

PROVIDING HEALTH INSURANCE TO ALL : THE COLOMBIAN EXPERIENCE



Ursula Giedion
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Studies and authors

- Summary of three recent impact evaluation studies on the Colombian health insurance scheme:
 - Giedion, Díaz y Alonso, 2006,
 - *The Impact of Subsidized Health Insurance on Access, Utilization and Health Status: The Case of Colombia.* World Bank (Working Paper for the WB Impact Evaluation Series in preparation).
 - Giedion, Díaz y Alonso, 2007,
 - *The impact of health insurance in the mandatory contributory regime on access and utilization: The case of Colombia.* The Brookings Institution.
 - Flórez, Giedion y Pardo, 2008,
 - *The impact of health insurance on financial protection in Colombia.* IADB..

Goal of the studies

- Evaluate the impact of public health insurance on key health sector performance indicators including access, utilization, and financial protection.
- These studies look neither at impact of health insurance on equity (treated elsewhere, Flórez et al.) nor on quality or efficiency.

Why is this of interest?

- At the country level:
 - Value-added of the health insurance scheme introduced in 1993 fiercely debated and available evidence mostly related to descriptive statistics.
 - Scarce evidence on the impact of HI on access, utilization and financial protection.
 - Question of impact of HI on health sector performance is being skipped. Questions now being addressed: poverty trap (subsidies), fiscal sustainability (aprox. 50% in the subsidized regime) and incentives for informal employment (through payroll taxes).

Why is this of interest?

- Elsewhere:

- Many advocates of health insurance for the poor and several countries trying to extend social insurance to the poor/informal sector.

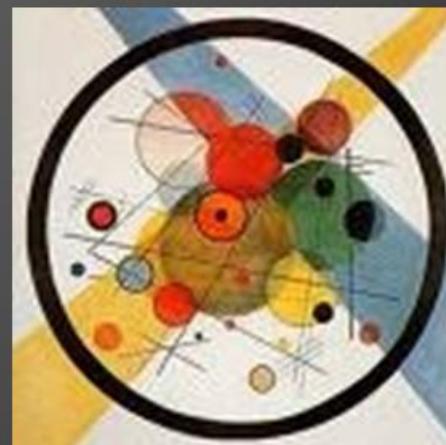
Overall findings:

- Estimates show that:
 1. HI improves access and utilization in both the subsidized regime for the poor and in the contributory regime.
 2. Access improves even for services that are free for all irrespective of an individual's insurance status (and for which we might not anticipate any additional benefits for those insured).
Spillover effect?
 3. HI reduces the incidence of catastrophic health expenditure.

Contents

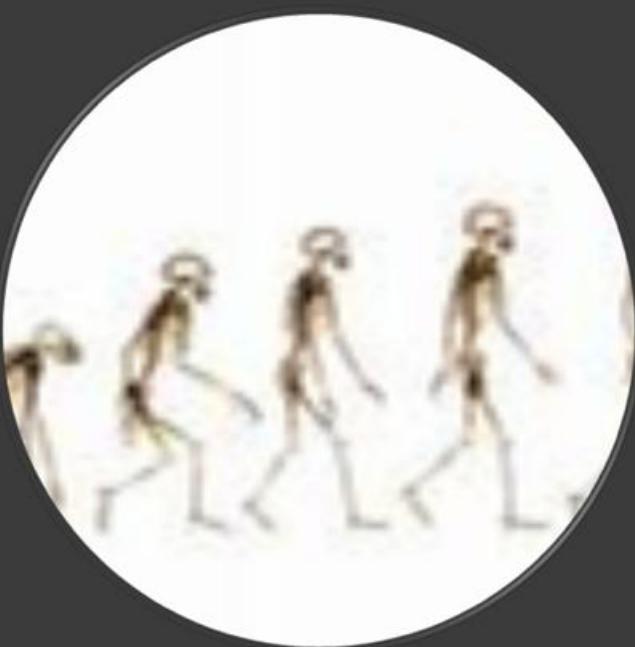
1. Stylized facts of health insurance in Colombia.
2. Impact of HI in Colombia.
3. Final reflexions

STYLIZED FACTS ON THE HEALTH INSURANCE SCHEME FOR THE POOR



Kandinski, Circles in Circles

Colombia's evolution from segmented health insurance system to universal health insurance



