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Universal Health Coverage Reforms

Patterns of Income, Spending and Coverage in
Four Developing Countries

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Abstract

Achieving universal health coverage (UHC) is a central social aspiration of most developing countries, but one that poses multiple policy challenges. This research reviews reforms in four developing countries over the past 15 years: Colombia, Ghana, Vietnam, and the Philippines. The countries were selected to illustrate different circumstances, policy approaches, and results in different regions of the world and for countries with different income levels. The research examines the changes that took place in the four countries in absolute and relative spending levels for public, private, and total health spending, along with changes in health insurance coverage. In particular, it explores the hypotheses that effective coverage expansion requires additional public financing and reduces out-of-pocket spending. The research also analyzes the link that may exist between the countries' economic cycles, health spending, and health insurance coverage. Finally, it looks at consequences of expanding coverage for equity.

All four countries have aimed to achieve UHC through social insurance mechanisms. Colombia's reform started in 1993 and has been able to achieve near universal coverage while reducing out-of-pocket spending and controlling total health costs. Ghana's reforms are more recent, starting in 2005, yet it has managed to achieve significant gains in health coverage and has also reduced dependence on out-of-pocket spending. Vietnam's social insurance reforms started in the 1990s. It has increased coverage while modestly reducing reliance on out-of-pocket spending during a period when total health expenditures tripled. Reforms in the Philippines since 1995 show slow progress in expanding coverage, rising expenditures and a growing reliance on out-of-pocket expenditures.

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Introduction

Achieving universal health coverage (UHC) is a central social aspiration of most developing countries, but one that poses multiple policy challenges. The World Health Organization's 2010 World Health Report, which is devoted to this subject, concludes that to achieve UHC developing countries must raise additional funding for health care, reduce reliance on out-of-pocket health financing, and improve the efficiency of resource use.

This research reviews the situation of four developing countries that over the past 15 years undertook health reforms aimed at achieving UHC: Ghana, Vietnam, the Philippines and Colombia. The countries were selected to illustrate different circumstances, policy approaches, and results in different regions of the world and for countries with different income levels. The research examines the changes that took place in the four countries in absolute and relative spending levels for public, private, and total health spending, along with changes in health insurance coverage. In particular, it explores the hypotheses that effective coverage expansion requires additional public financing and reduces out-of-pocket spending. The research also analyzes the link that may exist between the countries' economic cycles, health spending, and health insurance coverage. Finally, it looks at the equity consequences of coverage expansion.

The work relies on National Health Accounts data from WHO, health accounts data and statistics from the case study countries, and reports and publications on the countries' health systems. The study encompasses a 15-year time period, 1995-2009, over which the data are available for all four countries.

Table 1 presents selected summary statistics for the study countries. Over the study period all four countries experienced considerable economic growth: Ghana doubled real per capita income (it grew at an average annual rate of 5.1 percent), Vietnam nearly tripled it (7.7 percent average annual growth), while the Philippines and Colombia increased income by 60 and 70 percent respectively.

Health insurance coverage grew in all countries as well and all four relied on the social health insurance (SHI) approach to seek UHC. In Ghana coverage was nil in 1995 but reached almost 50 percent fifteen years later, owing to the National Health Insurance Act of 2003, and the publicly-financed National Health Insurance Scheme, whose coverage began to grow in earnest in 2005. Health insurance coverage also grew in an important way in Vietnam through Vietnam Social Security (VSS), from just over 13 percent in 1995 to 59 percent in 2010. In the Philippines official coverage by PhilHealth doubled during the period, to reach over two-thirds of the population by 2009.¹ Colombia's Law 100, which in 1994 mandated SHI coverage for all citizens, helped increase coverage from about 50 percent when it was passed to virtually universal coverage by 2009. While per capita total health spending in nominal PPP-adjusted dollars grew in all four countries, the increase was the largest in Vietnam, which more than quadrupled its initial spending. Both Ghana and Colombia experienced a large decrease in the share of total financing accounted for by

¹ This is an official figure. Survey data suggest that actual health insurance coverage in 2009 was only 42 percent.

out-of-pocket payments (OOP), while the share remained more or less unchanged in the two Asian countries.

Efforts to expand health coverage may be limited by the availability of financial and human health resources. By 2009 all four countries had similar tax revenue capacity as a share of GDP (bottom row of Table 1) and, hence, had a similar fiscal capacity to finance health care publicly. Yet the four countries exhibited large differences in the proportion of workers engaged in formal employment (highest in Vietnam and lowest in Ghana), a factor that influences their ability to collect SHI premiums. Ghana has the lowest availability of physicians of all four countries, a factor that may hinder its ability to expand health coverage. Vietnam, on the other hand, has the highest availability of hospital beds per citizen, and this may limit its ability to contain health spending.

Table 1 Summary indicators for case study countries (in ascending order of per capita GDP)

	Ghana		Vietnam		Philippines		Colombia	
	1995	2009	1995	2009	1995	2009	1995	2009
GNI per capita, (current international PPP \$)	766	1,535	979	2,766	1,991	3,540	5,449	8,595
Coverage								
Health insurance coverage								
Official figures	0.5	47.9	13.4 ^h	58.5 ^a	34.3	68.8 ^d	51.8 ^k	93.3
Survey based figures	–	–	–	–	–	42.0	–	–
Effective coverage immunization	73.8	93.4	91.6	90.2 ^c	63.8	84.0	81.3.3	90.1 ^c
Effective coverage	25.5 ^g	41.0 ^c	61.7 ^j	78.5 ^g	32.4 ^g	34.2 ^c	65.2 ^f	67.4
Effective coverage (births attended by skilled health personnel)	44.0 ⁱ	58.7 ^c	77.0 ⁱ	88.0	56.0 ⁱ	62.2 ^c	93.0	96.0 ^f
Health spending per capita, (current international PPP \$)	53	122	49	213	66	136	395	569
Health spending structure (%)								
General government	45.1	34.9	31.7	27.2	36.8	27.7	29.7	27.0
Social security	–	14.8	2.4	12.5	4.7	6.8	28.9	57.2
Private insurance	3.5	2.7	2.3	1.7	3.9	7.8	6.3	7.9
Out of pocket	45.6	34.3	60.0	56.8	52.6	53.4	35.0	7.9
External resources	5.8	13.3	3.5	1.7	1.9	4.3	0.1	0.1
Population density (people per sq. km of land area)	[	107.2 ^a	[	280.3 ^a	[	312.8 ^a	[	41.7 ^a
Urban population (% of total)	[	51.5 ^a	[	28.8 ^a	[	66.4 ^a	[	75.1 ^a
Physicians (per 1,000 people)	[	0.1	[	1.2 ^c	[	1.2	[	1.4 ^c
Hospital beds (per 1,000 people)	[	0.93	[	2.9 ^c	[	0.5	[	1.0 ^a
Nurses and midwives (per 1,000 people)	[	1.05	[	1.0 ^c	[	n.a.	[	0.6 ^a
Wage and salaried workers, total (% of total employed) ^m	[	19.9 ^e	[	76.0 ^d	[	52.4 ^c	[	46.5 ^a
Self-employed, total (% of total employed)	[	79.9 ^e	[	24.0 ^d	[	47.6 ^c	[	53.5 ^a
Unemployment, total (% of total labor force)	[	3.6 ^e	[	2.4 ^c	[	7.4 ^a	[	11.6 ^a
GINI index	[	42.8 ^e	[	35.6 ^d	[	44.0 ^e	[	55.9 ^a
Income share held by highest 20%	[	48.6 ^e	[	43.4 ^c	[	49.7	[	60.2 ^a
Poverty gap at \$1.25 a day (PPP) (%)	[	9.9 ^e	[	3.8 ^c	[	21.0	[	3.8 ^a
Poverty gap at national poverty line (%)	[	9.6 ^e	[	3.5 ^c	[	3.7	[	n.a.
Tax revenue (% of GDP) ⁿ	[	12.6	[	15.0 ^e	[	12.1 ^a	[	11.5 ^a

^a year 2010; ^c 2008; ^d 2007; ^e 2006; ^f 2005; ^g 2003; ^h 2002; ⁱ 2000; ^j 1998; ^k 1997; ^l 1996

n.a. Not available.

Sources: World Databank at <http://databank.worldbank.org/ddp/home.do> with the following two exceptions for Vietnam:

^m. ILO 2010 The informal economy in Vietnam.

ⁿ. FMcKinley, T. and K. Kyriili (2009) Is Stagnation of Domestic Revenue in Low-Income Countries Inevitable? Center for Development Policy and Research Discussion Paper.

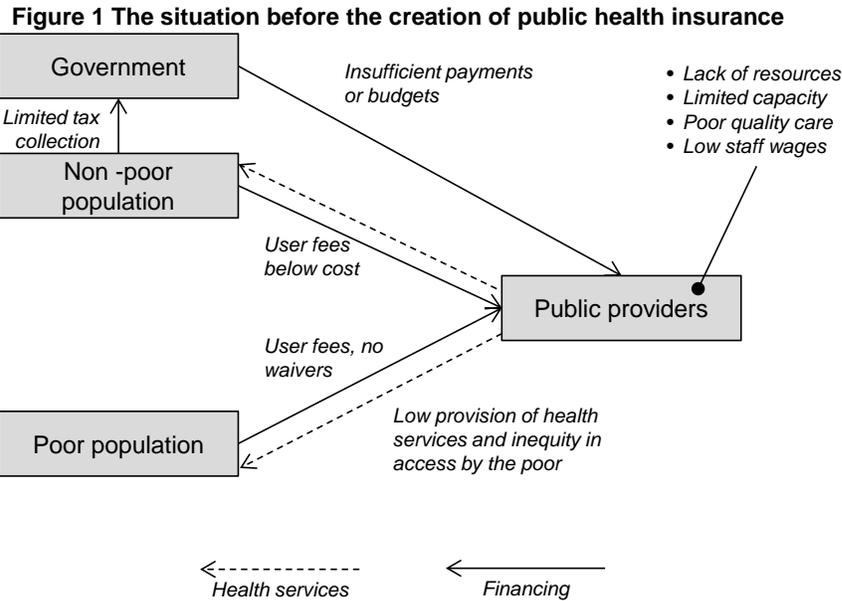
Conceptual framework

This section first presents basic definitions and offers a conceptual framework to analyze the consequences of a policy of expanded coverage through SHI, the approach followed by the four case study countries. It begins by describing a common scenario found in low- and middle-income countries prior to the implementation of public insurance. Next, it characterizes the general situation after SHI is adopted and used as the platform to expand coverage. Finally, it attempts to make some predictions about total health expenditure in the country and the changes in the patterns of health financing that occur with coverage expansion.

The following definitions are necessary for the analysis presented below:

- Public health expenditure (PuHE) includes two different sources of financing:
 - General revenue resources that government uses to make direct payments to public and/or private health care providers for services rendered to the insured, or resources that it uses to pay SHI health insurers so that they, in turn, can pay public and/or private health care providers for services to the insured.
 - Resources that households contribute to SHI in the form of periodic premiums (often as payroll deductions for formal sector workers).
- Private health expenditure (PrHE) includes two additional household sources of health care financing:
 - Out-of-pocket spending (OOPS) by households. These are payments of user fees, including insurance copayments, to government and private health care providers.
 - Household premium payments to private health insurers that are not part of the SHI system.

Figure 1 describes a typical situation seen in developing countries before the implementation of public insurance. Limited tax collection restricts public financing of government health care providers and leads to low wages for public health workers. To finance their operations and to supplement health workers' incomes, government health services must rely on a combination of government payments (or budgets) and user fees paid by poor and non-poor patients. Owing to the strong reliance of government health providers on user fees and the limited ability to pay by the poor, per capita utilization of health services by the poor is below their need for health care. This results in inequity in access. Public dissatisfaction with this situation may lead policymakers to enact public health insurance, either in the form of SHI, or a general tax-financed health system, or a mixed approach. Total health financing in the public sector is the sum of government spending on providers and user-fee revenue.

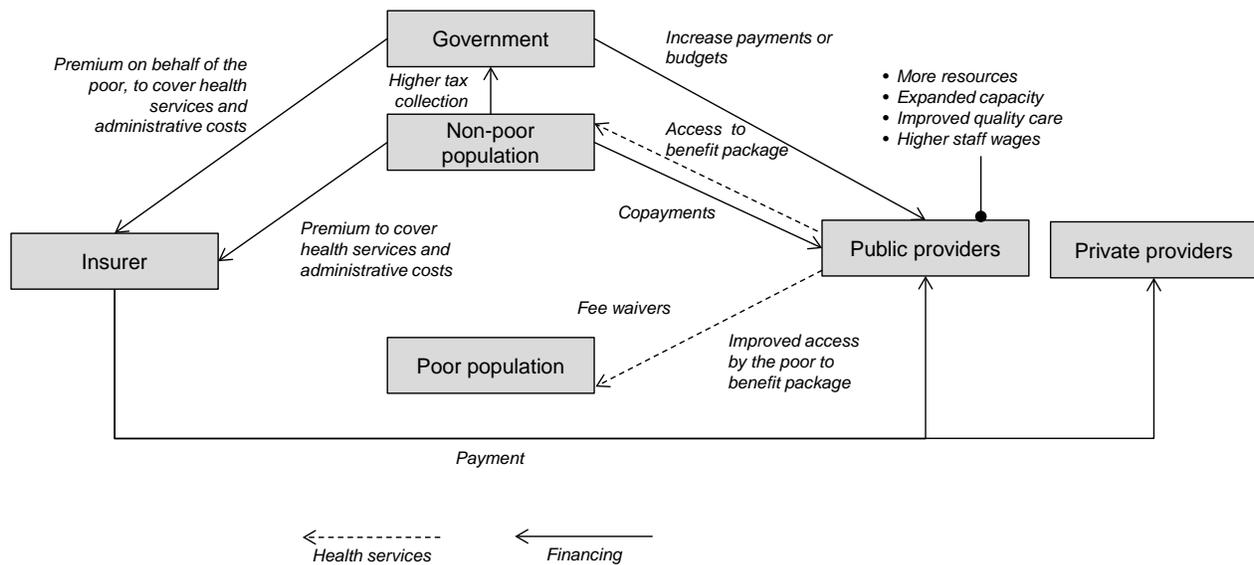


Source: Author.

The creation of SHI changes the above scenario in several ways (see Figure 2). To subsidize insurance coverage for the poor, government may pay a premium on their behalf or may directly pay health care providers for services delivered to the poor. The health insurance agency uses this government-subsidized premium to pay for health care for the covered poor and to defray its administrative costs. User fees in government facilities are abolished or greatly reduced for the poor, leading to an increase in the demand for health services. If this new demand is met by the providers then equity in health improves. Government may also subsidize insurance for the non-poor from the informal sector of the economy, who may otherwise not be willing voluntarily to contribute their own premium. The non-poor in the formal sector participate in SHI making regular premium payments, often in the form of monthly, mandatory payroll contributions. Their out-of-pocket spending (OOPS) in government health facilities may drop as fees are replaced by insurance copayments. There may be some cross-subsidization of the poor by the non-poor contributing members.

The creation of public insurance has multiple implications for health spending. First, the removal or drop of user fees leads to an increase in the demand for health care by both the poor and the non-poor and, if this additional demand is met by the public providers, there is a consequent net increase in provider spending. The extent of this increase will depend on the price elasticity of demand by the poor and the non-poor and on the behavior of providers' unit costs. In some cases, public providers may initially have excess capacity and therefore increasing output will increase only variable costs. But as output expands, providers may experience diseconomies of scale as they near capacity, and this may further increase their unit costs and total spending.

Figure 2 The situation after the creation of public health insurance



Source: Author.

The previous reasoning implies that total health spending in the public sector would increase because of greater spending by public providers resulting from increased output, and also because of the administrative costs of the newly created public insurance agency.

