

# Health Financing in Vietnam: Policy development and impacts

Björn Ekman

Department of Clinical Sciences

Lund University, Sweden

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# Outline of Presentation

- Part A: Health financing and outcomes
- Part B: Health financing policy making
- Part C: Impact evaluation of Health Care Funds for the Poor

# Vietnam: Economic development

- Rapid and sustained economic growth over past decades – around 7%-9% annual real per capita growth rates
- Generally, broad based poverty reduction – from around 50% in early 90s to less than 20% in 2006
- Remaining challenges among rural and ethnic minorities – including for health

## Health expenditure Vietnam and LMIC 2002-2005, WDI 2008

	2002	2003	2004	2005
<b>Vietnam</b>				
Health expenditure per capita (current US\$)	22	26	31	37
Health expenditure, private (% of GDP)	4	4	4	<b>4</b>
Health expenditure, public (% of GDP)	2	2	2	2
Health expenditure, public (% of government expenditure)	6	6	5	5
Health expenditure, public (% of total health expenditure)	30	31	27	26
Health expenditure, total (% of GDP)	5	5	6	6
Out-of-pocket health expenditure (% of private exp.)	87	86	86	<b>86</b>
<b>Low- and Middle-Income Countries</b>				
Health expenditure per capita (current US\$)	65	73	85	101
Health expenditure, private (% of GDP)	3	3	3	<b>3</b>
Health expenditure, public (% of GDP)	3	3	3	3
Health expenditure, public (% of government expenditure)	8	7	8	8
Health expenditure, public (% of total health expenditure)	45	46	47	48
Health expenditure, total (% of GDP)	5	5	5	6
Out-of-pocket health expenditure (% of private exp.)	81	80	78	<b>77</b>

# Health expenditure in Vietnam

- Relatively high levels of private health spending – particularly on pharmaceuticals and private providers of PHC, including traditional medicine
- Low levels of prepayment or pooling
- High levels of out-of-pocket payments – catastrophic spending, impoverishing effects, and reduces access

## Health outcomes Vietnam and LMIC 2002-2005, WDI 2008

	2002	2003	2004	2005	2006
<b>Vietnam</b>					
Incidence of tuberculosis (per 100,000 people)	180	178	176	174	173
Lifetime risk of maternal death (1 in: rate varies by country)	..	..	..	280	..
Low-birthweight babies (% of births)	9	..	..	..	7
Malnutrition prevalence, height for age (% of children under 5)	..	..	..	..	36
Malnutrition prevalence, weight for age (% of children under 5)	..	..	..	..	20
Maternal mortality ratio (modeled est., per 100,000 live births)	..	..	..	150	..
Prevalence of undernourishment (% of population)	..	17	16	..	..
<b>Low- and Middle-Income Countries</b>					
Incidence of tuberculosis (per 100,000 people)	163	164	164	163	162
Lifetime risk of maternal death (1 in: rate varies by country)	..	..	..	84	..
Low-birthweight babies (% of births)	..	..	..	..	10
Malnutrition prevalence, height for age (% of children under 5)	..	..	..	..	38
Malnutrition prevalence, weight for age (% of children under 5)	..	..	..	..	25
Maternal mortality ratio (modeled est., per 100,000 live births)	..	..	..	440	..
Prevalence of undernourishment (% of population)	..	16	16	..	..

## Life expectancy at birth Vietnam and Regional averages, WHS 2008

<b>Life expectancy at birth</b>	<b>2003</b>
AFRO	50
EMRO	66
EURO	74
PAHO	71
SEARO	64
WPRO	69
Vietnam	<b>71</b>

## Child mortality Vietnam and Regional averages, WHS 2008

<b>Child mortality (prob. dying 5/1,000 l. b.)</b>	<b>2003</b>
AFRO	147
EMRO	65
EURO	19
PAHO	28
SEARO	69
WPRO	36
Vietnam	<b>23</b>

## Part B:

### Health financing development

- Generally a strong emphasis on social development – poverty reduction
- Health and human development in particular viewed as important dimensions of development and progress
- Politically challenging and sensitive area

