Health Sector Reform in Transition Economies: the case of Vietnam

Luca Tiberti, PhD candidate
University of Florence

Economic reforms in Vietnam over the last decade

1986 (*DOI MOI*): begin of transition process from a centrally planned to a market economy

- **Structural adjustment policies** (fiscal and monetary restraints):
- removal of all price controls and nominal interest rate beyond inflation rate
- sharply devaluation of exchange rate and liberalization of foreign investment
- cut of government subsidies to state enterprises, introduction of user-fees for health care and education, removal of food subsidies
- privatization of land, dismantling of co-operatives and return to household-based farming
- fiscal and administrative decentralization
- Economic outcomes over the last decade
- high real growth of GDP
- low inflation rate and public debt
- improvement of foreign trade
- more funds for industry and tertiary sectors

Reforms of health care financing

- Under the planned economy health care was provided exclusively by the Government free of charge
- Health sector reforms:
  - introduction of user-fees
  - legalization of private provision
  - liberalization of pharmaceutical market
  - establishment of health insurance (first only mandatory, then also voluntarily)
  - sharply reduction of public subsidies to kindergarten and day care centres
  - cut of public subsidies pro commune health centres (CHCs)
  - entitlement by law of exemption from charges at public facilities for certain classes of people
- Large changes in composition of health care expenditure

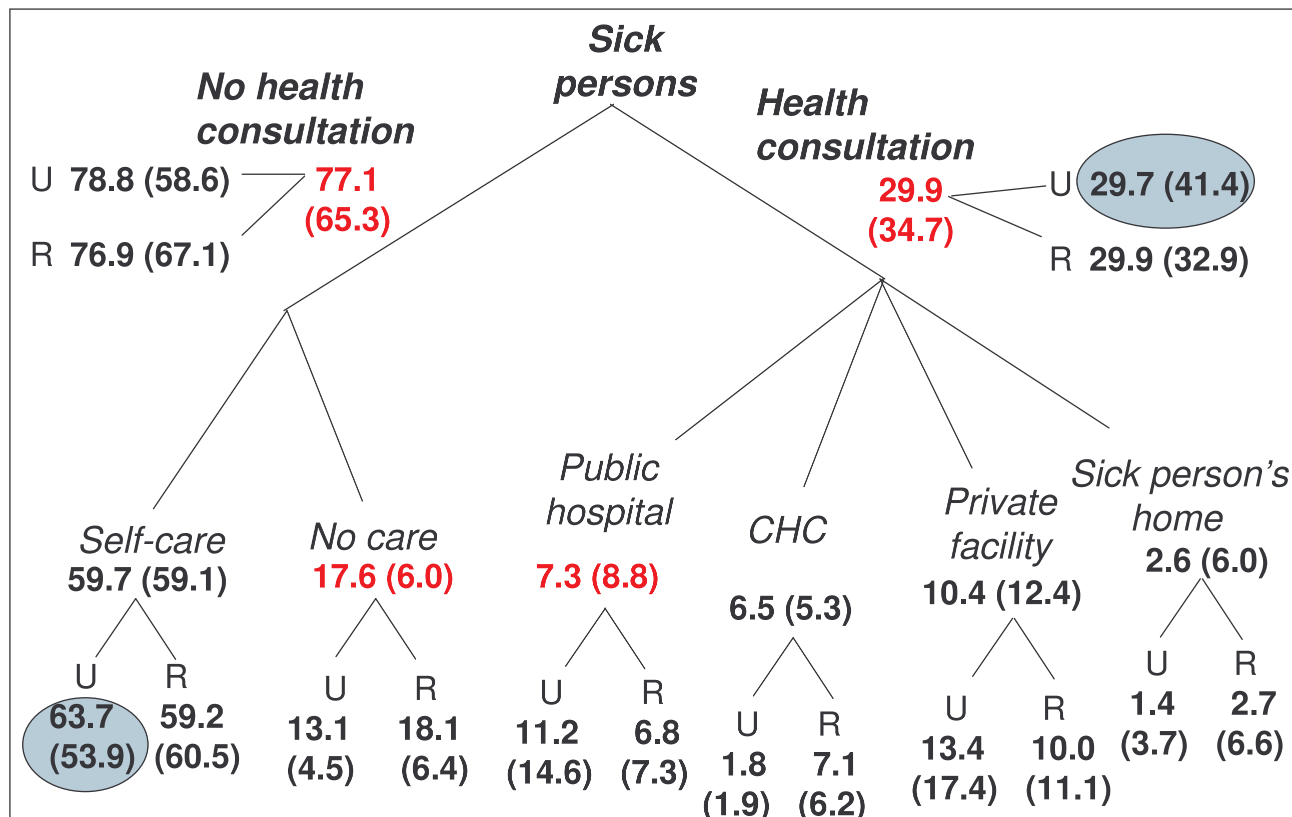
Composition of health care expenditure in Vietnam, 1995-2000