Still, there are several situations in which spending by public providers may not increase.

- (1) Public providers may ration demand for their services after the enactment of insurance, so that output (i.e., utilization) does not expand. This will happen if public providers are unwilling to see more patients and preserve their previous workload, or if they are not given enough economic or non-economic incentives for the additional output, or they lack complementary inputs (medicines, equipment, boxes) to deliver more care.
- (2) Government is unable or unwilling to spend more public resources on health services, either in the form of payments to public and private providers, or as contributions to SHI.
- (3) Public providers may continue to charge high user fees, thus inhibiting demand, even though the adoption of public insurance requires that they drop or remove user fees, particularly for poor patients.
- (4) Quality of public providers drops, so that even if output expands, reductions in quality of care offset higher output and public spending does not change.
- (5) There are large gains in efficiency of public providers so that increased output is possible with existing resources.
- (6) Government and private insurers may become better purchasers of health care services, both from public and private providers, by switching from supply-side budget financing to performance based contracts and by making better use of existing public investments in the health sector.

What will happen with the participation of government and households and in health care financing is difficult to predict. It will depend on the price elasticity of demand by the insured, the incentives of public providers under the new insurance regime, compliance with public providers with user fee reduction or removal, and the presence of economies or diseconomies of scale in the production of health services in government-run facilities. It will also depend on whether or not government adopts a new benefit package which is greater than what the average household consumed before the policy change.

The higher the price-elasticity of demand by the insured, the greater the increase in the volume and total cost of health care services demanded if the additional demand is met. The greater the reluctance of public providers to remove or lower user fees the smaller the increase in demand for public provider's care, output, and production costs. The presence of diseconomies of scale in public and private production will result in rising unit costs of health services and in higher spending on provision. Conversely, the existence of economies of scale in public and private provision will make it possible for public insurance to expand coverage with limited additional spending. The adoption of an explicit benefit package for all those insured will likely result in higher spending after the adoption of public insurance.

What happens to total health expenditure (THE) and the expenditure patterns in the health system will vary depending on which combination of the above scenarios takes place.

With the adoption of SHI, THE may or may not grow, depending on the four factors described above.

Figure 3 depicts a situation (Case 1) where, prior to coverage expansion, private health spending (PrHE) accounts for the majority of THE and coverage expansion results in increased THE, from THE^0 to THE^1 . Both public health expenditure (PuHE) and PrHE grow in real terms, but PuHE grows more. Hence, from an initial expenditure pattern where the majority of health spending was private $[B/(A+B)]$ the system moves to a new situation where public spending is predominant $[D/(C+D)]$.

Figure 3 Public, private and total health expenditure before and after coverage expansion, Case 1

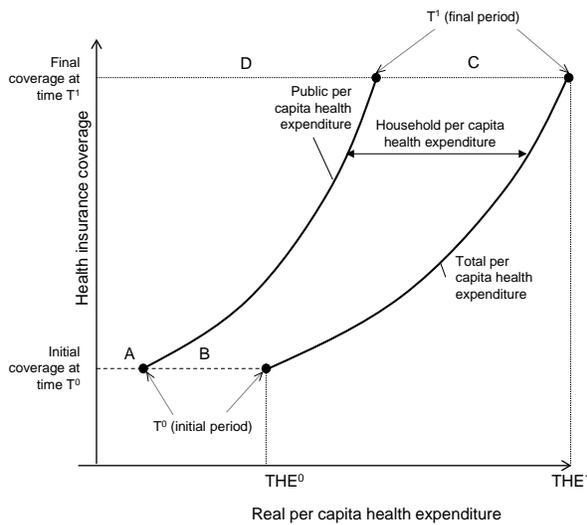
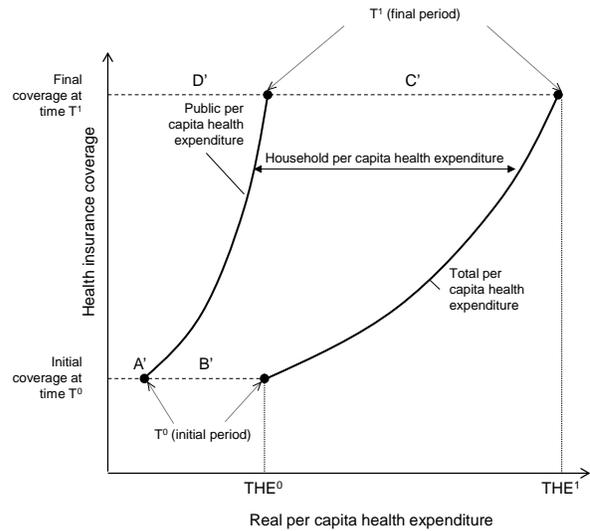


Figure 4 Public, private and total health expenditure before and after coverage expansion, Case 2



Source: Author.

A different situation (Case 2 in the figure on the right) is one where THE grows, but PrHE grows proportionally more than PuHE, such that after the expansion of SHI, the private share of health expenditure remains predominant.

This section concludes with a brief discussion of the concept of health insurance coverage. WHO (2010) identifies three dimensions of coverage: the proportions of the population to be covered, the range of services to be made available to those covered (depth of coverage), and the part of the total costs to be met by health insurance (degree of financial protection). Information about these three dimensions of coverage is seldom readily available in developing countries and there are often multiple and conflicting sources of information. For example, government health insurance agencies hand out health insurance cards to beneficiaries, but holding a card does not necessarily imply that the holder and his or her family are insured. Sometimes cards expire, or their validity is contingent on the timely payment of premiums, or the periodic re-establishment of eligibility. Thus, the officially-reported number of beneficiaries covered by public health insurance may not always be a good reflection of the number of actually covered beneficiaries. Additionally, the actual depth of coverage—the services that public insurance beneficiaries can regularly obtain—typically differs from the theoretical coverage that government health insurance may declare, because there may be insufficient supply and rationing of services, or sub-standard quality. Finally, the actual financial protection of public health insurance may be less than its official protection, because insurance providers, typically public insurers, may charge under-the-table fees to beneficiaries to complement their meager government salaries.

For the above reasons, when reviewing the four case studies that are the subject of this document, official health insurance coverage information is contrasted with statistics about the actual utilization of health services, or the actual coverage of some curative or

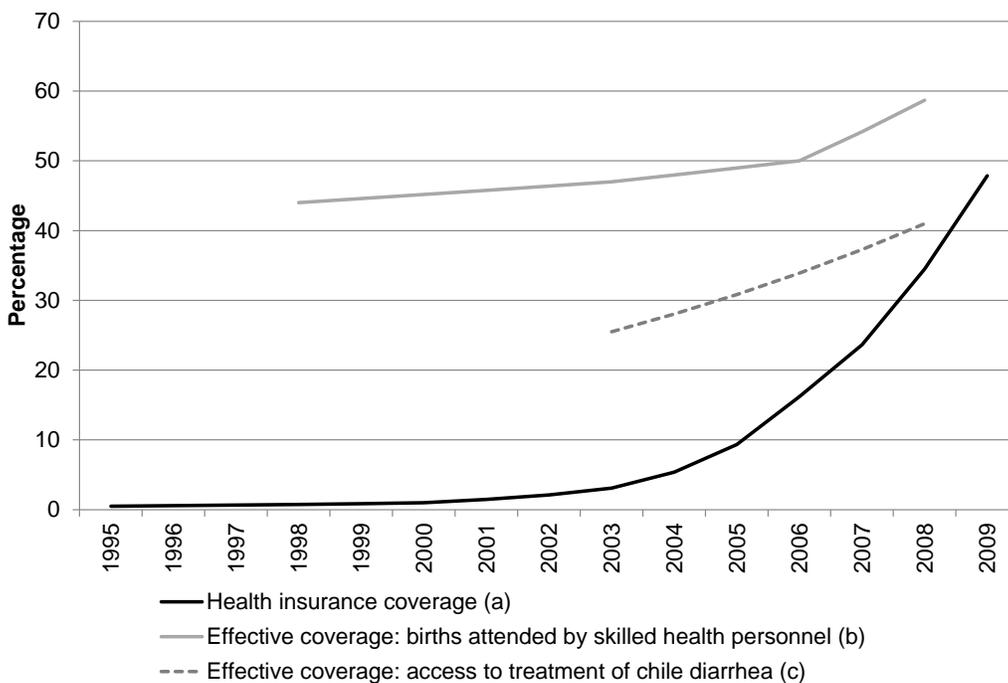
preventive services, to determine whether increases in official coverage figures are backed by actual increases in health services utilization. The proportion of deliveries in health care facilities, or the child vaccination coverage rates, or the actual use of curative services reported through household surveys by those who sought health care are used as proxies for effective health insurance coverage.

The remainder of this paper presents the cases of the four case study countries and uses the above analytical framework to analyze their evolution. It then offers a discussion of results and conclusions.

Ghana

In 2005 total life expectancy at birth in Ghana was 57 years and the infant mortality rate (IMR) was 55 per thousand life births. These indicators were better than expected among Sub-Saharan countries given Ghana's per capita income. Yet despite earlier improvements in health status since independence, between the late nineties and mid-2000s there were no improvements in child health outcomes and in child malnutrition in Ghana (World Bank, 2007).

Figure 5 Ghana: Health insurance coverage and some measures of effective coverage, 1995-2010 (percent)



Source: (a) Ghana's National Health Insurance Agency; (b) and (c) Ghana Demographic and Health Surveys.

To alleviate fiscal pressures, in the mid-1980s Ghana introduced user fees in government health facilities, and this improved the availability of drugs and supplies among these providers.² These measures, however, also resulted in inequity in access to health

² This paragraph draws on Brugiavini and Pace 2010.

services (Waddington and Enyimayew, 1990). During the nineties community health insurance developed in Ghana. In 2000 the New Patriotic Front promised to abolish user fees and to set up the National Health Insurance Scheme (NHIS) in order to remove financial barriers to health services.

The National Health Insurance Act of 2003 set up NHIS and insurance enrolment began in earnest in late 2005. Up until then, less than 5 percent of all Ghanaians had some form of health insurance coverage, mostly provided by large employers and by some mutual health organizations. The NHIS agency lists the following five sources of funding: (1) premiums from subscribers, (2) 2.5 percent National Health Insurance Levy, (3) 2.5 percent Social Security and National Insurance Trust (SSNIT) and deductions from the formal sector, (4) funds from Government of Ghana to be allocated by Parliament, and (5) returns from investment.³

According to data from Ghana's 2008 Demographic and Health Surveys (DHS), coverage by the NHIS was 39 percent for women and about 30 percent for men (Makinen *et al.* 2011). Total coverage was estimated at 34.5 percent (Figure 5). A randomly selected exit poll of patients from a sample of public and private health care providers in 2010 revealed that 50 percent of respondents had a valid NHIS card, and an additional 13 percent were covered by NHIS but were not able to produce a card at the time of the poll (Makinen *et al.* 2011). The two measures of effective coverage shown in Figure 5, show important improvements taking place along with the expansion of NHIS coverage.

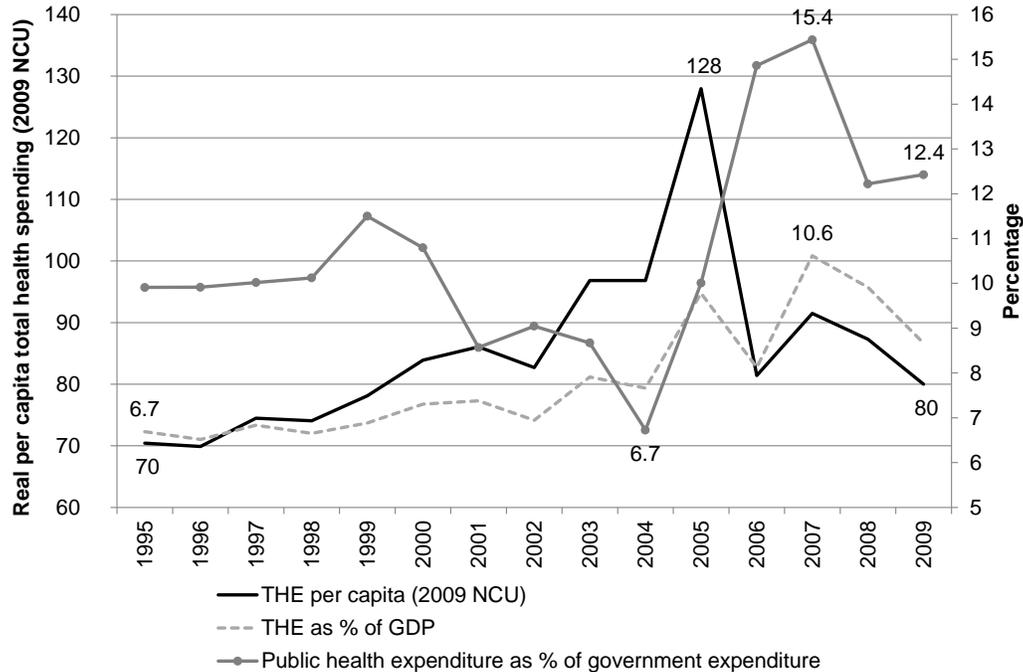
As Figure 6 shows, THE as a share of GDP grew over much of the period, from a starting value of 6.7 percent in 1995 to a maximum of 10.6 percent in 2007, but then it dropped to 8.7 percent in 2009. Government health spending as a share of total government expenditure has been erratic. From its lowest value of 6.7 percent in 2004 it went up to its highest value in the past 15 years in 2007, equal to 15.4 percent, possibly reflecting a considerable effort made by government to inject additional public resources to fund its NHIS initiative. THE per capita in Ghana (including donor resources) grew steadily in real terms between 1995 and 2005, from 70 Cedis at the beginning of the period to a peak of 128 Cedis (US\$86) at the end.^{4,5} It then experienced a large real decline to reach a value of 80 Cedis in 2009, or only 14 percent more than real THE per capita fifteen years earlier. Despite sustained increases in the share of government spending devoted to health, a drop in total government spending combined with drops in donor spending beginning in 2004 and in per capita OOPS after 2007 resulted in a sizeable overall decline in total health spending between 2005 and 2009.

³ <http://www.nhis.gov.gh/?CategoryID=216#ans21>

⁴ At the 2009 exchange rate of 1.49 Cedi per US dollar.

⁵ Health expenditure data for this and the other case study countries are presented in inflation-adjusted (i.e., real) local currency, referred to here as National Currently Unit (NCU), in 2009 values.