# Health care and financing: Realities

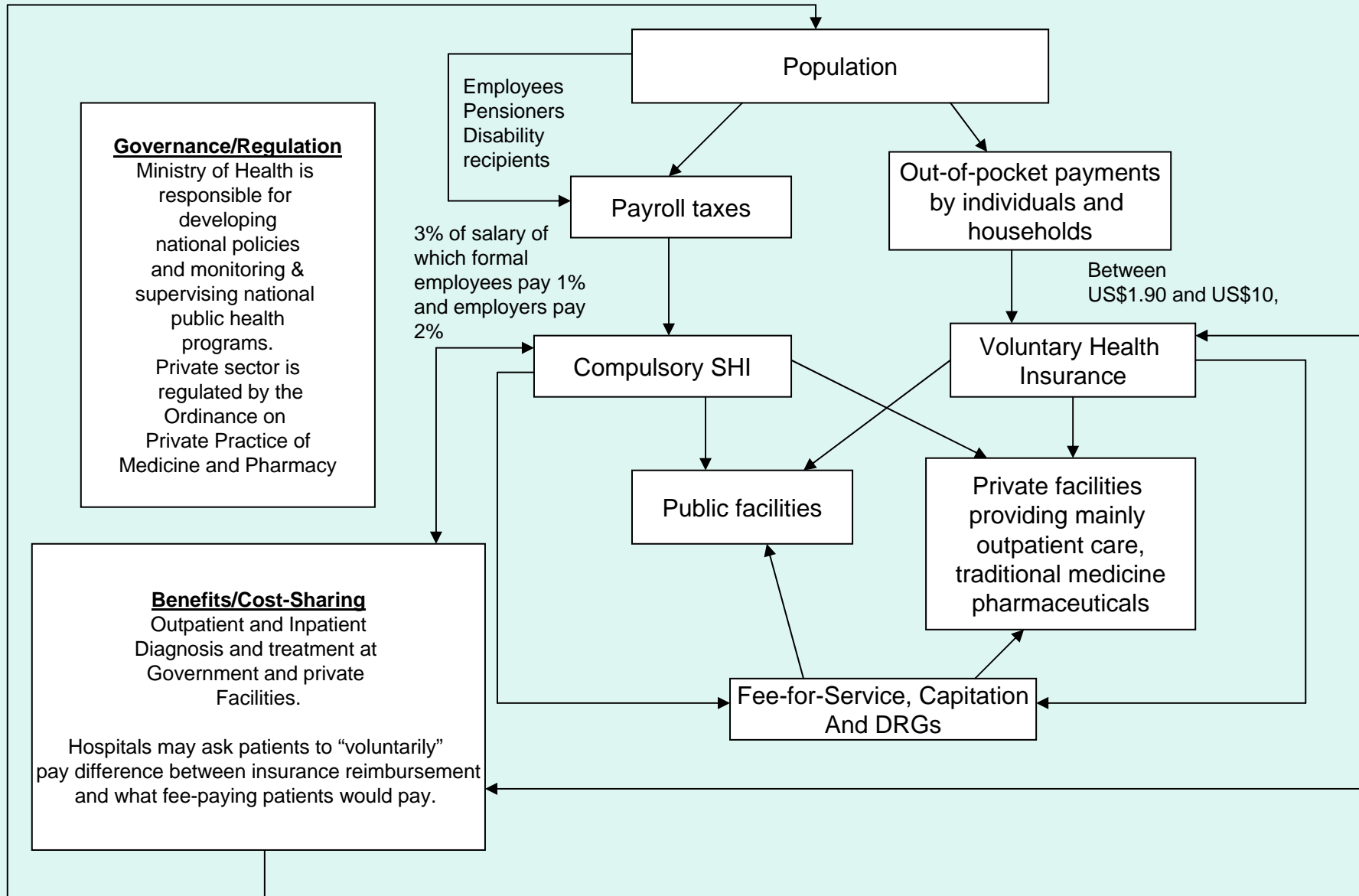
- Catastrophic effects: around 25% of population affected; worsened 1990s
- Poverty impact: around 4% more poverty due to OOP in 1990s
- Around 5.5% of total Hh resources paid OOP

➤ Policy actions

# Health financing arrangements

- Compulsory Health Insurance (CHI):
  - Social health insurance (SHI)
  - Health Care Funds for the Poor (HCFP)
  - Free health care for children under 5
- Voluntary health insurance (VHI)
  - Student health insurance
  - Group insurance

# Vietnam: Outline of health financing system



# Vietnam

## Financing/Contributions

- **Compulsory insurance contribution** rates are set at a modest 3 percent of contractual salary and basic allowances, pension, social insurance payments, scholarship, or minimum wage. **Voluntary social health insurance** contributions range between US\$1.90 and US\$10.00 depending on the locality and the type of risk pool (e.g., school, association, commune) and are paid by individuals and their households.