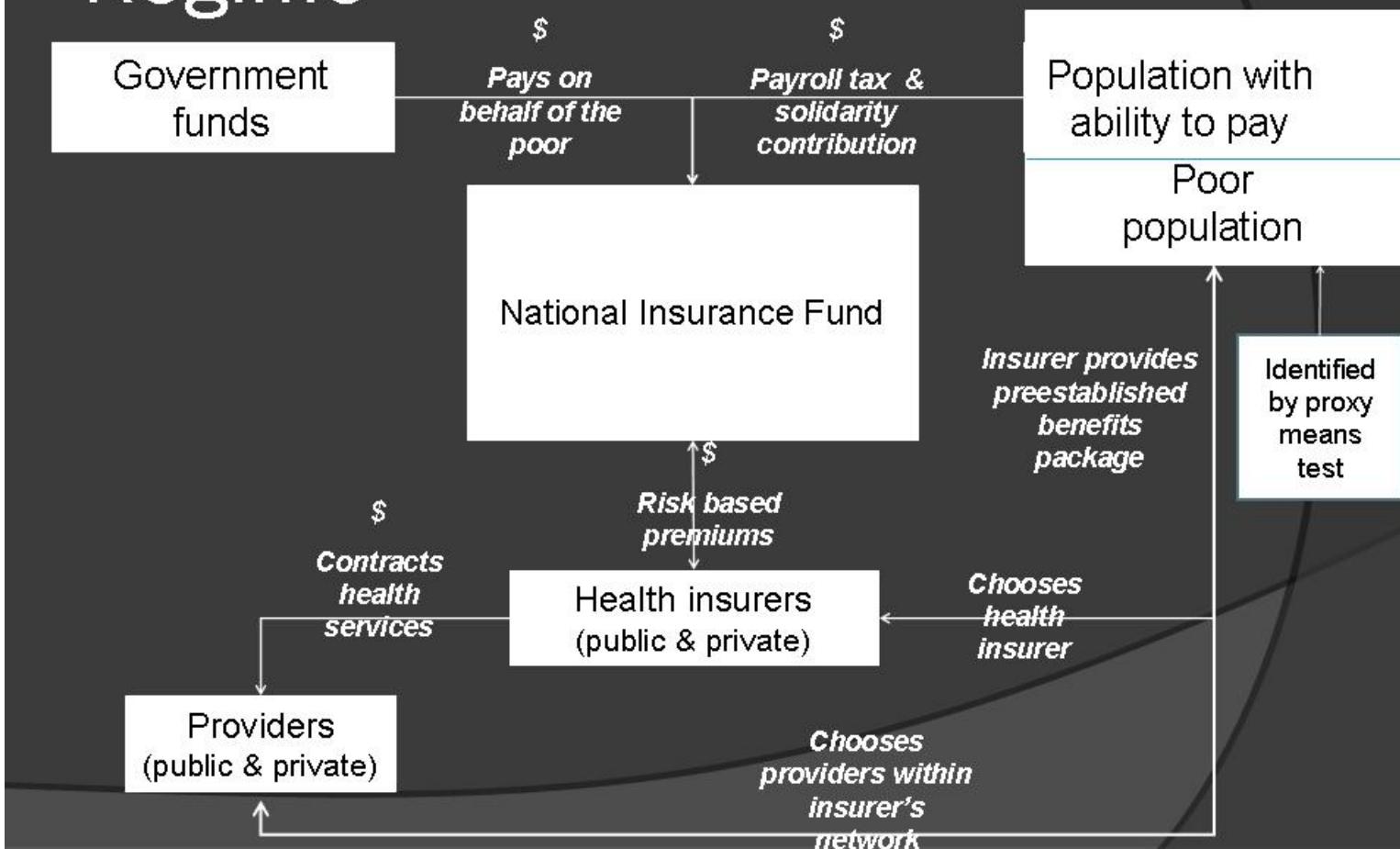
Where Colombia comes from

- Vertically integrated *social security system* for formal workers based on payroll taxes.
- Vertically integrated *public system* for the rest based on general taxes.
- Private sector based on OOP for those able to pay.

Colombia's system

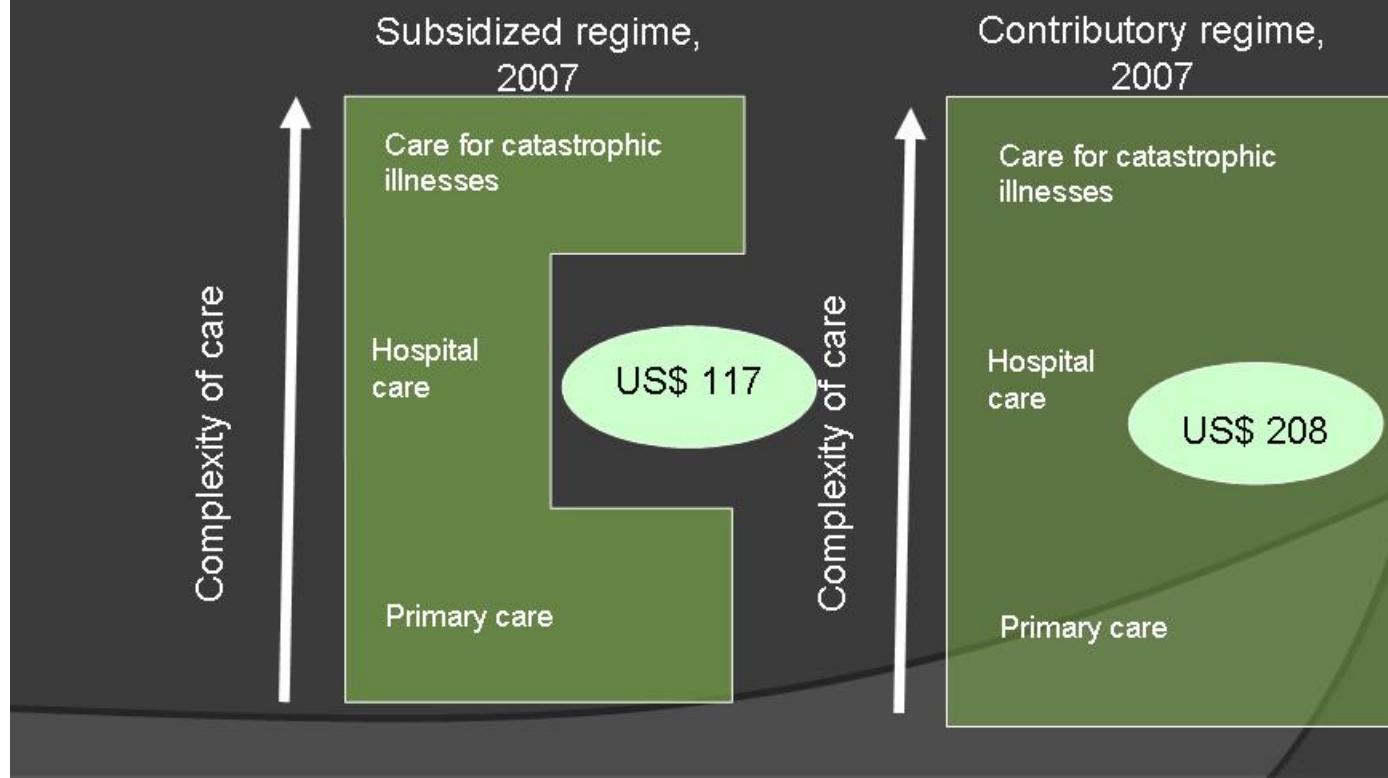
- Social insurance coverage for all.
- Based mainly on general taxes for the poor and on payroll taxes for those able to pay.