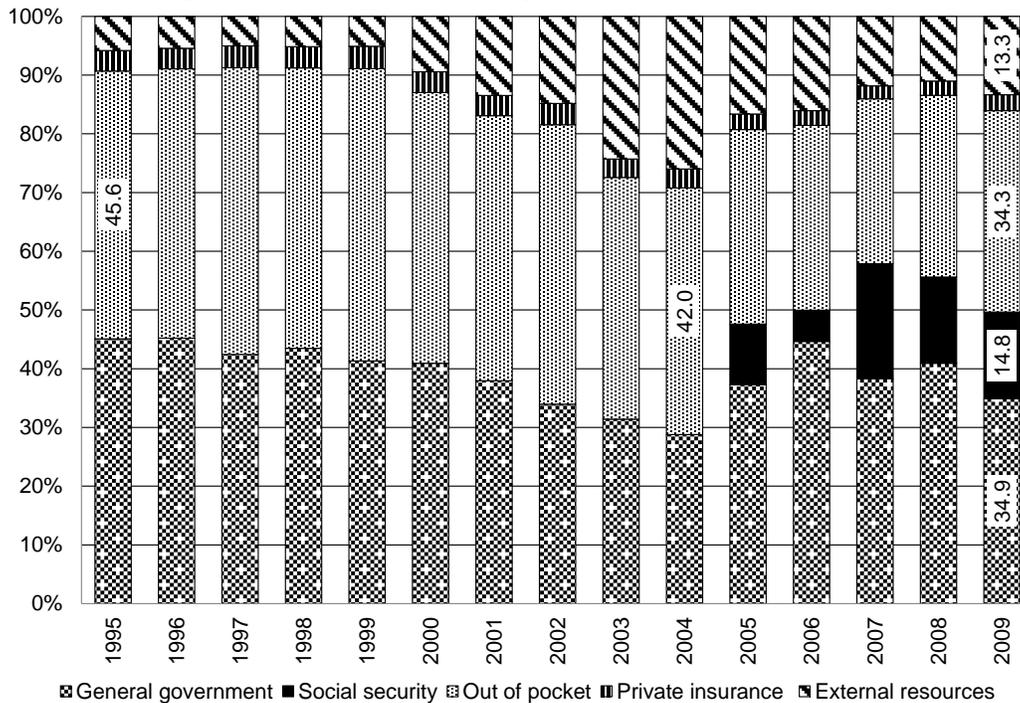
Figure 6 Ghana: THE per capita and as a share of GDP and PuHE as a share of total government expenditure, 1995-2009 (2000 Cedis and percent)



Source: Author with data from WHO's National Health Accounts database at <http://www.who.int/nha/0063ountry/en/> and World Bank's Databank at <http://databank.worldbank.org/ddp/home.do>.

The structure of health financing in Ghana has changed in several important ways since the implementation of NHIS (Figure 7). First, by 2009 donor funding had dropped to one-half its share in 2004. Second, SHI funding, which did not yet exist in 2004, has grown to represent about 15 percent of total health financing in the country. Third, OOPS has decreased significantly from 42 percent in 2004 of the total to 34.3 percent in 2009. Fourth, public financing outside of SHI has also grown to more than one-third of the total. Yet it must be noted that OOPS as a share of total health financing seems to have remained stagnant since 2005, while SHI contributions and non-SHI public financing represented a smaller participation in health financing in 2009 than they did in 2007.

Figure 7 Ghana: Health financing structure, 1995-2009 (percent)



Source: Author with data from WHO's National Health Accounts database at <http://www.who.int/nha/0063country/en/>

Until 2005 when NHIS was implemented, real per capita income grew every year in Ghana and so did real per capita THE, except in 2002, when real per capita THE fell slightly (see Figure A 1 in Annex A). During that period, growing external funding resulted in higher increases in THE than in GDP. In 2005, the year of the launch of NHIS, there was a strong public effort to increase health spending, both within and outside of SHI. Yet only one year into the life of NHIS real per capita income fell by over 20 percent and real THE fell by almost 35 percent. In subsequent years there has been a negative relationship between THE and GDP. It is unfortunate that the beginning of NHIS has been followed by such a significant drop in real per capita national income and that real THE per citizen has contracted, owing to a simultaneous drop in internal and external resources.

Out-of-pocket financing as a share of total financing fell for three consecutive years after the implementation of NHIS and reached a historic minimum of 28.1 percent in 2007. Yet beginning in 2008 it started to grow. By 2009 OOPS represented one-third of total health spending in the country, a proportion that was still lower than before NHIS.

Makinen *et al.* (2001) studied the impact of NHIS coverage on health care seeking patterns by women and children using data from the 2003 and 2008 DHS surveys. They found that women with NHIS coverage were more likely to seek prenatal care from a public provider, to deliver outside their home, and to select a public provider for their delivery. They also found that NHIS coverage increased in an important way the probability that a child with diarrhea would be taken to a formal, public or private health care facility. Brugiavini and Pace (2010) reached the same conclusions from their econometric study of health care

demand by women and children using the 2008 DHS survey. Additionally they found that NHIS had only a marginal effect in reducing health care OOPS by its beneficiaries. Sulzbach (2008) found similar positive effects of NHIS on access to care but also an important effect of NHIS on the reduction of OOPS on health services. Nguyen *et al.* (2011) used data from household surveys conducted in two rural districts to study the consequences of NHIS coverage on financial protection in health. They found that NHIS coverage had a positive financial protection effect and that the effect was stronger among the poor than among the general population. Specifically, they found that NHIS coverage significantly reduced the likelihood of incurring catastrophic payment, a phenomenon that was particularly remarkable among the poorest quintile of the sample.

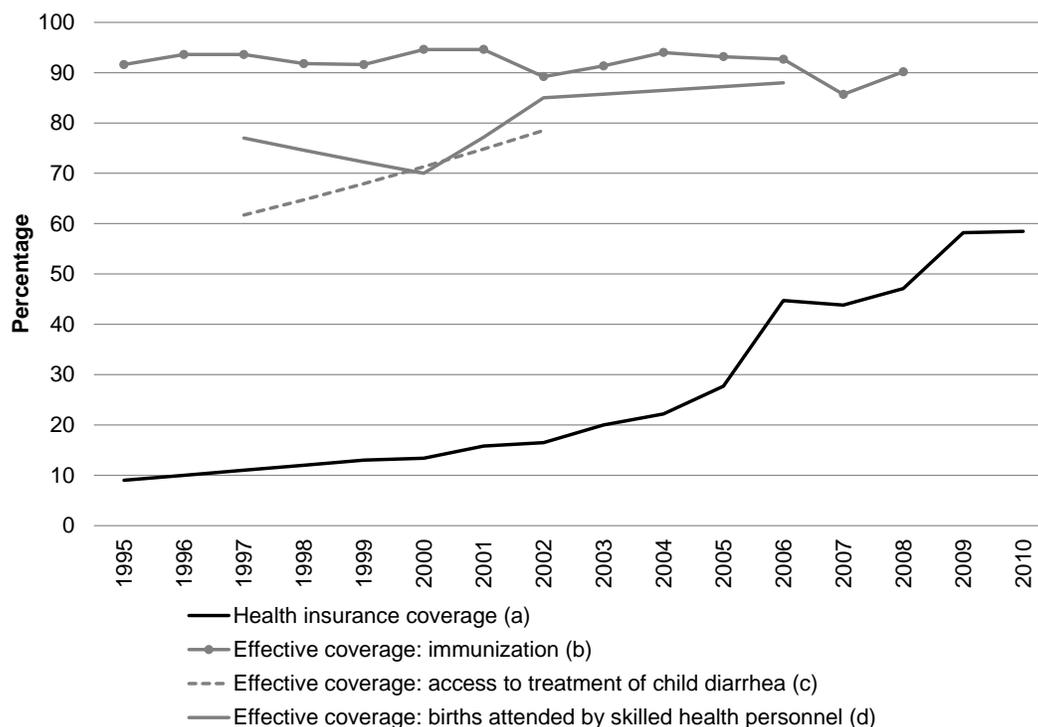
Vietnam

Vietnam is an exceptionally good performer in key health and population outcomes (Ekman *et al.* 2008; Lieberman and Wagstaff 2009). Its life expectancy at birth, at 70 years, exceeds by about 10 years that of reference, low-income countries, and its fertility rates have dropped to around replacement level. In the period 1995-2000, Vietnam experienced greater rates of reduction in under-five mortality than China, Indonesia, Philippines, and Thailand, and in the period 2000-05 it was outperformed only by China (Lieberman and Wagstaff, 2009). Health service coverage rates are high compared with other low-income countries; child immunization rates are around 97 percent, almost 90 percent of births are attended by a skilled health worker, and a relatively high proportion of the population has access to improved water and sanitation facilities (Ekman *et al.* 2008).

The country has undergone a series of health sector reforms that date back to the late 1980s and early 1990s. They include the liberalization of health care and pharmaceutical markets, the adoption of user fees in public health facilities, and the financing by the central government of the salaries of the staff of public facilities at the commune level. The latter was in response to the earlier abandonment of a decentralized economic model of rural production brigades. In 1993 the government, concerned with the detrimental consequences of widespread user fees on access to health services, launched its health insurance program in the hope of achieving UHC by the year 2010.

In 2008 coverage by Vietnam's Social Security (VSS) was estimated at 49 percent (see Figure 8). While deliveries attended by skilled health personnel and access to diarrhea treatment for children have increased in recent years, other measures, such as childhood immunizations, were already high when national insurance was adopted. Thus, it is difficult to establish possible causality between the increase in health insurance coverage and the evolution of the effective coverage measures shown in the figure.

Figure 8 Vietnam: Health insurance coverage and some measures of effective coverage (percent)

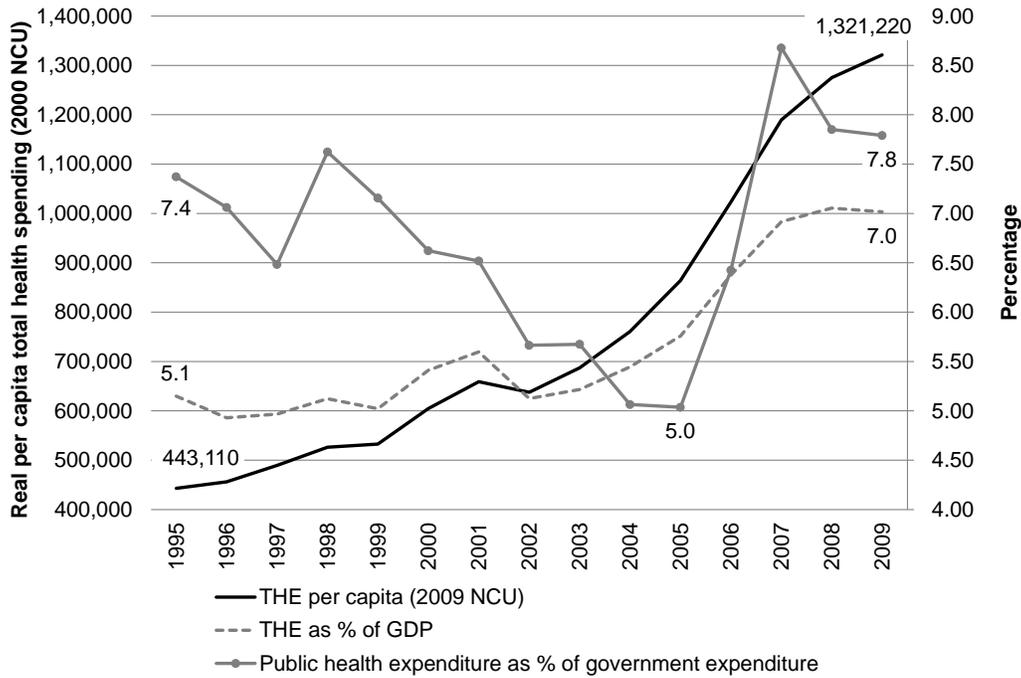


The country's SHI system has so-called compulsory and voluntary components. The compulsory component has a contributory scheme for formal sector workers, pensioners, the disabled and other special groups (9 percentage points of coverage in 2008). It also includes a non-contributory component (18 percentage points for the poor and other special groups such as ethnic minorities in mountainous areas and inhabitants in disadvantaged communities. The voluntary component covers schoolchildren under 6 years of age (11 percentage points), the dependents of workers enrolled in the contributory scheme, self-employed workers from the informal sector, and other special groups (11 percentage points).

Real THE per capita in Vietnam tripled between 1995 and 2009, from 443 thousand Vietnamese Dongs (VND) to 1.32 million VND (US\$ 77.35; see Figure 9). As a share of GDP, THE also grew from a low of 5.1 percent in 1995 to its highest value of about 7.0 percent by the end of the decade. Government health spending declined steadily as a share of total public spending between 1998 and 2005, to a low of 5.0 percent, even as SHI coverage was slowly growing. But over the next two years government health spending grew as a share of public spending to reach nearly 9 percent in 2007, and then declined to 7.8 percent in 2009. The expansion of public health spending corresponded to a period of rapid SHI coverage increase, with the incorporation of several subsidized population groups.⁶

⁶ The government of Vietnam subsidizes 100 percent of the SHI premium for the poor, children under 6 and some other vulnerable groups; 70% for the near poor; and at least 30% for medium income informal sector households.

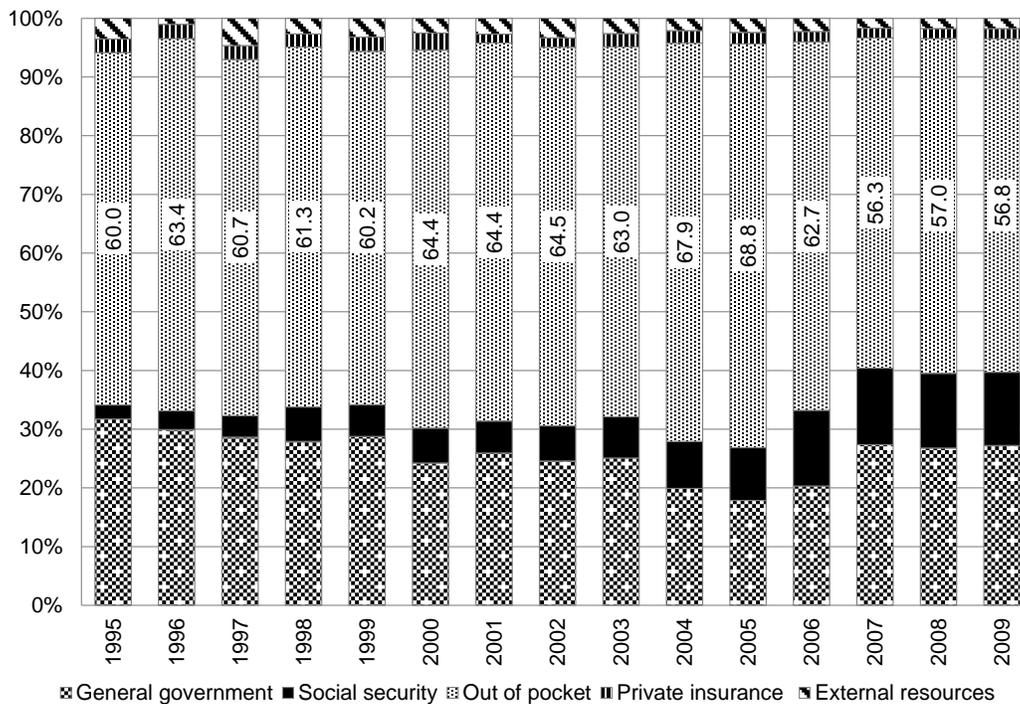
Figure 9 Vietnam: THE per capita and as a share of GDP and PuHE as a share of total government expenditure, 1995-2009 (2009 Vietnamese Dong and percent)



Source: Author with data from WHO's National Health Accounts database at <http://www.who.int/nha/country/en/>

Despite the expansion of SHI, OOPS in Vietnam remains the largest source of health financing (Figure 10). OOPS reached its highest share of health financing in 2004 (about two-thirds) but by 2009 it had dropped to about 57 percent, although in the last three years the annual decrease was marginal. The strong reliance of public and private providers on user fee revenue accounts for the persistently high share of OOPS financing. Reducing OOPS currently is a main objective of government policy makers, but they are aware that achieving a significant decline in OOPS will take years and require additional public financing.