## Provider Payments

- Reimbursement of providers is on a **fee-for-service** basis but capitation and case-mix options (such as diagnosis-related group, DRG) have also been introduced.

## Delivery System

- In 2006 as part of the **decentralization** process, the District Health Centers (DHCs) were split into three entities with distinct responsibilities: district health offices, district hospitals, and district preventive health centers. To be reversed!
- Most **primary health care** is provided by the Village Health Worker (VHW) and the Commune Health Stations (CHS), that also execute the national preventive health target programs.
- In addition to the public facilities, Vietnam's **growing private health sector** provides outpatient care and traditional medicine services and sells pharmaceuticals.

# Vietnam

## Eligibility

- Two groups of **beneficiaries** – direct contributors and the socially excluded through subsidies.
- **Voluntary health insurance**, by law, covers individuals who need health insurance but are not covered under the compulsory scheme, such as the self-employed or the nonworking population, or individuals who want to supplement their compulsory coverage.

## Benefits

- Outpatient and inpatient diagnosis and treatment at public providers and private facilities that have contracted with the social insurance agency
- The package covers a wide range of diagnostic, treatment and rehabilitation costs
- Some **exclusions** apply for certain health problems or treatments because of moral hazard issues, the elective nature of the intervention, or because those health problems are covered by other government programs.

# Part C: Impact evaluation of HCFFP

- Government of Vietnam established the Health Care Fund for the Poor (HCFFP) in 2002
- Rolled out nationwide in 2003 – not uniformly and not randomly!
- Benefits provided through health insurance or direct reimbursement to state health facilities
- Currently 15 million beneficiaries (poor households, ethnic minorities, residents of socio-economically disadvantaged communes)

# Objective and hypotheses

- **Objective:** determine the impact of HCFP on health care utilization and household OOP health expenditure during the initial program period of 2003-2004
- **Hypotheses**
  - Underlying assumption: HCFP reduces financial barriers
  - HCFP has a positive impact on overall utilization and utilization of public facilities
  - HCFP has a negative impact on utilization of private providers, self-treatment, delays in seeking care
  - HCFP has a negative impact on out-of-pocket expenditures
  - Stronger impact in cross-section data than panel data

# Methods – Data sources

- Vietnam Household Living Standard Surveys (VHLSS) 2002 and 2004
  - Health care utilization and expenditure
  - Information to identify persons eligible to receive benefits from the HCFP
  - Other covariates at individual, household and community level
- 9,000+ households in 2004
- 4,000+ households in panel 2002-2004

# Methods – Propensity score matching

- Proxies a random selection process by matching individuals in the treated group with individuals of similar characteristics in the untreated group (control group)
- Matches on the conditional probability of receiving treatment = propensity score (estimated through logit regression)
- Reduces bias due to differences in observable characteristics
  - And also bias due to differences in time invariant unobservables in double differences analysis

# Methods – Comparison groups

<b>Comparison</b>	<b>Treated (T)</b>	<b>Untreated (UT) (Controls)</b>
A	Eligible with card	Eligible without card
B	Eligible with card	Ineligible
C	Eligible without card	Ineligible