The Colombian Social Insurance Regime

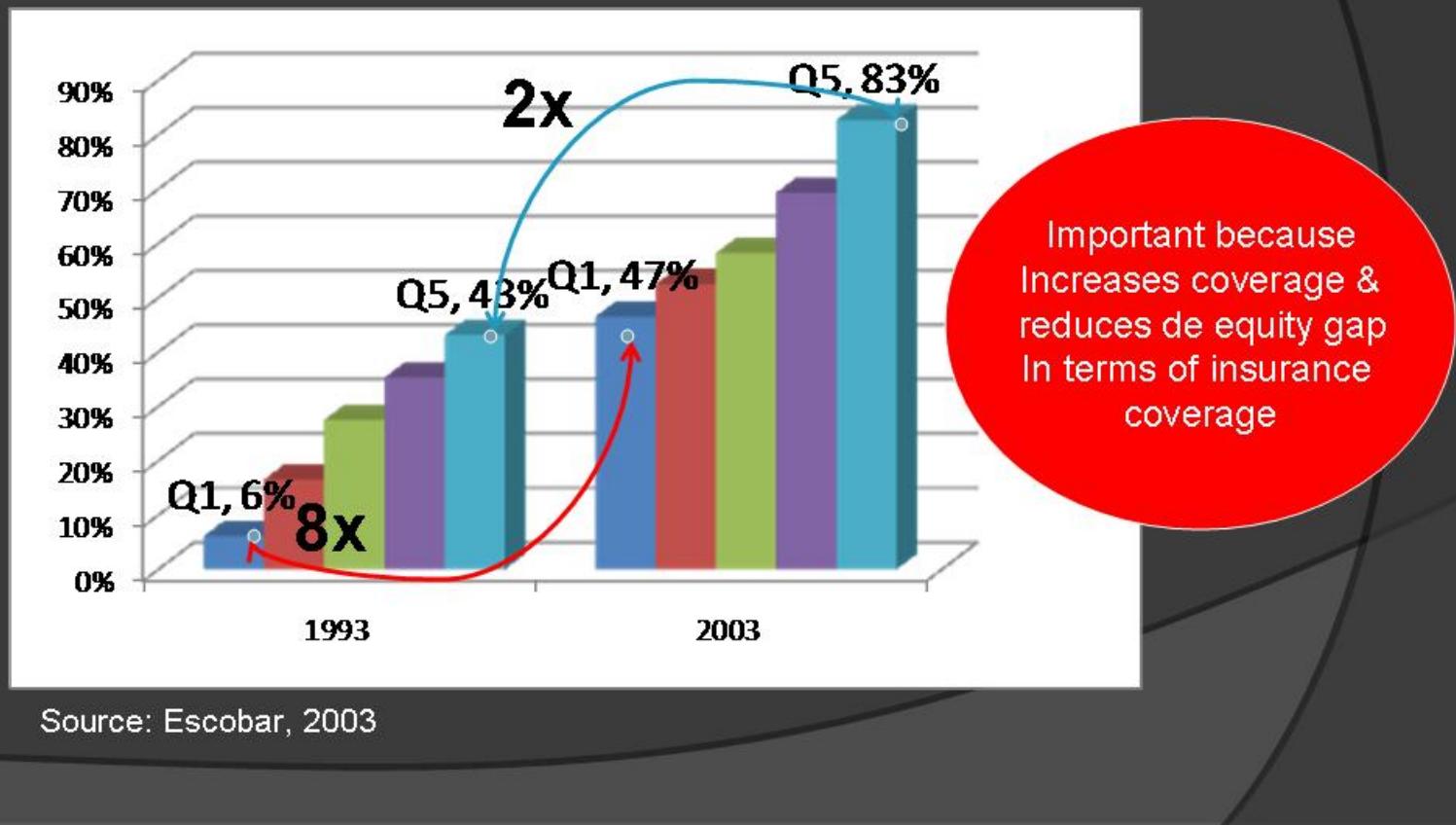


Health insurance in Colombia

Premiums and benefits plans



Increase in insurance coverage by quintile, 1993-2003



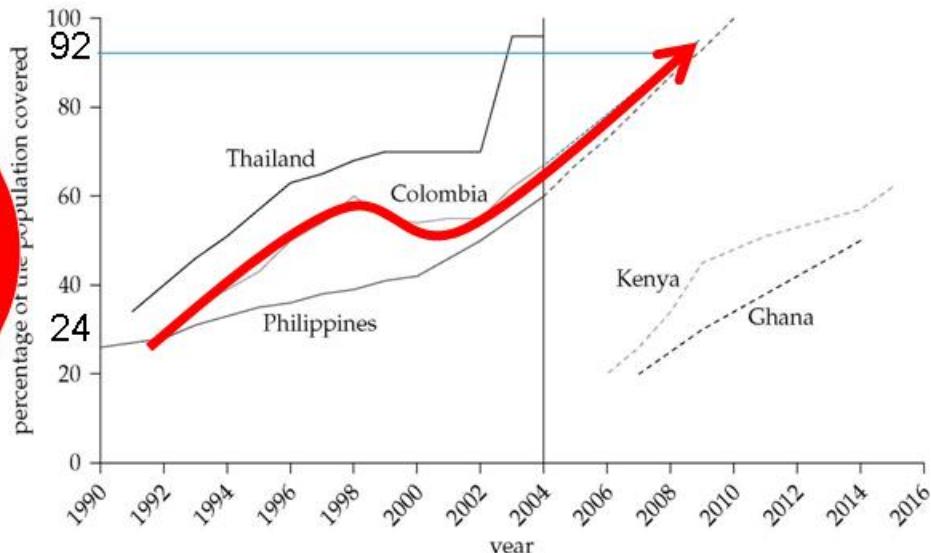
Growth of HI in Colombia

Colombia is among the few developing countries rapidly approaching universal coverage

in Colombia, 2007

Source: MPS, 2008 (Presentation by the General Director for Insurance of the MPS , March 10th, 2008)