Figure 10 Vietnam: Health financing structure, 1995-2009 (percent)



Source: Author with data from WHO's National Health Accounts database at <http://www.who.int/nha/country/en/>

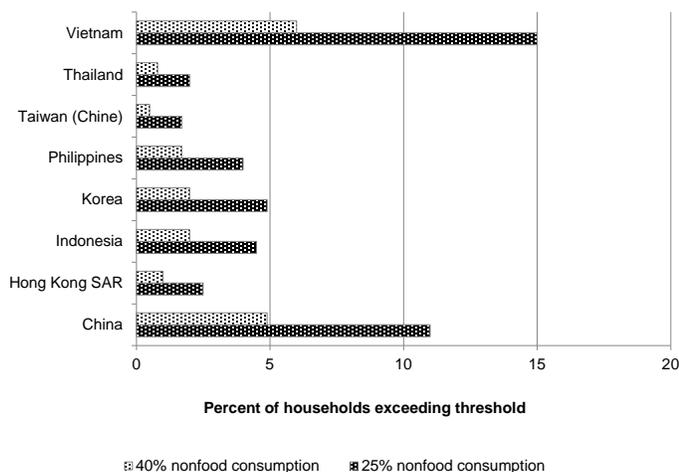
Extending health insurance coverage is costly when the population is offered effective and improved access to quality health services. A sustained growth in effective coverage is only possible if it is facilitated by a steady increase in THE and especially by growth in PuHE. Gertler (1998) concluded that Asian countries such as Korea, Singapore, and Taiwan were able to finance the significant costs of SHI coverage expansion thanks to sustained and high rates of economic growth. Vietnam experienced sustained economic growth in the 15-year study period (Figure A 2). Per capita GDP grew in real terms every year, and in all years except three, it grew above five percent. THE grew every single year as well, except in 2002. Generally it grew much more than GDP especially in the period 2003-2007, when SHI more aggressively expanded coverage. Real per capita GDP and real per capita THE are positively correlated, with a correlation coefficient of 0.48.

The expansion of SHI is financed from premium contributions by workers and employers and also from public subsidies for the poor who are exempted from the premium. Figure A 3 explores the relationship between the growth rates of real PuHE (i.e., the source of premium subsidies) and health insurance coverage (HIC). HIC grew in all but one year (2007) and, likewise, PuHE per capita grew in all but one year (2002). In 12 out of the 14 years of analysis, HIC grew more than real PuHE per capita. Even in 2002, when PuHE dropped, coverage continued to rise. The correlation coefficient between these two variables was 0.40.

The situation in Vietnam is very different from that in Colombia (see below) with respect to the evolution in the structure of health expenditure as health insurance coverage expanded. As shown below, the pattern of health expenditure in Colombia changed rather

dramatically over time: coverage expansion relied heavily on SHI while OOPS became a marginal source of financing. In Vietnam, expanding coverage did not significantly alter the structure of health expenditure. The predominant source of health financing has been –and remains– OOPS, reaching in some years over two-thirds of total financing. SHI contributions were a marginal source of financing in 1995 and have grown to represent 12.5 percent of the total by 2009. General government revenue has fluctuated over the study period from a maximum of nearly one-third in 1995 to a minimum of 17.9 percent in 2005; in 2009 it accounted for a larger share of total financing than it did in 2005 but a smaller share than 15 years earlier.

Figure 11 Vietnam and Other East Asian Countries: Catastrophic Household Health Expenses

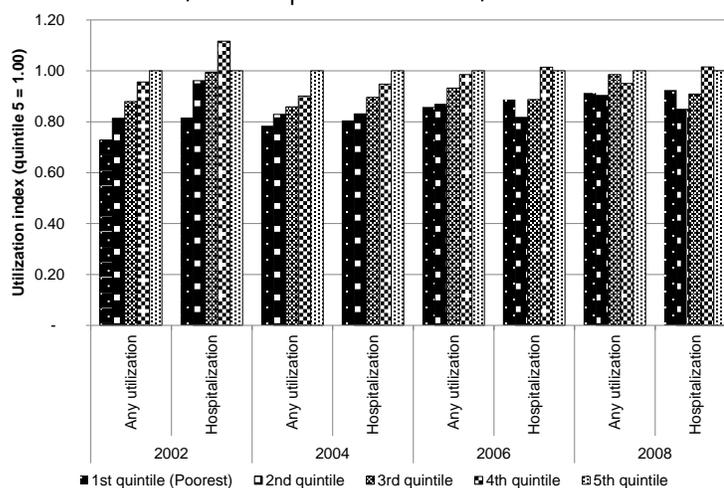


Source: Lieberman and Wagstaff (2009).

The predominance of private payments in health financing makes Vietnam the country with the largest incidence of catastrophic health spending in East Asia (Figure 11). Dao *et al.* (2008) analyzed household data from Living Standards Measurement Surveys conducted in Vietnam to study OOPS, the incidence of impoverishment from OOPS, and access to health care providers by different population groups. They found that user fees drove people deeper into poverty, widened the gap between poor and rich, and increased inequality in health outcomes.

Gwatkin *et al.* (2003) used household survey data to study changes in the utilization of curative health care for children in Vietnam in the period 1997-2002. They concluded that access by the poorest to treatment for fever and acute respiratory infection increased in public facilities and their utilization dropped in private facilities. By contrast, utilization of public treatment by richer quintiles (2 to 5) dropped while it increased in private facilities. It appears, then, that the poorest have relied

Figure 12 Vietnam: Utilization of ambulatory and inpatient services, and hospitalization rates, 2002-2008



Source: Hanoi Medical University and WHO Vietnam (2010).

increasingly on public providers for child curative care while better off individuals (the top 4 quintiles), who can afford private provider fees, seem to prefer private providers, possibly because they offer better quality care.

More recent findings based on an analysis of data from the Vietnam Living Standard Survey (VLSS) reveal that differences in access to any health services, either inpatient or outpatient, and to hospitalizations, persist but have been quickly narrowing (Figure 12), and this supports optimism about the positive effects of SHI coverage expansion.

Philippines

The Philippines has made important progress in improving child health and is on track to achieving the Millennium Development Goal (MDG) 4, which calls for a two-thirds reduction in the under-five mortality rate over the period 1990-2015.⁷ But these achievements mask large inequalities within the country. According to the 2008 DHS, child mortality indicators are four times higher among the lower income quintiles as compared with higher income quintiles, while there remain dramatic differences in life expectancy at birth across provinces. Progress on maternal and reproductive health has been slow and is also characterized by persistent and potentially growing disparities across regions and income groups.

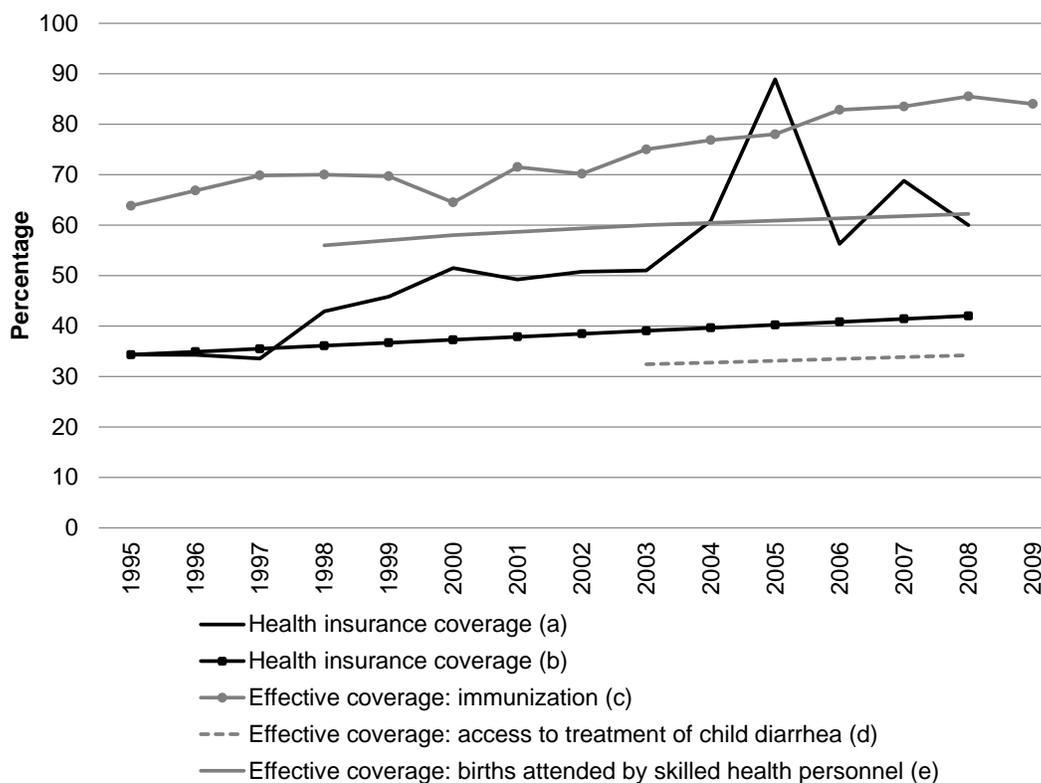
The country has undergone a series of health reforms since the early 1990s. In 1991 government transferred the management of public health facilities to local government units (LGUs) in provinces. In 1995 the National Health Insurance Law was passed with the objective of scaling up the existing SHI program in order to achieve UHC. The agency responsible for managing the SHI system, PhilHealth, was also given the responsibility of managing a government-financed health insurance component for the indigent. In 1998 government began implementing its Health Sector Reform Agenda (HSRA) which sought to expand and decentralize health insurance, to upgrade public health care providers to meet PhilHealth standards, improve the regulation of the private sector, and strengthen health planning in provinces. In 2005, government launched the “Fourmula 1 for Health” reform which sought to deepen the achievements of its predecessor, the HSRA project. This latest reform also focuses on health financing and has set out to reach universal coverage through PhilHealth and an expansion of the outpatient and inpatient benefit packages financed by this insurer.

There are conflicting figures on health insurance coverage in the Philippines. PhilHealth (2010) reported that sixty percent of the population had health insurance coverage in 2008, including 66 percent coverage for the non-poor and 49 percent coverage of the poor. The World Bank (2011) notes that these data are inconsistent with the coverage figures obtained from the 2008 National DHS, which reported national coverage for PhilHealth of only 38 percent and total insurance coverage of 42 percent. Accordingly, Figure 13 presents two alternative health insurance coverage curves. The first curve, which is based on data from PhilHealth (2010), Schwefel (no date, around 2010), and Jowett *et al.* (2007), shows

⁷ World Bank (2011).

an important upward trend to reach 60 percent coverage by 2008. The other uses only two extreme points, one for 1995 when, according to the World Bank (2011) coverage was about 30 percent, and another from the 2008 DHS which reports national insurance coverage of 42 percent. The points between these two values have been interpolated linearly only as a visual reference; they do not imply that health insurance coverage between 1995 and 2008 was that shown in the line. The figure also shows effective and growing coverage indicators for access to treatment for child diarrhea and access to skilled health personnel for deliveries.

Figure 13 Philippines: Health insurance coverage and some measures of effective coverage, 1995-2009



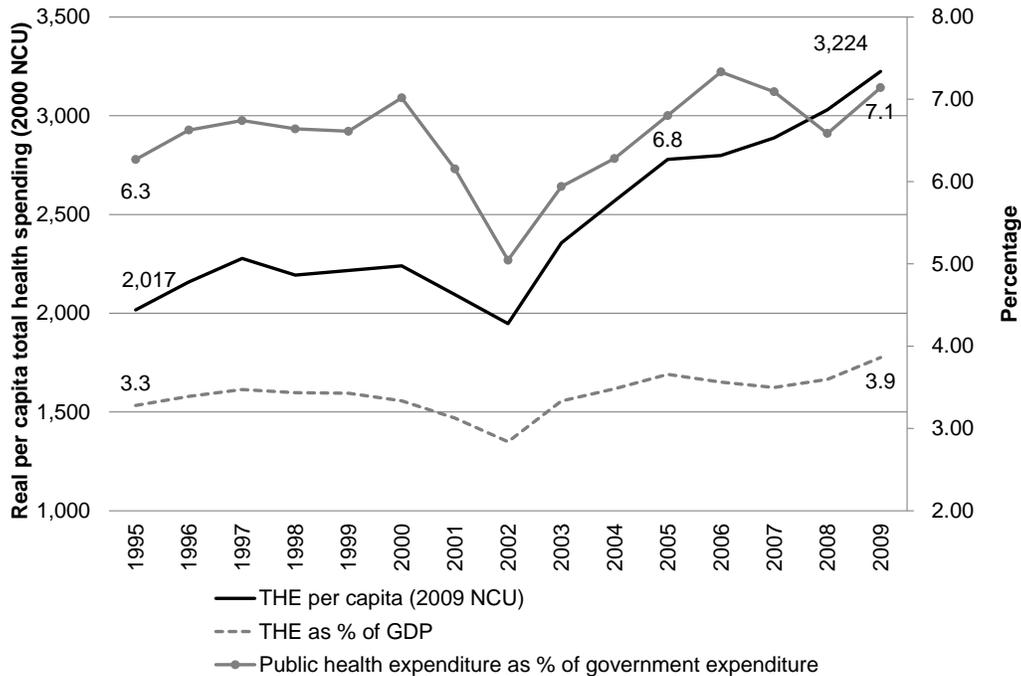
Sources: (a) Health insurance coverage according to PhilHealth (2010), Schwefel (No date, around 2010) and Jowett et al. (2007); (b) Health insurance coverage according to and World Bank (2011), and DHS (2008), (c) and (e): WHO; and (d) DHS 2003 and 2003.

Total health expenditure as a percentage of GDP remained somewhat constant at around 3.5 percent between 1995 and 2001 (Figure 14). It fell to under 3.0 percent in 2002 and since then it has increased almost steadily to reach 3.9 percent in 2009. Real THE per capita has followed a similar pattern than the previous indicator, reaching a minimum of just under 2,000 Philippines Pesos in 2002 and then increasing steadily to a maximum of 3,224 pesos in 2009.⁸ Private health spending per capita has experienced rapid growth since 2002 as well. In contrast, combined public health spending (outside and within SHI) has, in real

⁸ At the end of 2010 the exchange rate was US\$1 = 43.47 PHP (Philippine Peso).

per capita terms, remained somewhat unchanged over the entire 15-year period (not shown in the figure). Thus, much of the effort to shoulder growing real per capita health spending has been made by the private sector and, more specifically, by households through OOPS.

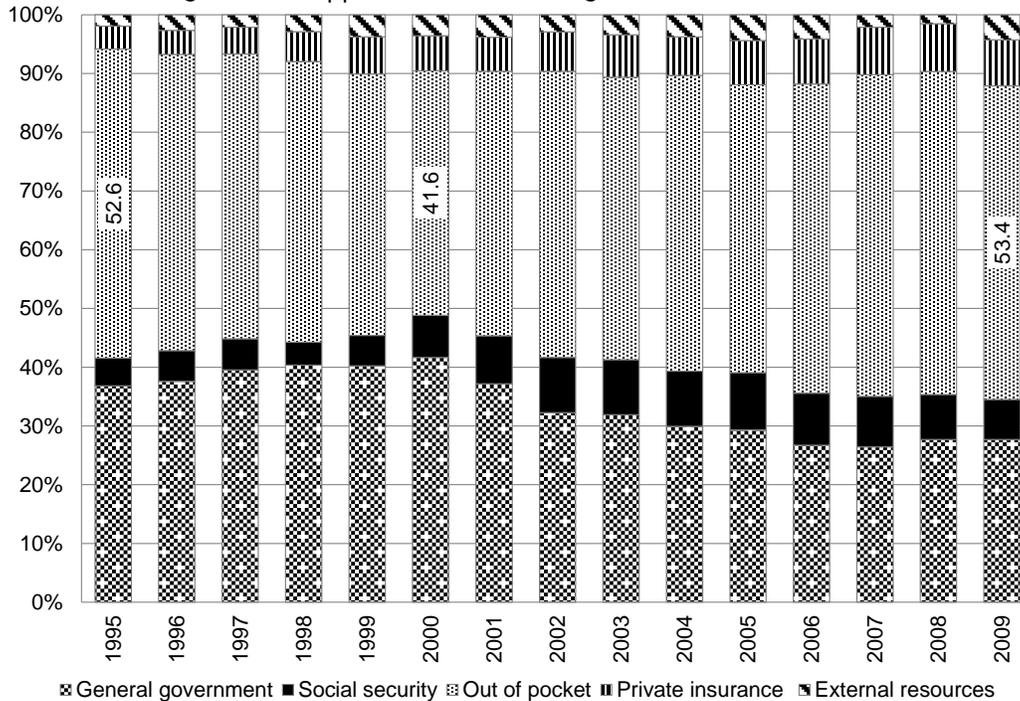
Figure 14 Philippines: THE per capita and as a share of GDP and PuHE as a share of total government expenditure, 1995-2009 (2009 pesos and percent)



The World Bank (2011) presents global comparisons of health spending patterns to assess the situation in the Philippines. It concludes that the Philippines devotes a smaller share of its GDP to health than would be expected given its current per capita income; its per capita THE, measured in international dollars, is somewhat below expectation in the international context; public health spending as a share of THE is also less than would be expected; and private health spending and OOPS as a share of THE are considerably more than would be expected. It concludes by stating that “While total health spending in the Philippines and the public share are low, the private and OOP shares are very high, and both private and OOP spending per capita are at or slightly above the levels in global comparators, despite the overall low level of total health spending.”