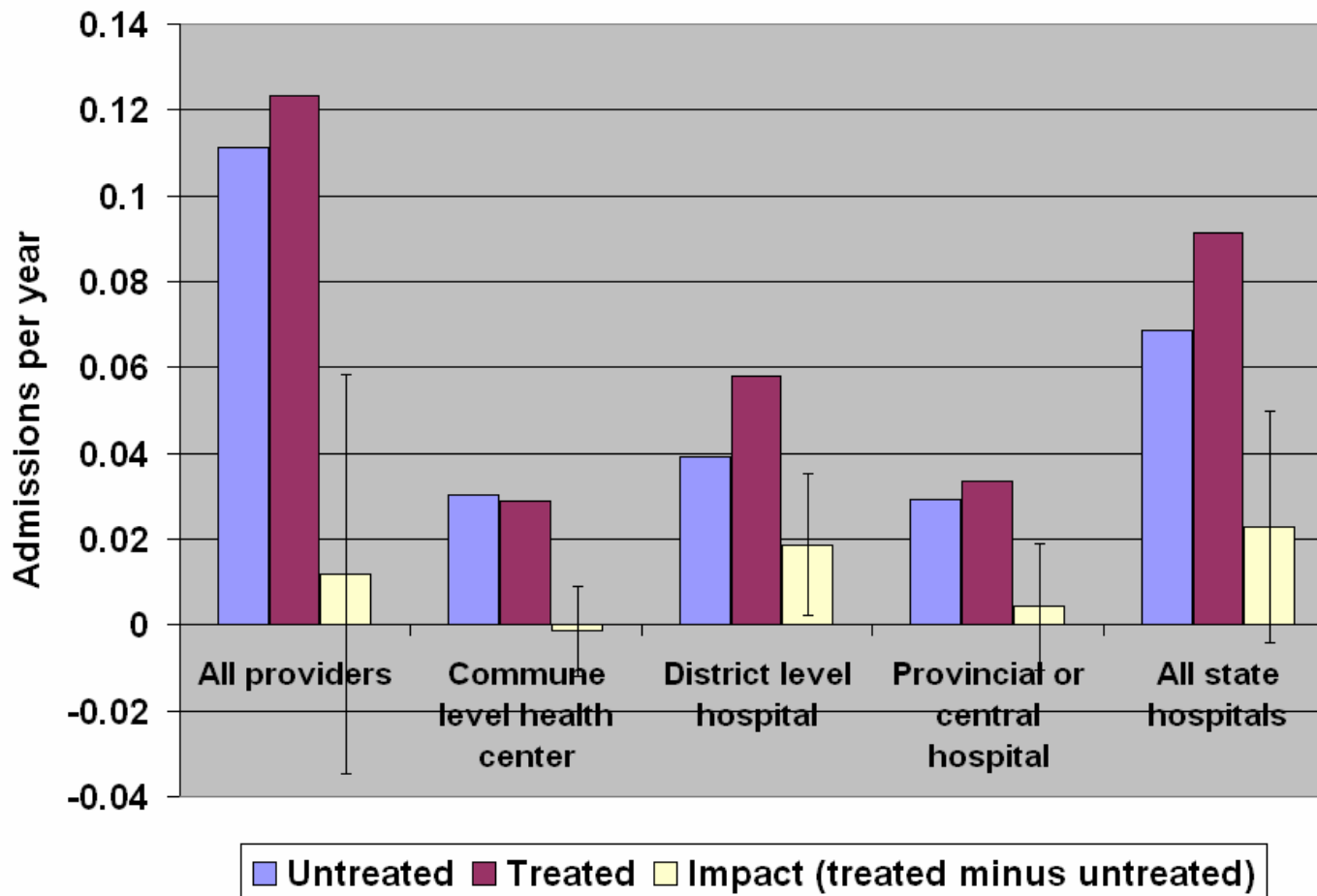
- This presentation focuses on the results of Comparison A
  - A takes advantage of “natural experiment”
  - Difficult to find good matches in B
  - Insignificant results in C