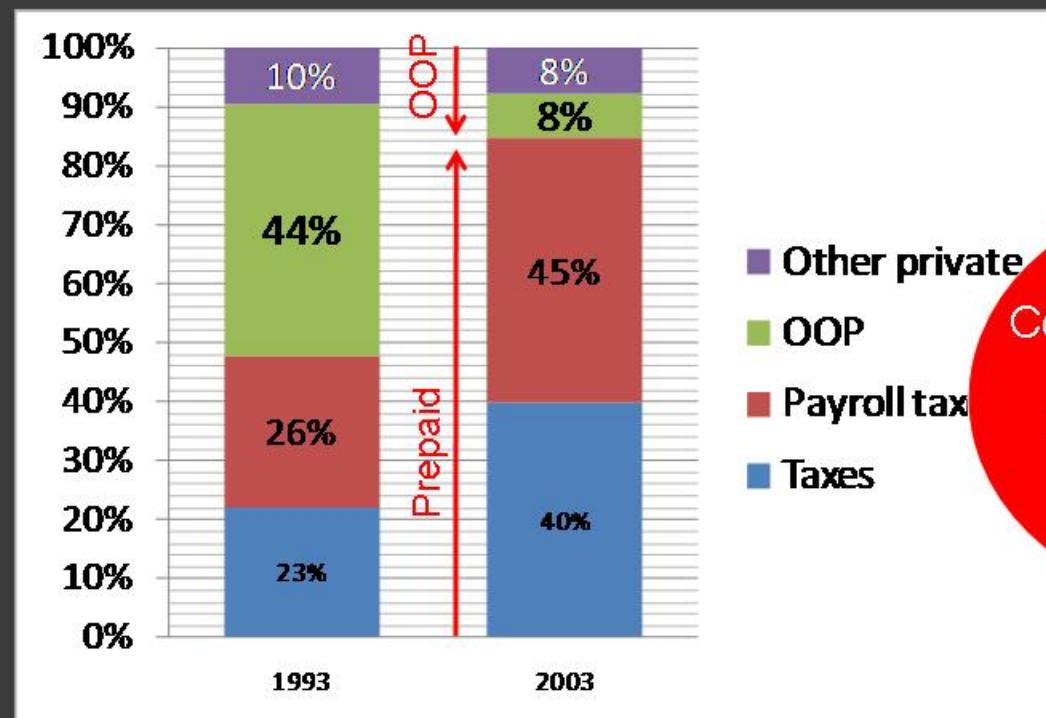
Figure 2.1. Progress Toward Universality, Selected Countries, 1990–2014



Source: Colombia: Ministry of Social Protection data; Ghana: 2003 National Health Insurance Act; Kenya: WHO and German Agency for Technical Cooperation 2004; Philippines: PhilHealth data; Thailand: WHO 2004.

Source: Hsiao, 2007. Recent data on Colombia based on projections by the Ministry of Social Protection

