

Insights from Insurance Demand Theory for Developing Countries

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March 15, 2005

Wharton Impact Conference:

Voluntary Health Insurance in Developing Countries

Philadelphia, PA

The Motivation and the Problem

- Developing countries typically display large proportions of payment for medical care made out of pocket.
- This is so even if (as is usual) there is a “free” public system: funding and tax constraints.
- Out of pocket payments span the income distribution (except for subsistence).
- So there is a prima facie case for voluntary insurance to improve welfare!

Table 1

OUT OF POCKET PAYMENTS AS % OF NATIONAL HEALTH EXPENDITURES, SELECTED DEVELOPING COUNTRIES, 2001

| Country | % | Country | % |
|----------------|------|-------------|------|
| Angola | 36.9 | Kenya | 53.1 |
| China | 59.9 | Lebanon | 58.4 |
| Cote d'Ivoire | 75.4 | Morocco | 45.0 |
| Dominican Rep. | 56.5 | Pakistan | 75.6 |
| Egypt | 47.1 | Paraguay | 44.2 |
| El Salvador | 50.6 | Philippines | 42.8 |
| Ghana | 40.4 | Syria | 56.1 |
| India | 82.1 | Tanzania | 44.3 |
| Iran | 53.2 | Viet Nam | 62.6 |
| Jamaica | 42.5 | | |

Source: Neehlan Seckhu and William Savedoff, "Private Health Insurance: Implications for Developing Countries," WHO Bulletin, February, 2005

Insurance and “affordability”

- No positive economic definition of “affordability”; it is (at best) a value judgment.
- If a household can afford high cost care, it can afford insurance at premiums close to expected expense.

The Basics of Insurance Demand

- “Risk averse” people demand insurance in order to convert rare catastrophic expenses into predictable manageable ones.
- Risk averse people demand insurance at fair premiums.
- Key question 1: Does the premium exceed the expected value?
- Key question 2: Does the household’s risk aversion make it willing to pay a risk premium that is greater than that excess?

The Hopeful Hypothesis

- If loading or administrative cost for voluntary insurance can be “moderate,” there should be private demand for insurance.
- This is even more likely to be so if there is a subsidy to offset all or part of the loading.
- A benchmark loading level: 25-35% of premiums.

When Is Insurance Most Valuable to Consumers?

- Given equal expected values, an insurance policy is more valuable the lower the premium and the higher the loss.
- So health insurance is most valuable to consumers (not necessarily to public health types) when the expense is rare, large, and effective for health.
- A classic example: a costly drug.

Impediments to Insurance 1: Moral Hazard

- Insurance increases the amount of spending, conditional on an illness.
- Moral hazard should not lead to zero insurance, but will lead to less generous coverage for those expenses subject to greatest “price motivated” increase.
- Moral hazard through income effects (Nyman) will not lead to less coverage.

Observations on MH

- Spending expands across the income distribution: *not* stronger for lower income with an income-related deductible.
- Moral hazard represents use of low value care so it is inefficient but trades off against risk protection.
- Moral hazard for preventive care can be benign.
- A policy conflict: the greater the increase in “access,” the lower the demand for coverage?

Impediments to Insurance 2: Adverse Selection

- If the premium for a below-average risk is not below average, that risk may decline coverage. This can lead to small or nonexistent insurance markets.
- True adverse selection may not be a problem in developing countries: consumers do not have sophisticated knowledge.
- But it can be caused by inability of insurers to distinguish risk types or by regulations forbidding risk rating.

Observations on Adverse Selection and Risk Rating

- Risk rating is efficient and usually maximizes the proportion voluntarily taking insurance.
- Adverse selection primarily harms low risks.
- Community rating probably causes uninsurance, but may shift the mix of those covered.
- Direct subsidies are a better way than required community rating to help poor high risks: feasible in developing countries?
- Seems risky to rely on community spirit and social capital to solve the problem.

Further Impediments to Voluntary Insurance: Market

- Buyers may mistrust sellers.
- Control of moral hazard could be an issue.
- Reserves not that large a problem, but may be helped with mutualization.
- Consumers may be poorly informed.
- If different income groups want different policies, it may be hard to offer a good moderate income policy.

Further Impediments to Voluntary Insurance: Political

- “Cream skimming” only occurs with regulation but politicians may want to redistribute from young to old or healthy to sickly.
- A political taste for “equity” by income may dislike insurance markets that make inequity apparent by leading to efficient lower “quality” but lower cost products for the non-rich.
- There may be a political demand for regulation.