

The Impact of Health Financing Policies on Household Spending: Evidence from Cambodia Socio-Economic Survey 2004 and 2009

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Background

After two decades of civil war, Cambodia has its fully peace in 1998. As a developing country with no social health insurance; the country was formulated and is implementing various form of health care schemes like user fee, health equity fund, community based-health insurance, and voucher.

Civil war 1970s-1980s → Peace agreement in 1991 → Post conflict's health care reforms, mostly in late 1990s



Objective

Our study aim to assess the impact of health financing policies on household health expenditures by using the nationally representative household survey data in 2004 and 2009, by using difference-in-difference and two-part model. More importantly, our study intends to measure the combined effects of user fee and health equity fund on household health expenditure.

Findings

Table 1 : Out-of-Pocket Spending per capita per day by Poverty Status (in Cambodian Riels, at 2009 prices)

	2004		2009		change		%change	
	non-poor	poor	non-poor	poor	non-poor	poor	non-poor	poor
Control	661.0	160.3	561.0	881.1	100.0	720.7	-15.1	449.5
UF	1165.9	742.8	548.0	523.9	617.9	-218.9	-53.0	-29.5
HEF	372.4	154.5	120.5	19.1	251.9	-135.5	-67.6	-87.7
UF & HEF	156.7	125.5	438.1	212.2	-281.5	86.8	179.7	69.2
Total	825.1	493.0	515.5	491.4	309.6	-1.5	-37.5	-0.3

Table 2: The Impacts of UF, HEF, UF and HEF on Household Health Spending: Probit with GLM with log link and gamma distribution

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	uf_hef	uf	uf	uf	hef	hef
time	-0.173***	0.519**	-0.142**	0.479*	-0.116*	0.482**
uf_hef	-0.455***	-0.246				
time_uf_hef	0.432***	-0.376				
uf			-0.0195	0.407		
time_uf			0.125	-0.727**		
hef					-0.255	0.256
time_hef					0.176	-1.635**
Constant	-0.8030***	7.536***	-0.735***	6.122***	-0.494	6.832***
Observations	3,223	3,223	6,024	6,024	1,926	1,926

Note: *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent. Explanatory variables listed in Table 8, and wealth quintiles are also included. Source: Authors' calculation

Table 3: The Impacts of UF, HEF, UF and HEF on Household Health Spending: Probit with OLS with logged dependent variable

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	uf_hef	uf	uf	uf	hef	hef
time	-0.173***	0.392***	-0.142**	0.364***	-0.116*	0.389***
uf_hef	-0.455***	0.101				
time_uf_hef	0.432***	-0.631**				
uf			-0.0195	-0.0481		
time_uf			0.125	-0.0735		
hef					-0.255	0.232
time_hef					0.176	-0.992**
Constant	-0.803***	6.947***	-0.735***	6.205***	-0.494	7.086***
Observations	3,223	3,223	6,024	6,024	1,926	1,926

Note: *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent. Explanatory variables listed in Table 8, and wealth quintiles are also included. Source: Authors' calculation

As shown in Tables 2 and 3, amongst the households with positive out-of-pocket health expenditure, the coefficients of the interacted terms between HEF and time dummy which captured the impact of HEF on out-of-pocket health expenditure in outcome equations is negative and statistically significant at 5 percent level regardless of the different approaches of two-part model that we employed. This evidence confirms that HEF will definitely help reducing out-of-pocket health expenditure in Cambodia. In other words, HEF has largely increased access to health care services in Cambodia particularly for the poor that represented 28 percent of the total population in 2009.

Table 4: The Impacts of UF, HEF, UF and HEF on the Share of Household Health Spending to Total Spending: Probit with GLM with log link and gamma distribution

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	uf_hef	uf	uf	uf	hef	hef
time	-0.173***	0.0557	-0.142**	0.0263	-0.116*	0.0631
uf_hef	-0.455***	-0.167				
time_uf_hef	0.432***	-0.312				
uf			-0.0195	-0.0554		
time_uf			0.125	-0.121		
hef					-0.255	0.207
time_hef					0.176	-1.289***
Constant	-0.803***	2.451***	-0.735***	1.926***	-0.494	1.900***
Observations	3,223	3,223	6,024	6,024	1,926	1,926

Note: *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent. Explanatory variables listed in Table 8, and wealth quintiles are also included. Source: Authors' calculation

As shown in Tables 4, in addition to the level of out-of-pocket health expenditures, we also examine the effects of health financing policies on the share of out-of-pocket health expenditure to total spending.

We find that the coefficient of the interacted terms between HEF and time dummy is negative and statistically significant at 1 percent level Probit with GLM with log link and gamma distribution are employed. This evidence indicates that HEF does not only reduce out-of-pocket health expenditure but also its share to total spending.

Key Messages

- However, user fee is unlikely to constrain household health spending as it was originally designed.
- Even though user fee has been implemented with the most effective program such health equity fund, its impact is not inclusive.
- The continuation and expansion of health equity fund scheme is definitely crucial for Cambodia