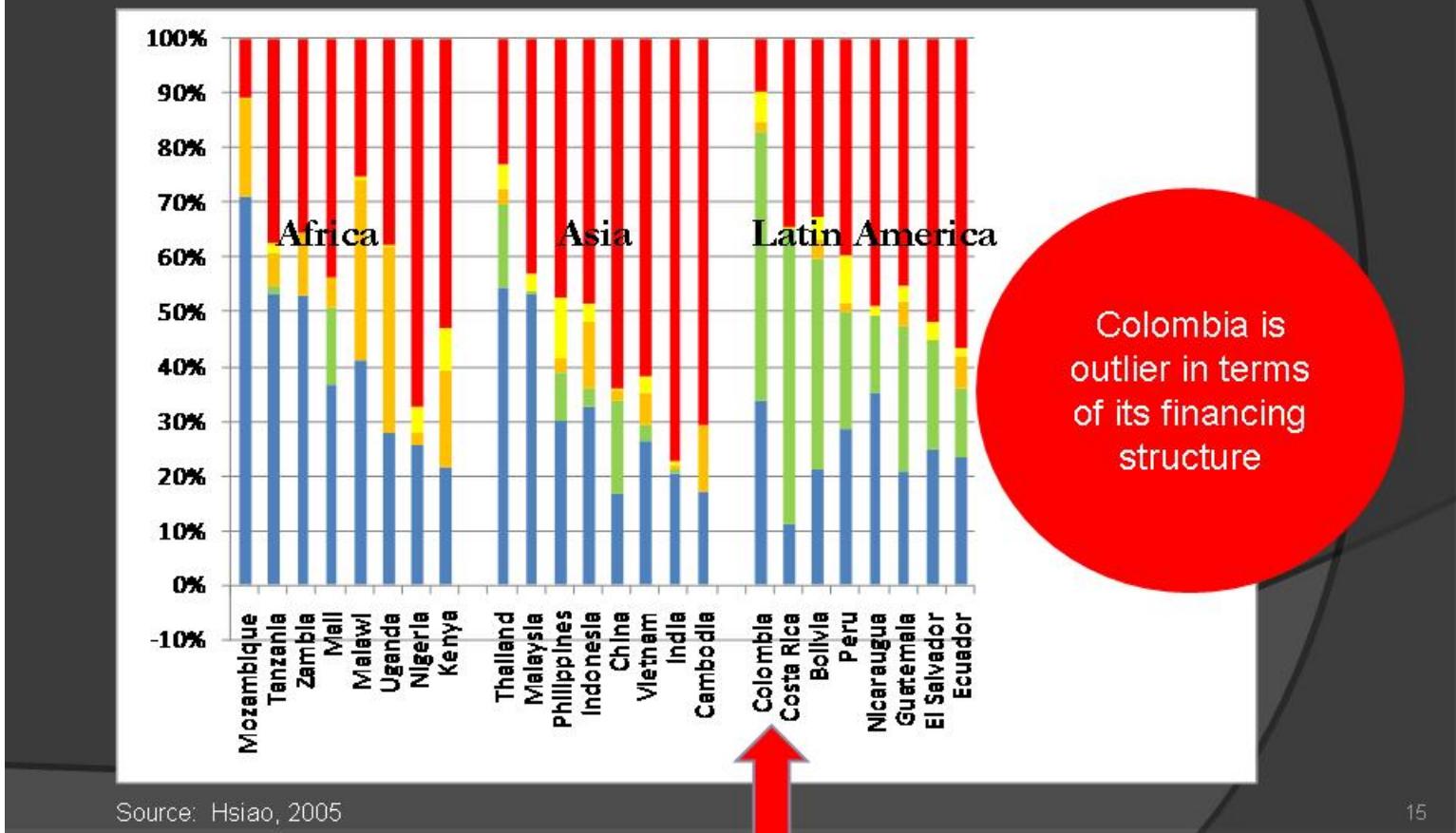
Composition of health expenditure, Colombia, 1993-2003



Colombia has radically changed its health financing sources

Source: Colombian National Health Accounts, Barón, 2006.

Colombia's financing structure in the international perspective



EVALUATING THE IMPACT OF HI ON ON ACCESS, UTILIZATION AND FINANCIAL PROTECTION



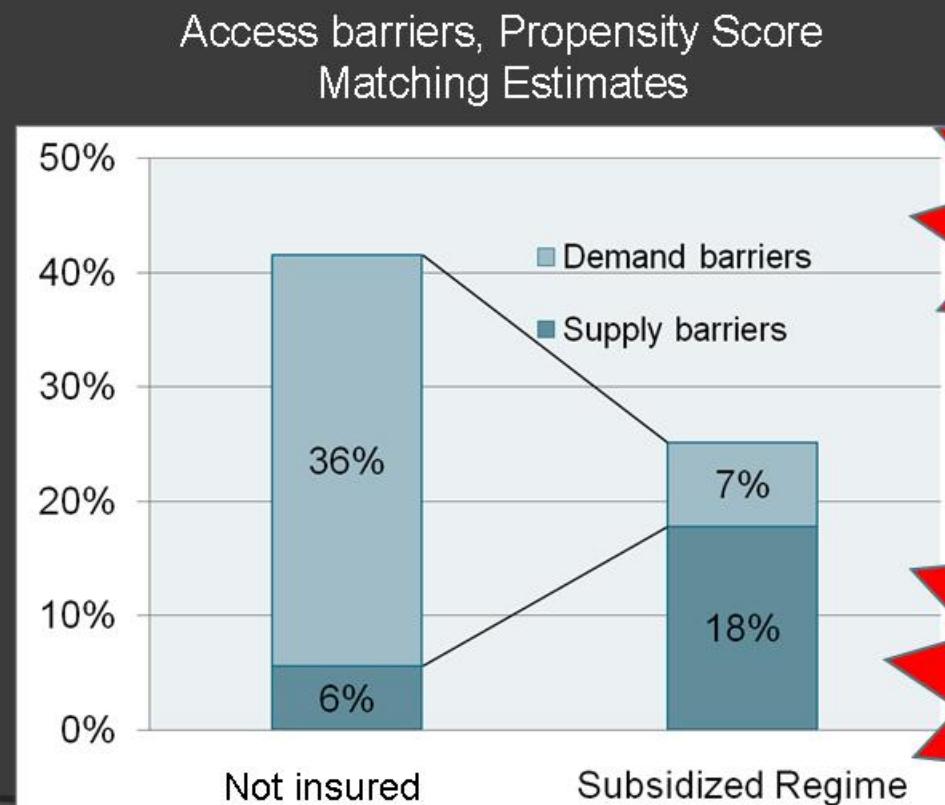
What methods?

	Subsidized regime		Contributory Regime	
Dimension	Access & Use	Financial Protection	Access & Use	Financial protection
PSM	X	X		
DD	X			
MDD	X			
IV			X	X

What data?

