sensitive to the premium, but old LGUs are not
  - NG Plan 5/2.5 million crowd out LGU's own SP coverage
  - SP coverage increases the more costly it is to provide other public services (evidence of substitution)
  - SP coverage lower in 2004 and 2007 than in 2001

Preliminary conclusions (2)

- LGU decisions are sensitive to electoral incentives
  - LCEs who face term limits increase SP coverage, regardless of their membership in political dynasties, but not effect on the provision of other public services
    - Perhaps in preparation for a comeback? Or, leaving a legacy?
  - SP coverage rate increases as the average SP coverage rate of other LGUs in province increase
    - Electoral pressure not to be seen as the laggard among fellow mayors

Implications

- Politics could be good for health.
  - Politicians extend insurance coverage to the poor and the political indigents, possibly because she is pro-health, use health to dispense favors and win supporters or both.
  - Promoting yardstick competition among LGUs or LCEs can promote universal health insurance coverage
    - Results indicate the willingness of LGUs to extend coverage to the near poor who may not qualify under the NHTS PR (EO 867 s. 2010)
    - However, it remains to be seen LGUs will actually extend coverage to the near poor even without NG subsidy.
  - Efficiency of extending coverage to near poor through NG subsidy to the LGUs must be investigated further.