



Pro MHI Africa

EU-African University Network to strengthen
community-based micro health insurance

Forum La Concertation, Yaoundé, 30th of
September 2009 – Gerald Leppert

Thème 2:

La mise en réseau peut-elle limiter le risque financier des mutualités?

Topic 2

Can a network of mutual health organisations help to cope with financial risks?

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Outline:

1. Introduction
2. Financial risks in micro health insurance
3. Solutions and limitations through a network of micro health insurance units
4. Outlook & questions

1. Introduction:

- Financial risks are those risks which can lead...
 - to situations where an organisation cannot fulfil its purpose and its obligations due to insufficient liquidity or funds.
 - in the worst case to insolvency of the organisation.
 - Financial risks can either be technical or operational.
 - Technical risks: directly or indirectly associated with the technical or actuarial bases of calculation for premiums and technical provisions.
 - Operational risks: resulting from management, other operational inefficiencies or issues in liquidity and access to financial markets.
- **Micro health insurance units face a wide variety of financial risks. What different financial risks play a role in reality?**

2. Financial risks in Micro health insurance

2 a. Technical financial risks (I): Overview

Technical financial risk 1	Techn. risk 2	Techn. risk 3
Financial risks due to <u>small risk pools</u> , resulting from high variation of occurrence of illnesses.	Financial risks due to <u>unexpected fluctuations</u> in the occurrence of illnesses.	Financial risks due to <u>high cost cases</u> (e.g. HIV/AIDS or chronic diseases) and due to open and high ceiling amounts



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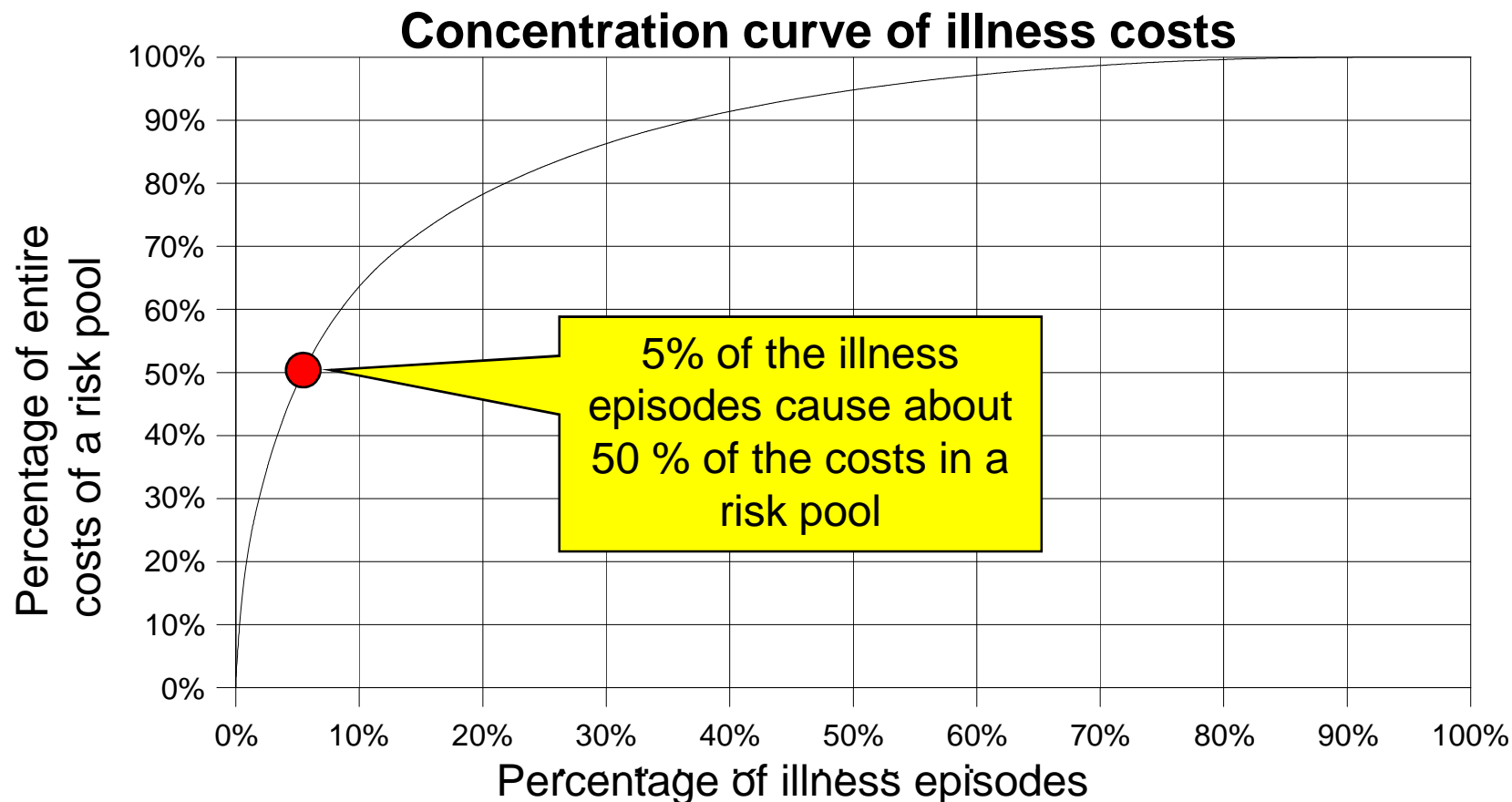
2 a. Technical financial risks (II): Small risk pools