Selected Health variables	1995	1996	1997	1998	1999	2000
- Total expenditure on Health as % of GDP of which:	3.9	4.6	4.5	4.7	5.5	5.2
▪ Public*	1.57	1.60	1.40	1.36	1.34	1.34
▪ Private*	2.32	2.99	3.09	3.33	4.15	3.85
- General Government expenditure on Health as % of Total expenditure on Health	40.4	34.8	31.2	29.1	24.4	25.8
- Private expenditure on Health as % of Total expenditure on Health	59.6	65.2	68.8	70.9	75.6	74.2
- General Government expenditure on Health as % of Total Government expenditure	6.6	6.7	6.2	6.8	6.4	6.5
- External Resources for Health as % of General Government Expenditure on Health	6.6	10.8	13.7	15.6	12.5	12.3
- Out-of-Pocket Expenditure as % of Total Expenditure on Health	55.2	60.3	63.5	65.6	70.1	68.7
- Social Security spending on Health as % of General Government Expenditure on health	0.8	1.0	1.2	1.3	1.6	1.5
- Per capita Total expenditure on Health at International Dollar rate ($)	68	87	93	104	128	129
- Per capita Government expenditure on Health at International Dollar rate ($)	28	30	29	30	31	33

Source: WHO, 2002 (Annex 5)

(a) Descriptive statistics from VLSS

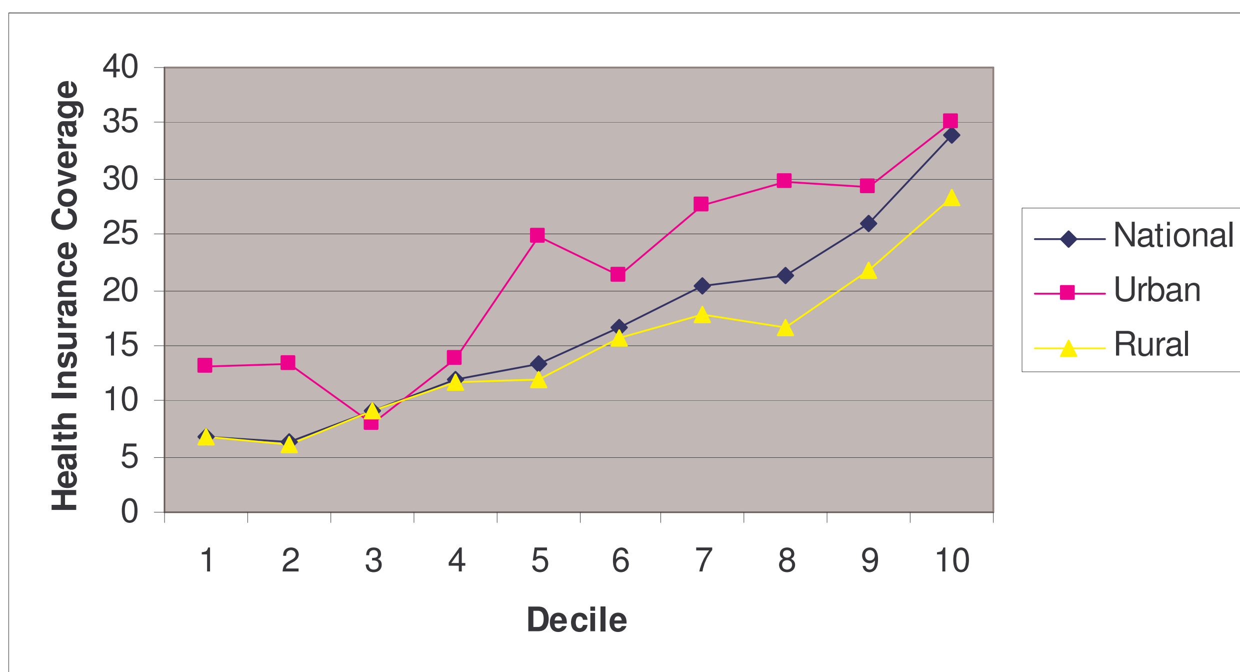
Distribution of health care demand in Vietnam in 1998 and (1993)