# Methods – Analysis of impact

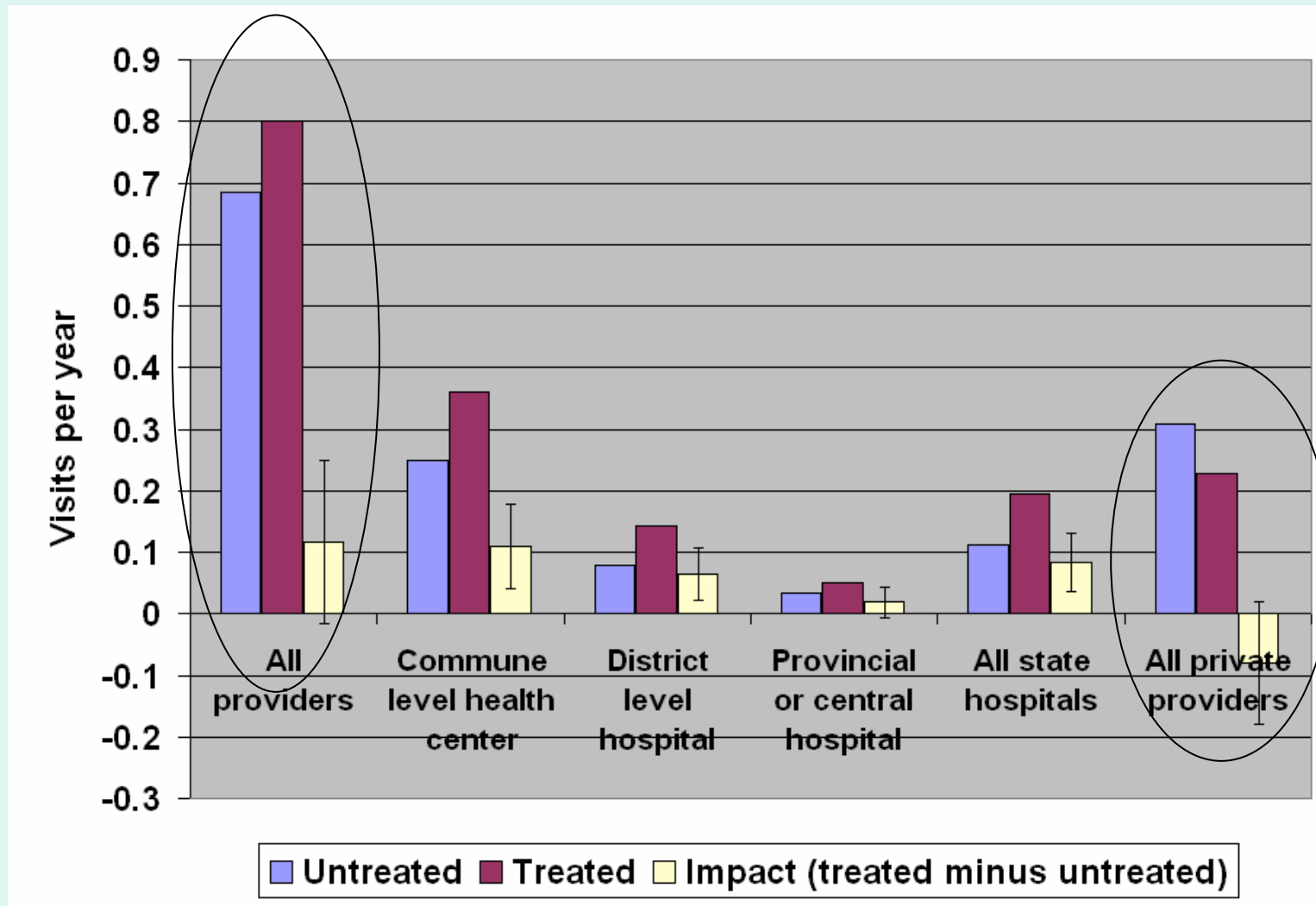
- Single differences analysis of cross-section data (2004)
  - Reduces bias from differences in observables
  - Measure impact: compare average outcomes T and UT
- Double differences analysis of panel data (2002 and 2004)
  - Eliminates bias from differences in observables and time invariant unobservables correlated with treatment and outcomes
  - Measure impact: 1) calculate changes in outcomes before and after intervention for T and UT separately, and 2) compare differences between T and UT