Like Vietnam, the Philippines relies strongly on OOPS as a source of health financing (Figure 15). Unlike Vietnam, and to some extent Ghana, the expansion of SHI in the Philippines has not been accompanied by a drop in the share of OOPS in total health financing. To the contrary, when official health insurance coverage began to grow in an accelerated way around 2002, the reliance on OOPS financing increased to reach 53.4% in 2009. As shown below, such a heavy dependence on private health financing is having detrimental consequences for equity in access, financial protection, and health-related impoverishment.

Figure 15 Philippines: health financing structure, 1995-2009 (%)



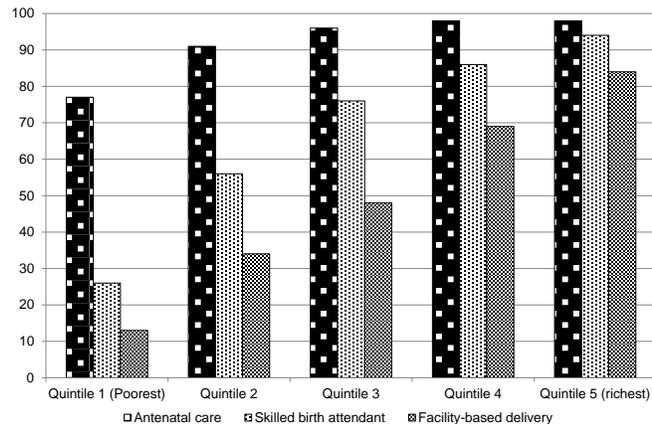
Source: Author with data from WHO's National Health Accounts database at <http://www.who.int/nha/country/en/>

The Philippine economy grew in 11 out of the 14 years included in the study period; real per capita GDP fell, albeit mildly, in only three years, 1998, 2001, and 2009 (Figure A 4). Real THE grew in most years as well except in three, two of which coincided with a drop in per capita GDP (1998 and 2001). In several years, growth in THE far exceeded growth in income, notably in the period 2003-2006. In contrast with the situation of Ghana and Vietnam, both of which exhibit a positive and moderate to high correlation coefficient between annual changes in THE and health insurance coverage, the Philippines only has a weak and negative relationship between these two variables (correlation coefficient of -0.13). In other words, the expansion of health insurance coverage has neither resulted in nor has it been a consequence of higher health spending. This finding could support the hypothesis that the official figures for health insurance coverage could be nominal (many people having coverage but do not receive benefits) and may not reflect, at least in the short term, effective changes in the consumption of covered services by beneficiaries. Had effective coverage increased in proportion to official population coverage figures, it would have translated into higher health spending in the same years when official coverage grew.

Unlike Ghana and Colombia (see below), the strong dependence on OOPS for health financing in the Philippines has negatively affected access to health care, especially by the poor. Jowett *et al.* (2007) explained that PhilHealth set up benefit ceilings (maximum reimbursement rate for hospital services) and did not negotiate prices with hospitals serving its beneficiaries. As a consequence, the insured were left with an important share of the bill to finance out-of-pocket above the amount actually covered by PhilHealth. They argued that a recent increase in PhilHealth benefit ceilings would not be effective in reducing OOPS by its beneficiaries, as providers would increase their prices. They also showed that

patients received greater financial protection in government hospitals than in public hospitals. Herrin and Lavado (2011) analyzed household survey data to determine access to health services by income groups, progressivity in health financing, and catastrophic and impoverishing health spending in the Philippines. They found large inequities in access (Figure 16) and relatively infrequent catastrophic payments. According to their study one percent of Filipinos are impoverished each year due to medical expenditure, and OOPS is composed mostly of expenditures on medicines.

Figure 16 Philippines: Access to maternal health care services, National DHS 2008



Source: Herrin and Lavado (2011).

Colombia

Until 1994, Colombia's health system was organized in a typical Latin American fashion. It comprised a powerful Ministry of Health that was responsible for health policy and for running a nationwide network of public health care providers; it had a single public institution that ran the SHI system, covering only formal health workers and their families; and it featured a modest private sector engaged in health insurance and health care delivery mostly for the better-off. The beneficiaries of SHI, who accounted for less than half of the population, could obtain health care from the institution's own providers. Lower-income and poor Colombians had as their main source of health care the array of public providers. These, by law, delivered services at no charge to patients, but their limited resources resulted in rationing and low quality care. This fragmented system was characterized by large inequalities in access to health services and in health status, and conferred limited financial protection to the poor against health shocks.

That all began to change with the passage of Law 100 in 1994, which called for UHC to be achieved by the year 2000. Formal sector workers and their employers, and non-poor informal sector workers, were required to enroll in a contributory regime and pay SHI contributions equal to 12.5 percent of their income. In return, they would obtain a broad and explicit benefit package. About 10 percent of their contributions were to be combined with government general revenue funding to subsidize SHI for the nation's fifty percent poor.⁹ An initially smaller benefit package for the poor would be progressively increased to match the larger package of the contributory regime by the year 2000. All Colombians were in principle free to select an insurer of their choice while insurers, in turn, were allowed to purchase health care services from public and private health providers. Govern-

⁹ According to the World Bank (2004), extreme poverty in Colombia was 18.8 percent and poverty was estimated at about 50 percent.

ment health care providers, who up until then were financed through supply-side historic budgets, were expected gradually to draw demand-side financing from the sale of services to SHI insurers.

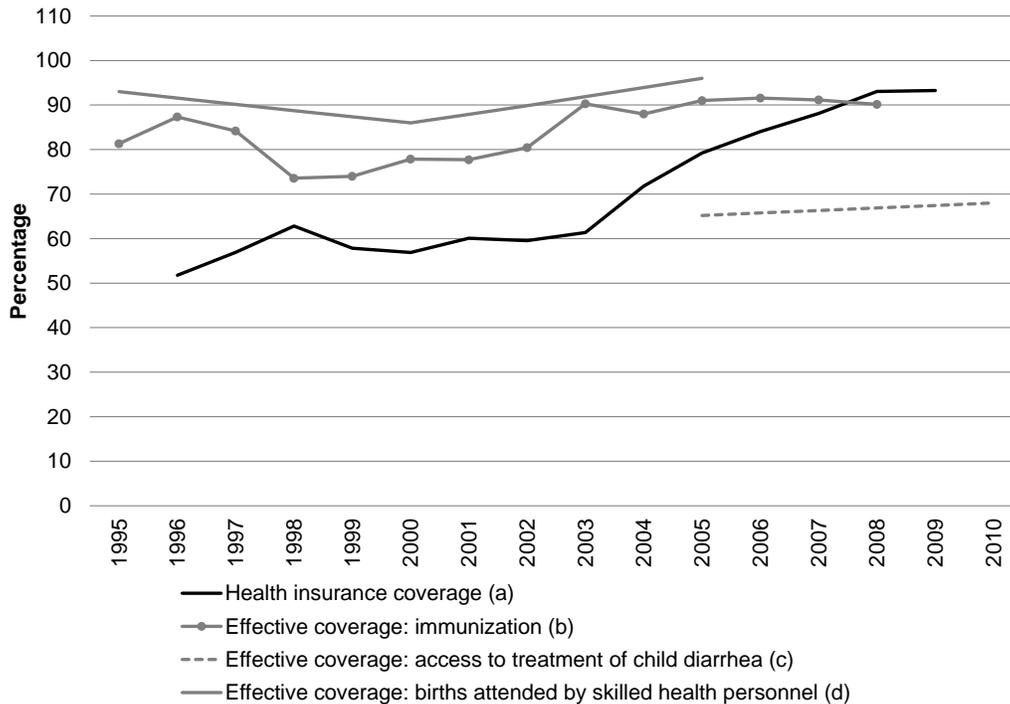
Colombia's sweeping health sector reform gained immediate notoriety in Latin America and elsewhere in the developing world, and several countries, including Chile and the Dominican Republic, emulated some of its features. While it scored several achievements, the reform also met many obstacles. The achievements included growing enrolment in SHI, increasing access to health services for all groups, better financial protection against health shocks, and improved awareness of rights vis-à-vis health insurance and health care. The obstacles included a recession and slower-than-expected economic growth, widespread evasion of SHI contributions, much slower-than-planned expansion of coverage, and lawsuits that forced insurers to pay for services not included in their benefit package. To date, Colombia's SHI maintains separate benefit packages for the contributory and subsidized regime.

By 2009 Colombia's SHI system covered nearly 95 percent of the population (Figure 17).¹⁰ Effective access to health services has increased along with insurance coverage: access to curative health care by those with a perceived health problem over a 30-day recall period increased between 2005 and 2010, and the proportion of births attended by skilled health personnel increased between 2000 and 2005, after an initial drop in the preceding 5 years.¹¹

¹⁰ Ministry of Health of Colombia. Official Records of Affiliation to General Health Social Security Regime (SGSSS).

¹¹ Profamilia (2005 and 2010) Encuesta Nacional de Demografía y Salud (ENDS) Colombia. No such data are available prior to 2005.

Figure 17 Colombia: Health insurance coverage, other measures of effective coverage, 1995-2010 (%)



Source: Author from WHO National Health Accounts database at www.who.int/nha/en/

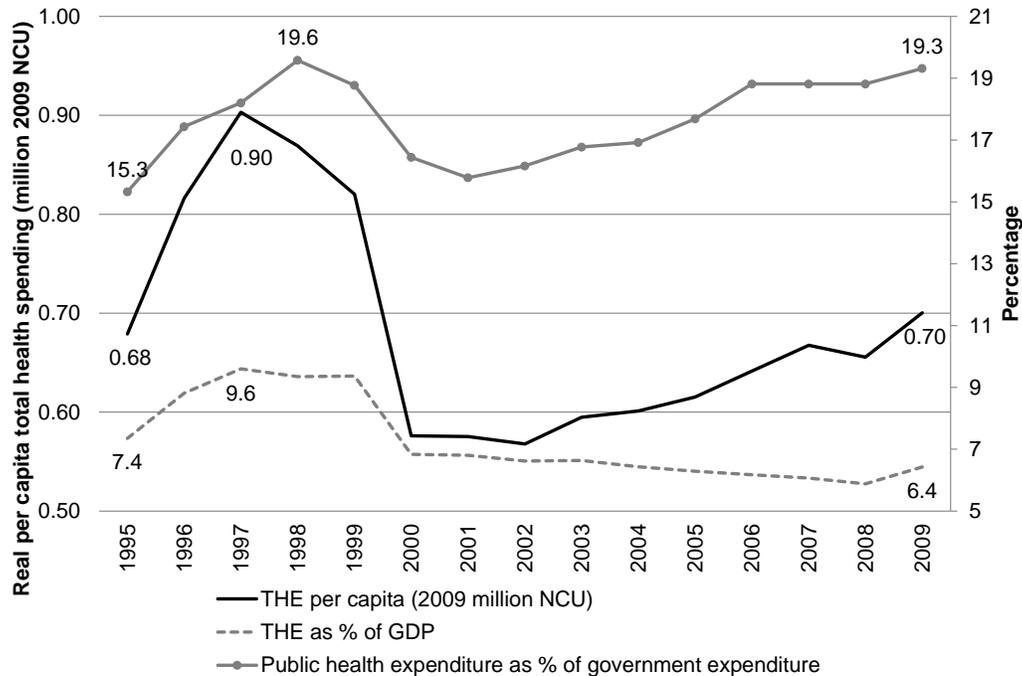
THE as a percentage of GDP experienced a large increase following the reform, from 7.35 percent in 1995 to close to 10 percent from 1997 to 1999 (Figure 18). It then dropped to less than 7 percent in 2000 and declined slowly but steadily over the next eight years to reach a minimum of 5.88 percent in 2008. In 2009 this downward trend reversed and THE grew to 6.42 percent.

The large, four-year health spending expansion that started in 1995 reflects the country's need for significant initial investments for reform implementation. These included the creation of new institutions, such as the Health Superintendent and the Solidarity and Guarantee Fund, the targeting effort necessary to select beneficiaries of the SHI subsidized regime, and the demand-side public resources needed to subsidize their enrolment.

The first few years into the reform were characterized by a large increase in THE per capita, from 0.68 million pesos in 1995 to 0.90 million pesos in 1997 (Figure 18). The bulk of the increase came from SHI contributions made by government, on behalf of the poor, and by individuals and employers. To defray the costs of the reform, government increased the share of its budget devoted to health from 15.3 percent in 1995 to 19.6 percent in 1998. This share subsequently declined but regained its high level by 2009. As a share of GDP, THE also grew, from 7.4 percent in 1995 to 9.6 percent in 1997. It is puzzling to note that in 2009, 15 years into the reform, after having nearly achieved UHC, real THE per citizen was nearly the same amount it was when the reform started in 1995, or about

700,000 Colombian pesos (US\$ 350).¹² Equally striking is that THE as a share of GDP was the historically low figure of 6.4 percent in 2009 compared with a higher figure when the reform started.

Figure 18 Colombia: THE per capita and as a share of GDP and PuHE as a share of total government expenditure, 1995-2009 (million 2009 pesos and percent)

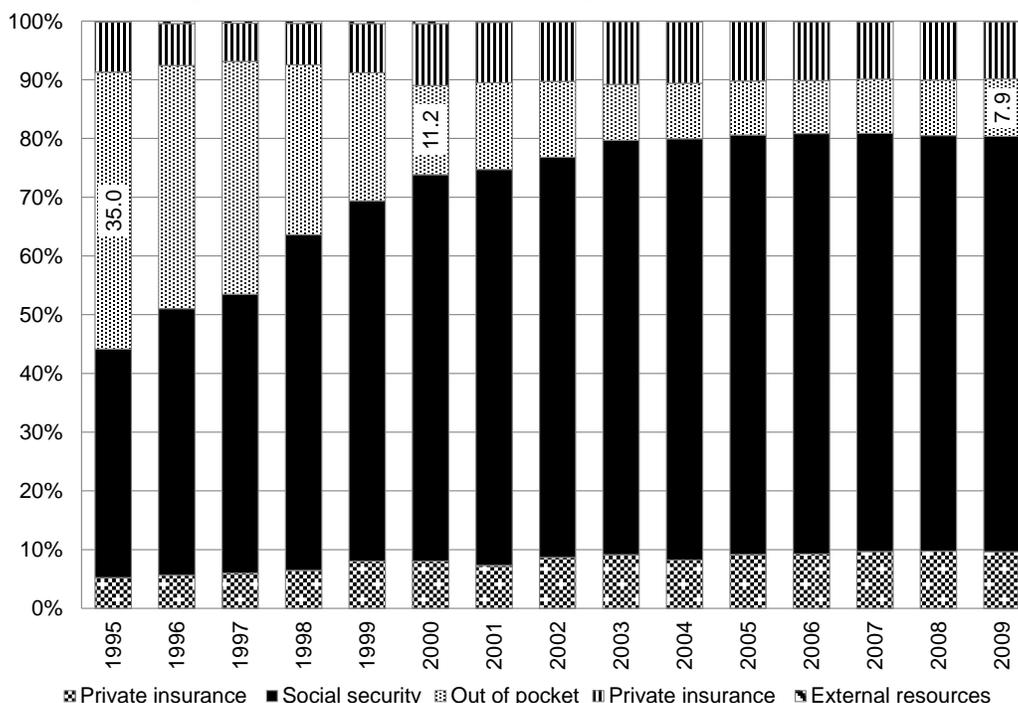


Source: Author with data from WHO's National Health Accounts database at <http://www.who.int/nha/0063country/en/>

As noted, the expansion of HIC in Colombia was financed mostly through SHI contributions (Figure 19), which increased from about 29 percent of total financing in 1995 to close to 60 percent after 2005. General government revenue remained more or less constant throughout the period, ranging from a high of about 32 percent in 2000 to a low of 25 percent in 2008. An important result from a health policy standpoint is that Colombia's reform resulted in a sizable drop in out-of-pocket spending (OOPS) as a source of health financing. Early in the reform OOPS represented over one-third of total health financing, a proportion which dropped year after year to reach less than 8 percent by 2003.