<i>Country</i>	<i>People covered</i>	<i>Schemes</i>	<i>Average risk pool</i>
Burkina Faso	20000	81	247
Chad	1775	7	254
Benin	41428	42	986
Cameroon	51637	47	1099
Guinea	84820	55	1542
Kenya	66500	32	2078
Togo	20011	9	2223
Uganda	40000	14	2857
Senegal	308563	79	3906
DR Congo	114465	28	4088
Mauritania	13055	3	4352
Niger	49868	9	5541
Mali	469815	51	9212
Ivory Coast	527670	36	14658
Nigeria	68300	3	22767
Guinea-Bissau	40400	1	40400

2 a. Technical financial risks (III): Small risk pools and variance of occurrence of health risks

- Around 95% of the schemes in Sub-Saharan Africa cover less than 1,000 persons (Ndiaye et al. 2007)
- Risk of insolvency (Dror et al. 2005):
 - Average membership of 1,203 -> Probability of insolvency $\geq 34\%$ (at 10% safety margin).
 - Average membership of 1,203 -> Probability of insolvency $\geq 21.4\%$ (at 20% safety margin).
 - Average membership of 2,604 -> Probability of insolvency $\geq 7.5\%$ (at 10% safety margin).

2 a. Technical financial risks (IV): High cost cases and multimorbidities



Data source: Self information on illness costs of 4,316 Personen in India 2005, who were ill during the last 3 months

2 b. Operational financial risks (I): Overview

Operational financial Risk 1	Operat. Risk 2	Operat. Risk 3
Financial instabilities due to <u>lacking social marketing capacities</u> and <u>low renewal rate</u> of members.	Financial risks due to <u>lacking management capacities</u> and poor governance	Financial risks due to <u>insufficient regulatory framework</u> regarding micro health insurance

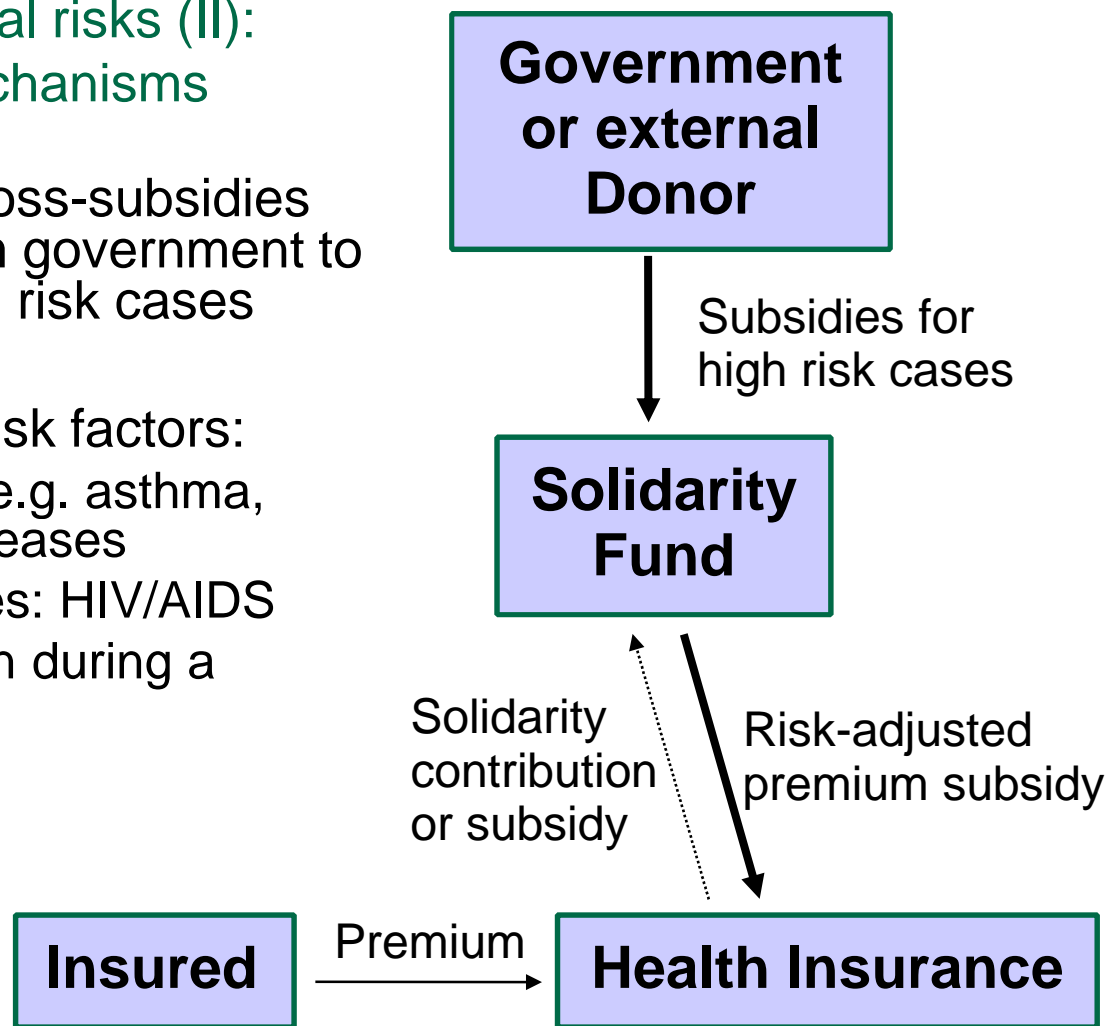
3. Solutions and Limitations through a network