# RESULTS:

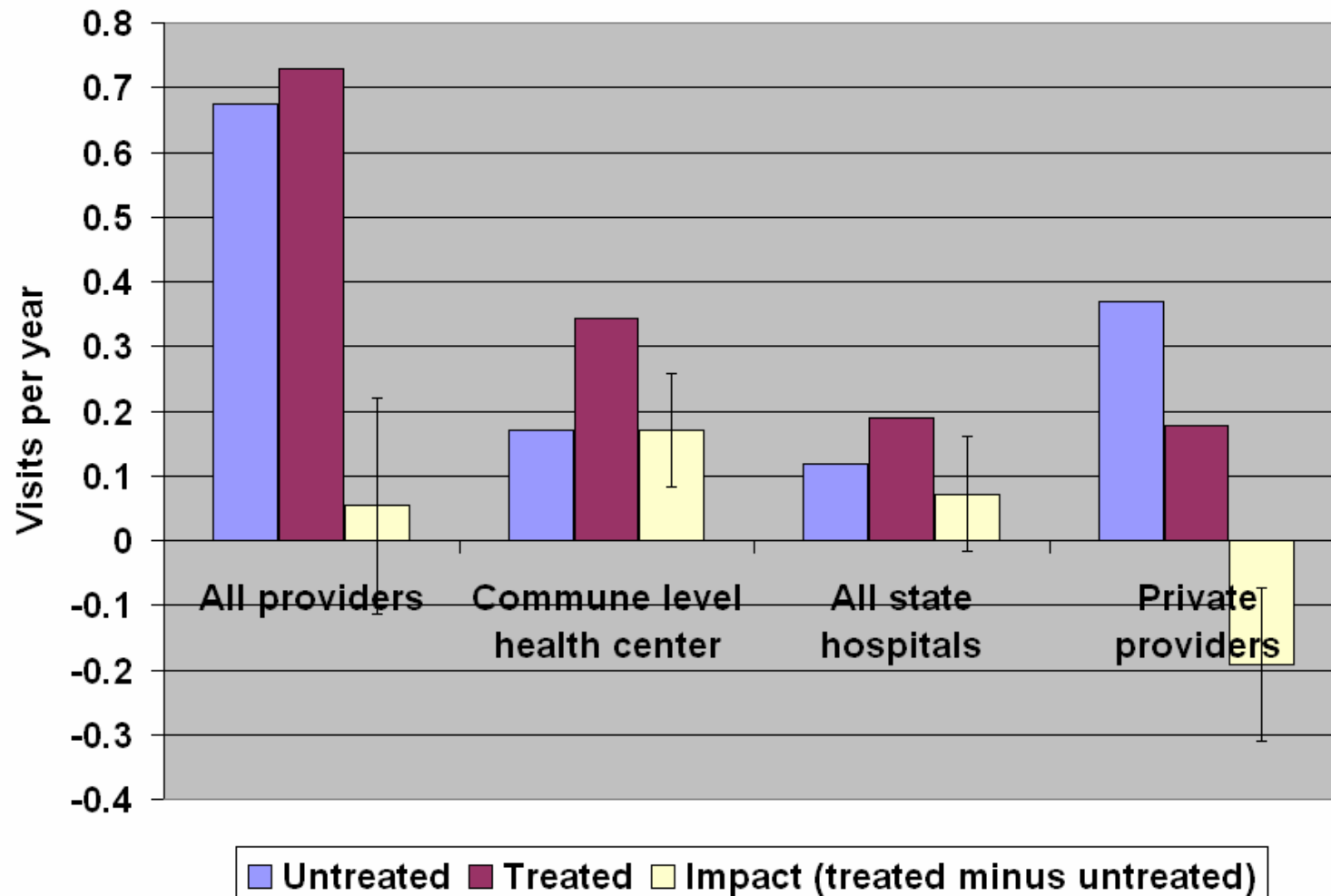
## Impact on utilization of inpatient care (Comparison A – single differences analysis)