¹² Computed at the 2009 exchange rate of 2,000 Colombian pesos per US dollar.

Figure 19 Colombia: Health financing structure, 1995-2009 (%)

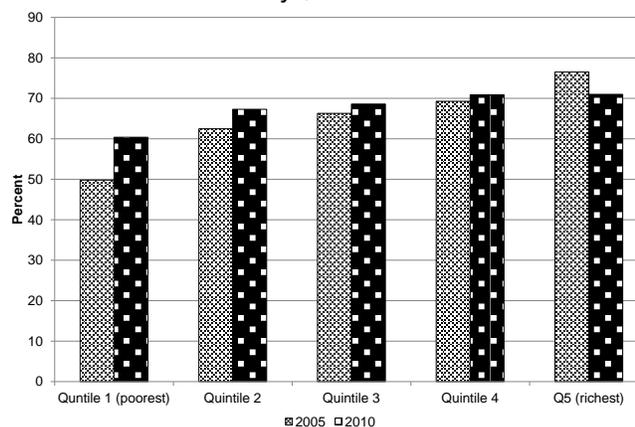


Source: Author with data from WHO's National Health Accounts database at <http://www.who.int/nha/country/en/>

In Colombia THE appears to be closely and positively related to income (see Figure A 6). Per capita GDP grew in nine out of the 14 years studied, and THE grew in each of those nine years. In three of the four years where real per capita GDP fell, so did real THE. The exception is the year 2009, where per capita GDP fell by about 2 percent yet THE increased by about 8 percent. The correlation coefficient between real THE and real per capita GDP is 0.43

The reduced reliance on user-fee financing by public and private providers should have resulted in improved health care access. This issue is explored in Figure 20 with information from Colombia's Demographic and Health Surveys (DHS) for the years 2005 and 2010. The figure shows the propensity to obtain curative care from a doctor by children and adults who reported a self-perceived health problem in a period of one month prior to the survey.¹³ Access improved for the bottom four quintiles and the largest increase took place among the poorest. In the annex these

Figure 20 Colombia: Percentage seeing the doctor among those with a self-perceived health problem in the last 30 days, 2005 and 2010



Source: Author with data from 2005 and 2010 DHS surveys.

¹³ No equivalent data exist for prior years.

data are presented as concentration curves. In 2005 and 2010, both concentration curves were below the equality line, indicating that in both years lower income individuals had less access to care from a doctor than ones with higher incomes. Yet the distance between the concentration curve and the equality line grew smaller in 2010, indicating that while a small degree of inequality persisted, equity improved relative to the situation 5 years earlier. The concentration index in 2005 was 0.0704 and in 2010 it dropped to 0.0272.¹⁴

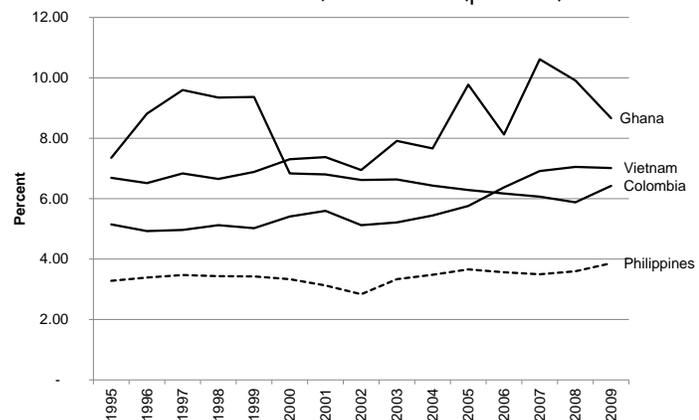
Discussion

This paper has described the reforms adopted by four developing countries with the aim of achieving UHC and studies the health spending patterns that emerged. Below is a summary of the main findings from each country, followed by a comparative analysis of health financing patterns.

In Ghana health insurance coverage grew from virtually no coverage in 1995 to nearly 40 percent coverage by 2009. The increased coverage can be attributed almost entirely to the implementation of public insurance in 2005, through NIHS. This policy seems to have had positive consequences in the health sector in terms of improved access to health services for the insured, especially the poor, and reduced OOPS. The implementation of NHIS was accompanied by a significant fiscal effort to expand public health spending and a consequent reduction in the reliance of the health system on user-fee revenue. Nevertheless, a drop in government revenue combined with a reduction in both donor health spending and OOPS resulted in a sizeable contraction in real THE per citizen, from a high of 128 Cedis in 2005 to a low of 80 Cedis in 2009. The gains in access and financial protection that NHIS seems to have achieved may be hard to sustain in a scenario of persistent lower public and total health spending.

Vietnam's Social Security has achieved 60 percent population coverage, including formal sector workers and their families, who make SHI contributions, and also several population groups that benefit from publicly subsidized insurance. Coverage rates for maternal and child preventive services were high well before SHI coverage expansion and therefore cannot be attributed to SHI reform. Evidence about the consequences of SHI expansion on access to health services

Figure 21 Case study countries: Total health spending as a share of GDP, 1995-2009 (percent)



Source: Author from national health accounts at www.who.org.

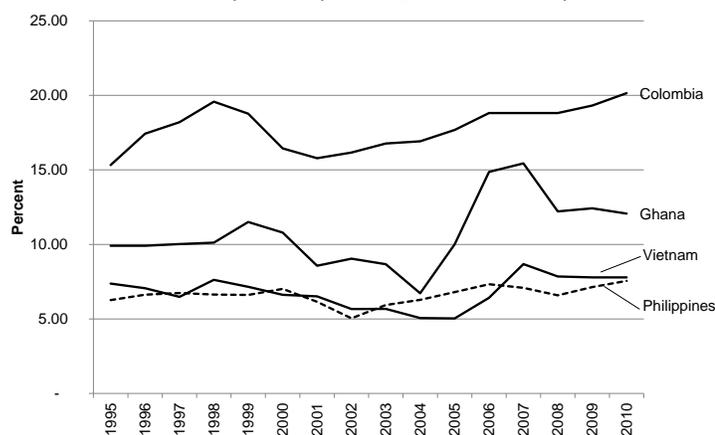
¹⁴ Concentration indices were computed with the tool ADePT developed by Wagstaff et al. at The World Bank and available at <http://web.worldbank.org/wbsite/external/topics/exthealthnutritionandpopulation/extpah/0,,contentMDK:20216933~menuPK:400482~pagePK:148956~piPK:216618~theSitePK:400476,00.html>

was mixed until recently. It showed some improvements in access to curative care in public facilities and reduced access to private care for the poor. Yet up until 2006 inequalities in Vietnam seemed to have widened. The pervasive presence of user fees in government health facilities resulted in inequities in access to services and inequalities in health status between poor and non-poor citizens, and also in impoverishment. More recent evidence from the late 2000s, however, indicates that equity and equality may be improving. Still, the strong reliance of Vietnam’s health system on user-fee revenue will limit further improvements in health equity. Persistent economic growth should make it possible for government to increase public revenue and allocate more resources to improve the working conditions of public health workers and the quality of care in public facilities. These factors should facilitate the effective reduction of user fees in government health facilities.

The Philippines, like Vietnam, has remained heavily dependent on user-fee revenue for health sector financing. Combined public spending (government subsidies to public providers plus contributions to SHI) as a share of total health financing is smaller today than it was 15 years ago. Further, the amount of resources available for SHI has shrunk as a share of total funding for the health sector. Official figures about the coverage of SHI seem to reflect nominal but not effective health coverage. This is a conclusion that arises from recent analyses of access to health care and financial protection from health shocks in the country, which show inequity in access and growing impoverishment from health events. Survey based figures about SHI beneficiaries reveal lower coverage than official numbers. Of all countries reviewed here, the Philippines is the one with the lowest share of the health sector in the overall economy: in 2009 less than 4 percent of GDP was devoted to the health sector (Figure 21). Improving equity in health and reducing inequalities in health status will occur only when government expands health spending. Currently health spending by government is only 7.1 percent of total public spending, a figure that is relatively small compared to that of the other countries studied (Figure 22).

Colombia exhibits the greatest fiscal effort of all study countries to finance the health sector. In 2009 the government of Colombia devoted one-fifth of all public resources to health. Official SHI coverage figures coincide with information from household surveys, and there is ample empirical evidence that access to health services has improved in Colombia and so has equity in health and equality in health status. These findings are consistent with a sustained drop over time in user-fee financing for health care –currently at less than 8 percent and by far the lowest of all case study countries (Figure 23). Four out of every five dollars spent in Colombia’s health sector come

Figure 22 Case study countries: Public health spending as a share of total public spending, 1995-2009 (percent)



Source: Author from national health accounts at www.who.org.

by far the lowest of all case study countries (Figure 23). Four out of every five dollars spent in Colombia’s health sector come

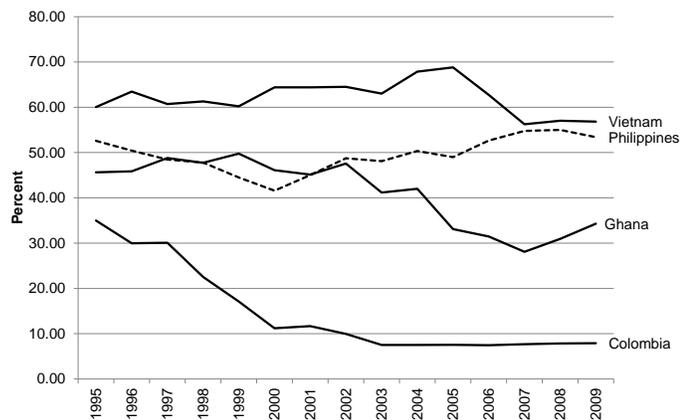
from SHI or from direct government subsidies to providers. Yet what is puzzling about Colombia is that the observed improvements in health equity have been made possible even as total health spending per citizen has remained nearly constant in real terms. A key research question is to determine what factors led to such large gains in the efficiency of public health spending. If research confirmed that efficiency improvements made possible the gains in equity while maintaining the real amount of per capita resources devoted by Colombia for health, then learning about how efficiency gains were achieved would be a valuable lesson for all developing countries. The following are some hypotheses: Government may have become a better buyer of health services by reducing supply-side subsidies to public health providers and increasing demand side payments based on actual output. Greater reliance of private SHI health insurers, known in Colombia as EPSs (Health Promoting Enterprises), on public health providers may have reduced their spending on health care and improved the efficiency of public investments in the health sector.

The remainder of this section further reviews health spending patterns for the case study countries.

Figure 24 plots real per capita GDP against real per capita THE. The starting values of these two variables since the year 1995 were set to an index equal to 1.00. Subsequent values were computed in reference to this index. Thus, an index value of 1.35 for THE means that THE in that year was 35 percent higher than in 1995; an index value of 0.80 for GDP means that GDP was 20 percent less in that year than in 1995. The diagonal line represents an expansion path where both variables grow annually at the same pace relative to their initial values.

Colombia began a major reform in 1995 with great impetus, making a large fiscal effort to finance the start up costs of the reform at a time when the economy was virtually stagnant. As can be seen in the upper left quadrant of Figure 24, in the first three years per capita THE grew by about 35 percent while per capita GDP remained virtually unchanged. In the next two years, from 1998 to 2000, GDP fell by almost 10 percent, in the first recession experienced by Colombia in nearly 50 years, while THE fell by 40 percentage points (from an index value of 1.35 to 0.95), to an amount that was well below its starting point. Between 2001 and 2007, GDP expanded and so did THE. In 2009 there was a slight contraction in GDP, probably as a result of the world's Great Recession yet THE continued to grow while the government made a special effort to continue expanding THE (see more on this below). It is remarkable to observe that after a 15-year reform, per capita THE was nearly identical in real terms to its initial value in 1995. Yet during these 15 years health

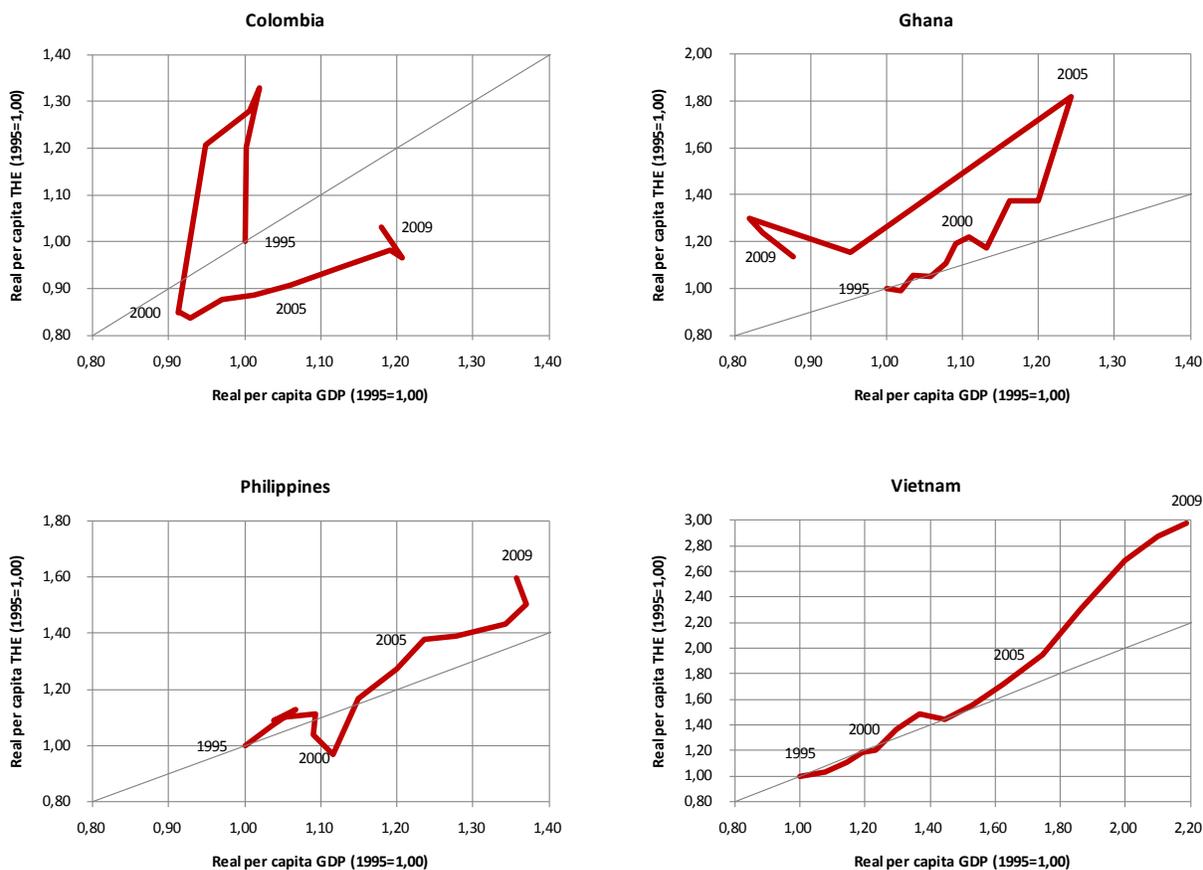
Figure 23 Case study countries: Out-of-pocket spending as a share of total health spending, 1995-2010 (percent)



Source: Author from national health accounts at www.who.org.

insurance coverage increased from about 50 percent in 1995 to near universality (93 percent) in 2009. In Colombia OOPS decreased throughout the reform process and equity in health care access improved considerably as a result of the reform, but real per capita THE remained virtually unchanged. Thus, the reform appears to have been efficient because it achieved improvements in equity at almost no additional real cost.