	Subsidized Regime	Contributory Regime	
Data	Access & Use Financial protection	Access & Use Financial protection	
DHS 1995 & 2005	X		
LSMS 2003		X	X
Administrative data	X	X	X
Census data	X	X	X

Impact on barriers of access Subsidized Regime



HI reduces barriers of access

HI changes the types of access problems

Impact of insurance on access

Contributory Regime

**Contributory
health
insurance
reduces
access
problems**

Financial barrier of
access

IV estimates

-47% Self-empl.
-14% Employed

Decreases
probability of
experiencing barriers
of access

-2% Self-empl.
-2% Employed

Access to prescribed
medicines

+75% Self-empl.
+76% Employed

Self-medication when
having a health
problem

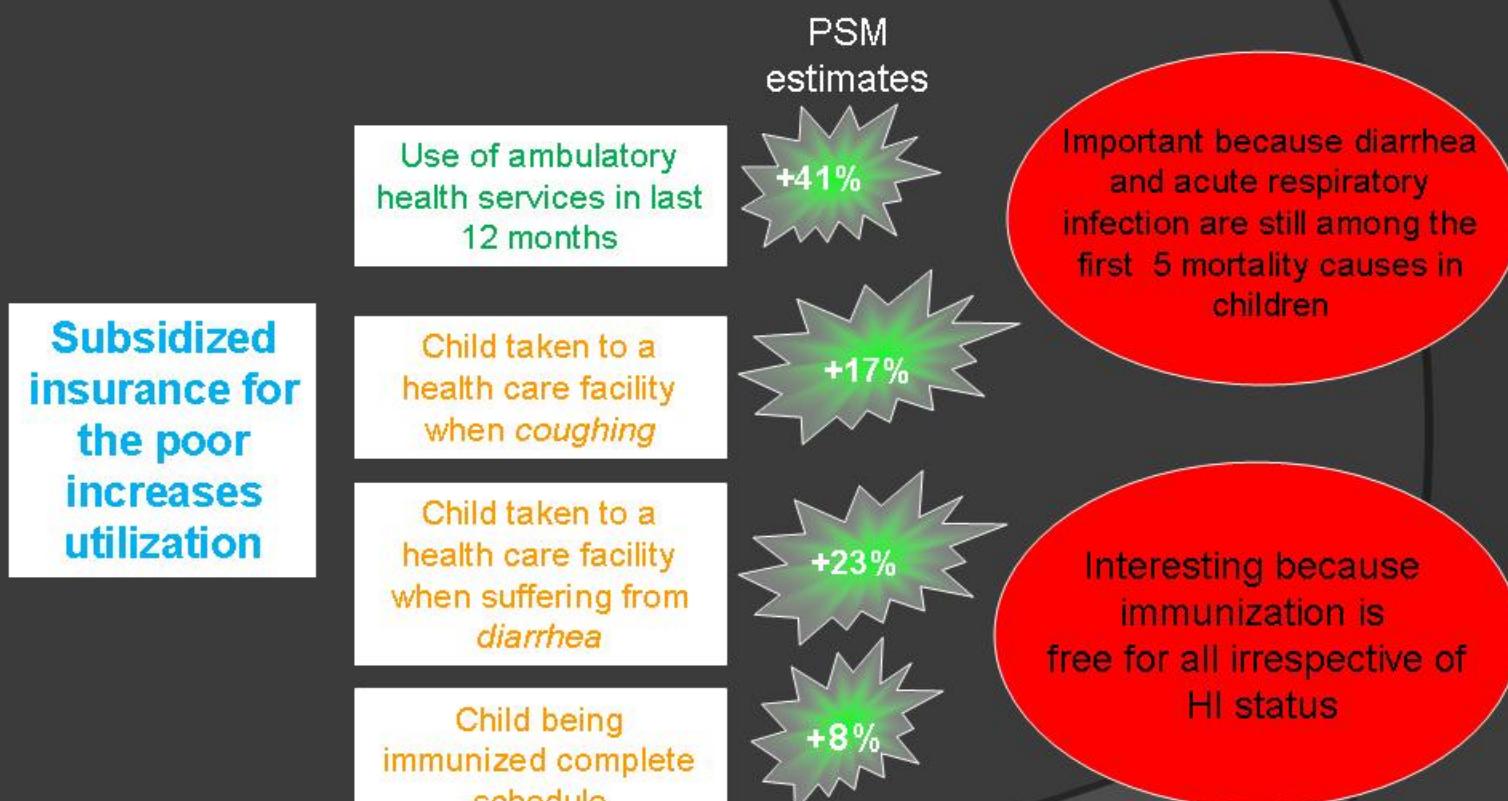
-15% Self-empl.
-18% Employed

Important because
before the reform
Insurance coverage
was limited
to formal workers
and there was
no family coverage

Note: Only statistically significant results are reported on this slide. IV with probit or with bivariate probit or simple probit with controls.