## Impact on utilization of outpatient care (Comparison A – single differences analysis)



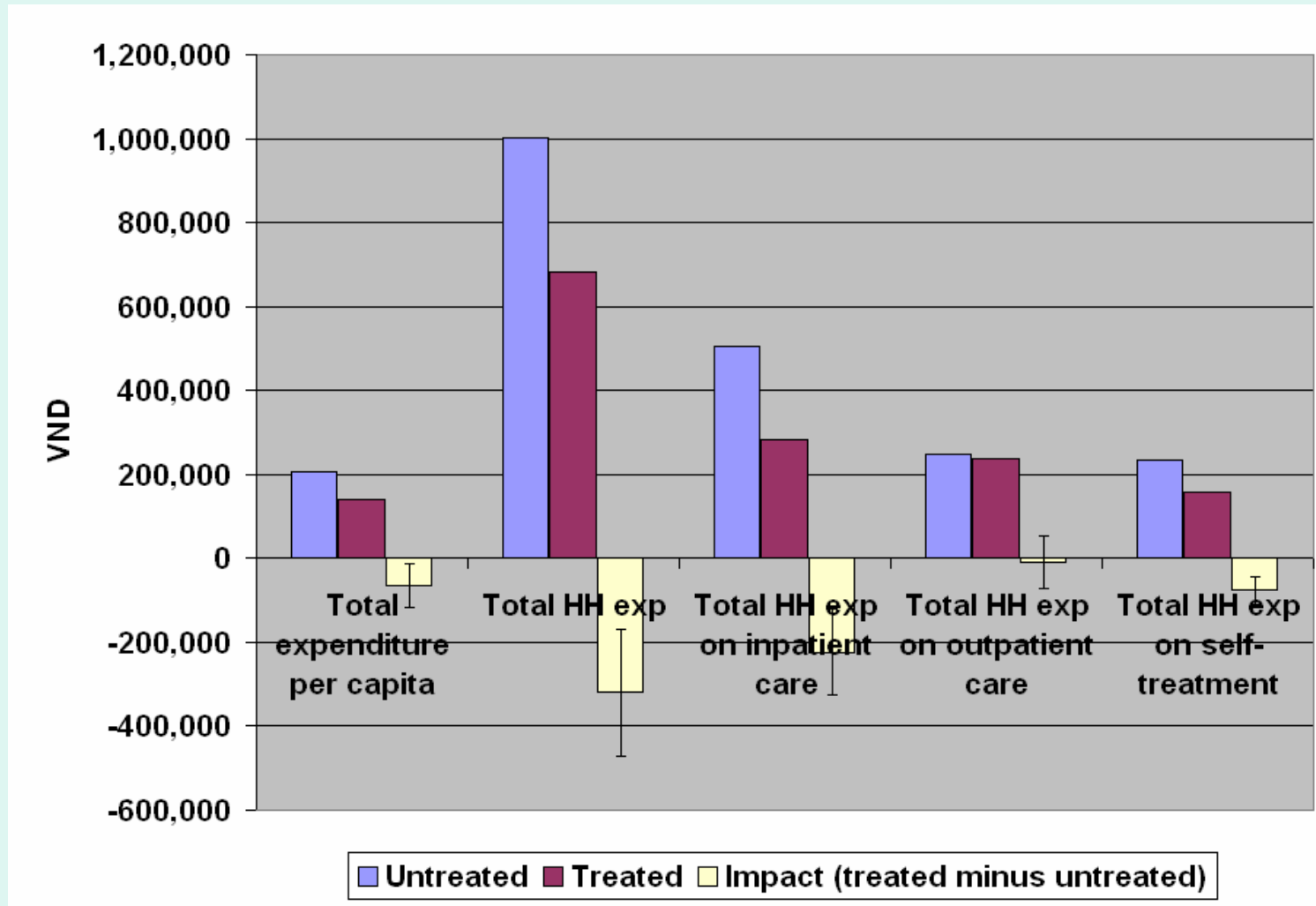
## Impact on utilization of outpatient care (Comparison A – double differences analysis)



# Results: Health care utilization

- A shift from private to public health care
- A shift from lower level care to higher level care

# Impact on health expenditure (Comparison A – single differences analysis)



# Results: Health care spending

- Overall a negative on levels of health care expenditure on the treated compared with controls
- Effect ranges from -16% (self-medication) to -27% (inpatient care)

# Conclusions

- Hypotheses of analysis were supported
- HCFP contributed to improvements in outcomes
- Short-term positive impacts suggest immediate effects of policy intervention
- Suggestions for further research:
  - Medium-term impact (VHLSS 2006)
  - Longer-term impact (VHLSS 2008, 2010, etc.)
  - Should complement routine monitoring and evaluation

# Lessons learned from health financing reforms: Vietnam and beyond

- Social insurance may not be a panacea, especially in a low-income setting
- Vietnam's and Sri Lanka's experiences contrast sharply, suggesting that many different paths can be followed to successful reform
- Widespread literacy seems to have played an important role in Vietnam, as in Sri Lanka
- Good governance has been an important enabling factor.
- Inheritance of a network of primary health care facilities was also an important enabler
- The Vietnam case also highlights the importance of strong economic growth in helping sustain the reforms
- The gradual implementation of reforms in Vietnam – as opposed to a “big-bang” approach – appears to have helped instill a learning-by-doing twist into policy making.

**Thanks for your attention!**