Figure 24 Relationship between real per capita GDP and real per capita THE, 1995-2009



Source: Author from various sources mentioned earlier in the report.

The situation in Ghana was quite different (upper right quadrant of Figure 24). In the decade that preceded its NHIS reform, between 1995 and 2005, both the economy and THE expanded hand in hand. In 2006, a year into the reform that sought to achieve UHC, income experienced a major drop and so did THE. GDP fell again in 2007 yet THE experienced a mild increase. In 2009 the economy expanded but THE fell. At the end of this 15 year period, real per capita THE was only slightly above its initial value. It is ironic that income and THE were so regular in their growth prior to the reform and so irregular immediately after.

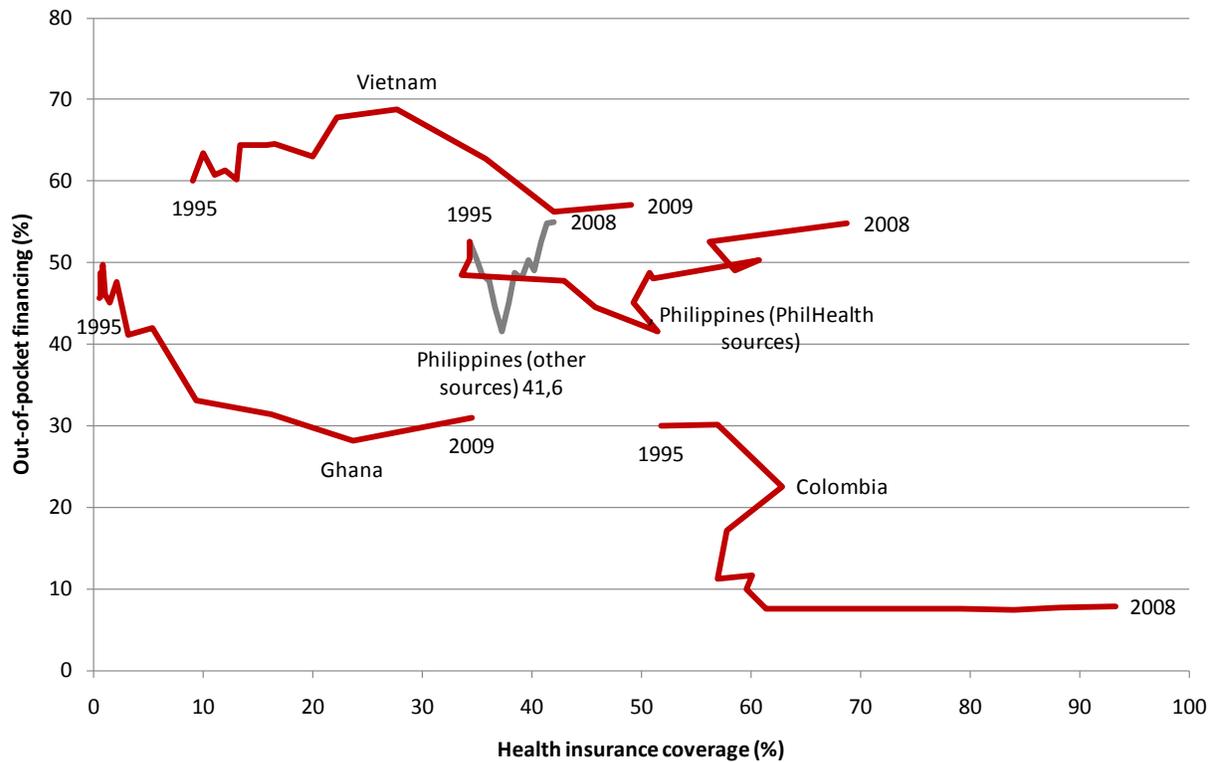
In the Philippines (bottom left quadrant in the figure), both GDP and THE grew more or less steadily since 1995, the year in which the National Health Insurance Law was passed, except in the year 2000 when THE fell. By 2009 GDP had expanded by about 35 percent relative to 1995 and THE by 60 percent. Despite this significant expansion in income and

spending, there remain considerable health equity problems in the Philippines to a large extent because much of the expansion in THE came from OOPS.

Finally, the case of Vietnam represents yet another situation (bottom right). Both income and health spending grew at nearly the same pace until 2003. Starting in 2004, THE grew above GDP every year until 2009. That growth largely reflected additional private spending on health services, although public spending, while smaller in total magnitude, grew as well. Between 2005 and 2009 OOPS financing grew in total real value but its share in health financing dropped by 10 percentage points, from 68.8 percent to 56.8 percent.

The role of OOPS financing in the reforms of the study countries is illustrated in Figure 25. On the vertical axis is the share of THE accounted for by OOPS while on the vertical axis is health insurance coverage. Colombia and Ghana are the two study countries that were able to expand health insurance coverage in an important way while achieving substantial reductions in OOPS financing. Equity in health in these two countries has improved, as the evidence indicates. Vietnam has achieved a significant expansion in health insurance coverage but a modest reduction in OOPS financing. There remain considerable equity problems in Vietnam, although recent signs of a drop in the share of OOPS are auspicious. Further reductions will require a large fiscal effort and a successful package of health reforms to be able to change the behavior of public providers and their reliance on OOPS. The Philippines constitutes probably the least successful of these reform efforts judging from the pattern shown in the figure below. The figure shows two alternative curves, one that relies on official coverage figures and another on alternative figures from household surveys and the author's own estimates. If the official coverage figures are used, then the Philippines has achieved a large expansion in health insurance coverage, but OOPS has increased its relative share of health financing. This is having negative consequences on equity in health, as discussed above. If the alternative coverage figures are taken, a bleaker situation appears. Over a 14-year period, coverage has improved only marginally while OOPS has grown as a financing source.

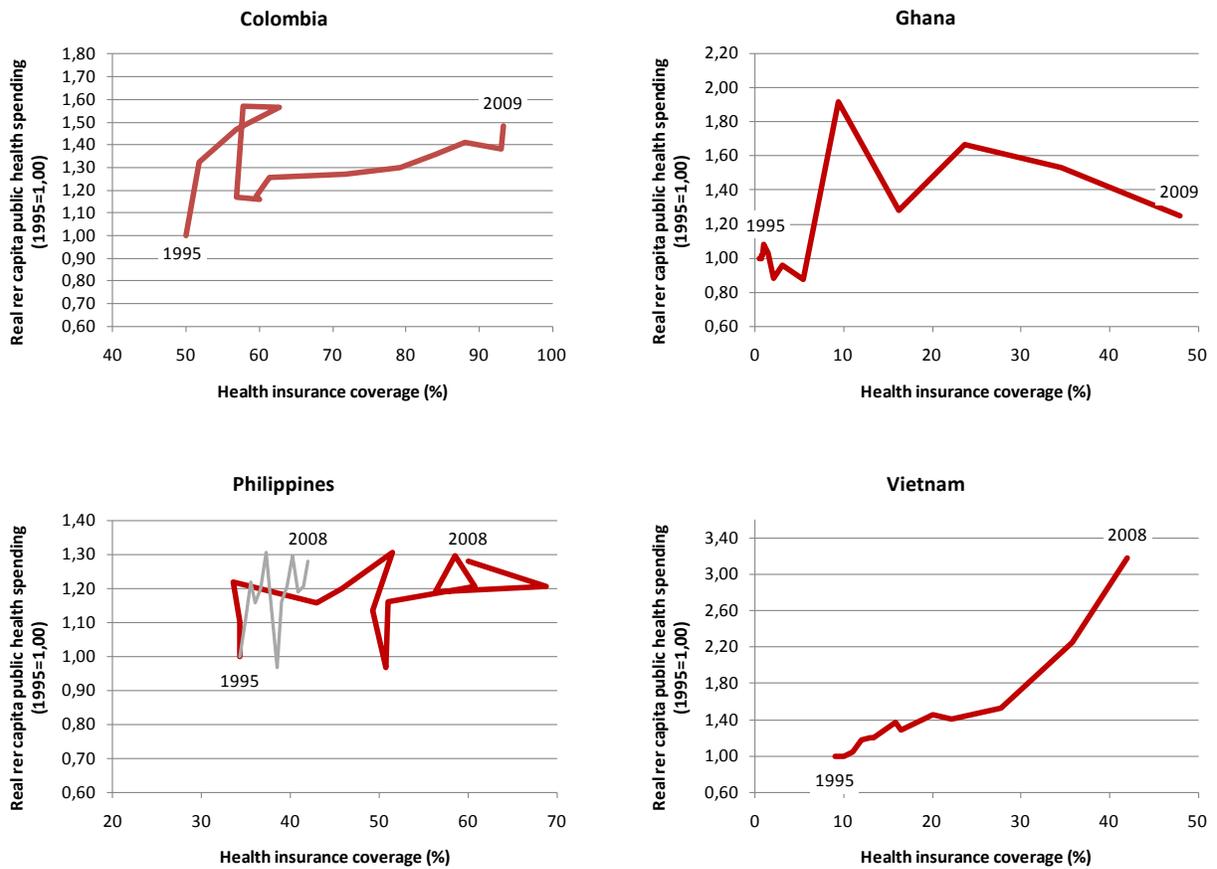
Figure 25 Expansion of health insurance coverage and out-of-pocket health spending



Source: Author from various sources mentioned earlier in the report.

The final figure of the report (Figure 26) shows the effort made by public sources to finance the expansion of health insurance coverage as coverage expands. Public sources include both general revenue financing channeled outside of SHI as well as public and private contributions to SHI. Colombia and Vietnam are two noteworthy examples of countries that have managed to channel growing public resources to health financing to fuel the expansion of coverage. The Philippines and Ghana have expanded public sources as well, but in more modest proportions. In relative terms, Ghana has outperformed the Philippines because for an equivalent increase in public financing it has managed to achieve much larger gains in coverage than the Philippines, when the household-based coverage data are used.

Figure 26 Real per capita public health spending and health insurance coverage, 1995-2009



Source: Author from various sources mentioned earlier in the report.

Note: the two curves shown for the Philippines correspond to two different sources. The darker curve uses official SHI coverage figures from PhilHealth. The lighter curve uses instead DHS and World Bank coverage data.

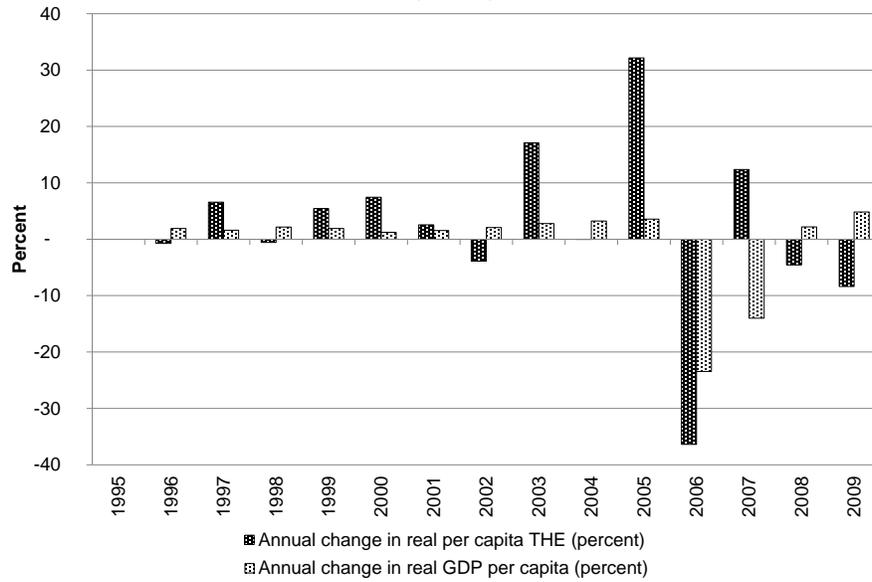
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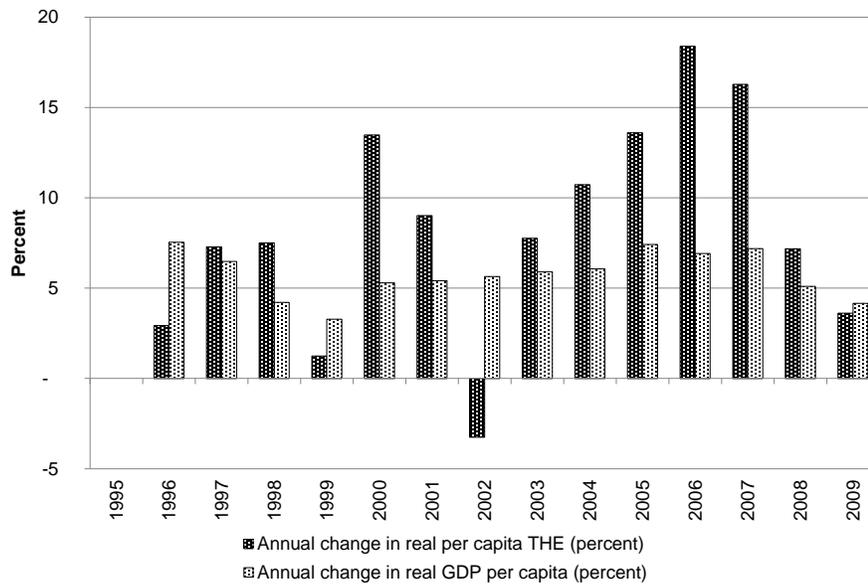
Annex A. Additional tables

Figure A 1 Ghana: Annual changes in per capita GDP and in THE, 1995-2009 (%)



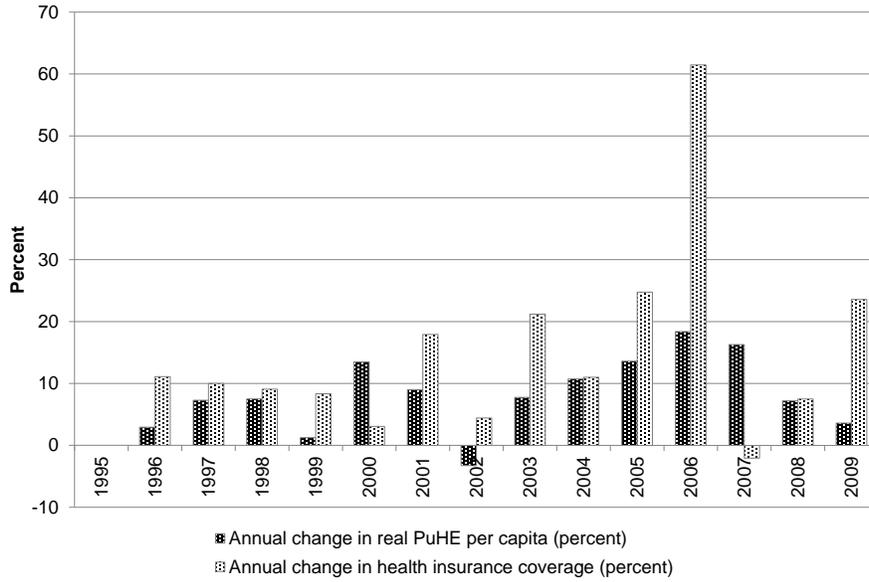
Source: Author with data from WHO's National Health Accounts database at <http://www.who.int/nha/country/en/>

Figure A 2 Vietnam Annual changes in real per capita THE and GDP (percent)



Source: Author with data from WHO's National Health Accounts database at <http://www.who.int/nha/country/en/>

Figure A 3 Vietnam: Annual changes in HIC and in real PuHE per capita, 1995-2009 (percent)



Source: Author with data from WHO's National Health Accounts database at <http://www.who.int/nha/country/en/> for total health expenditure and from ILO (2009 and Lieberman and Wagstaff (2009) for health insurance coverage.