3 a. Solutions for technical risks (I): Overview

Solution 1	Solution 2	Solution 3
<u>Risk adjustment</u> mechanisms between insurance schemes (e.g. forming of high risk pools, channeling subsidies to support high cost cases) → Response to the technical risks “small risk pools” and “high cost cases”	<u>Reinsurance</u> <u>mechanisms</u> → Response to the technical risks “small risk pools” and “unexpected fluctuations”	<u>Endowment funds</u> for the first years of operation of new mutual insurance schemes → Response to technical risks “small risk pools” and “unexpected fluctuations”

3 a. Solutions for technical risks (II): Risk adjustment mechanisms

- Risk Adjustment = Cross-subsidies between MHO or from government to a MHO for taking high risk cases
- Identification of high risk factors:
 - Chronic diseases, e.g. asthma, cardio-vascular diseases
 - Permanent diseases: HIV/AIDS
 - Long hospitalization during a specific year
 - Disabilities
 - Old age



3 a. Solutions for technical risks (III): Reinsurance

- Reinsurance aims to solve problems of unexpected variations in losses and risk occurrence → particularly important for small risk pools.
- How does it work? A mutual health organisation insures itself at the reinsurer. It pays a premiums and receives the benefit, if the contractually defined losses occur (e.g. extra ordinal fluctuations, epidemics, natural disasters, ...)
- Reinsurer can be an insurance company, a government or a network of mutual health organisations.
- The reinsurance mechanism allows a diversification of risks and enlarges the risk-pool.

3 a. Solutions for technical risks (IV): Endowment fund

- The first operational years of a mutual health organisation are the most crucial ones, because:
 - Risk pool still small
 - Financial resources still small
 - Experiences still low concerning average losses, actual needed premium amount and real costs.
- An Endowment fund is a fund of a certain size available to the new scheme. It can be
 - partly a subsidy,
 - partly a guarantee fund, available only if certain projections or expectations have not been fulfilled (e.g. enrolment rate, too high illness frequency and losses)
 - partly a credit
- Endowment funds can be a solution to the risk of insolvency after inception of a new scheme.

3 b. Solutions for operational risks (I): Overview

Solution 1	Solution 2	Solution 3
Lobbying for a <u>regulatory framework</u> and governmental subsidies	<u>Teaching and training programmes</u> in the network	<u>Treatment agreements and clearance of treatment costs</u> between mutual health insurance schemes
→ Response to “insufficient regulatory framework”	→ Response to “lacking social marketing” and “lacking management capacities”	→ Response to “lacking social marketing” and “low renewal rates”

4. Outlook & Questions (I):

- Some financial risks generally cannot be solved by one mutual health organisation alone.
- A network of mutual health organisations can provide solutions to several financial risks, both technical and operational.
- However, not all solutions can be implemented without complexity:

High complexity	→ Risk adjustment → Reinsurance
Medium complexity	→ Endowment fund → Lobby for regulatory framework
Low complexity	→ Treatment agreements → Teaching and training

4. Outlook & Questions (II):

1. What financial risks have the most serious impact on mutual health organisations in practice?
2. Which of the presented “solutions” and “mechanisms” against financial risks do you consider feasible and appropriate within a network of mutual health organisations? Would you propose any other solution?



Merci beaucoup pour votre aimable attention!
Thank you very much for your attention!

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www.microhealthinsurance-africa.org

Further reading:

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- Fonteneau, Bénédicte; Bruno Galland (2006): The community-based model: Mutual health organizations in Africa. In: Churchill, Craig (ed.). Protecting the poor - A microinsurance compendium, 378-400.
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