Impact of insurance on *utilization*

Subsidized Regime

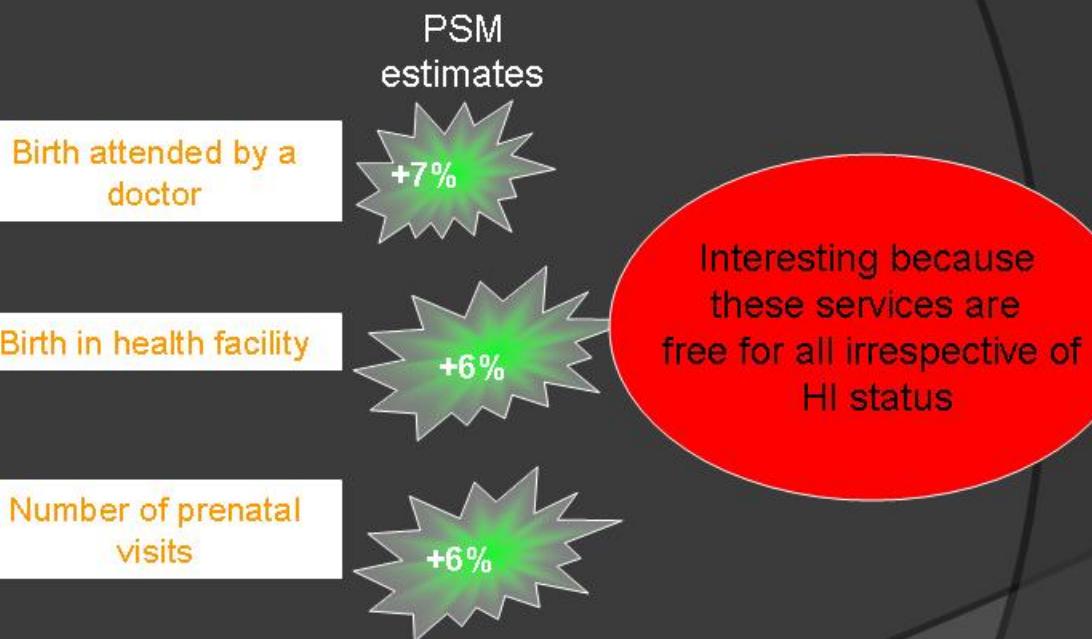


Note: Only statistically significant results are reported on this slide. PSM, Kernel Epanechnikov , bandwidth 0.001

Impact of insurance on *utilization*

Subsidized Regime

**Subsidized
insurance for
the poor
increases
access for
maternal
services**

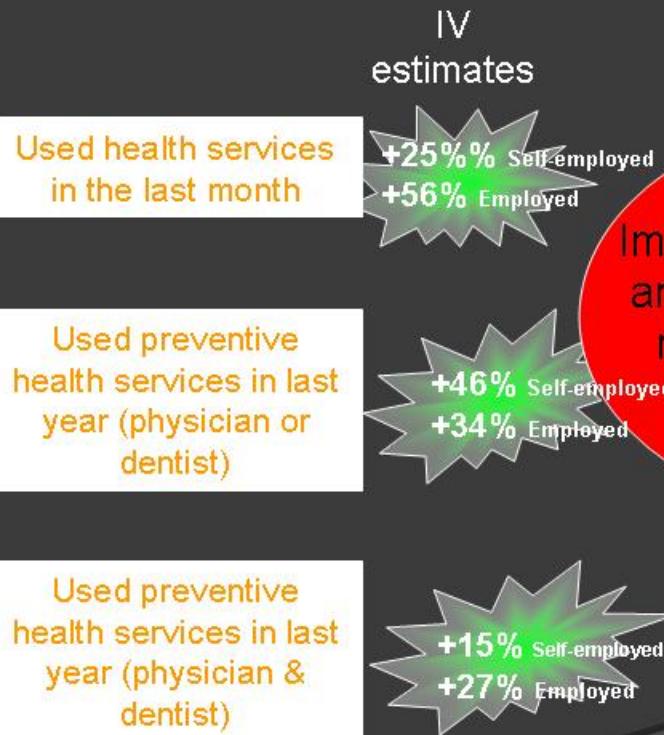


Note: Only statistically significant results are reported on this slide. PSM, Kernel Epanechnikov , bandwidth 0.001

Impact of insurance on *utilization*

Contributory Regime

**Contributory
insurance
increases
access for
curative and
preventive
services**



Important as self-employed and family members were not covered prior to the reform

Note: Only statistically significant results are reported on this slide. IV with probit or with bivariate probit or simple probit with controls.

Distributional impact

Urban/Rural

Subsidized insurance for the poor increases access and use more in the rural areas

PSM estimates

Urban

Rural

Use of ambulatory health services in last 12 months

+33%

+49%

Child taken to a health care facility when coughing

+15%

+33%

Child taken to a health care facility when suffering from diarrhea

+11%

+38%

Delivery in health care facility

+2%

+9%

1/ This table only reports results from PSM and from one model specification (KE with bandwidth 0.001). Similar results were found for other model specifications.

Impact of insurance on *financial protection*

Subsidized Regime

Subsidized insurance for the poor mitigates the impact of catastrophic expenditure