Figure A 4 Philippines: Annual changes in real per capita THE and GDP (percent)

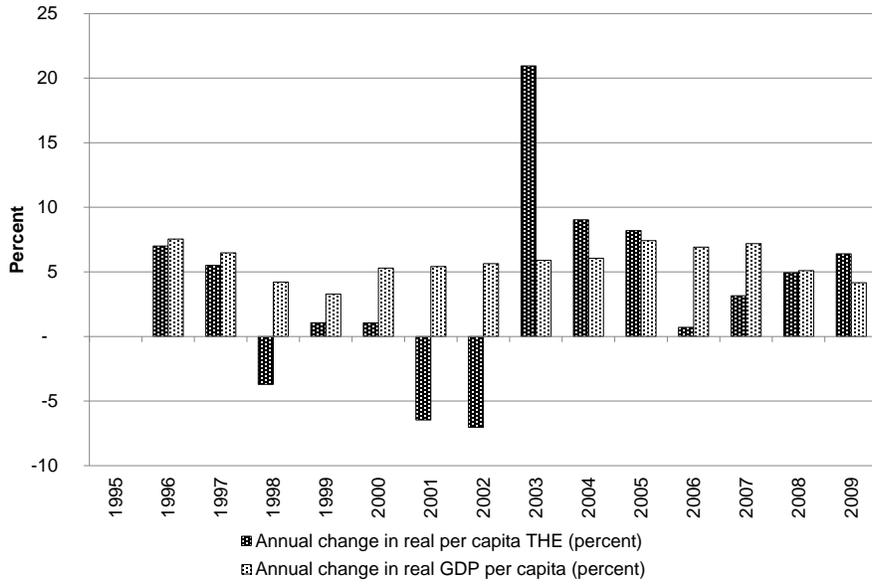


Figure A 5 Philippines: Annual changes in HIC and in real PuHE per capita, 1995-2009 (percent)

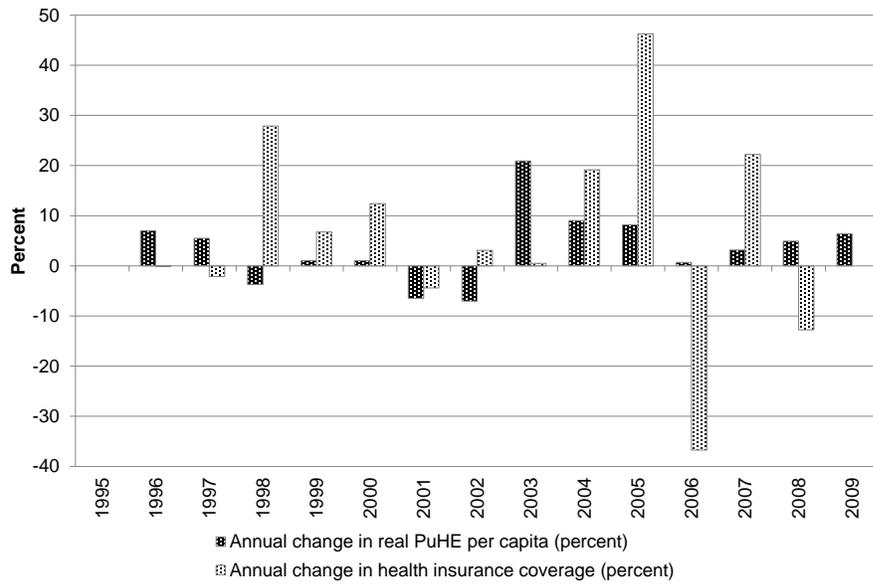


Figure A 6 Colombia: Annual changes in real per capita THE and GDP (percent)

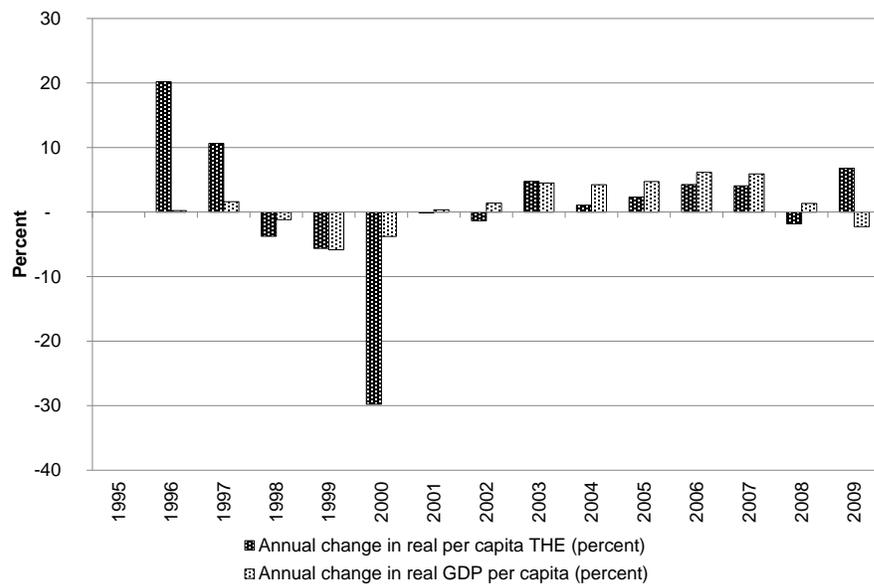


Figure A 7 Colombia: Annual changes in HIC and in real PuHE per capita, 1995-2009 (percent)

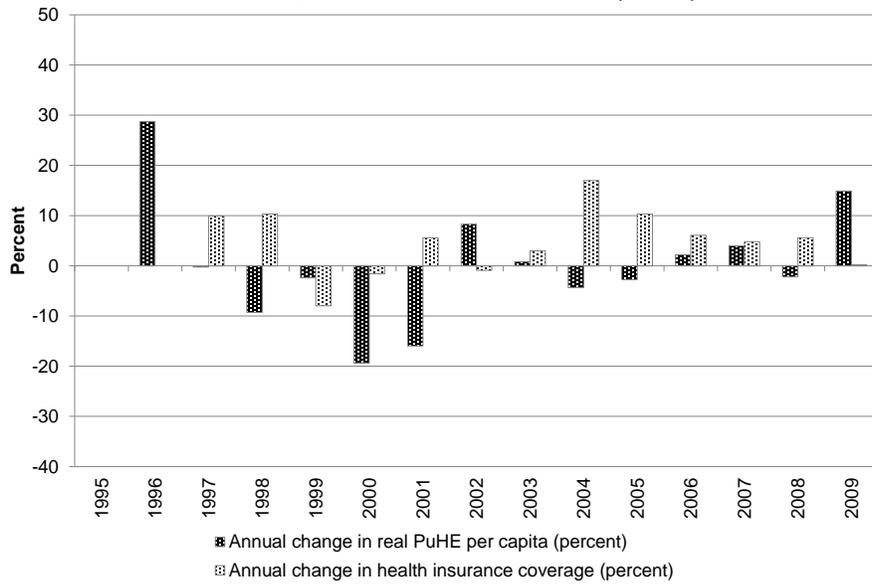
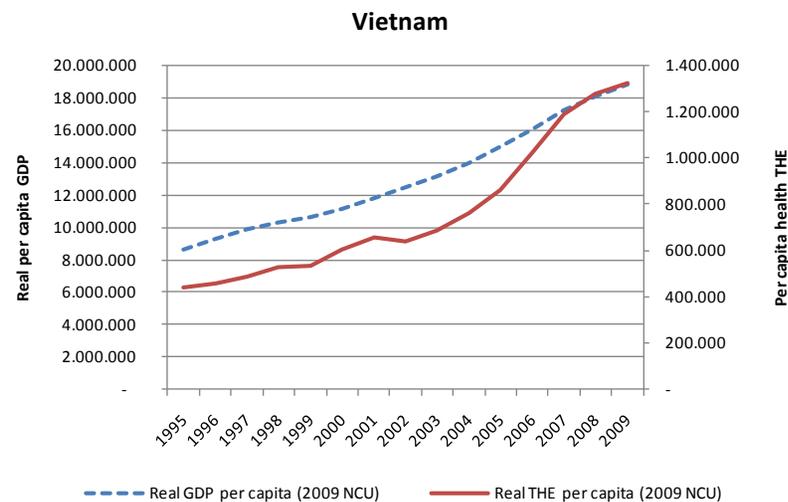
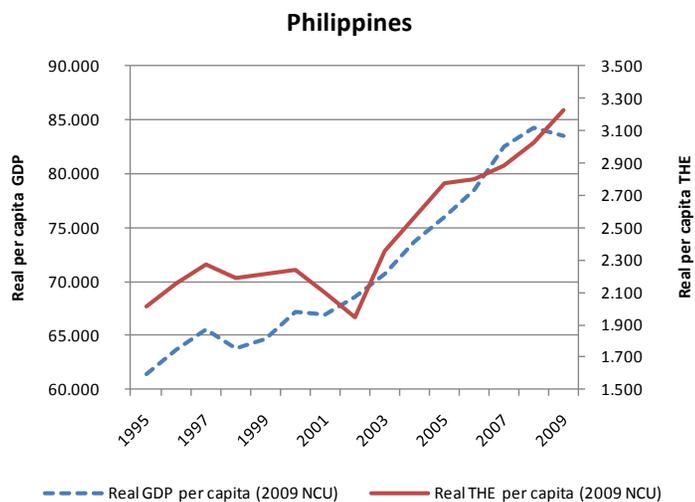
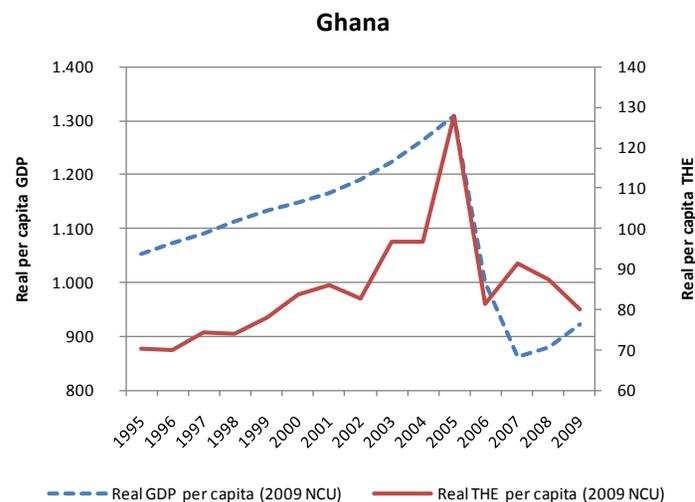
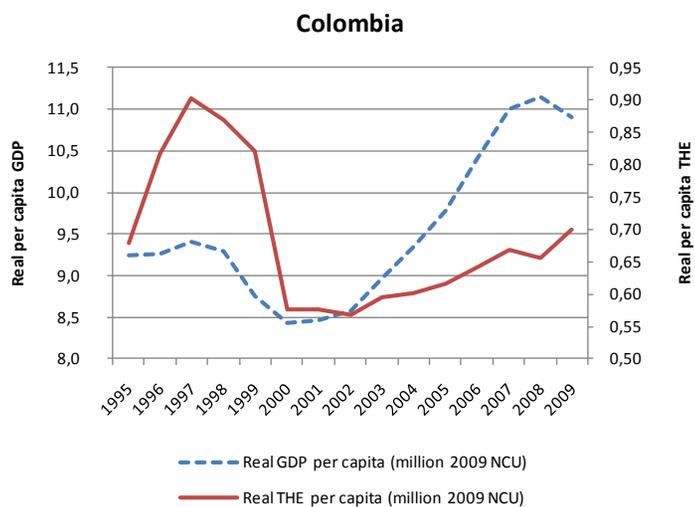
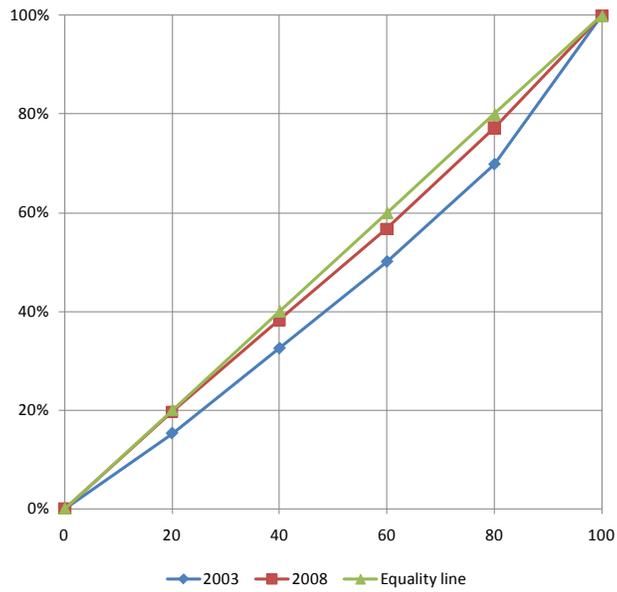


Figure A 8 Trends in real per capita GDP and THE, 1995-2009



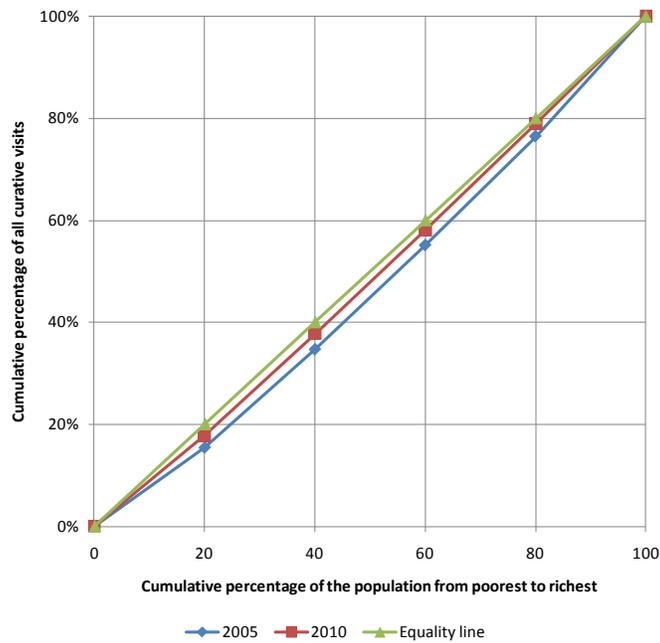
Source: Author with data from WHO's National Health Accounts database at <http://www.who.int/nha/country/en/>

Figure A 9 Ghana: Concentration curves for treatment of child diarrhea in a health facility, 2003 and 2010



Source: Author from DHS 2003 and 2008.

Figure A 10 Colombia: Concentration curves for curative consultation with a doctor among those with a self-perceived health problem in the last 30 days, 2005 and 2010



Source: Author with data from 2005 and 2010 DHS surveys.