Type of provision and no-care by income deciles

decile	No-care		Public hospital		Commune health centre		Private facility		Self-care	
	93	98	93	98	93	98	93	98	93	98
1	22.7	31.9	3.7	3.7 (16.0)	4.5	8.9 (45.9)	5.7	9.6	63.0	46.2
2	5.9	19.7	4.9	4.0 (12.3)	7.4	5.6 (0)	8.0	8.0	58.6	56.2
3	5.1	17.6	5.4	6.1 (15.6)	7.2	7.3 (0)	8.8	5.7	57.2	60.2
4	5.3	14.6	5.5	6.1 (29.8)	6.2	9.0 (0)	7.1	9.1	63.3	67.2
5	5.3	14.6	9.0	7.9 (28.9)	5.9	7.8 (43.2)	16.2	11.1	64.1	61.9
6	6.5	13.6	8.6	8.1 (33.4)	7.1	6.4 (71.0)	11.7	11.4	61.4	63.3
7	3.5	16.6	9.0	7.3 (37.1)	4.4	5.5 (34.8)	11.9	13.7	62.6	64.6
8	2.8	13.0	9.7	11.2 (37.4)	4.4	5.3 (24.1)	13.8	9.8	55.1	66.5
9	2.0	11.1	13.0	11.3 (37.2)	4.1	3.3 (41.4)	18.4	15.1	57.1	63.1
10	3.3	14.9	18.6	14.0 (43.7)	2.1	1.6 (37.2)	21.6	16.5	46.7	54.0
Total	6.1	17.6	8.8	7.3 (30.7)	5.3	6.5 (16.4)	12.4	10.4	59.2	59.7

Distribution of health insurance in Vietnam in 1998 by income deciles



Average ratios: National = 15.7; Urban = 28.4; Rural = 12.1

Health care demand by age group

Age group	Public hospital		Commune Health Centre		Private facility		Sick person's home	
	93	98	93	98	93	98	93	98
0 ├5	7.4	5.5 (0.5)	8.0	7.9 (4.2)	18.2	17.5	5.0	2.4
5 ├15	6.0	5.7 (41.5)	5.8	6.5 (19.5)	10.7	10.1	3.7	1.5
15 ├60	10.4	7.9 (29.2)	4.8	6.6 (17.4)	11.8	9.5	5.9	2.4
60 ├above	8.7	9.3 (41.9)	2.9	4.5 (23.7)	9.2	8.0	11.5	5.2

Age group	Self-care		Consultation		No-care	
	93	98	93	98	93	98
0 ├5	55.8	55.1	40.5	34.7	3.4	18.1
5 ├15	66.8	57.5	27.4	25.8	5.6	21.1
15 ├60	57.6	61.0	35.2	29.9	7.1	16.7
60 ├above	59.0	62.2	34.7	31.9	6.0	14.6

(b): Empyrical Tests from VLSS Urban Health Consultation (LOGIT)

Indipendent Variables	1993		1998	
	dy/dx	P>|z|	dy/dx	P>|z|
oc	.031	0.488	-.035	0.267
edu1	.004	0.313	.004	0.154
logconsexpurb	.023	0.671	.088	0.002
logselfcarexp	.204	0.005	.017	0.357
ageclass1	.132	0.002	.281	0.000
ageclass2	.029	0.466	.077	0.032
ageclass4	.028	0.530	-.007	0.798
ethnicity	-.037	0.452	-.060	0.104
insurance	-	-	.105	0.000
gender	-.017	0.518	-.046	0.000
illdd	.007	0.000	.007	0.000
logtotexpd	.165	0.000	.075	0.000
quint1	*-.098*	*0.260*	*-.186*	*0.055*
quint5	*.140*	*0.000*	*.110*	*0.000*
Prob (y)	**0.34**		**0.22**	

Urban Health Consultation Expenditure as ratio of Total Expenditure (OLS)