OOP represent 10% or more of non-subsistence income

OOP represents 20% or more of non-subsistence income

OOP represents 30% or more of non-subsistence income

OOP represents 40% or more of non-subsistence income

PSM estimates

-36%

-39%

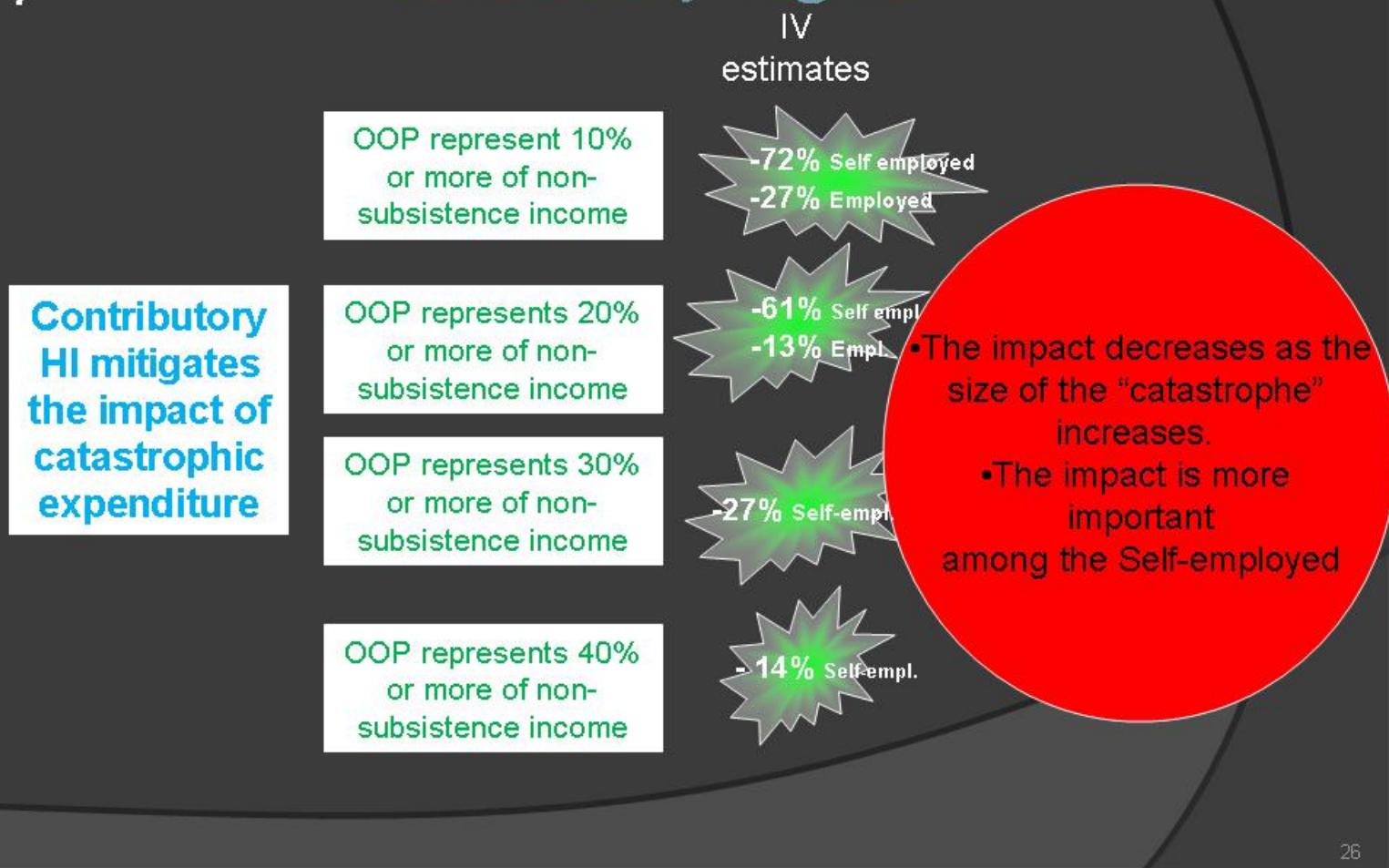
-44%

-27%

This is important as 5% /30% of all Colombians/health service users have monthly OOP above 30% of their monthly subsistence income

Note: Only statistically significant results are reported on this slide. PSM, Kernel Epanechnikov , bandwidth 0.001

Impact of insurance on *financial protection*. Contributory Regime



3 Final Reflexions

◎ 1 related to results:

- Results indicate that HI in Colombia improves access, utilization and financial protection.
- Indicators have improved for those insured but are still worrisome in some instances. For example:
 - 30% still experience barriers of access in the SR.
 - 20% of affiliates of the SR using health services spend more than 20% of their monthly non-subsistence income on health related OOP.
 - Supply side problems become a key issue in the SR now that financial barriers have been reduced.
 - 50% of those affiliated in the CR do not receive all prescribed medicines.



Health insurance is not just a dichotomous variable-it's a “complex machine”

- It varies in extent, duration, organization, financing etc. and its impact will depend on all of these.
- Its impact on health and health related outcomes is indirect-so if we want to further improve impacts we need to look at the details of organization.

Charlie Chaplin in Modern Times

3 Final Reflexions

- 2 methodological:

1. If we really want to evaluate the impact of HI on health status, general household survey data will possibly not do the job.
 - We need variables capable of detecting underlying changes in quality of life related to access to services covered by the benefits package.
 - Start using the concept of effective coverage rather than blunt health measures may be an alternative.
2. The current way of measuring financial protection relies on many methodological assumptions and measures the hypothetical impact of HI on household income. We need to think more about this.



GRACIAS

Evaluating the impact of HI on health status: methodological considerations

1. Health status is itself a determinant of affiliation to insurance. The controls we can introduce for this are incomplete at best.
 - → We won't know whether the observed health status is consequence of insurance or insurance is itself consequence of the observed health status.?



Which came first, the chicken or the egg?

2. We only have very gross measures of health (child mortality, weight at birth) :
 - o They are not sensitive enough to capture the potential impact of changes in access to health services on health status.
 - o Often few observations.
3. DHS surveys typically concentrate on child-mother health status variables and include virtually no information on adult's health status. Any extrapolation would by highly questionable.
4. Many of the services that are related to child/mother health status variables are free for all and irrespective of HI status-we would not expect any differences.

5. The impact of HI on health status is indirect (via improved access).
6. Ultimately the question is: what type of indicators do we need to detect the impact of improved access obtained through HI?

→ I would argue that different types of data are needed for the description of health status versus analytic models of health status which try to explain why some people are healthy and some are not.
→ **HEALTH STATUS MEASUREMENT DESIGNS SHOULD REFLECT THEIR PURPOSE**