Indipendent Variables	1993		1998	
	dy/dx	P>|z|	dy/dx	P>|z|
oc	-.018	0.586	.101	0.120
edu1	-.002	0.393	.003	0.563
ageclass1	.007	0.816	-.009	0.856
ageclass2	-.037	0.228	-.010	0.863
ageclass4	-.016	0.635	-.023	0.680
ethnicity	-.011	0.751	-.049	0.416
insurance	-	-	-.194	0.000
gender	-.015	0.472	.034	0.374
illdd	.000	0.819	.007	0.001
logtotexpd	-.249	0.000	-.228	0.000
costant	2.590	0.000	2.452	0.000
R^2	**0.3197**		**0.1455**	

Rural Health Consultation (LOGIT)

Indipendent Variables	1993		1998	
	dy/dx	P>|z|	dy/dx	P>|z|
oc	.060	0.212	-.001	0.967
edu1	.008	0.000	-.002	0.102
logconsexprur	.073	0.036	.041	0.000
logselfcarexp	-.025	0.446	.103	0.000
distconsultat	-.014	0.000	-.002	0.000
distpharm	.003	0.051	.003	0.000
ageclass1	.088	0.000	.109	0.000
ageclass2	-.041	0.020	.015	0.195
ageclass4	-.026	0.226	-.077	0.000
ethnicity	.027	0.122	-.001	0.891
insurance	-	-	.063	0.000
gender	-.020	0.128	-.008	0.365
illdd	.008	0.000	.007	0.000
farmer	.035	0.043	.054	0.000
logtotexpd	.101	0.000	.057	0.000
quint1	*-.085*	*0.000*	*-.036*	*0.001*
quint5	*.092*	*0.000*	*.037*	*0.041*
Prob (y)	**0.30**		**0.22**	

Typology of Urban Health Consultation (MLOGIT e LOGIT)

Indipendent Variables	1993 Public Hospital		1993 Private Facility		1998	
	dy/dx	P>|z|	dy/dx	P>|z|	dy/dx	P>|z|
oc	.240	0.001	-.318	0.000	.061	0.493
edu1	.012	0.085	-.015	0.044	.022	0.004
loghospexp	.095	0.238	-.024	0.767	.074	0.016
logpristexp	.019	0.815	-.015	0.725	-.132	0.052
logcpmexp	-.015	0.638	-.029	0.655	-	-
ageclass1	-.111	0.094	.204	0.002	-.099	0.184
ageclass2	-.217	0.001	.243	0.000	-.082	0.283
ageclass4	-.012	0.879	-.175	0.022	.092	0.219
ethnicity	.195	0.011	-.214	0.008	.156	0.052
insurance	-	-	-	-	.241	0.000
gender	.099	0.053	-.114	0.029	-.048	0.358
illdd	.010	0.004	-.008	0.018	.005	0.078
logtotexpd	-.020	0.661	.088	0.068	-.038	0.430
Prob(y)	**0.43**		**0.50**		**0.43**	

Infant Mortality Rate, Under 5 Mortality Rate and Child Mortality Rate by region and geographical area (in 1993)

Region	IMR	U5MR	Child mortality rate
Northern Highlands	62.2	82.1	21.2
Red River Delta	35.3	43.7	9.5
North Central	37.7	50.8	13.7
Central Highlands	71.6	108.1	44.9
Southeast	31.2	47.7	17.0
Mekong River Delta	48.2	68.9	22.1
Central Coast	37.1	46.2	8.6
Urban	27.0	35.9	9.1
Rural	48.2	66.1	18.8
Vietnam	45.1	61.6	17.5

Source: GSO, 1994 (cited in UNICEF, 2000)

Conclusion

- According to an important part of the literature (i.e. Glewwe, Litwack, Dollar) economic and social reforms improved the total welfare ("…most, and perhaps even almost all, Vietnamese households have more money to pay for health services than did before 1986", Glewwe and Litwack, 1998, pg 22)
- Although a general increase of consumption, this study would show that:
  - access to health care facilities is generally lower and more unequal (critical differences between urban and rural areas)
  - insurance and income are very discriminatory variables
  - self-care continues to be too high
  - access to higher-quality health care facilities is greatly restricted by the establishment of health insurance and the huge cut of public expenditure
  - CHCs and self-care are considered inferior goods (for s.c. it is not true in rural areas)
  - the youngest agegroup would result the most affected by reforms
  - the whole population would prefer private provision
  - health care indicators improved only for the richest deciles and a wide divergence between regions and within geographical areas results